Canon

imageRUNNER ADVANCE C9280 PRO/C9270 PRO/C7280i/C7270i/ C7270/C7260i/C7260

Service Manual Rev.3

Application

This manual has been issued by Canon Inc. for qualified persons to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

Corrections

This manual may contain technical inaccuracies or typographical errors due to improvements or changes in products. When changes occur in applicable products or in the contents of this manual, Canon will release technical information as the need arises. In the event of major changes in the contents of this manual over a long or short period, Canon will issue a new edition of this manual.

The following paragraph does not apply to any countries where such provisions are inconsistent with local law.

Trademarks

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Copyright

Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

Explanation of Symbols

The following symbols are used throughout this Service Manual.

Symbols	Explanation
	Check.
	Check visually.
	Check the noise.
	Disconnect the connector.
	Connect the connector.
	Remove the cable/wire from the cable guide or wire saddle.
	Set the cable/wire to the cable guide or wire saddle.
	Remove the screw.
	Tighten the screw.

Symbols	Explanation
	Remove the claw.
	Insert the claw.
	Use the bundled part.
	Push the part.
	Plug the power cable.
	Turn on the power.

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.

   In the diagrams, ▮▮▮▮ represents the path of mechanical drive; where a signal name accompanies the symbol, the arrow ⟶ indicates the direction of the electric signal.

   The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.

2. In the digital circuits, '1' is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low". (The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.

   In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.

All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine.

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7 Error Code

8 Service Mode

9 Installation

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Safety Precautions

- CDRH Act
- Laser Safety
- Handling of Laser System
- Turn power switch ON
- Safety of Toner
- Notes When Handling a Lithium Battery
- Notes Before it Works Serving
- Points to Note at Cleaning

imageRUNNER ADVANCE C9075 PRO/9070 PRO/9065 PRO/9060 PRO/C7065/7055 Series

CDRH Act

The Center for Devices and Radiological Health of the US Food and Drug Administration put into force regulations concerning laser products on August 2, 1976. These regulations apply to laser products manufactured on and after August 1, 1976, and the sale of laser products not certified under the regulations is banned within the Untied States. The label shown here indicates compliance with the CDRH regulations, and its attachment is required on all laser products that are soled in the United States.

CANON INC.
30-2,SHIMOMARUKO,3-CHOME,OHTA-KU,TOKYO,
146.JAPAN

MANUFACTURED :

THIS PRODUCT CONFORMS WITH DHHS RADIATION
PERFORMANCE STANDARD 21CFR CHAPTER1
SUBCHAPTER J.

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⚠

A different description may be used for a different product.

Laser Safety

Laser beam radiation may pose a danger to the human body. A laser scanner mounted on the machine is sealed with the protection housing and external cover to prevent the laser beam from leaking to the outside. The laser beam never leaks out of the scanner as far as users operate the machine normally

The following warnings are given to comply with Safety Principles (EN60950).

Sicherheit des Lasers
Laserstrahlen können für den menschlichen Körper gefährlich sein. Aus diesem Grund ist das optische Lasersystem mit einem Schutzgehäuse und einer Außenabdeckung dicht verschlossen und hat eine Struktur, die keine Laserstrahlen nach außen dringen lässt. Unter der Voraussetzung, dass der Benutzer dieses Gerät normal bedient, ist ein Austritt von Laserstrahlen daher ausgeschlossen.

Handling of Laser System

When servicing the area around the laser assembly, be sure to turn off the main power.
If you must service while the power is turned on, be sure to keep the followings:
- Do not use a screwdriver or tools that have a high level of reflectance in the laser path.
- Remove watches and rings before starting the work. (They can reflect the laser beam, possibly hitting the eye.)

The machine's covers that can reflect laser light are identified by means of a warning label (Figure). If you must detach a cover showing the label, be sure to take extra caution during the work.

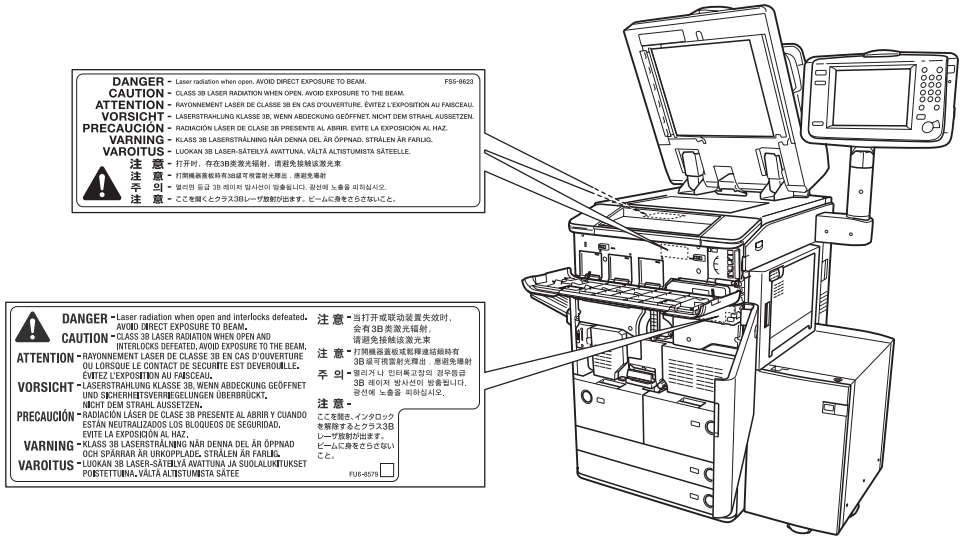
The following warnings are given to comply with Safety Principles (EN60950).

Handhabung des Laserteils
Bei servicearbeiten am oder in der Nähe des Laserteils zuerst das Hauptgerät abschalten.

Bei Servicearbeiten, die unbedingt bei eingeschaltetem Gerät durchgeführt werden müssen, auf jeden Fall die folgenden Vorsichtsmaßnahmen beachten.

- Keine stark reflektierenden Schraubenzieher oder ähnliche Werkzeuge direkt in den Lichtpfad des Laserstrahls bringen.
- Vor Beginn der Arbeit Uhren, Ringe und ähnliche Gegenstände abnehmen. (Reflektierte Laserstrahlen könnten sonst in die Augen geraten.)

Abdeckungen, die möglicherweise Laserstrahlen reflektieren, haben in der auf dem Bild gezeigten Position einen Aufkleber. Bei Servicearbeiten auf der Innenseite von Abdeckungen mit Aufkleber ist besondere Vorsicht erforderlich.



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Turn power switch ON

The machine is equipped with 2 power switches: main power switch and control panel power switch.

The machine goes on when the main power switch is turned on (i.e., other than in low power mode, sleep mode).

⚠ CAUTION:

Do not turn off the main power switch while the progress bar is indicated, during which access is made to the HDD. If deprived of power, the HDD can suffer a fault (E602).

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Safety of Toner

About Toner

The machine's toner is a non-toxic material made of plastic, iron, and small amounts of dye.

⚠ CAUTION:

Do not throw toner into fire. It may cause explosion.

Toner on Clothing or Skin

- If your clothing or skin has come into contact with toner, wipe it off with tissue; then, wash it off with water.
- Do not use warm water, which will cause the toner to jell and fuse permanently with the fibers of the cloth.
- Tonner is easy to react with plastic material, avoid contact with plastic.

Notes When Handling a Lithium Battery

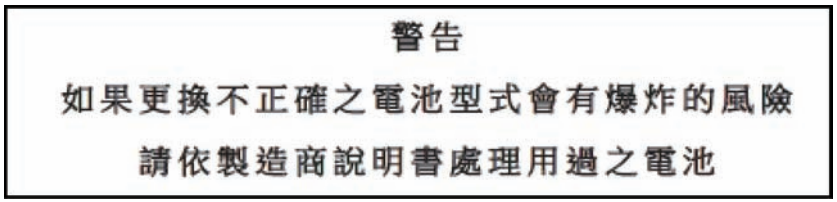
⚠ CAUTION:

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

The following warnings are given to comply with Safety Principles (EN60950).

⚠ CAUTION:

Wenn mit dem falschen Typ ausgewechselt, besteht Explosionsgefahr.
Gebrauchte Batterien gemäß der Anleitung beseitigen.



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Notes Before it Works Serving

⚠ CAUTION:

At servicing, be sure to turn OFF the power source according to the specified steps and disconnect the power plug.

Points to Note at Cleaning

⚠ CAUTION:

When performing cleaning using organic solvent such as alcohol, be sure to check that the component of solvent is vaporized completely before assembling.

Product Overview

- Product lineups
- Features
- Specifications
- Name of Parts

Product lineups

Main unit

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Underlined (2-digit) numeric figures indicate print speed (ppm: print per minute)

	imageRUNNER ADVANCE C9280 PRO	imageRUNNER ADVANCE C9270 PRO	imageRUNNER ADVANCE C7270	imageRUNNER ADVANCE C7260
Print speed	80ppm	70ppm	70ppm	60ppm
Positioning	Light-Production machine Target machine: iR5075		Office machine Target machine: iRC6880, iRC5880	
Control Panel	Upright Control Panel		Flat Control Panel * Option: Upright Control Panel	
HDD	JPN: 1TB Other: 160GB		160GB	
Communication method with pickup/delivery options	Serial			
Pickup/delivery options	• Some equipments are connected to iR ADV C9280 PRO / C9270 PRO only. • Some equipments are connected to iR ADV C7270 / C7260 only.			

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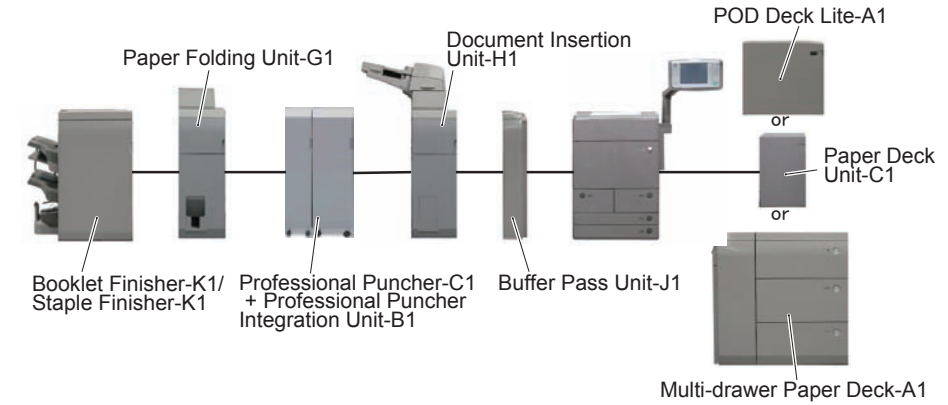
Pickup/delivery options

Applicable options for each model

Connectable pickup/delivery options differ according to the model

Connecting configuration

imageRUNNER ADVANCE C9280 PRO/9270 PRO



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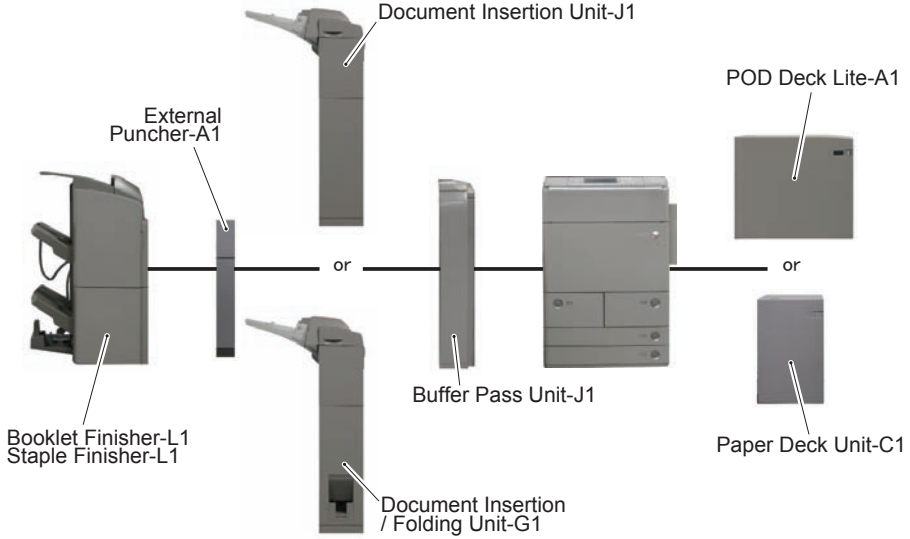
imageRUNNER ADVANCE C7270 /7260



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■ Compulsory options and conditions

● Pickup options

Product name	Compulsory options and conditions
POD Deck Lite-A1	Pickup method: air separation method Pickup capacity: 3500 sheets (80g/m^2) Paper type: thick paper/thin paper/coated paper Paper size: B5 to 13”X19” Paper basis weight: : 52 to 300g/m^2 Double-feed detection: not available
Multi-drawer Paper Deck-A1	Option for iR ADVANCE C9280 PRO/9270 PRO Pickup method: air separation method Pickup capacity: 6000 sheets (80g/m^2) Paper type: thick paper/thin paper/Coated paper Paper size: A5 to 13”X19.2” Paper basis weight: : 52 to 300g/m^2 Double-feed detection: option
Paper Deck Unit-C1	Pickup method: retard method Pickup capacity: 3500 sheets (80g/m^2) Paper type: thick paper/thin paper Paper size: A4, B5, LTR Paper basis weight: : 52 to 220g/m^2 Double-feed detection: not available
Cassette Heater Unit 38	Option for cassette in main unit JPN, ASIA, CN, KR, TW : Standard EUR : Option 120V-area: not available
Paper Deck Heater Unit-A1	Option for Paper Deck Unit - C1 Available for JPN, ASIA, CN, KR, TW only Other-area: assigned as a service part
Paper Deck Warm Breeze Unit-A1	Option for Multi-drawer Paper Deck-A1 (upper/middle/lower cassette) Available for Japanese models only Other-area: assigned as a service part

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● Delivery options

Product name	Compulsory options and conditions
Document Insertion Unit-H1	Option for iR ADVANCE C9280 PRO/9270 PRO Pickup capacity: max. 400 sheets (200-sheet each for the upper deck and the lower deck) Paper type: plain paper/recycled paper/color paper/thick paper/coated paper Paper size: B5 to 13”X19.2” Paper basis weight: : 52 to 300g/m^2
Document Insertion Unit-J1	Option for iR ADVANCE C7270/7260 Connection is available with either this Insertion Unit - J1 or Paper Folding Insertion Unit - G1 Pickup capacity: max. 400 sheets (200-sheet each for the upper deck and the lower deck) Paper type: plain paper/recycled paper/color paper/thick paper/coated paper Paper size: B5 to 13”X19.2” Paper basis weight: : 52 to 300g/m^2
Document Insertion / Folding Unit-G1	Connection is available with either this Paper Folding Insertion Unit - G1 or Insertion Unit - J1 as an option for iR ADVANCE C7270/7260. Pickup capacity: max. 400 sheets (200-sheet each for the upper deck and the lower deck) Paper type: plain paper/recycled paper/color paper/thick paper/coated paper Paper size: B5 to 13”X19.2” Paper basis weight: : 52 to 300g/m^2
Professional Puncher-C1	Option for iR ADVANCE C9280 PRO/9270 PRO Professional Puncher Integration Unit-B1 is required
Professional Puncher Integration Unit-B1	Option for iR ADVANCE C9280 PRO/9270 PRO To be used with Professional Puncher-C1
Paper Folding Unit-G1	Option for iR ADVANCE C9280 PRO/9270 PRO Staple Finisher/Saddle Finisher is required at downstream configuration Folding type: Z-fold, C-fold, Half fold, Accordion Z-fold, Double parallel fold Paper size: A4R to 11”X17” for folding, B5 to 13”X19.2” for through-pass Paper basis weight: 52 to 105g/m^2 (Double parallel fold: 52 to 90g/m^2)
Staple Finisher-K1	Option for iR ADVANCE C9280 PRO/9270 PRO Buffer Path Unit - J1 is required at upstream configuration Paper basis weight: 52 to 300g/m^2
Booklet Finisher-K1	Option for iR ADVANCE C9280 PRO/9270 PRO Buffer Path Unit - J1 is required at upstream configuration Saddle: irregular saddle stitch with A4 - 13”x19.2”, 20-sheet saddle stitching, 3-sheet for no-staple V-fold
Staple Finisher-L1	Option for iR ADVANCE C7270/7260 Buffer Path Unit - J1 is required at upstream configuration No compulsory options and particular conditions Paper basis weight: 52 to 300g/m^2
Booklet Finisher-L1	Option for iR ADVANCE C7270/7260 Buffer Path Unit - J1 is required at upstream configuration Saddle: 16-sheet saddle stitching
Buffer Pass Unit-J1	Necessary when a finisher is connected

Product name	Compulsory options and conditions
Inner Booklet Trimmer-A1	Option for Staple Finisher - K1/Booklet Finisher-K1
Puncher Unit-BE1	Option for Staple Finisher - K1/Booklet Finisher-K1. For Japanese models only. AB, 2-hole
Puncher Unit-BF1/ BG1/BH1	Option for Staple Finisher - K1/Booklet Finisher-K1. BF1: Inch, 2/3-hole BG1: FRN, 2/4-hole BH1: SWE, 4-hole
External 2 Hole Puncher-A1	Option for Staple Finisher - L1/Booklet Finisher - L1. AB, 2-hole
External 2/3 Hole Puncher-A1	Option for Staple Finisher - L1/Booklet Finisher - L1. Inch, 2/3-hole
External 2/4 Hole Puncher - A1	Option for Staple Finisher - L1/Booklet Finisher - L1. FRN, 2/4-hole
External 4 Hole Puncher-A1	Option for Staple Finisher - L1/Booklet Finisher - L1. SWE, 4-hole
Staple Cartridge-D2	Saddle staple CRG. Option for Saddle Finisher - L1
Staple Cartridge-D3	Saddle staple CRG. Option for Saddle Finisher - L1
Staple-P1	Saddle staple CRG. Option for Saddle Finisher - K1
Staple-J1	Plain staple CRG. Option for Staple Finisher - L1/Saddle Finisher - L1.
Staple-G1	Plain staple CRG. Option for Staple Finisher - K1/Saddle Finisher - K1.

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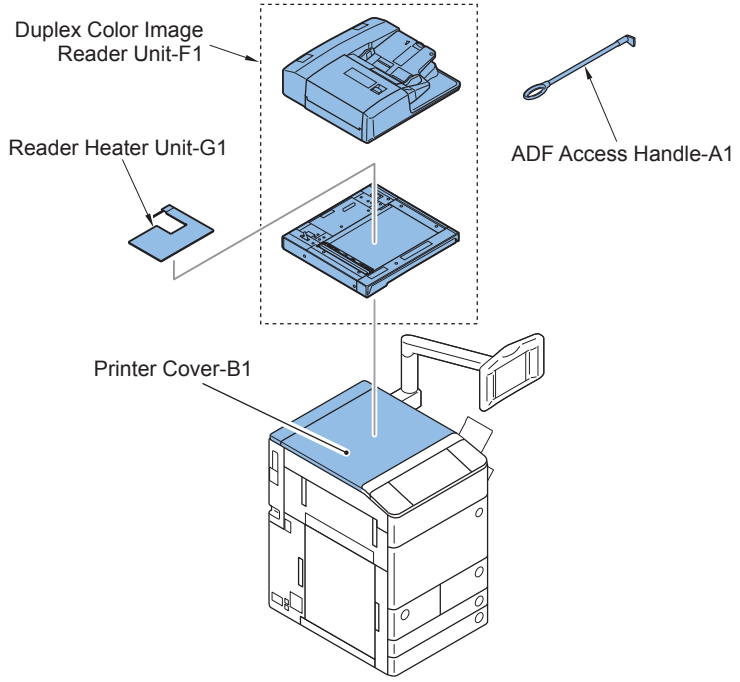
Scanning options

Compulsory options and conditions



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Product name	Compulsory options and conditions
Duplex Color Image Reader - F1	Simultaneous 2-sided scanning B/W (1-SIDED/2-SIDED): :600dpi=120/120ipm, 300dpi: 120/200ipm Color (1-sided/2-sided): :600dpi=70/70ipm, 300dpi: 120/140ipm Paper basis weight: <1-sided> AB-configuration: 38 to 220 g/m^2 Inch-configuration:50 to 220 g/m^2 <2-sided> 50 to 220 g/m^2 In case of the color original or the B/W original under mixed configuration of color and B/W originals, paper basis weight is 64 to 220 g/m^2 Stacking capacity: max. 300 sheets
Reader Heater Kit - G1	For JPN, ASIA, CN, KR, TW only Other-area: assigned as a service part
ADF Access Handle-A1	It is the cover to be installed at the top of the host machine when using this equipment as a printer model.
Printer Cover-B1	It is the handle to support opening and closing the Feeder.

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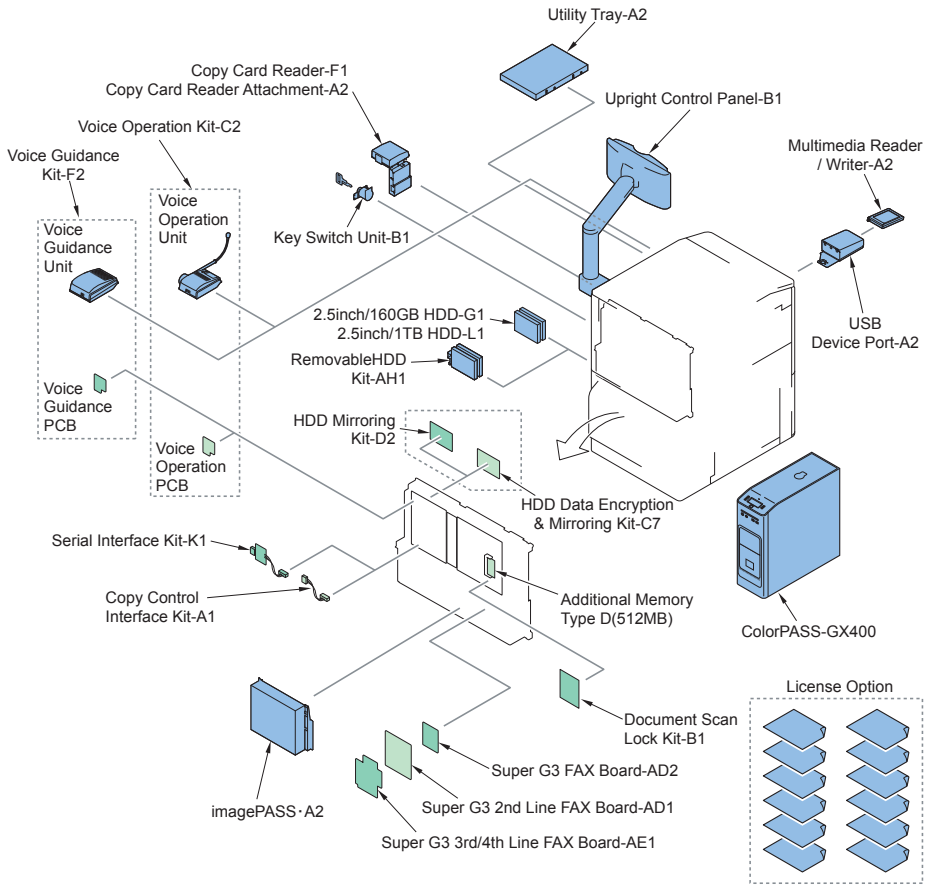
Expanded-feature options

Compulsory options and conditions



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Hardware products

Product name	Compulsory options and conditions
Upright Control Panel - B1	Option for iR ADVANCE C7270/7260 Equipped as standard with iR ADVANCE C9280 PRO/9270 PRO
Utillity Tray-A2	No particular options and conditions are required.
Key Swecth Unit-B1	
Copy Card Reader – F1	Copy Card Reader Installation Kit-A2 is required. Using with Serial Interface Kit-K1 and Control Interface Kit-A1 is not available.
Copy Card Reader Attachment Kit – A2	Required when Card Reader-F1 is installed.
Super G3 FAX Board - AD2	No compulsory options and particular conditions
Super G3 2nd Line FAX Board - AD1	No compulsory options and particular conditions
Super G3 3rd/4th LineFAX Board - AE1	No compulsory options and particular conditions
Voice Guidance Kit - F2	Consists of the voice guidance PCB and the voice guidance assembly.
Voice Operation Kit - C2	Consists of the voice operation PCB and the voice operation panel.
HDD Data Encryption & Mirroring Kit-C7	No compulsory options and particular conditions
USB Device Port - A2	Consists of USB 2-port HUB PCB only.
Additional Memory Type D (512MB)	Necessary when PS, PDF Direct, PDF/XPS Direct, Trust Stamp, ImagePASS-A2, or ColorPASS-GX400 is installed.
2.5inch/160GB HDD - G1	This is used when the mirroring function is used with HDD Data Encryption & Mirroring Kit-C7. No particular options and conditions are required.
2.5inch/1TB HDD - L1	This is used when the mirroring function is used with HDD Data Encryption & Mirroring Kit-C7. No particular options and conditions are required.
Removable HDD Kit - AH1	No compulsory options and particular conditions
HDD Mirroring Kit - D2	No compulsory options and particular conditions
Multimedia Reader/Writer - A2	USB device port - A2 is required. Supporting CF, SD memory and memory stick.
imagePASS - A2	Additional memory Type D (512MB) is required.
ColorPASS - GX400	Additional memory Type D (512MB) is required.
eM Controller-C1	
Serial Interface Kit-K1	Required when the coin manager is connected. Using with Copy Card Reader-F1 and Control Interface Kit-A2 is not available.
Copy Control Interface Kit-A1	Required when the coin manager is connected. Using with Copy Card Reader-F1 and Serial Interface Kit-K1 is not available. .

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License products

At the time of installation, obtain the license number according to the license certificate included in the package, and enter the license number on the control panel of the main unit. This operation activates the applicable features.

No physical installation work is required at the time of installation.

Product name	Compulsory options and conditions
PCL Printer Kit - AS1	No particular options and conditions are required.
PCL International Font Set-A1	No particular options and conditions are required.
PS Printer Kit - AS1	No particular options and conditions are required.
Direct print Kit (for PDF/XPS) - H1	No particular options and conditions are required.
Direct print Kit (for PDF) - H1	No particular options and conditions are required.
Direct print Kit (for XPS) - H1	No particular options and conditions are required.
Remote Operation Software Kit - B1	No particular options and conditions are required.
Barcode Printing Kit-D1	No particular options and conditions are required.
Encryption Secure Print Software Kit - D1	No particular options and conditions are required.
Secure Watermark - B1	No particular options and conditions are required.
Document Scan Lock Kit - B1	No particular options and conditions are required.
ACCESS MANAGEMENT SYSTEM Kit - B1	No particular options and conditions are required.
Web Access Software – H1	No particular options and conditions are required.
Universal Send Advanced Feature Set - D1	No particular options and conditions are required.
Universal Send Security Feature Set - D1	No particular options and conditions are required.
Universal Send Digital User Signature Kit - C1	No particular options and conditions are required.
Remote FAX Kit - A1	No particular options and conditions are required.
iR-ADV Security Kit-A1 for IEEE 2600.1 Common Criteria Certification	No particular options and conditions are required.

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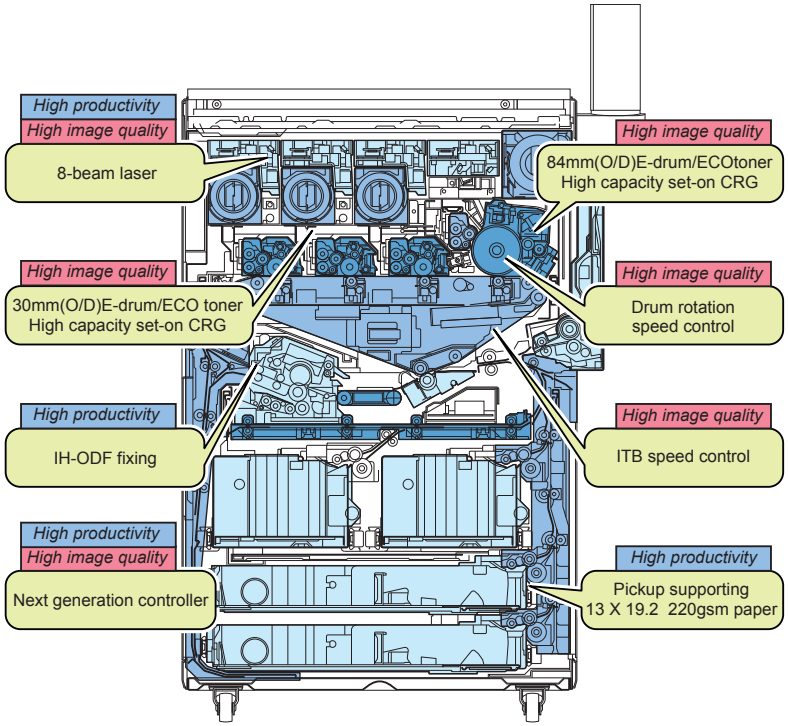
Features

Product features



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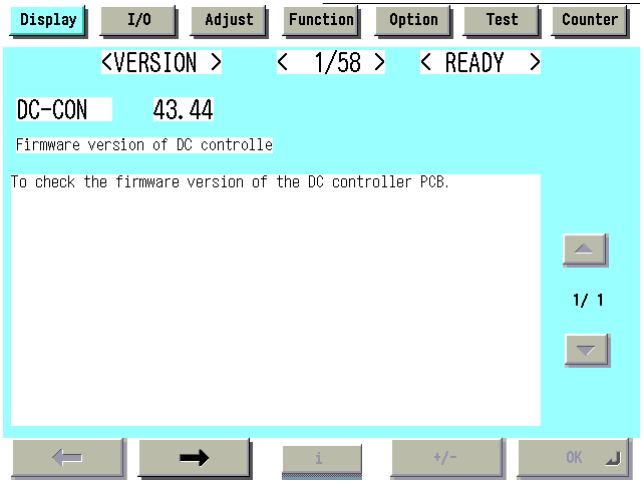
Features on service work

New Service Mode

Descriptions of Service Mode items are also displayed



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Features

- Natural language description
- Items in 'COPIER > OPTION > BODY' are newly classified.
- Enhanced I/O information
- Descriptions of Error Codes/Alarm Codes are displayed
- Simplified screen switching between Level 1 and Level 2

Improvement on operability for version upgrading

Version upgrading for most options (*) is available through the main unit.
As usual, SST (Service Support Tool) is used for version upgrading.

* Professional Puncher is excluded.
Version upgrading for Professional Puncher is performed by connecting with a PC that has the firmware (built-in downloader) installed.

Display specifications of Jam/Error codes

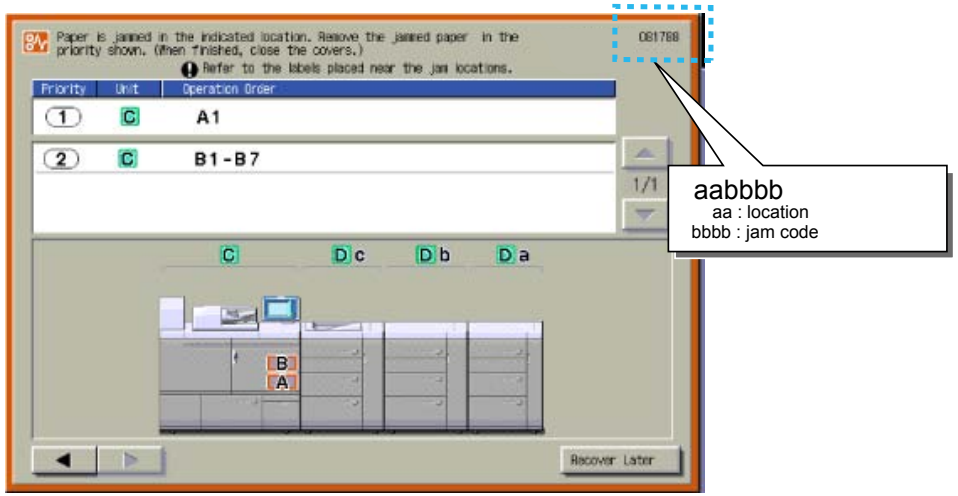
Jam code:

"Jam code" and "Occurrence location code" are displayed on the screen (*) when a jam occurs.

Error code:

In addition to "Error code", "Occurrence location code" is displayed on the screen when an error occurs.

Jam code



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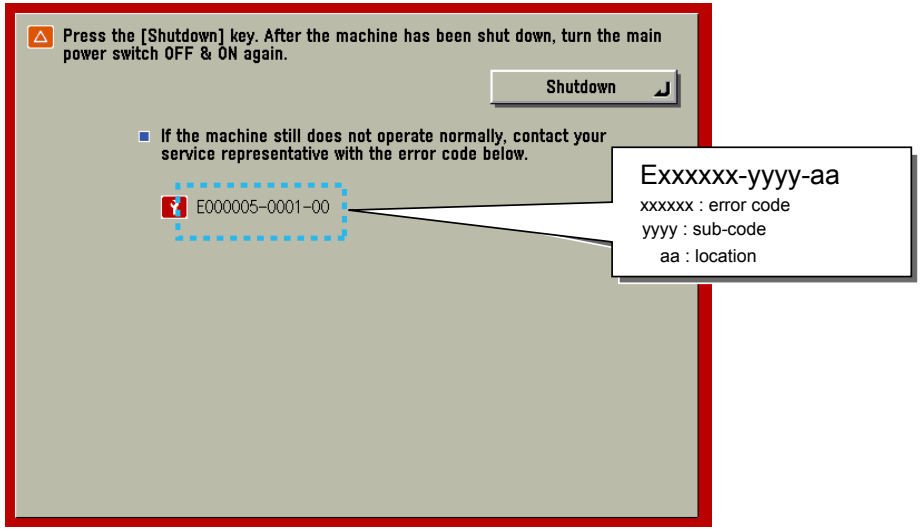
Error code



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Advantage on service activity

On receipt of a user call regarding a Jam or Error :

- The malfunctioning location (device) can be identified before a technician dispatch.
- The cause and remedy can be assumed before a technician dispatch.
- Remote service by a phone or e-mail can recover their malfunction depending on the reported cause of jam such as improper user operation. (A technician dispatch is not required)

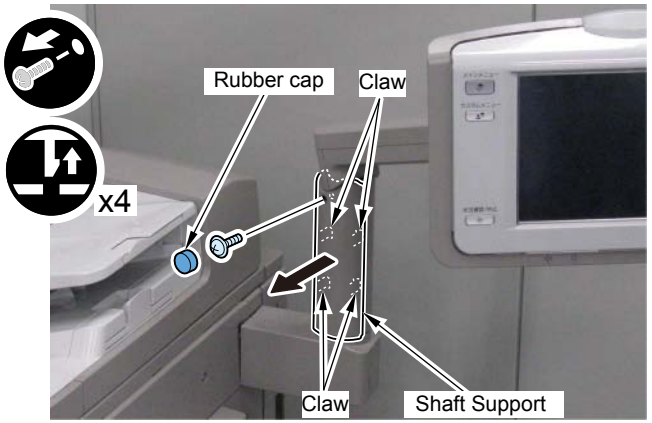
Improvement of serviceability

Upright Control Panel can be rotated, so that service mode, etc. can be performed even at the operation on the rear side of the machine.

<Procedure>

1) Remove the Shaft Support Cover left.

- 4 claws
- 1 screw
- 1 rubber cap



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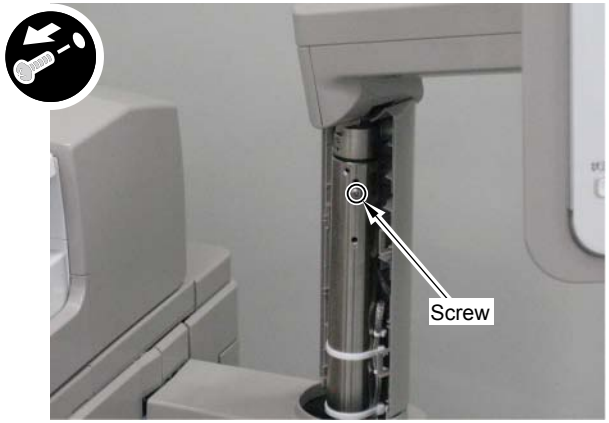
2) Remove the screw of the arm

- 1 screw



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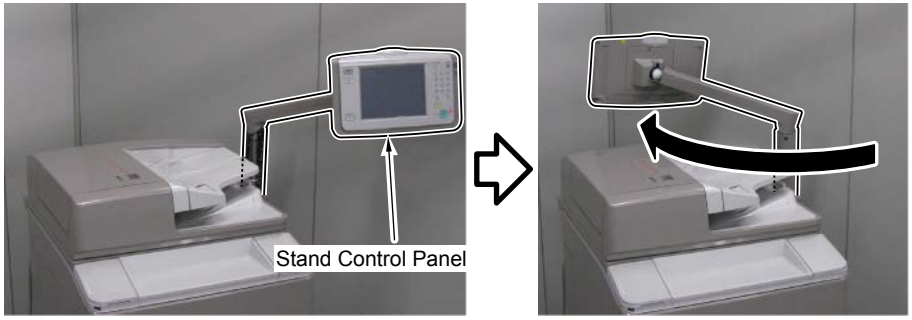
3) Turn the Stand Control Panel.



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Specifications

Specifications of main unit

Installation method of main unit			Console type
Photoreceptor	Black		84mm (O/D) OPC drum
	Color		30.6mm (O/D) OPC drum
Exposure method			Laser exposure method
Charging method	Black		Corona + grid charging method
	Color		AC roller charging method
Developing method			Dry, 2-component method
Transfer method			Intermediate belt transfer method (primary transfer, secondary transfer: transfer roller method)
Separation method			Curvature separation method + static eliminator
Pickup method:	Right/Left deck		Separation retard method
	Upper/Lower cassette		Separation retard method
	Manual feed tray		Simplified retard method
Drum cleaning method	Black		Cleaning blade + brush roller
	Color		Cleaning blade
ITB cleaning method			Cleaning blade
Fixing method			twin belt fixing
Toner type			Non-magnetic negative toner
Toner supplying method			Set-on
Toner level detecting function			Available
Lead-edge image margin			4.0 mm +1.5/-1.0 mm
Left/Right image margin			2.5 mm +1.5 mm
Warm-up time	Quick staring ON	To copy icon indication	iR ADV-C9280 PRO/9270 PRO: 10 sec or less iR ADV-C7270/7260: 7 sec or less
		To copy possibility	30 sec or less
	Quick staring OFF	To copy possibility	31 sec or less
	At the time of sleep return		30 sec or less
First copy time	Black		imageRUNNER ADV-C9280 PRO/9270 PRO: 4.4 sec imageRUNNER ADV-C7270/7260: 4.9 sec
	Color		imageRUNNER ADV-C9280 PRO/9270 PRO: 6.0 sec imageRUNNER ADV-C7270/7260: 6.6 sec
Image gradation			256 gradation
Print resolution			Max. 1200 dpi X 1200 dpi
Maximum image guarantee area			313 X 466.6mm

Maximum printable area	1-sided	323 x 476.6mm
	2-sided	313 x 476.6mm
Paper size		A5R to 13”X 19.2” (330.2 X 487.7 mm)
Pickup capacity:	Right/Left deck	1100 sheets (80g/m^2) 1250 sheets (64 g/m^2)
	Upper/Lower cassette	550 sheets (80g/m^2) 680 sheets (64 g/m^2)
	Manual feed tray	100 sheets (80g/m^2)
Duplexing method		Through pass
Memory capacity		For Main Controller 1: Max. 1GB For Main Controller 2: Max. 1.5GB (standard: 1GB Option: 512MB)
HDD capacity		iR ADVANCE C9280 PRP/9270 PRO (JPN): 1TB Others: 160GB
Temperature range in use environment		See Chapter 9, "Checking the Installation Environment."
Humidity range in use environment		See Chapter 9, "Checking the Installation Environment."
Atmospheric pressure range in use environment		810.6 to 1013.3 hpa (0.8 to 1.0 of atmospheric pressure)
Operational noise		58 db or less
Rated power supply		See "Power supply specifications."
Maximum energy consumption		imageRUNNER ADV-C9280 PRO: 2.5kW or less imageRUNNER ADV-C9270 PRO/7270/7260: 2kW or less
Dimension		See Chapter 9, "Checking Installation Space."
Mass		Approx. 231.5 kg

T-1-7

Power supply specifications

Product name	Power supply source (number of cables)	Japan		North America		EUR		Asia		Aus	
		V (V)	I (A)	V (V)	I (A)	V (V)	I (A)	V (V)	I (A)	V (V)	I (A)
imageRUNNER ADVANCE C9280 PRO/C9270 PRO	Power outlet (1or 2 pc.)	200	15	208	15	220-240	15	220-240	15	220-240	15
		1 pc./2 pc.		1 pc.		1 pc.		1 pc.		1 pc.	
imageRUNNER ADVANCE C7270/C7260	Power outlet (1or 2 pc.)	100	15	120	20	220-240	10	220-240	10	220-240	10
		2 pc.		1 pc.		1 pc.		1 pc.		1 pc.	
Paper Deck Unit -C1	Main unit	-	-	-	-	-	-	-	-	-	-
POD Deck Light-A1	Power supply outlet (1)	100	2.4	120	2.4	230	1.2	230	1.2	230	1.2
Multi-drawer Paper Deck-A1	Power supply outlet (1)	100	4.0	120	4.0	230	2.0	230	2.0	230	2.0
Insertion Unit - H1	Power supply outlet (1)	100	1.0	120	1.0	230	1.0	230	1.0	230	1.0
Document Insertion Unit - J1	Power supply outlet (1)	-	-	120	2.8	230	2.8	230	2.8	230	2.8
Staple Finisher - K1	Power supply outlet (1)	100	2.8	120	2.8	230	2.8	230	2.8	230	2.8
Staple Finisher - L1	Main unit	-	-	-	-	-	-	-	-	-	-
Saddle Finisher - K1	Power supply outlet (1)	100	2.8	120	2.8	230	2.8	230	2.8	230	2.8
Saddle Finisher - L1	Main unit	-	-	-	-	-	-	-	-	-	-
Puncher Unit - BE1/BF1/BG1/BH1	Finisher	-	-	-	-	-	-	-	-	-	-
External 2-hole Puncher - A1	Finisher	-	-	-	-	-	-	-	-	-	-
Professional Puncher - C1	Integration Unit - B1	-	-	-	-	-	-	-	-	-	-
Professional Puncher Integration Unit - B1	Power supply outlet (1)	-	-	120	5.5	230	3.1	230	3.1	230	3.1
Paper Folding Insertion Unit - G1	Power supply outlet (1)	100	1.0	120	1.0	230	1.0	230	1.0	230	1.0
Paper Folding Unit - G1	Finisher	-	-	-	-	-	-	-	-	-	-
Inner Trimmer - A1	Finisher	-	-	-	-	-	-	-	-	-	-
Duplex Color Image Reader Unit - F1	Main unit	-	-	-	-	-	-	-	-	-	-

T-1-8

Weight - size

Product name	Width (mm)	Depth (mm)	Height (mm)	Weight Approx. (Kg)
iR ADVANCE C9280 PRO/9270 PRO/ C9060 PRO	689	932	1040	231.5
iR ADVANCE C7270/7260	689	932	1040	231.5
Duplex Color Image Reader - F1	633	603	179	27.4
POD Deck Light - A1	601	621	570	50
Multi-drawer Paper Deck-A1	950	797	1040	150
Paper Deck Unit - C1	323	583	570	29.4
Insertion Unit - H1	662	679	1242	40
Insertion Unit - J1	746	793	1407	61
Paper Folding Insertion Unit - G1	662	679	1242	76
Paper Folding Unit - G1	336	793	1190	71
Professional Puncher - C1	305	792	1040	80
Professional Puncher Integration Unit - B1	250	792	1040	40
Staple Finisher - K1	654	765	1040	61
Saddle Finisher - K1	767	765	1040	108
Staple Finisher - L1	649	656	1121	48
Saddle Finisher - L1	649	656	1121	72
Buffer Path Unit - J1	182.7	663.3	962.8	18.75
External 2-hole Puncher - A1	107	615	825	7.7
External 2/3 Hole Puncher - A1	107	615	825	7.7
External 2/4 Hole Puncher - A1	107	615	825	7.7
External 4 Hole Puncher - A1	107	615	825	7.7

T-1-9

Productivity (print speed)

Size	Mode	Paper type	Paper basis weight (g/m^2)	ImageRUNNER ADVANCE							
				C9280 PRO				C9270 PRO			
				Cassette		Manual feed		Cassette		Manual feed	
				Color	BW	Color	BW	Color	BW	Color	BW
A4 / LTR	1-sided	Plain paper	52-105	70.0	80.0	40.2		65.0	70.0	36.6	
		Thick paper	106-220	35.0	40.0	20.1		32.5	35.0	18.3	
			221-300	23.3	26.7	13.4		21.7	23.3	12.2	
	2-sided	Plain paper	52-105	70.0	80.0	35.9		65.0	70.0	31.5	
		Thick paper	106-220	35.0	40.0	17.9		32.5	35.0	15.7	
			221-300	-	-	-		-	-	-	
A3 / LDR	1-sided	Plain paper	52-105	35.0	40.0	20.7(A3) /20.1(LDR)		32.5	35.0	18.8(A3) / 18.3(LDR)	
		Thick paper	106-220	17.5	20.0	10.3(A3) /10.0(LDR)		16.2	17.5	9.4(A3) / 9.1(LDR)	
			221-300	11.6	13.3	6.9(A3) /6.7(LDR)		10.8	11.7	6.2(A3) / 6.1(LDR)	
	2-sided	Plain paper	52-105	35.0	40.0	18.4(A3) /17.9(LDR)		32.5	35.0	16.2(A3) / 15.7(LDR)	
		Thick paper	106-220	17.5	20.0	9.2(A3) /8.9(LDR)		16.2	17.5	8.1(A3) / 7.8(LDR)	
			221-300	-	-	-		-	-	-	

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Size	Mode	Paper type	Paper basis weight (g/m^2)	ImageRUNNER ADVANCE							
				C7270				C7260			
				Cassette		Manual feed		Cassette		Manual feed	
				Color	BW	Color	BW	Color	BW	Color	BW
A4 / LTR	1-sided	Plain paper	52-90	60.0	70.0	36.6		55.0	60.0	36.6	
			90-105	55.0	65.0	36.6					
		Thick paper	106-220	30.0	35.0	18.3		27.5	30.0	18.3	
			221-300	20.0	22.3	12.2		18.3	20.0	12.2	
	2-sided	Plain paper	52-90	60.0	70.0	31.5		55.0	60.0	31.5	
			90-105	55.0	65.0	31.5					
		Thick paper	106-220	30.0	35.0	15.7		27.5	30.0	15.7	
			221-300	-	-	-		-	-	-	
A3 / LDR	1-sided	Plain paper	52-90	30.0	35.0	18.8(A3)/ 18.3(LDR)		27.5	30.0	18.8(A3) / 18.3(LDR)	
			90-105	27.5	32.5	18.8(A3)/ 18.3(LDR)					
		Thick paper	106-220	15.0	17.5	9.4(A3) / 9.1(LDR)		13.7	15.0	9.4(A3) / 9.1(LDR)	
			221-300	10.0	11.7	6.2(A3) / 6.1(LDR)		9.1	10.0	6.2(A3) / 6.1(LDR)	
	2-sided	Plain paper	52-90	30.0	35.0	16.2(A3)/ 15.7(LDR)		27.5	30.0	16.2(A3) / 15.7(LDR)	
			90-105	27.5	32.5	16.2(A3)/ 15.7(LDR)					
		Thick paper	106-220	15.0	17.5	8.1(A3) / 7.8(LDR)		13.7	15.0	8.1(A3) / 7.8(LDR)	
			221-300	-	-	-		-	-	-	

T-1-11

Paper type

Usable paper types are shown on the next page and later.

For irregular-sized paper, refer to the table below.

Type	Feeding direction (mm)	Width direction (mm)
Irregular size 1-1	182.0 to 209.9	139.7 to 181.9
Irregular size 1-2	210.0 to 279.2	
Irregular size 1-3	279.3 to 432.0	
Irregular size 1-4	432.1 to 487.7	
Irregular size 2-1	182.0 to 209.9	182.0 to 210.0
Irregular size 2-2	210.0 to 279.2	
Irregular size 2-3	279.3 to 432.0	
Irregular size 2-4	432.1 to 487.7	
Irregular size 3-1	182.0 to 209.9	210.1 to 297.0
Irregular size 3-2	210.0 to 279.2	
Irregular size 3-3	279.3 to 432.0	
Irregular size 3-4	432.1 to 487.7	
Irregular size 4-1	182.0 to 209.9	297.1 to 330.2
Irregular size 4-2	210.0 to 279.2	
Irregular size 4-3	279.3 to 432.0	
Irregular size 4-4	432.1 to 487.7	
Irregular size 5	487.8 to 630.0	139.7 to 330.2

T-1-12

Pickup

Paper type (g/m^2)	Size	Multi-purpose Tray	Right deck of main unit	Left deck of main unit	Cassette 3 of main unit	Cassette 4 of main unit	POD Deck Light	Paper Deck	Multi Deck	Insertion Unit	Independent Insertion Unit
Thin paper (52 to 63) Plain paper (64 to 90, 91 to 105) Recycled paper (64 to 90, 91 to 105) Color paper (64 to 90) Thick paper (106 to 150, 151 to 220)	A4, B5, LTR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	A3, B4, A4R, 11x17, LGL, LTRR, SRA3, 12x18, 13x19	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes
	B5R, EXEC	Yes	No	No	Yes	Yes	No	No	Yes	Yes	Yes
	"A5R, STMTR, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, A-LTR A-LTRR, GLTR-R, GLTR, GLGL, AFLS, FLS Irregular size1-1, Irregular size1-2, Irregular size1-3, Irregular size1-4"	Yes	No	No	Yes	Yes	No	No	Yes	No	No
	K8, K16	Yes	No	No	Yes	Yes	No	No	No	No	Yes
	K16R	No	No	No	Yes	Yes	No	No	No	No	No
	F4A	Yes	No	No	Yes	Yes	No	No	No	No	No
	Irregular size0-1, Irregular size0-2, Irregular size5	Yes	No	No	No	No	No	No	No	No	No
	Irregular size2-1, Irregular size2-2, Irregular size2-3, Irregular size2-4, Irregular size3-1, Irregular size3-2, Irregular size3-3, Irregular size3-4, Irregular size4-1, Irregular size4-2, Irregular size4-3, Irregular size4-4	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes
	EXEC-R	No	No	No	No	No	No	No	No	No	No
Embossed paper (106 to 150, 151 to 220) Thick paper (221 to 256) Embossed paper (221 to 256) (106 to 150, 151 to 220, 221 to 256) 2-side coated paper (106 to 150, 151 to 220, 221 to 256)	A3, B4, A4R, A4, B5, 11x17, LGL, LTR, LTRR, SRA3, 12x18, 13x19	Yes	No	No	No	No	Yes	No	Yes	Yes	Yes
	B5R EXEC	Yes	No	No	No	No	No	No	Yes	Yes	Yes
	"A5R, STMTR, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, A-LTR A-LTRR, GLTR-R, GLTR, GLGL, AFLS, FLS, Irregular size1-1, Irregular size1-2, Irregular size1-3, Irregular size1-4"	Yes	No	No	No	No	No	No	Yes	No	No
	K8 K16	Yes	No	No	No	No	No	No	No	No	Yes
	F4A, Irregular size0-1, Irregular size0-2, Irregular size5	Yes	No	No	No	No	No	No	No	No	No
	Irregular size2-1, Irregular size2-2, Irregular size2-3, Irregular size2-4, Irregular size3-1, Irregular size3-2, Irregular size3-3, Irregular size3-4, Irregular size4-1, Irregular size4-2, Irregular size4-3, Irregular size4-4	Yes	No	No	No	No	No	No	Yes	No	Yes
	EXEC-R K16R	No	No	No	No	No	No	No	No	No	No

Paper type (g/m^2)	Size	Multi-purpose Tray	Right deck of main unit	Left deck of main unit	Cassette 3 of main unit	Cassette 4 of main unit	POD Deck Light	Paper Deck	Multi Deck	Insertion Unit	Independent Insertion Unit
Thick paper (257 to 300) Embossed paper (257 to 300) 1-side coated paper (257 to 300) 2-side coated paper (257 to 300)	A3, B4, A4R, A4, B5, 11x17, LGL, LTR, LTRR, SRA3, 12x18, 13x19	Yes	No	No	No	No	Yes	No	Yes	No	Yes
	B5R, EXEC, Irregular size2-1, Irregular size2-2, Irregular size2-3, Irregular size2-4, Irregular size3-1, Irregular size3-2, Irregular size3-3, Irregular size3-4, Irregular size4-1, Irregular size4-2, Irregular size4-3, Irregular size4-4	Yes	No	No	No	No	No	No	Yes	No	Yes
	A5R, STMTR, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, A-LTR, A-LTRR, GLTR-R, GLTR, GLGL, AFLS, FLS, Irregular size1-1, Irregular size1-2, Irregular size1-3, Irregular size1-4	Yes	No	No	No	No	No	No	Yes	No	No
	K8 K16	Yes	No	No	No	No	No	No	No	No	Yes
	F4A, Irregular size0-1, Irregular size0-2, Irregular size5	Yes	No	No	No	No	No	No	No	No	No
	EXEC-R K16R	No	No	No	No	No	No	No	No	No	No
Transparency	A4 LTR	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
	A4R LTRR	Yes	No	No	Yes	Yes	Yes	No	Yes	No	No

Paper type (g/m^2)	Size	Multi-purpose Tray	Right deck of main unit	Left deck of main unit	Cassette 3 of main unit	Cassette 4 of main unit	POD Deck Light	Paper Deck	Multi Deck	Insertion Unit	Independent Insertion Unit
Label paper (151 to 180)	A3, B4, A4R, A4, B5, 11x17, LGL, LTR, LTRR, SRA3, 12x18, 13x19	Yes	No	No	No	No	Yes	No	Yes	No	No
	"B5R, A5R, STMTR, EXEC, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, A-LTR, A-LTRR, GLTR-R, GLTR GLGL, AFLS, FLS, Irregular size1-1, Irregular size1-2, Irregular size1-3, Irregular size1-4, Irregular size2-1, Irregular size2-2, Irregular size2-3, Irregular size2-4, Irregular size3-1, Irregular size3-2, Irregular size3-3, Irregular size3-4, Irregular size4-1, Irregular size4-2, Irregular size4-3, Irregular size4-4"	Yes	No	No	No	No	No	No	Yes	No	No
	K8, K16, F4A, Irregular size0-1, Irregular size0-2, Irregular size5	Yes	No	No	No	No	No	No	No	No	No
	EXEC-R, K16R	No	No	No	No	No	No	No	No	No	No

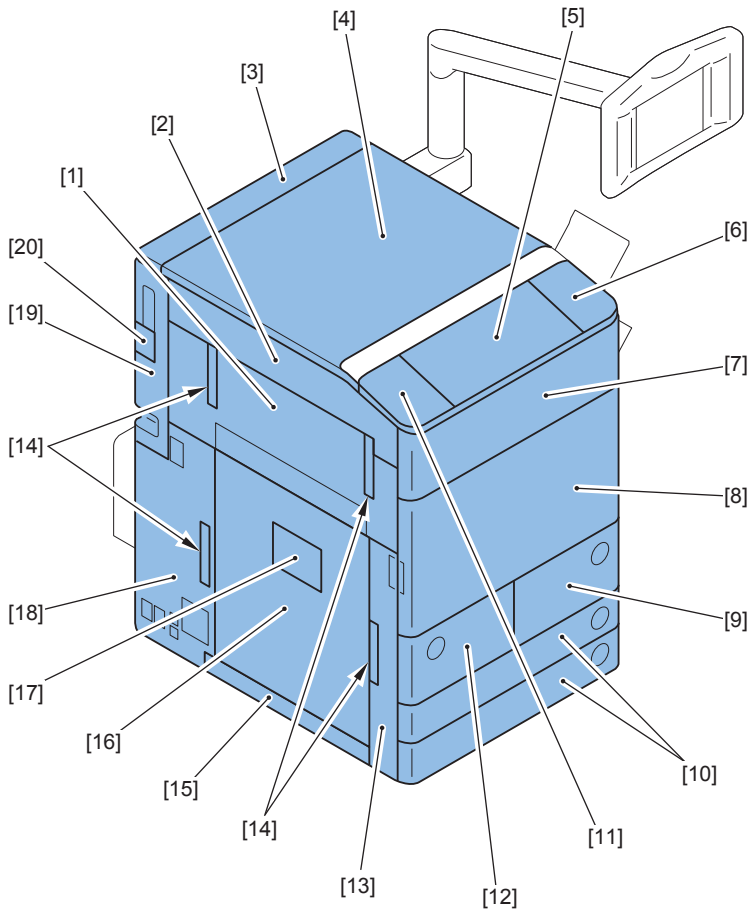
Paper type (g/m^2)	Size	Multi-purpose Tray	Right deck of main unit	Left deck of main unit	Cassette 3 of main unit	Cassette 4 of main unit	POD Deck Light	Paper Deck	Multi Deck	Insertion Unit	Independent Insertion Unit
Bond paper (64 to 90, 91 to 105)	A4, B5	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
	A3, B4, A4R, SRA3, 12x18, 13x19	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes
	11x17, LGL, LTRR	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes
	"A5R, STMTR, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, A-LTR, A-LTRR, GLTR-R, GLTR, GLGL, AFLS, FLS, Irregular size1-1, Irregular size1-2, Irregular size1-3, Irregular size1-4 "	Yes	No	No	Yes	Yes	No	No	Yes	No	No
	B5R, Irregular size2-1, Irregular size2-2, Irregular size2-3, Irregular size2-4, Irregular size3-1, Irregular size3-2, Irregular size3-3, Irregular size3-4, Irregular size4-1, Irregular size4-2, Irregular size4-3, Irregular size4-4	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes
	LTR	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
	EXEC	Yes	No	No	Yes	Yes	No	No	Yes	Yes	Yes
	K8, K16	Yes	No	No	Yes	Yes	No	No	No	No	Yes
	F4A	Yes	No	No	Yes	Yes	No	No	No	No	No
	Irregular size0-1, Irregular size0-2, Irregular size5	Yes	No	No	No	No	No	No	No	No	No
	K16R	No	No	No	Yes	Yes	No	No	No	No	No
	EXEC-R	No	No	No	No	No	No	No	No	No	No
Tab paper (151 to 220)	A4,LTR	No	No	No	Yes	Yes	No	No	Yes	Yes	Yes
Punch paper (64 to 90)	A4 LTR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Postcard	Postcard, double (2-pane) postcard, 4-pane postcard	Yes	No	No	No	No	No	No	No	No	No
Envelope	COM10, Monarch, ISO-C5, ISO-B5, DL, K2 , N3, Y0, Irregular size 1-1 to 4-4	Yes	No	No	No	No	No	No	No	No	No

T-1-13

Name of Parts

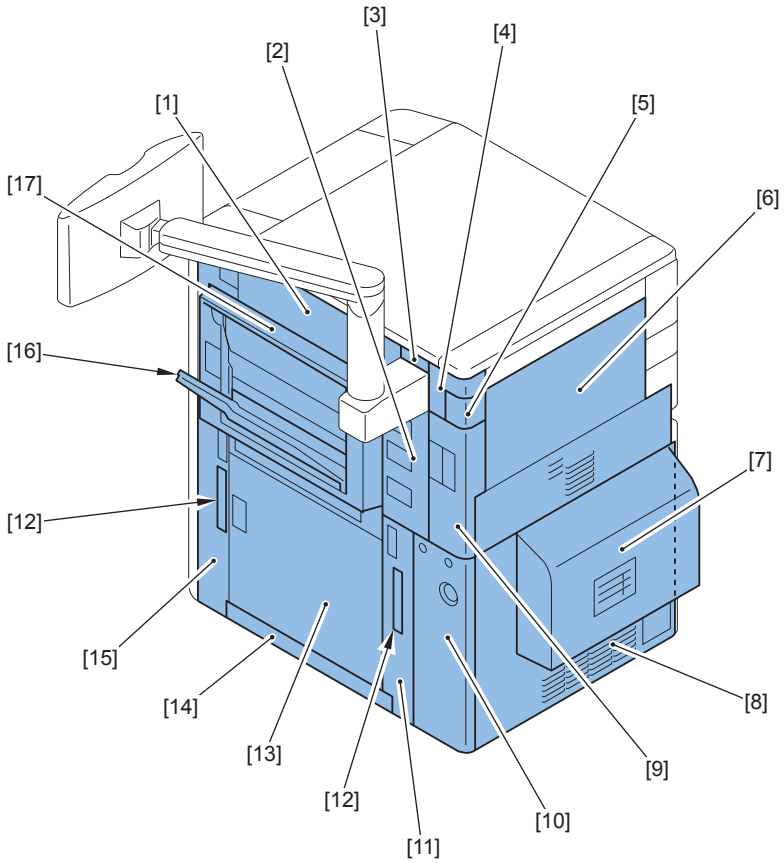
External View

Outer Covers



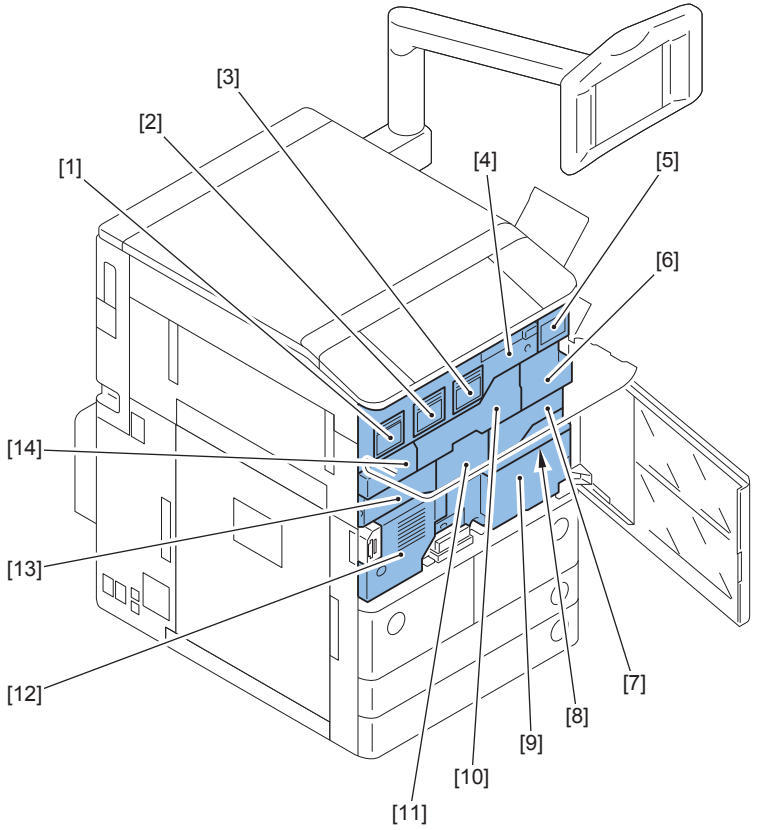
F-1-14

[1] Left Middle Cover
[2] Left Upper Cover
[3] Box Upper Cover
[4] Upper Cover
[5] Upper Middle Cover
[6] Upper Right Cover
[7] Front Upper Cover
[8] Front Cover
[9] Deck Right Cover
[10] Cassette Front Cover
[11] Upper Left Cover
[12] Deck Left Cover
[13] Left Lower Cover 2
[14] Handle Cover
[15] Left Lower Cover 1
[16] Reverse Door Cover
[17] Reverse Door Face Cover
[18] Left Lower Cover 3
[19] Box Left Cover
[20] Box Left Connector Cover



F-1-15

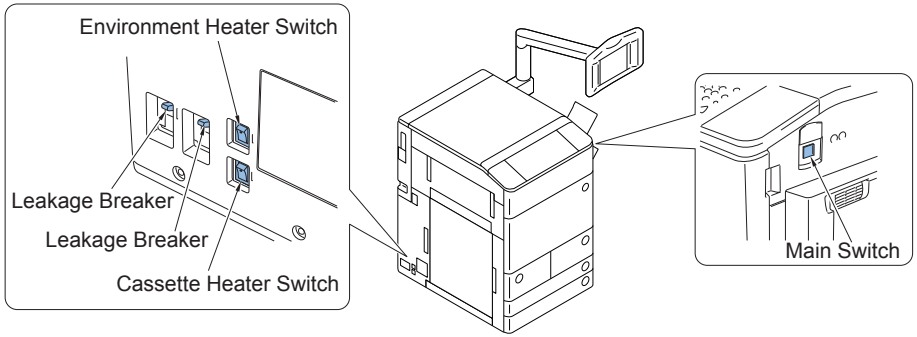
[1] Right Upper Cover 1
[2] Right Middle Cover
[3] Right Upper Cover 2
[4] Box Right Cover
[5] Box Right Connector Cover
[6] Rear Upper Cover
[7] Noise Reduction Cover
[8] Rear Lower Cover
[9] HDD Cover
[10] Waste Toner Container Cover
[11] Right Lower Cover 3
[12] Handle Cover
[13] Vertical Path Cover
[14] Right Lower Cover 1
[15] Right Lower Cover 2
[16] Multi-purpose Tray
[17] Multi-purpose Tray Cover



F-1-16

[1] Toner Container Replacement Cover (Y)
[2] Toner Container Replacement Cover (M)
[3] Toner Container Replacement Cover (C)
[4] Toner Container Replacement Unit Inner Cover
[5] Toner Container Replacement Cover (Bk)
[6] Front Inner Handle Right Cover
[7] ITB Inner Right Cover
[8] Fixing Feed Right Upper Inner Cover
[9] Fixing Feed Right Lower Inner Cover
[10] Process Unit Inner Cover
[11] ITB Inner Middle Cover
[12] Fixing Feed Left Inner Cover
[13] ITB Inner Left Cover
[14] Front Inner Handle Left Cover

Switches, I/F, others



F-1-17

This machine is equipped with the Main Power Switch, Control Panel Power Switch and Environment Heater Switch.

[1] Main Power Switch

This switch is used to turn OFF / ON the power of host machine.

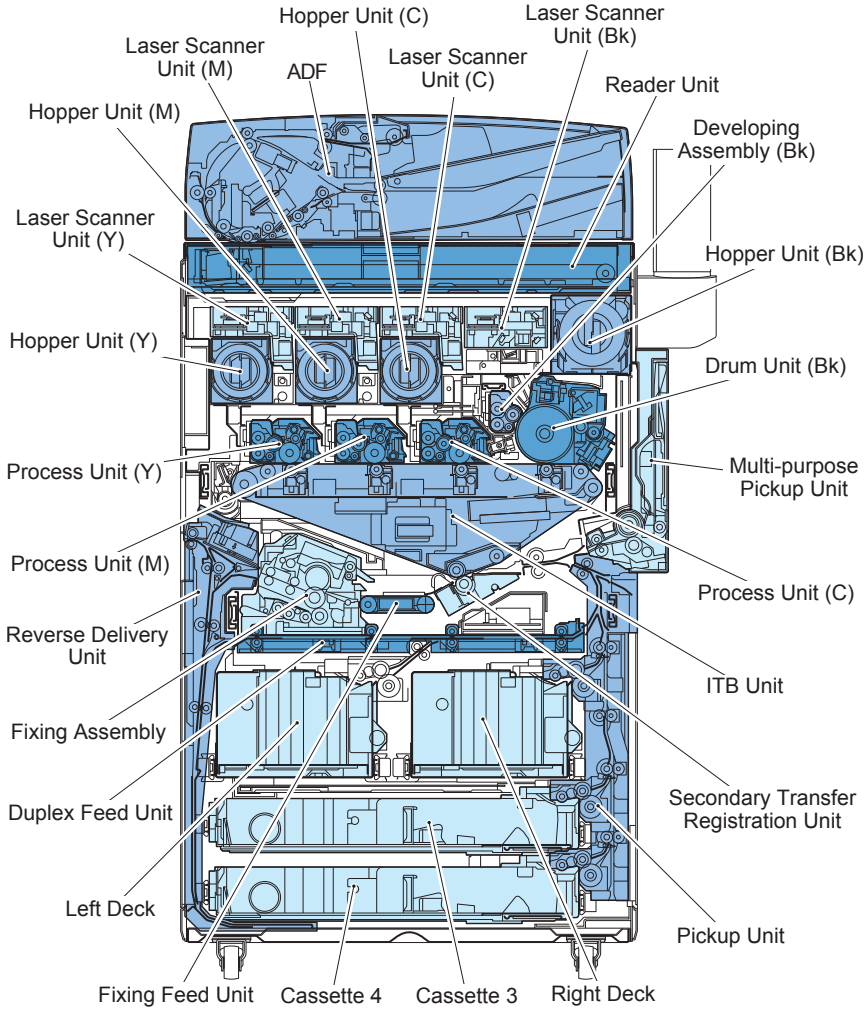
[2] Control Panel Power Switch

This switch is to shift the machine to power-save mode or to restore it to normal mode.

[3] Environment Heater Switch

Environment Heater Switch is to supply and shut the power to Cassette Heater and Reader Heater.

Sectional View



F-1-18

Operation

■ Power Supply Switches

● Types of power supply switche

The machine has three types of power switches, the main power switch, control panel power switch and drum heater power switch.
During normal operation (excluding sleep mode), power is supplied by turning the power switch ON.
Environment heater switch is to supply and stop the power to the drum heater, cassette heater and reader heater.

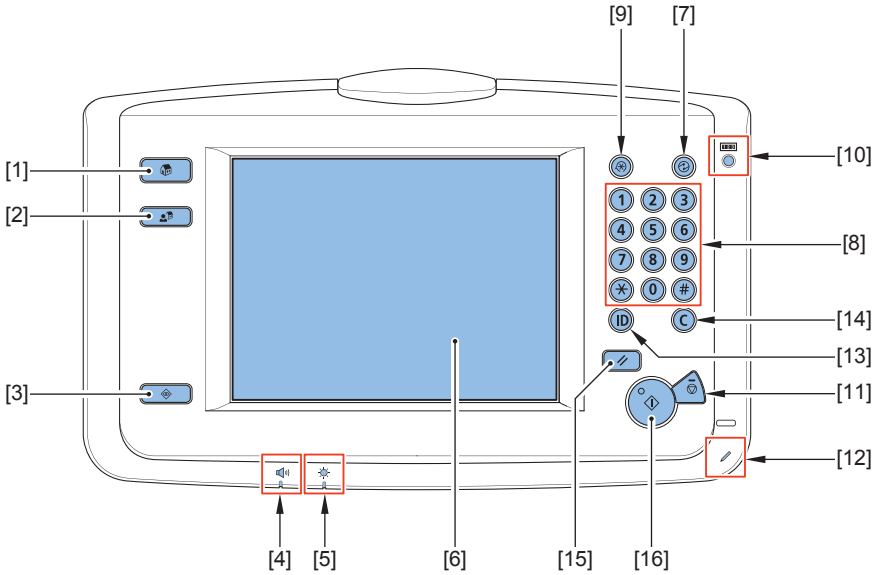
● How to power ON/ OFF, and precautions to be observed (main unit/ optional devices)

- While progress bar is kept displayed at power-on, HDD access is processing; thus, never turn OFF the Main Power Switch.
- To turn off the power, turn off the Main Power Switch. (Conventional shutdown sequence operation is not required.)
- After power-OFF (after the Main Power Switch is turned OFF), do not reactivate the Main Power Switch until a screen disappears.
  Do not turn OFF the power while download is processing.

Control Panel

Control Panel

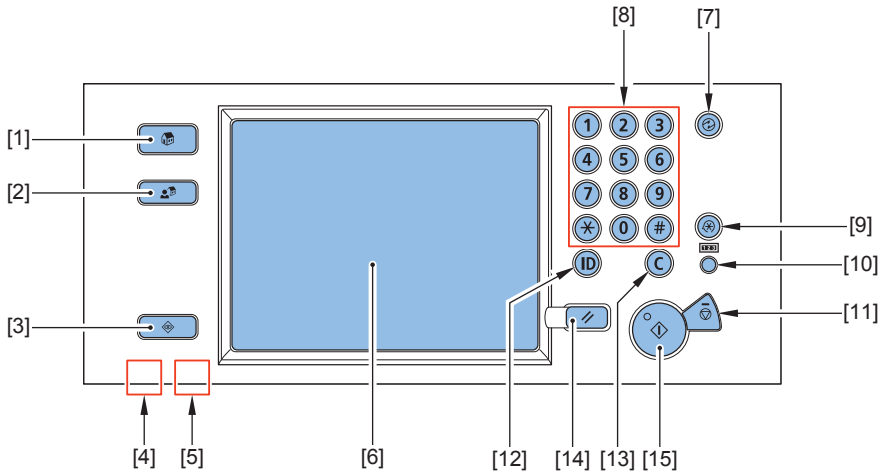
imageRUNNER ADVANCE C9200 Series



F-1-19

[1] Main Menu Key
[2] Custom Menu Key
[3] Status Check/Stop Key
[4] FAX Volume Adjustment Key
[5] Screen Brightness Adjustment Dial
[6] Touch Panel Display
[7] Energy Saver Key
[8] Keypad
[9] Settings/Registration Key
[10] Counter Check Key
[11] Stop Key
[12] Operation Pen
[13] ID (authentication) Key
[14] Clear Key
[15] Reset Key
[16] Start Key

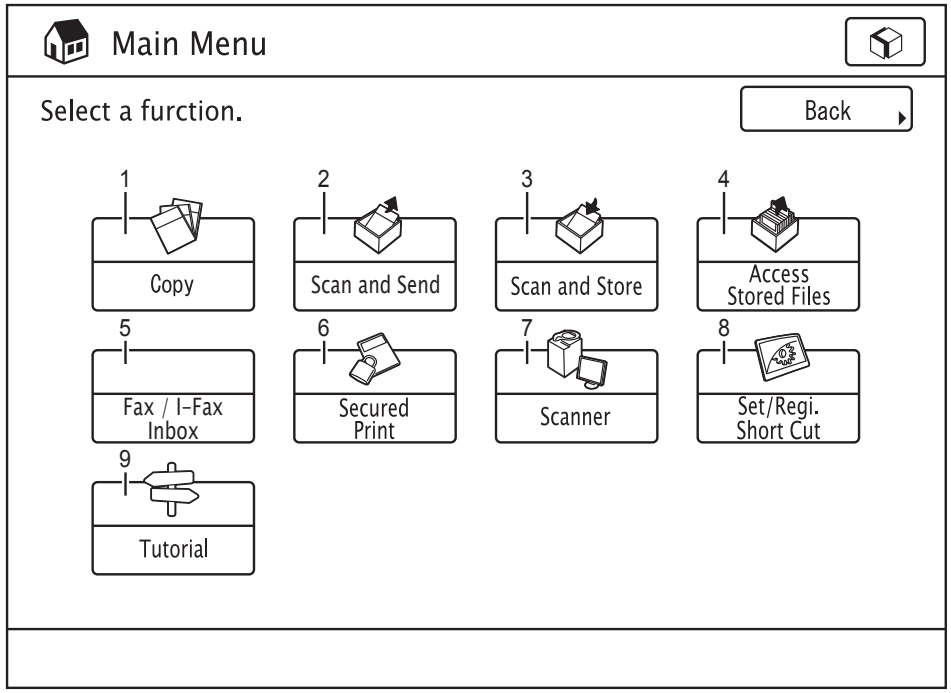
imageRUNNER ADVANCE C7200 Series



F-1-20

[1] Main Menu Key
[2] Custom Menu Key
[3] Status Check/Stop Key
[4] FAX Volume Adjustment Key
[5] Screen Brightness Adjustment Dial
[6] Touch Panel Display
[7] Energy Saver Key
[8] Keypad
[9] Settings/Registration Key
[10] Counter Check Key
[11] Stop Key
[12] ID (authentication) Key
[13] Clear Key
[14]] Reset Key
[15] Start Key

Main Menu



F-1-21

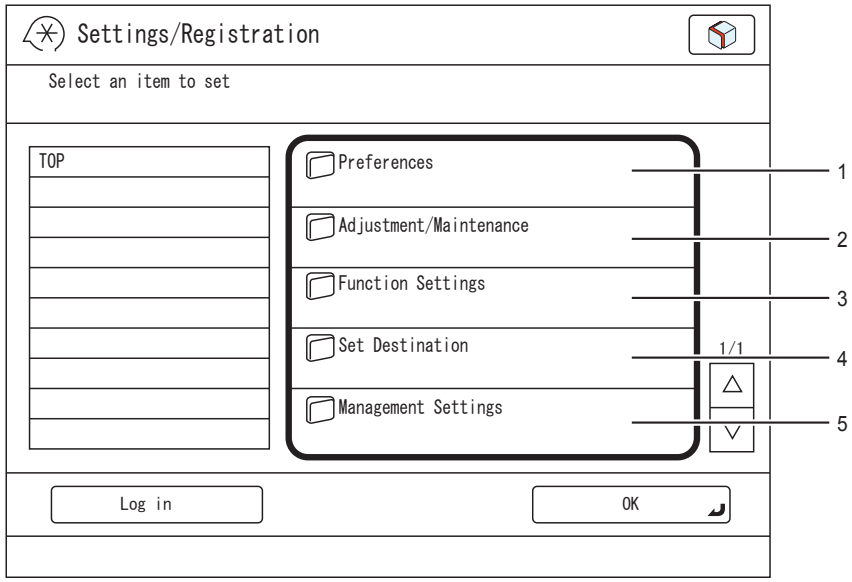
[1] Copy
[2] Scan and Send
[3] Scan and Store
[4] Access Stored Files
[5] Fax/I-Fax Inbox
[6] Secured Print
[7] Scanner
[8] Set/Regi. Short Cut
[9] Tutorial

Difference of Main menu

iRC 5180/5185 Series	iR ADVANCE C9280 PRO/9270 PRO/7270/7260 Series
Copy	Copy
Send	Scan and Send
Mail BOX	Scan and Store (New)
	Access Stored Files (New)
	Fax/I-Fax Inbox
Menu change key	-----
Print Job	Secured Print
Scan	Scanner
-----	Set/Regi. Short Cut (New)
(Help)	Tutorial

T-1-14

Settings/Registration Menu



F-1-22

[1] Preferences
[2] Adjustment/Maintenance
[3] Function Settings
[4] Set Destination
[5] Management Settings

Difference of Settings/Registration menu

iRC 5180/5185 Series	iR ADVANCE C9280 PRO/9270 PRO/7270/7260 Series
Common Settings	Preferences
Timer Settings	
Adjustment/ Cleaning	Adjustment/Maintenance
System Settings	Set Destination
Report Settings	Function Settings
Copy Settings	
Communication Settings	
Mail Box Settings	
Printer Settings	
Address Book Settings	Management Settings

T-1-15

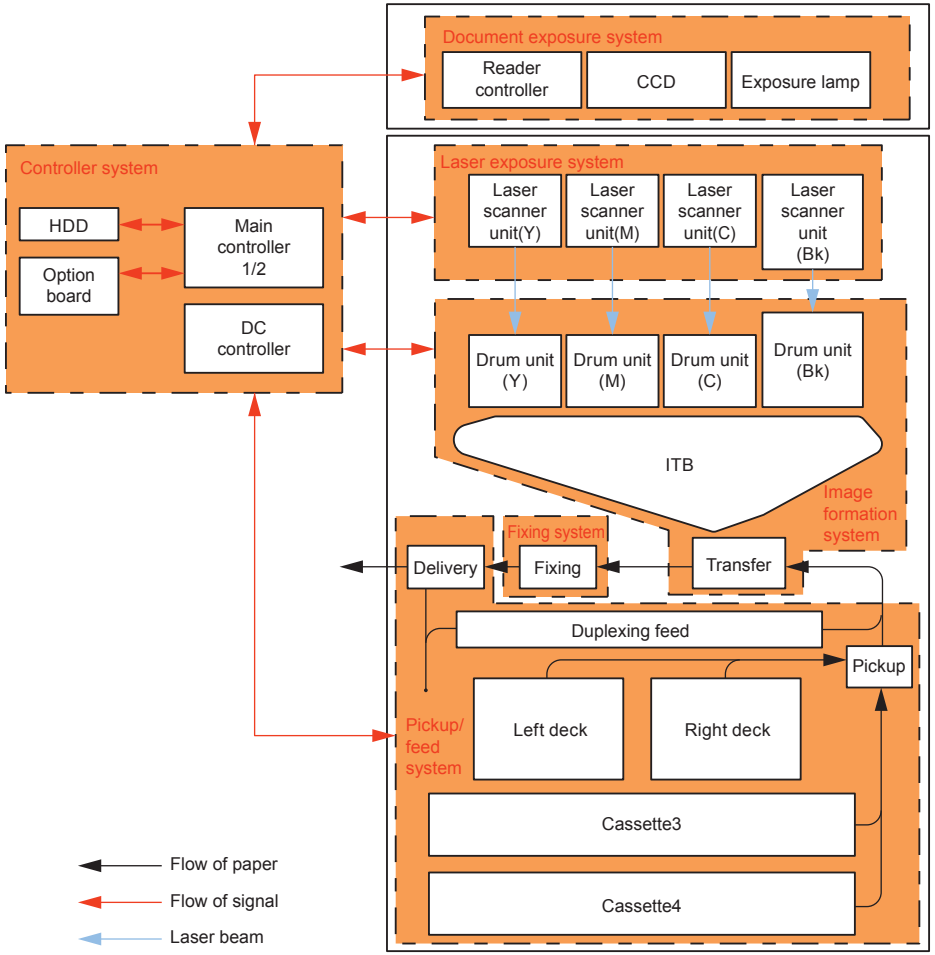
2 Technology

- Basic Configuration
- Controller System
- DCM
- Laser Exposure System
- Image Formation System
- Fixing System
- Pickup / Feed System
- External and Controls
- MEAP
- Embedded RDS
- Updater

Basic Configuration

Functional Configuration

The machine may broadly be divided into the following functional system blocks; document exposure system block, controller system block, laser exposure system block, image formation system block, fixing system block and pickup/feed system block.



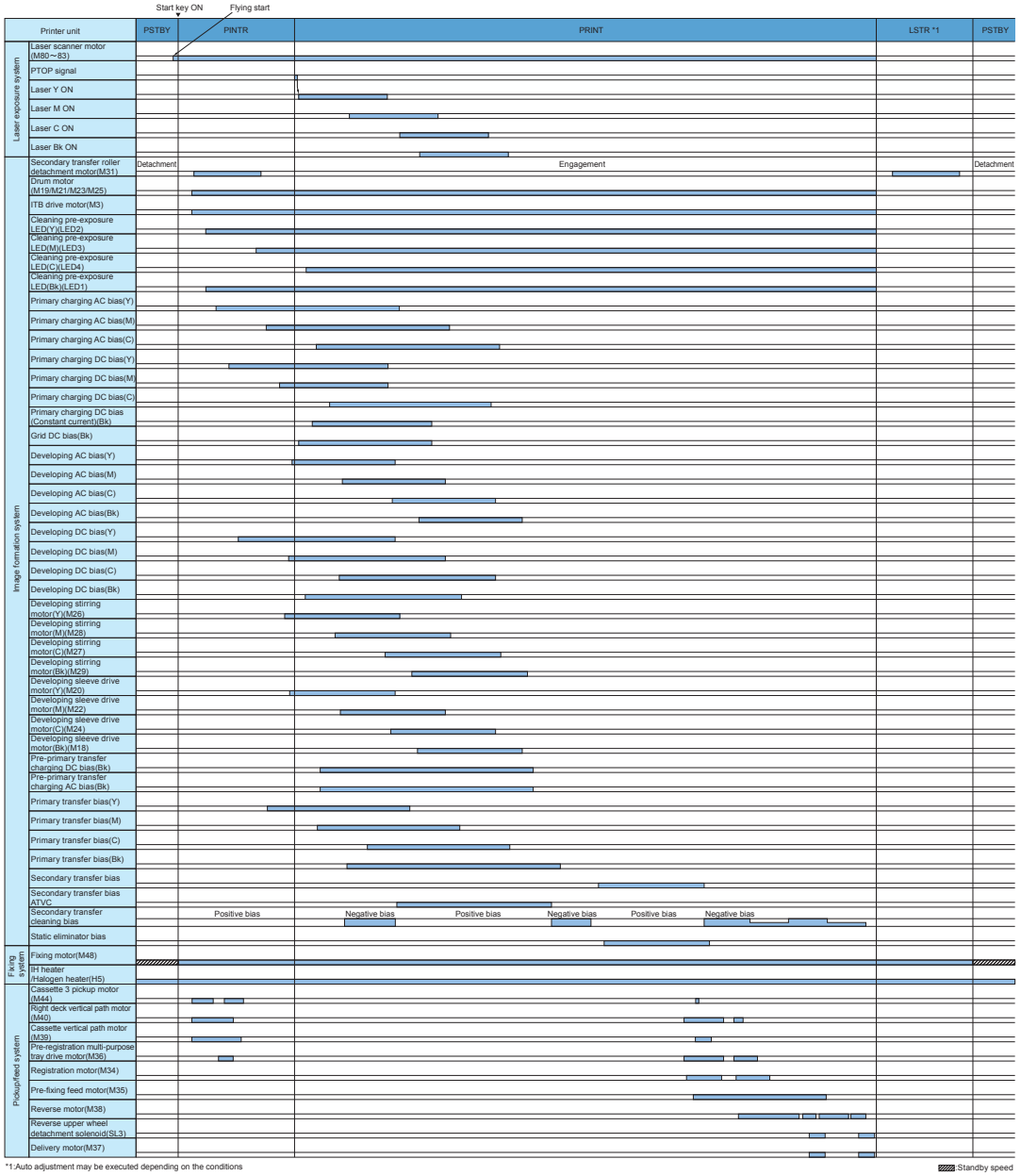
F-2-1

Basic Sequence

Basic sequence at power ON

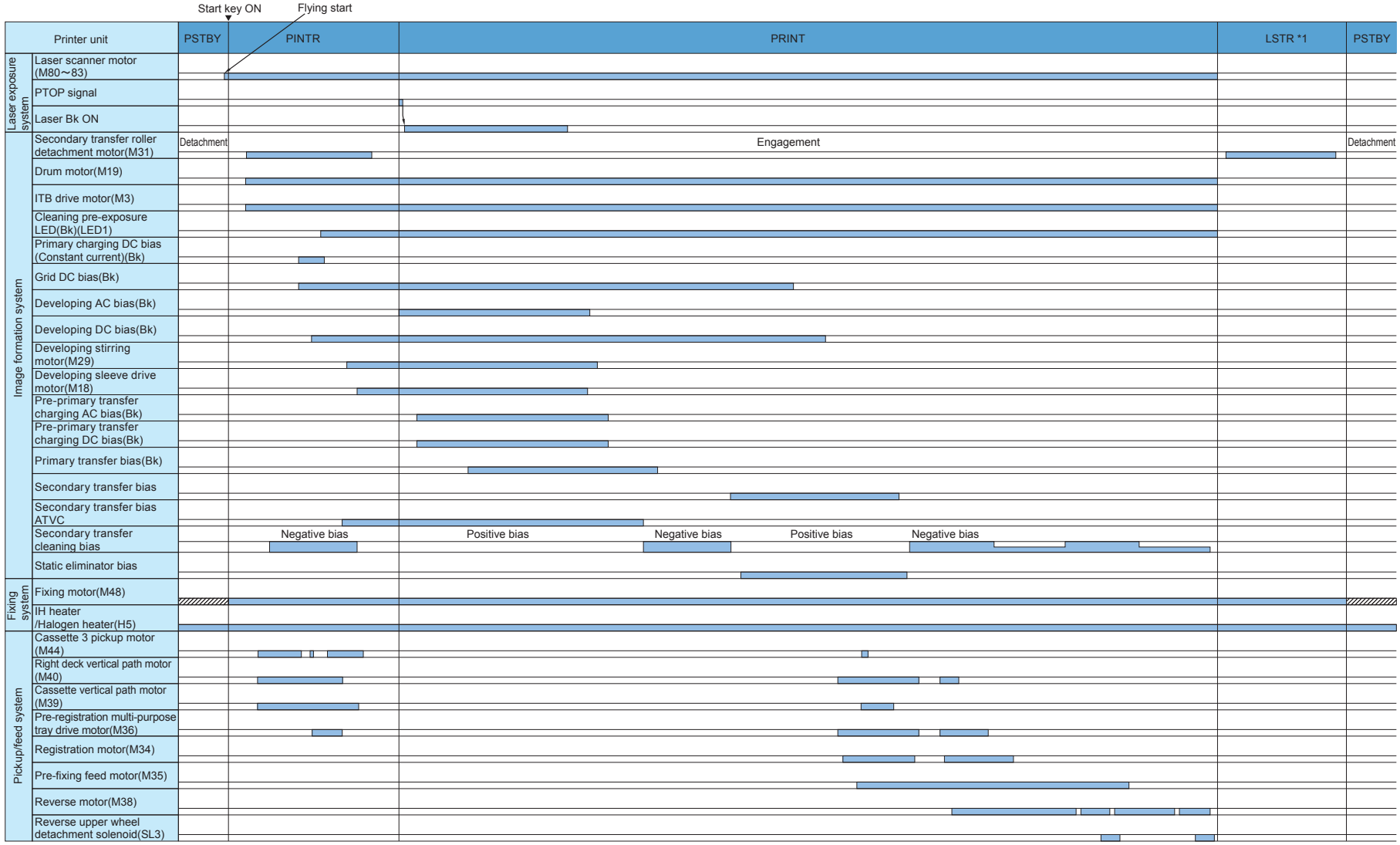
F-2-2

■ Basic sequence at printing <Condition:Full color, Cassette 3, A4 1-sided (1 sheet)>



F-2-3

■ Basic sequence at power ON <Condition:Monochrome, Cassette 3, A4 1-sided (1 sheet)>



*1:Auto adjustment may be executed depending on the conditions

:Standby speed

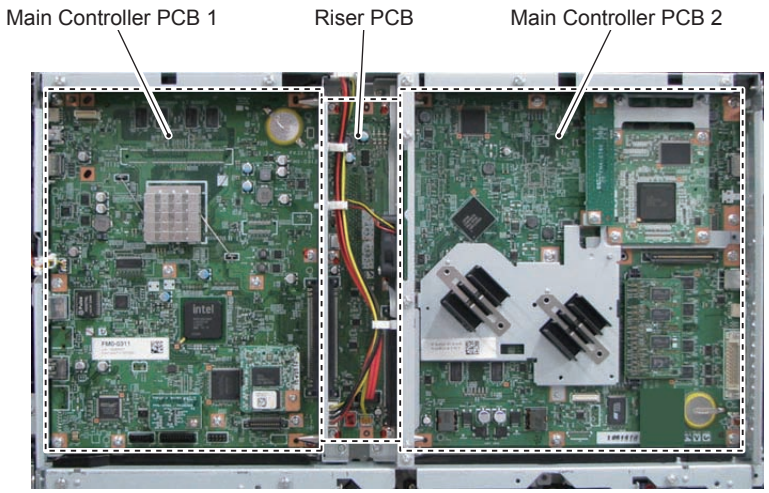
F-2-4

Controller System

Overview

Features

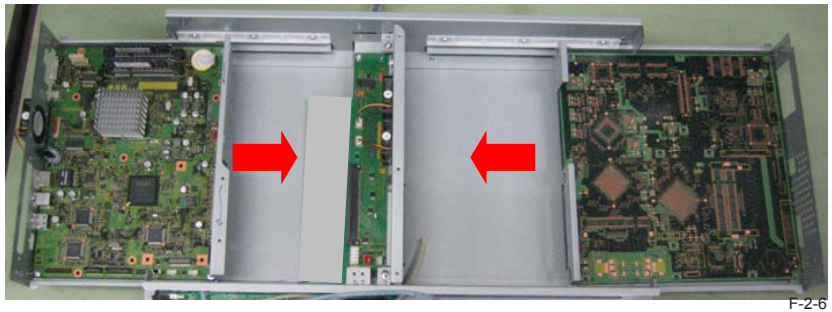
Using a new controller enables high speed PDL processing, high image quality and high functionality.



F-2-5

Main controller PCB 1 controls the entire system. Main controller PCB 2 mainly controls image processing.

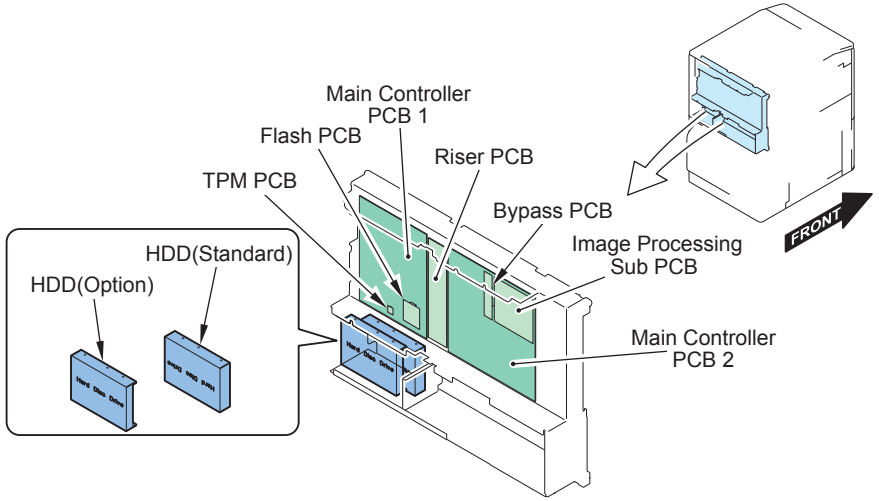
Main controller PCBs 1 and 2 are connected through the riser PCB.
This configuration improves installability / removability of the main controller PCBs. (Slot-in / out)



F-2-6

Specifications/configuration

PCBs



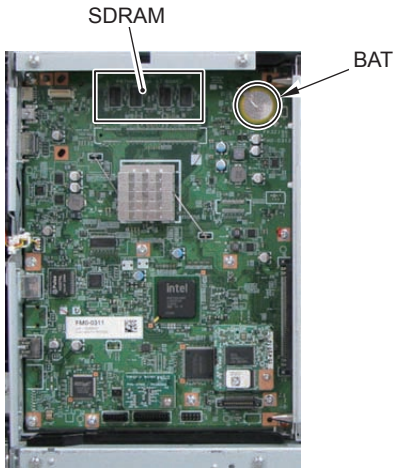
F-2-7

Parts name	Function, specifications, features
Main controller PCB 1	CPU: 1.66 GHz, Control of the entire system Various controls (memory, control panel, electric power, voice), I/Fs (PCI, USB (host), RTC
Flash PCB	Boot program
TPM PCB	To generate and save encryption key Available only when TPM settings is ON: Management Settings > Data Management > TPM Settings (default: OFF) Not available with China models
Main controller PCB 2	CPU: 400 MHz, Image control Various image processing (color space conversion, enlarge, reduction, rotation, composition, compression, rasterizing, resolution conversion, image binarization), delay memory control between drums, HDD control, I/Fs (reader, FAX, USB (device))
Image Processing Sub PCB	Image processing
Bypass PCB	Internal bus connection Remove this PCB when using imagePASS-A2 (to be attached to the main unit) and install the open I/F PCB.
Riser PCB	I/F (main controller 1 - 2, main controller - HDD, main controller - DC controller)
HDD	2.5 inch SATA I/F Standard: 160 GB (80G usable area) Up to 2 HDDs can be mounted in the case of mirroring configuration. BOX data, Address book, security information (password, certificate) Op.: 2.5 inch / 160 GB HDD-G1, 2.5 inch / 1 TB HDD-H1

T-2-1

Memory

Main controller PCB 1

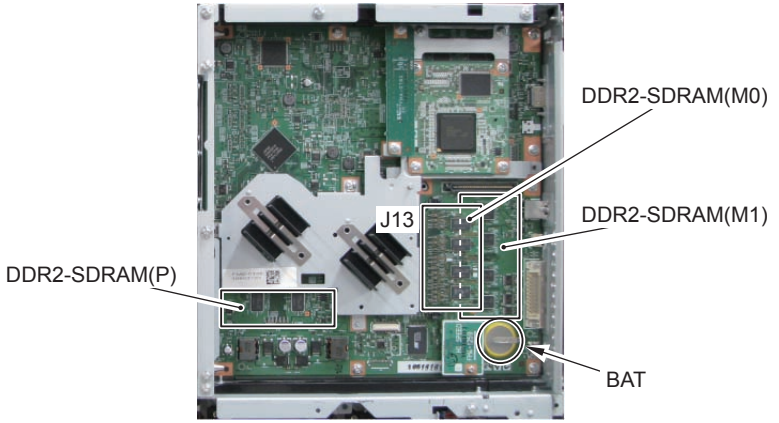


F-2-8

Parts name	Function, specifications, features
SDRAM	2 slot/1 GB (standard) J2031: 512 MB J2032: 512 MB Clock frequency: 333 MHz Used for saving image, program data
Lithium battery (BAT1))	For RTC Life: approx. 10 years

T-2-2

Main controller PCB 2



F-2-9

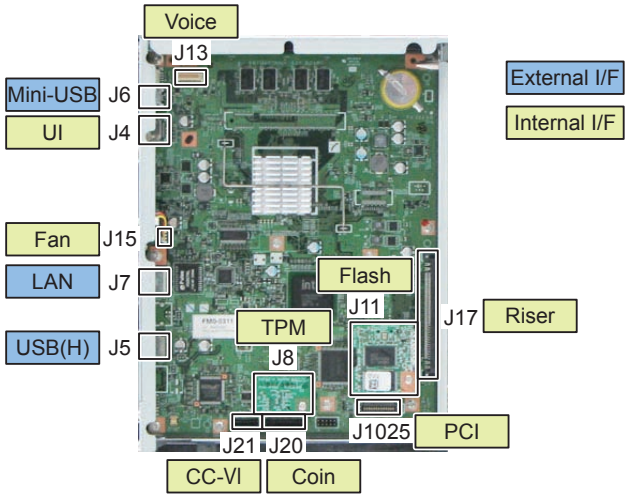
Parts name	Function, specifications, features
DDR2-SDRAM (M1)	1 GB (standard) / clock frequency: 200 MHz Rasterizing, rendering, resolution conversion, coding / decoding
DDR2-SDRAM (M0)	512 MB (standard / Op.*) / clock frequency: 200 Hz Product name: Additional Memory Type D (512 MB) Rasterizing, rendering, resolution conversion, coding / decoding To be used when using the following options: PS Printer Kit-AR1, Direct Print Kit (for PDF / XPS)-H1, imagePASS-A2, ColorPASS-GX400
DDR2-SDRAM (P)	512 MB (standard) / clock frequency: 200MHz Print image processing, delay processing between drums
SRAM	16 Mbit To save data in Settings / Registration Mode / Service Mode and image data management information in HDD
Lithium battery (BAT1)	For SRAM backup, Life: approx. 10 years

T-2-3

* The capacity differs according to the location or model

I/F, connector

Main controller PCB 1



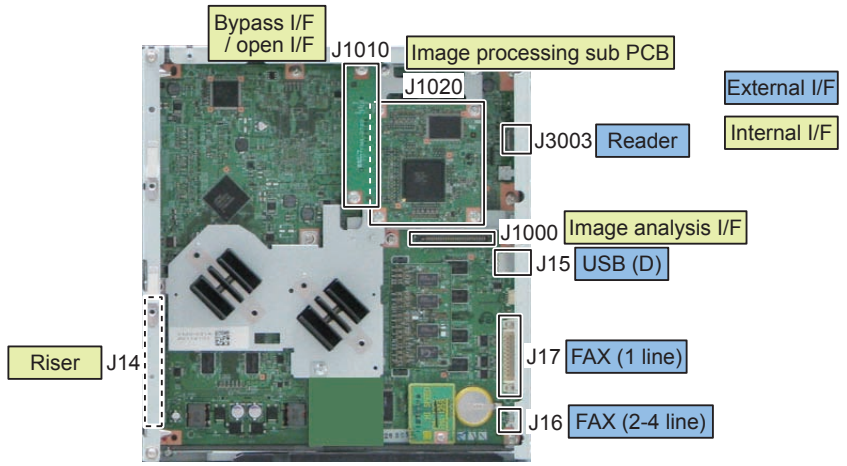
F-2-10

No.	Function, specifications	No.	Function, specifications
J13	Voice I/F (Op.)	J11	Flash PCB I/F
J4	Control panel I/F	J5	USB I/F (Host) *1 For MEAP, For USB keyboard (Op.)
J6	Mini-USB I/F (Op.) Connect USB Device Port-B1	J8	TPM PCB I/F
J15	Fan I/F	J1025	PCI expansion PCB I/F (Op.)
J7	LAN I/F 1000BASE-T / 100BASE-TX / 10BASE-T Also to be used as I/F for imagePASS-B1 / ColorPASS-GX400 (Op.)	J21	I/F for control interface kit (Op.)
		J20	I/F for card reader, I/F for serial interface kit, I/F for coin manager (all Op.)
J17	Riser PCB I/F		

T-2-4

*1: There is 1 port on the control panel as well

Main controller PCB 2



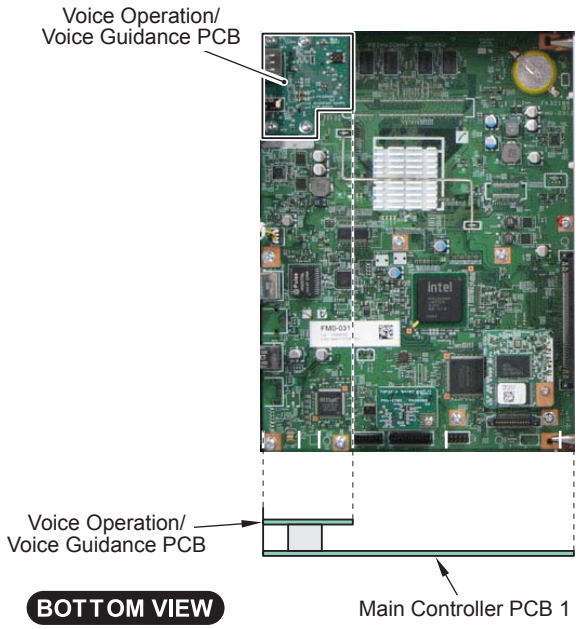
F-2-11

Jack No.	Function, specifications
J14	Riser PCB I/F
J16	Mini-USB I/F for 2 to 4-lines FAX
J17	FAX-USB I/F for 1-line FAX Product name: Advanced G3 FAX Board-AE1
J1000	Image analysis PCB I/F Product name: Image Data Analyzer Board-A1
J1010	Bypass PCB I/F Mount the open I/F PCB when using ColorPASS-GX300 / imagePASS-B1
J3003	Reader I/F
J1020	Image processing sub PCB

T-2-5

Function expansion options

Main controller PCB1

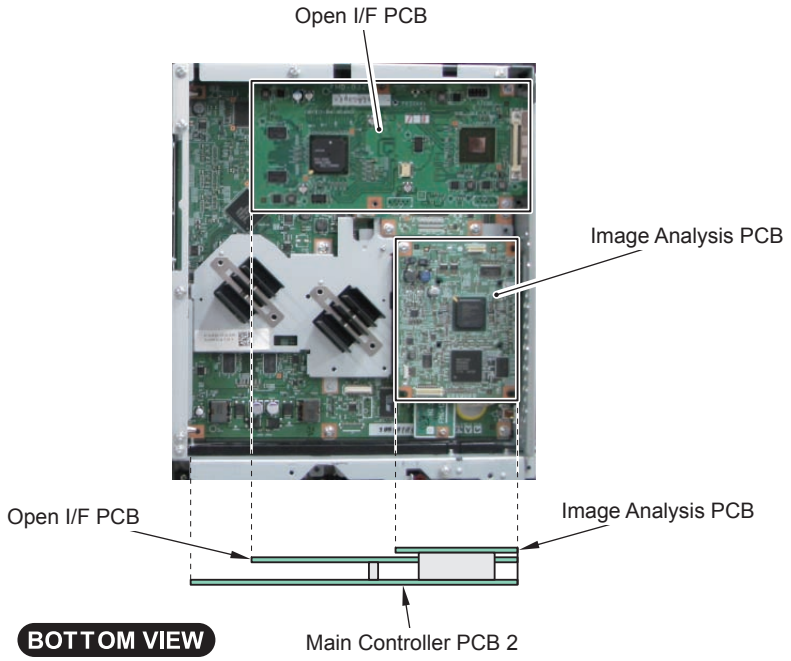


F-2-12

Name	Function, specifications, features
Voice Recognition PCB Voice Guidance PCB	Voice Operation Kit, Voice Guidance Kit (for non-Japanese models only)
IPSec PCB	Excluded from the option configuration because it has been installed on the Main Controller PCB as standard.

T-2-6

Main controller PCB 2



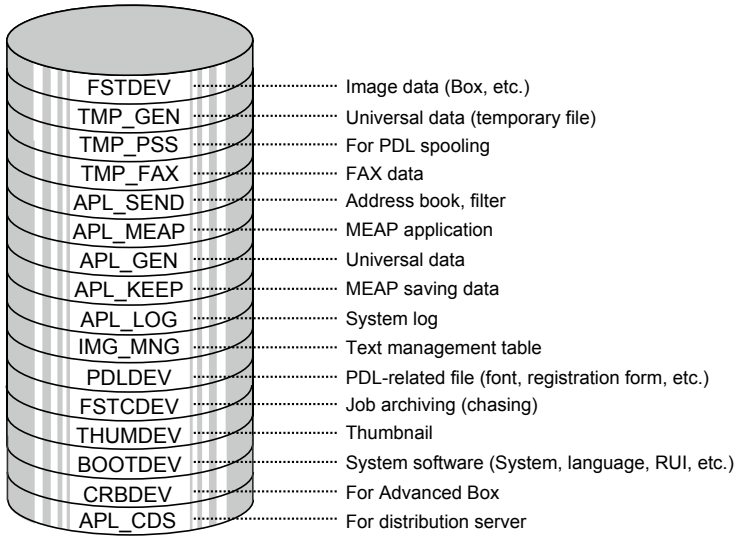
F-2-13

Name	Function, specifications, features
Open I/F PCB F link PCB (main) F link PCB (sub)	imagePASS-B1 / ColorPASS-GX300
Image analysis PCB	Product name: Image Data Analyzer Board-A1 Scan protection for output original (Copy / SEND / BOX)

T-2-7

HDD

The partitions for Advanced Box and the distribution server are added.
Advanced Box area can be increased by installing the high-capacity HDD option.



F-2-14

Boot sequence

F-2-15

NOTE :
Due to the high speed startup, the progress bar and the activating PCB are not synchronized.
For this reason, the progress bar cannot be utilized for troubleshooting.
See the following error code list for the troubleshooting.

Related Error Codes (major error codes):

Error Code		Error description
E602		Error in HDD
	0001	Failure in recognizing HDD Boot partition (BOOTDEV) is not found at startup.
	0002	There is no system software for the main CPU.
	0006	There is no system software for the sub CPU.
E604		Failure in memory (main controller PCB 1)
	1024	Capacity shortage of DDR2-SDRAM (1GB required)
E613		Failure in memory (main controller PCB 2)
	1024	Capacity shortage of DDR2-SDRAM (M0, M1) (1GB required)
	1536	Capacity shortage of DDR2-SDRAM (M0, M1) (1.5GB required)
E748		Error in board (Flash PCB)
	2010	IPL (Initial Program Loader) is not found.
	2011	OS is not found.

T-2-8

Shutdown sequence

Before turning OFF the main power switch, it is necessary to perform HDD completion processing (to prevent damage on the HDD), cooling of the internal printer (to prevent fixed toner due to high temperature) and exhaust (to prevent smeared image due to chemical reaction of ozone in the machine and photosensitive drum). This sequential processing is called “shutdown sequence” and was executed on the legacy models manually (by holding down the power supply switch on the Control Panel for a specific duration).

When the main power switch is turned OFF on the main body, Main Controller PCB 1 detects this operation and then the shutdown sequence starts / executes automatically.

In addition, hardware shutdown sequence exists. If shutdown sequence is not executed normally due to occurrence of software trouble, the machine is shut down in 110 seconds at a maximum by the timer in the AC Driver PCB. If it is not shut down within 110 seconds, failure of the AC Driver PCB is suspected.

Controls

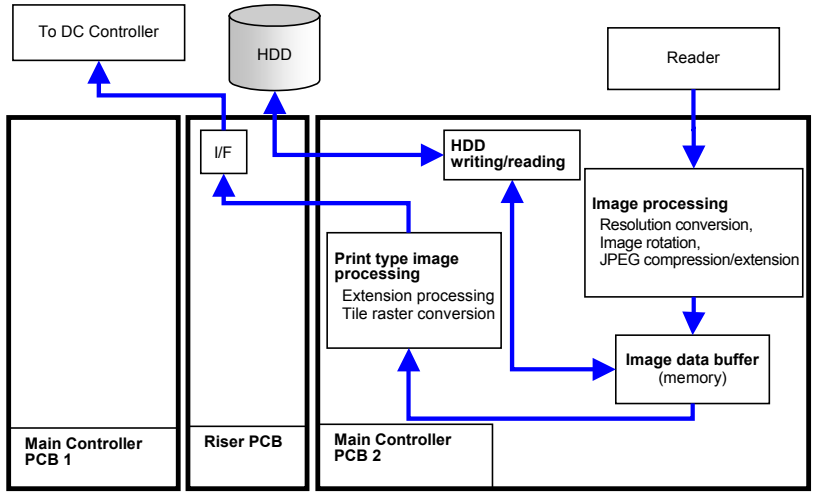
Overview

Item	Control Detail	Reference
Image processing control	Convert the image data input from the external device or reader unit into the video data and send it to DC controller.	p. 2-12
Backup battery	Data backup battery in case of power failure or disconnection of power plug.	p. 2-13
Power save function	Reduce the power consumption at standby mode.	p. 2-14
Security function	Encryption key, certificate, protection of password	p. 2-8
Large capacity HDD (option)	Reinforcement of advanced box use area	p. 2-12
HDD mirroring function (option)	Mirroring processing of HDD data	p. 2-13
Removable HDD (option)	HDD is installable/removable by user.	p. 2-28

T-2-9

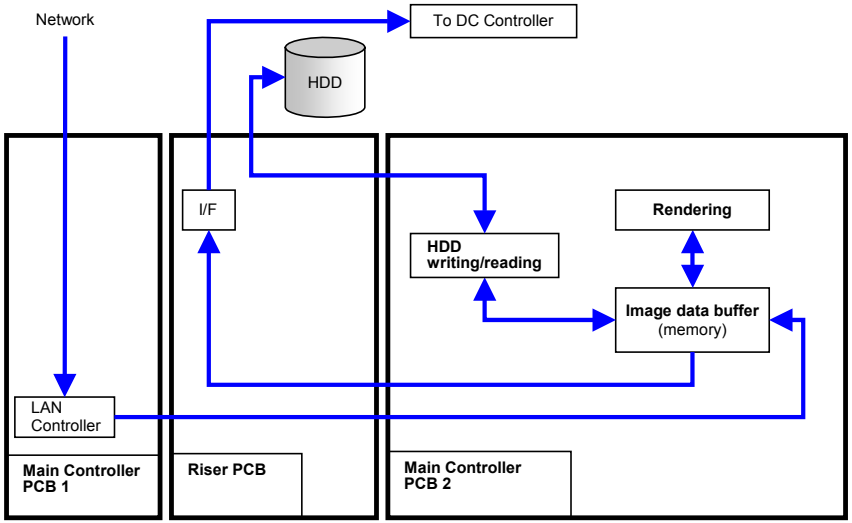
Image Processing Control

Copy



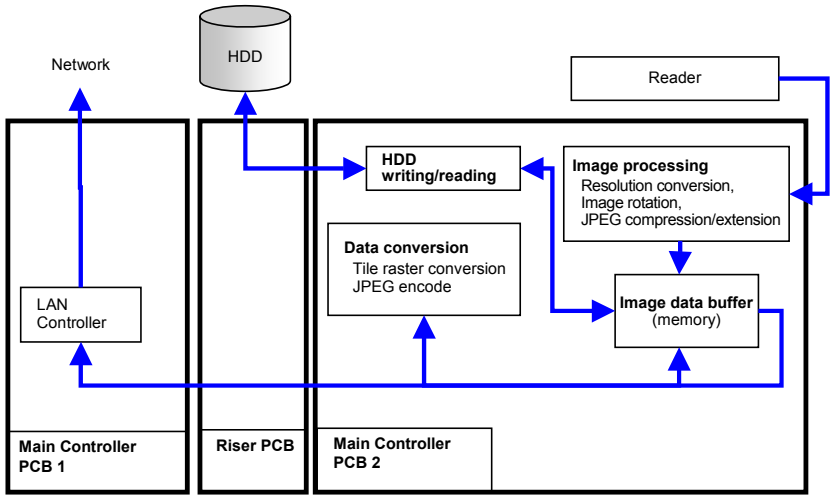
F-2-16

Print



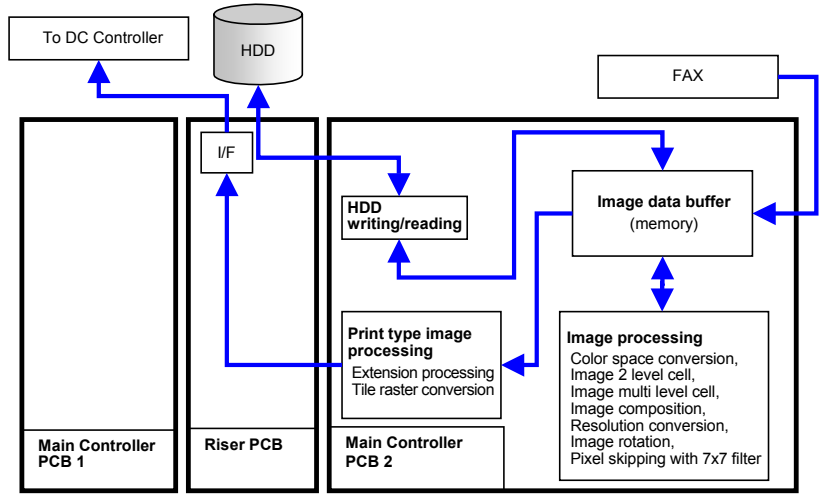
F-2-17

SEND



F-2-18

FAX



F-2-19

Backup Battery

Main controller PCB of the host machine has one lithium battery as a data backup battery in case of power failure or disconnection of the power plug.

DC controller PCB is not equipped with the battery.

Main Controller PCB1

Type of battery	Lithium battery (3V, 620 mAh)
Life of battery	Approx 10 years (when the power plug is disconnected)
Replacement of battery	Battery cannot be replaced independently on service site.

T-2-10

Main Controller PCB2

Type of battery	Lithium battery (3V, 620 mAh)
Life of battery	Approx 10 years (when the power plug is disconnected)
Replacement of battery	Battery cannot be replaced independently on service site.

T-2-11

DC Controller PCB

Type of battery	Lithium battery (3V, 600 mAh)
Life of battery	Approx 10 years (when the power plug is disconnected)
Replacement of battery	Battery cannot be replaced independently on service site.

T-2-12

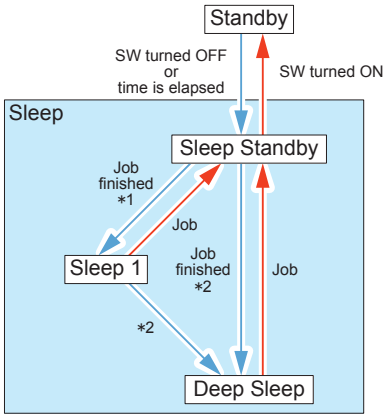
Caution:

Be sure to replace the battery correctly; otherwise, it may explode.

Do not use the other battery than the one specified by the manufacture (same type name or equivalent).

Follow the instruction of manufacture to dispose of the replaced battery.

■ Power-saving function



F-2-20

Sleep standby

Control panel is turned OFF.

Power supply other than the control panel is the same with Standby mode.

Power-saving

Control panel is turned OFF.

Power supply other than the control panel is the same with Standby mode.

Deep Sleep

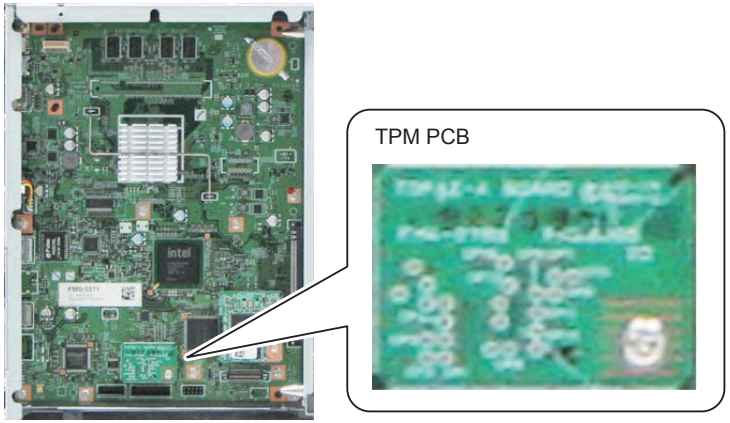
3V for all-night power PCB is only supplied. If a next job is submitted, the machine moves to Standby mode.

- Print job
- Control panel power switch is pressed.

■ Security Features (Encryption Key, Certificate, Password Protection)

● Overview

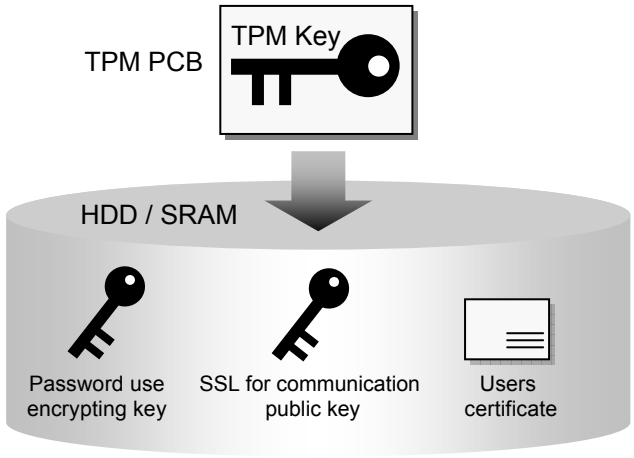
The main controller PCB 1 of the host machine holds a new PCB named “TPM PCB”. “TPM” stands for “Trusted Platform Module”, which collectively refers to the chip set for generating and storing encryption keys and computing public key encryption.



F-2-21

The TPM PCB protects security information (passwords, certificates, and encryption keys) stored in the HDD and SRAM. Note that this PCB does not protect set, registered or stored data other than security information.

The TPM key embedded in the chip is used to encrypt / decrypt security information.



F-2-22

The TPM key is protected from illegal access in a virtually perfect manner, thus the security information of the host machine is securely protected even in the following conditions.

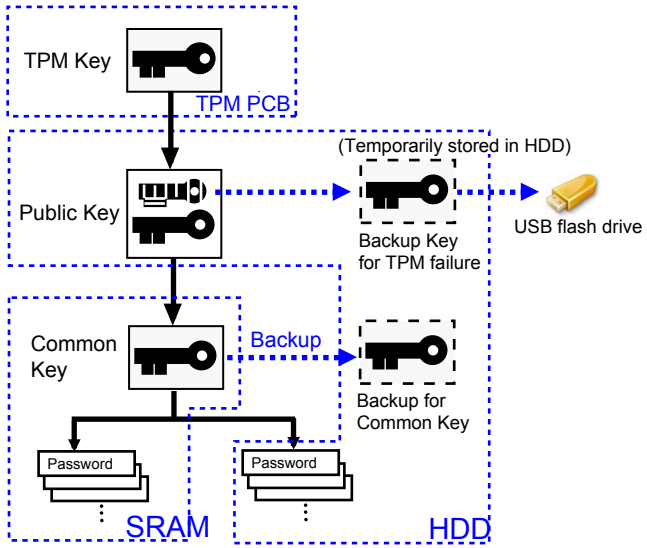
- When the HDD and / or the main controller PCB is taken out from the host machine and installed in the MFP with the different serial number (the model information held in the TPM PCB is specific to the machine originally enabled the TPM setting)
- When the system of the host machine is hacked via the network

Enable this function in Setting / Registration mode.
Management Setting > Data Management > TPM Setting -> ON (OFF by default)

Configuration of Security Information

The security functionality behaves differently depending on the TPM setting on the UI.
This machine provides the two types of TPM settings. See the figure below for the security information flow in each setting.

- When the TPM setting is ON

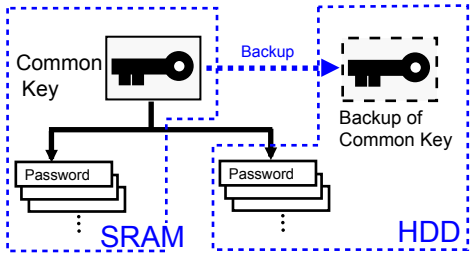


F-2-23

When the TPM setting is ON, the TPM key is enabled to secure information with the three keys. Therefore, the security information held in each machine is safely protected.
The security information in this setting can be accessed by the three keys and multiple passwords stored in the SRAM and HDD.
Each data is stored in the specified location (enclosed with blue dots in the figure above). Since the data in the upper layer are linked to those in the lower layer, security information is activated only when data in all the layers are linked.
For the backup purpose, the backup key is temporarily stored also in the HDD to be prepared for a TPM failure (only for the initial failure after the TPM setting is ON).
This key can be backed up using the USB flash drive. Once backed up, the backup key is deleted from the HDD.
The common key information is stored in the HDD as well as the SRAM. The common key stored in the SRAM is cleared when the main controller PCB 2 (SRAM) is replaced or after MN-CON clear. However, the common key stored in the HDD automatically restores that in the SRAM so that the security information is decodable even after servicing. Note that the security information is not decodable correctly in case the HDD is failed or formatted because

the public key information stored in the HDD is cleared. If this occurs, execute “Initialize All Data / Settings” in user mode to set the TPM setting to OFF. This will maintain the password information in the SRAM even after the password information is initialized.

- When the TPM setting is OFF:



F-2-24

When the TPM setting is OFF, the TPM key is disabled. Thus, the security information is protected only by the common key.
Under this setting, the security information held in this machine is protected at the level equivalent to the conventional machines.
The security functionality in this setting is configured by the common key and multiple passwords stored in the SRAM and HDD.
When the TPM setting is set to OFF, the security information is protected by the common key and multiple passwords stored in SRAM and HDD.
The common key information is stored in the HDD as well as the SRAM. The common key stored in the SRAM is cleared when the main controller PCB 2 (SRAM) is replaced or after MN-CON clear. Since the common key stored in the HDD will automatically restore the common key in the SRAM, the security information is decodable correctly even after servicing. Unlike the case that the TPM setting is set to ON, the password information stored in the HDD is initialized when the HDD is replaced or formatted. However, the password information is maintained in the SRAM.

TPM Setting for Security Information

The security information can be protected with or without TPM by switching between TPM settings in Setting / Registration mode.

- When the TPM setting is ON
  The security functionality is enabled in 4 levels (TPM key, public key, common key and password).
- When the TPM setting is OFF
  The security functionality is enabled in 2 levels (common key and password).

Preparation before Installing TPM

Before installing TPM, ask the user to back up data.
Follow the steps below to back up data.

1) From Remote UI, execute Setting / Registration > Management Setting > Data Management > Import / Export. The following data types should be backed up.
- Address book (see *1)
- Device settings (transfer settings, address book, frequently-used Send functions) (see *2)
- Setting / Registration
- Printer settings can be exported
- Favorites stored in the web browser (only when the web browser is enabled) (see *3)

*1 Each of address books can be exported. If the address book is seen as a part of device settings, this step can be disregarded.
*2 Among settings in the main menu, only “Frequently-used Setting” under “Scan and Send” can be backed up.
*3 These are available only in the specific models or configurations.

2) Select “Export” from Custom Menu of the Remote UI to back up “Custom Menu Setting Information”.

3) Log in to the system as Administrator from User Management of Advanced Box on Remote UI. Then, execute “Export” to back up “User Information of Advanced Box”.

Works before / after introduction

Execute the following in Setting / Registration mode (“TPM setting” is OFF by default).

1. Enable the feature
2. Backup the TPM key
3. Restore the TPM key
4. Disable the feature

The works above are basically done by users.

CAUTION:

When the TPM setting is set to “ON”, advice users on the following:

Back up the TPM key swiftly after the setting is ON

Keep the password used at backup securely

Never lose the USB flash drive with the backup TPM key file saved

The TPM key should be restored after the TPM PCB is replaced due to failures or the like.

(TPM key restoration is enabled only at TPM PCB replacement.)

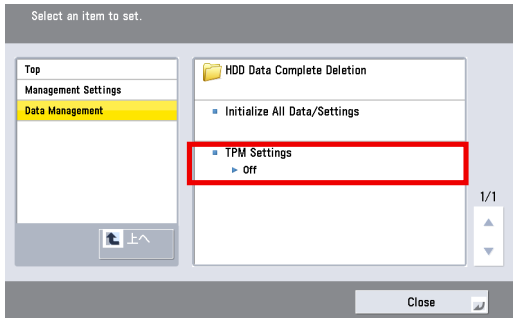
Unless the key is restored, the security information (passwords, encryption key, and certificates) cannot be used.

When the key restoration is failed due to the USB flash drive lost or others, “Initialize All Data / Settings” should be executed to reactivate TPM functionality. The security may be undermined if the old Setting / Registration data are maintained as it is.

1. Enable Functionality

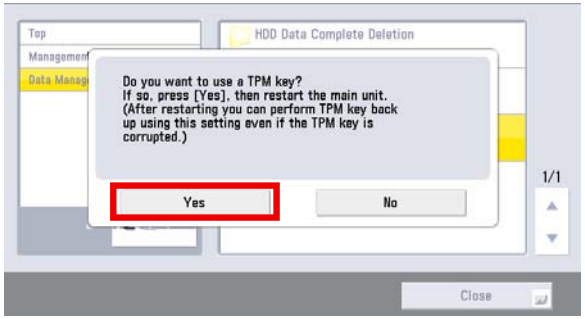
MEMO: Setup of “System Management PIN”
It is recommended for users (administrators) to set the system management PIN before installing TPM. The TPM key is backed up after the TPM setting is set to “ON”. However, the key backup is permitted only once. Unless the key is properly backed up, users other than administrators may illegally obtain the backup file. To avoid such risks effectively, the system management PIN should be set.

1)Set Management Setting > Data Management > TPM Setting to “ON”.
Setting / Registration



F-2-25

2)Click “Yes”, and restart the machine.



F-2-26

This setting is enabled after the machine is restarted.

2.TPM Key Backup

The TPM key backup file can be stored only in USB flash drive (supported file system: FAT32).

Note that this file requires the memory free space of several MBs.

F-2-27

1) Insert the USB flash drive to the machine.
The USB I/F (host) is found at the side of the control panel as well as the main controller PCB.

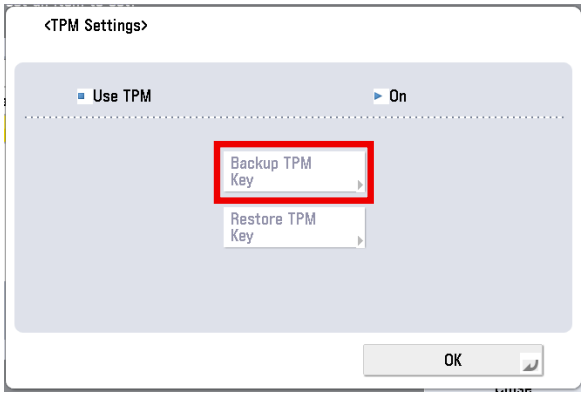
CAUTION:

Ensure to insert only one USB flash drive.

If the backup job is started with 2 or more USB flash drives connected, the message is shown to notify that the backup is failed.

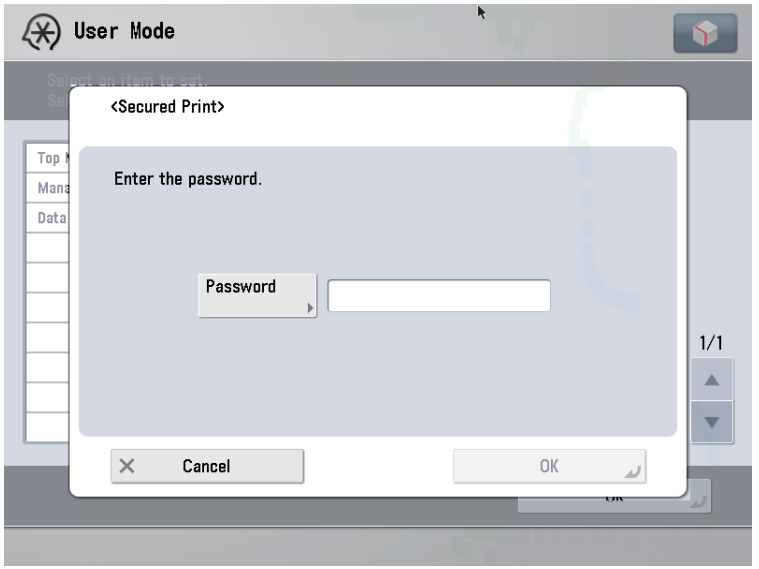
MEMO:
The USB flash drive holds the TPM key backup files by serial number. Thus, backup files for multiple machines can be saved in a USB flash drive.

2)Click [Back up TPM Key] in Management Setting > Data Management > TPM Setting.



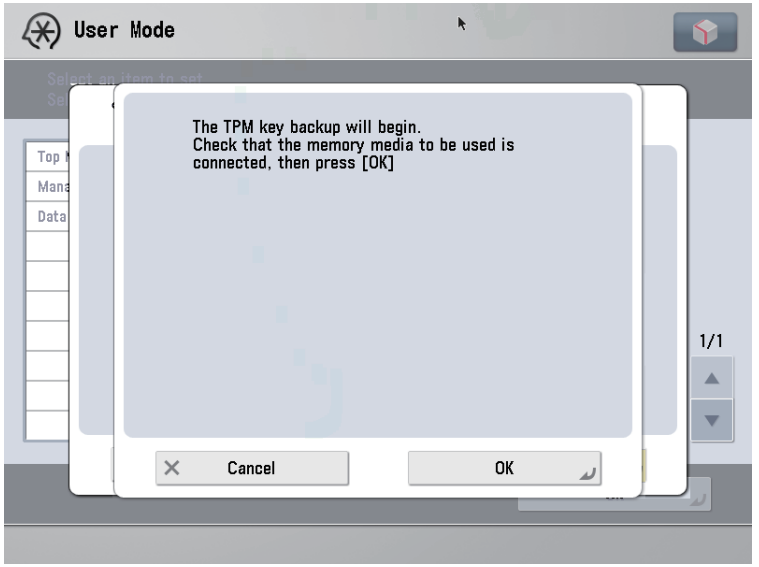
F-2-28

3) Click [Password] to enter the password (4-12 digits). Then, enter the password for confirmation.



F-2-29

4) Click [OK] to initiate TPM key backup.



F-2-30

5) Click [OK] on Backup Completion Screen and remove the USB flash drive.

CAUTION: The following may cause failures in backup.

If any of the following is detected, the backup process is aborted and the message and the cause for the failure are shown on the screen. Take an appropriate measure to recover this.

- The USB flash drive is not inserted to the machine
- 2 or more USB flash drives are inserted to the machine
- The USB flash drive has insufficient free memory space
- The USB flash drive is write-protected
- No key is found

CAUTION: The USB flash drive should be securely stored.

Give advice users on the following points.

- The USB flash drive should be securely stored
- Once the TPM key backup file is saved in the USB flash drive, never save the backup file on a server or the like accessible to unanimous users.

MEMO: Name of TPM key backup file
The serial number for the machine is automatically assigned as the backup file name.

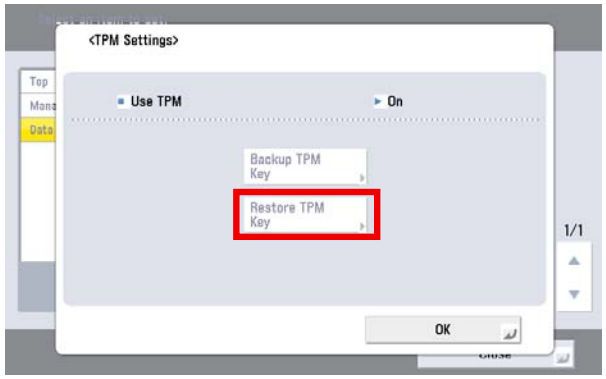
3. Restore of TPM key

Procedure is about the same as the backup work.

Difference between restore work and backup work:

Rebooting is necessary (turn OFF and then ON the main power) after completion of restore work.

1) Connect the USB memory that saves TPM key.
2) Select the following: Management setting > Data management > TPM setting; and click [Restore TPM key].



F-2-31

3) Enter the password set in the backup process.
4) Click [OK] on Start Restoration Screen. The restoration process is started.
5) Click [OK] on Restoration Completion Screen. Remove the USB flash drive and turn OFF/ ON the main power switch.

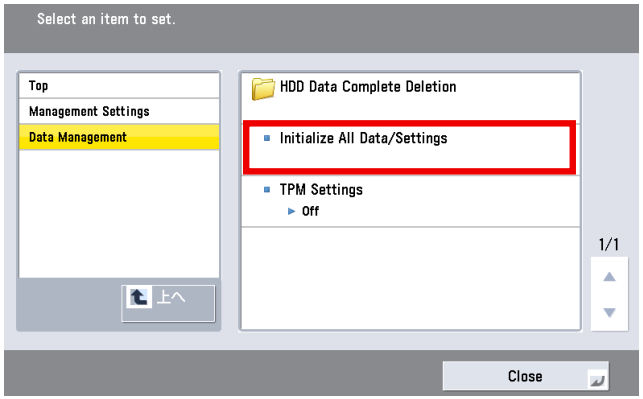
CAUTION: The following may cause failures in restoration.

If any of the following is detected, the restoration process is aborted and the message and the cause for the failure are shown on the screen. Take an appropriate measure for recovery.

- The USB flash drive is not inserted to the machine
- 2 or more USB flash drives are inserted to the machine
- The USB flash drive is security-protected
- No TPM key is saved in the USB flash drive
- The TPM key saved in the USB flash drive is not for the machine
- The wrong password is entered
- After the TPM key was backed up, [Initialize All Systems/ Settings] was executed
- SRAM (the main controller PCB 1) or HDD is crashed

4. Disable the feature

To set “OFF” for the TPM setting, execute [Initialize All Data / Settings].



F-2-32

CAUTION: Points to note when disabling functionality

To disable the use of TPM, all data and settings should be initialized. If this is executed, user information saved in the HDD/ SRAM is totally cleared. Ensure to back up the data before disabling TPM settings.

List of data to be cleared

- Data saved in BOX/ Advanced Box
- Data saved in Inbox (Fax Box/ System Box)
- Destination data registered in Address Book
- Read mode registered using Send function
- Mode memory registered using Copy/ Box function
- MEAP applications and their license files
- Data saved using MEAP applications
- Password for MEAP SMS (Service Management Service)
  (The password is returned to default if any change is made.)
- User authentication information registered by local device authentication via SSO-H (Single Sign-On H)
- Unsent documents (documents for scheduled transmission and reserved transmission)
- Job logs
- Contents set in Setting / Registration
- Image-composite registration form
- Registered transfer settings

- Key pair and server certificate registered in Management Setting (Setting/ Registration) > [Device Management] > [Certificate Settings]
- Audit log

Steps of data restoration after recovery

To restore data, select the following on UI: Settings/Registration > Management Settings > Data Management > Import > Import of Settings/Registration.
The data listed below cannot be restored, thus should be set again.

Environment Settings

- Paper settings
- Display settings in the destination to save
- Time fine-adjustment for timer/ power settings
- Date/ time settings (excluding time zone and daylight-saving settings)
- User settings for SNMPv3
- Context settings
- Firewall settings (excluding MAC address filter)

Function Settings

- Image-composite form for the common print operation
- Printer settings
- Transfer settings for the common receipt/ transfer settings
- Inbox settings
- Frequently-used Copy settings
- Registered short-cuts in “Other Functions”
- Frequently-used Send settings
- Frequently-used settings for saving/ using files

Address Settings

- Address Book

Management Settings

- Sheet counts in Department ID Management
- Settings for device information distribution
- Certificate settings
- License registration
- Remote operation settings
- Box backup/ restoration
- TPM Settings
- Setting of audit log collection

Overview of Actions taken against Troubles

Location with failure	TPM Setting = ON	TPM Setting = OFF	Relevant Error Code
TPM PCB	1. Check the TPM PCB connection 2. Replace the TPM PCBs 3. Turn OFF/ ON the power 4. See the section of “Restoring TPM Key” to restore the TPM key. 5. Turn OFF/ ON the main power for recovery	N/A (TPM PCB is not in use when the TPM setting is set to OFF.)	Initially E746-0031 is shown on the screen. When the power is turned OFF/ON after the TPM PCB is replaced, E746-0032 is shown (only when the TPM setting is set to ON).
HDD	1.Replace the HDDs. 2.Format the HDD. 3.Download the system software. 4.See the section of “Disabling Functionality” to execute “Initialize All Data/ Settings”. 5.Turn OFF/ON the power. The TPM setting is automatically set to OFF. 6.Set the TPM setting to ON (the public key and the common key are automatically set).	1. Replace the HDDs. 2. Format the HDD. 3. Download the system software. 4. Restore the password information stored in the HDD.	Initially E602-xxxx is shown (the different extension is shown depends on cases). After the system software is reinstalled, E746-0033 is shown.
Main Controller PCB 2 (SRAM)	1. Replace the main controller PCB 2. 2. The common key backed up in the HDD will be automatically restored in the SRAM. 3. The TPM setting on the control panel is reset to OFF. Manually set the TPM setting to ON (the machine is operated in the TPM setting ON). 4. Restore the password information stored in the SRAM (see *1).	1. Replace the main controller PCB 2. 2. The common key backed up in the HDD will be automatically restored in the SRAM. 3. Restore the password information stored in the SRAM (see *1).	E747-xxxx (the different extension is shown depends on cases).

T-2-13

*1 If “No” is indicated in the field of Backup Column in the table of “Security Information Storage Location”, the relevant information should be set manually again.

Related Error Code

Error Code		Error description, Assumed cause, remedy	
E746		Error in encryption	
	0031	Error in hardware	
		Assumed cause	The TPM PCB is not mounted; the TPM PCB for the other machine is mounted; the TPM chip is crashed.
		Remedy	Mount the TPM PCB for the machine; replace with the new TPM PCB
	0032	Error occurred but the system is recoverable	
		Assumed cause	Keys are unmatched
		Remedy	Restore the TPM key
	0033	Error occurred and the system is unrecoverable	
		Assumed cause	Security information cannot be found in the HDD/ SRAM
		Remedy	Execute “Initialize All Data/ Settings”
	0035	TPM version error	Install the supported TPM.

T-2-14

Security Information Storage Location

Storage Location	Data Type	Function	Name of Data	Backup Availability
HDD	Password/ PIN	BOX	BOX Password	Yes
HDD	Password/ PIN	BOX	Password for Fax BOX	Yes
HDD	Password/ PIN	SEND	Password for a file destination of Address Book	Yes
HDD	Password/ PIN	MEAP	Authentication information registered by local device authentication via SSO-H	Yes
HDD	Certificate/ Secret Key	SSL,AMS	Device key pair (SSL, AMS)	No
HDD	Certificate/ Secret Key	Signature SEND	User key pair	No
HDD	Others	User setting information	Key information linked to user (password)	No
SRAM	Password/ PIN	BOX	Password for encryption at BOX backup	No
SRAM	Password/ PIN	BOX	Password for SMS server at BOX backup	No
SRAM	Password/ PIN	Advanced BOX	Password for Advanced BOX backup	No
SRAM	Password/ PIN	Advanced BOX	Password for SMS server at Advanced BOX backup	No
SRAM	Password/ PIN	SEND	Password for LDAP server	Yes
SRAM	Password/ PIN	SEND	Password for POP3 server	Yes
SRAM	Password/ PIN	SEND	Password for time-stamped PDF	Yes
SRAM	Password/ PIN	SEND	Password for Adobe ES Rights Management Server	Yes
SRAM	Password/ PIN	SEND	PIN for destination list (in destination setting)	Yes
SRAM	Password/ PIN	UI	Password for service mode	No
SRAM	Password/ PIN	Network	Password for IPP authentication	Yes
SRAM	Password/ PIN	Network	Password for FTP authentication	Yes
SRAM	Password/ PIN	Network	User name and password for client in Proxy authentication	Yes
SRAM	Password/ PIN	Network	Login password for Netware print server	Yes

Storage Location	Data Type	Function	Name of Data	Backup Availability
SRAM	Password/ PIN	Network	Policy common key for IPSec	Yes
SRAM	Password/ PIN	Network	User name and password for PEAP/TTLS authentication	Yes
SRAM	Password/ PIN	Others	Password for FAX receipt	Yes
SRAM	Password/ PIN	Others	Department management data (including System Manager password)	Yes
SRAM	Encryption key	MIB	Authentication and encryption keys for SNMPv3	No
SRAM	Password/ PIN	MEAP	SMS login password	Yes

T-2-15

● Security Information Storage Location (data managed under the mechanism other than TPM management)

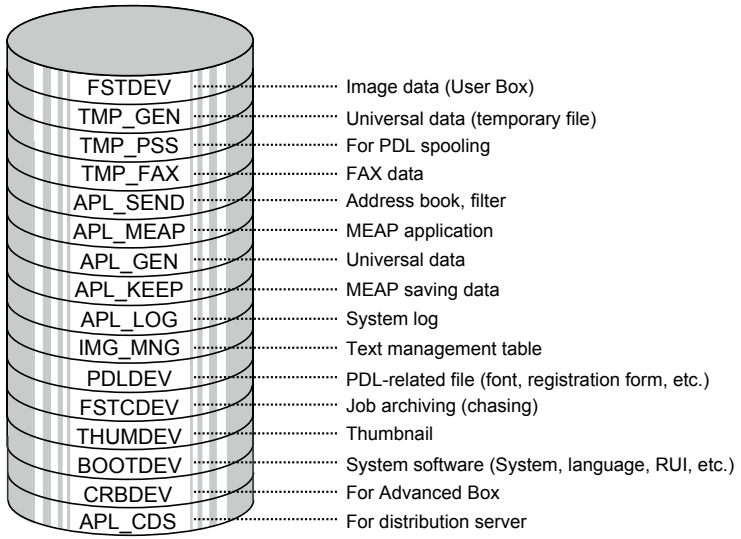
Storage Location	Data Type	Function	Name of Data	Backup Availability
HDD	Password/ PIN	Advanced BOX	User information in Advanced BOX	Yes

T-2-16

■ High capacity HDD (Option)

The HDD capacity mounted on this machine is 160GB as standard. Mounting a 2.5 inch / 1TB HDD-H1 (option) makes 1TB in HDD capacity. High capacity is required in the case of saving large amounts of data with “Advanced Box.”

Mounting this option increases capacity for Advanced Box.
15GB: in the case of 160GB HDD capacity
629GB: in the case of 1TB HDD capacity



F-2-33

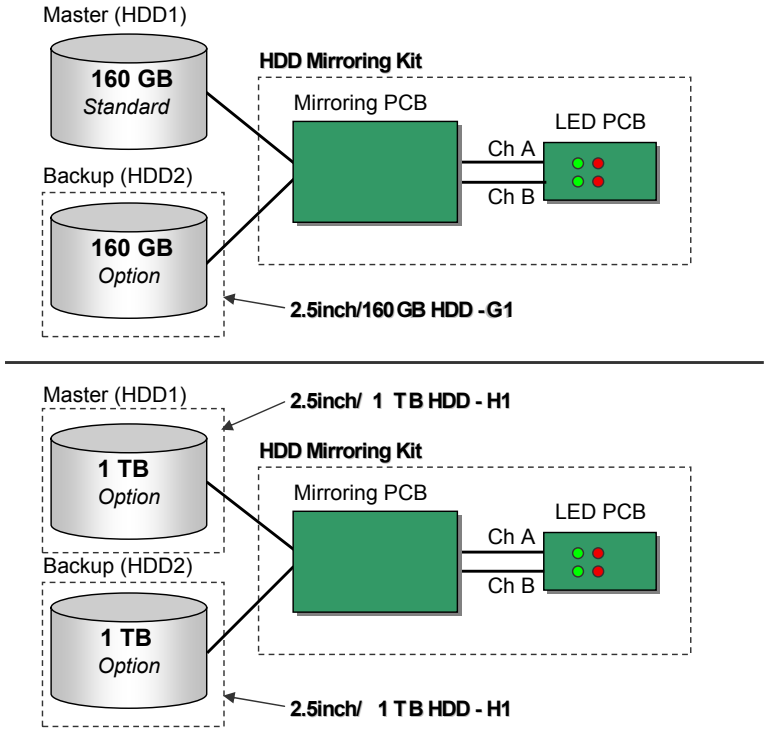
Although simple calculation says: 1TB - 160GB = 840GB, it requires 20% of snapshot area and the data area to be used for internal processing in the system. Therefore, 629GB can be actually used for text storage area.

HDD mirroring feature (option)

Overview

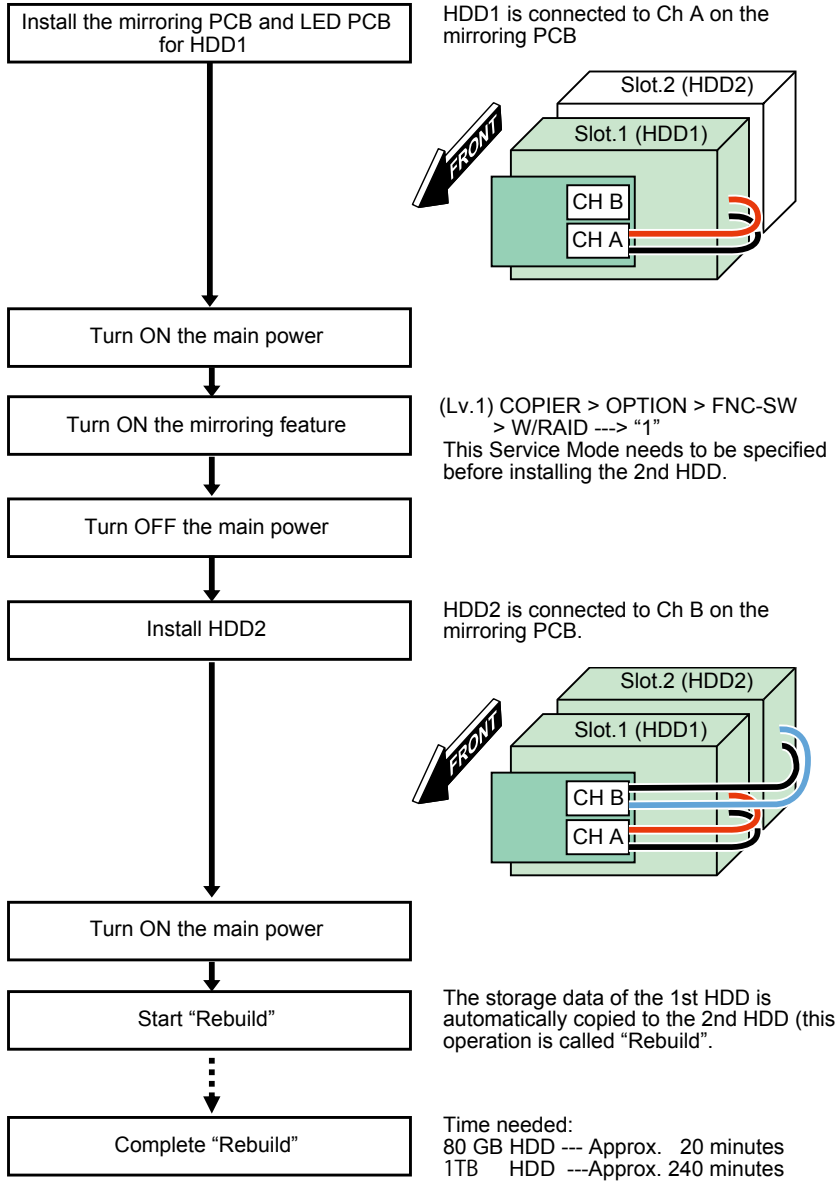
This option enables HDD data mirroring (RAID1).
When one HDD is crashed, the other HDD backs up the operation. This minimizes the downtime due to crash, thus enhancing the reliability as the document server.

Mirroring is performed in the following 2 ways depending on HDD capacities (160GB or 1TB).
The mirroring PCB controls the reading / writing timing of HDD data.
The LED PCB indicates HDD operation statuses by LED.



F-2-34

Works before using this functionality (installation)



F-2-35

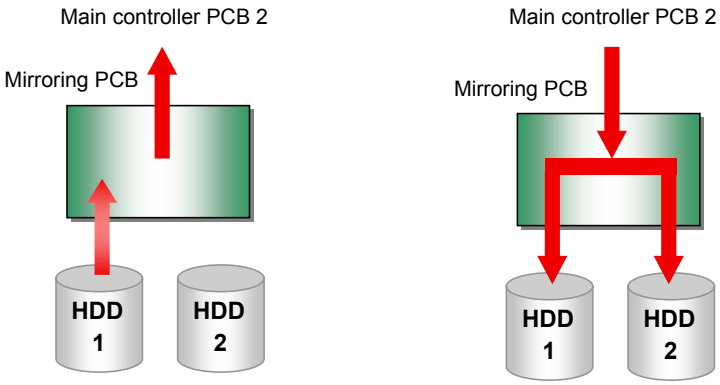
Rebuild progress is shown as messages on the status line of the control panel.
“Copying data to HDD. xx%”

MEMO:
- This machine can be used even during “rebuild” process (operation is performed with HDD1)
- The HDD will not be damaged even if turning OFF the power during “rebuild” process. “Rebuild” is resumed once the power is turned ON the next time. This does not apply in the case of blackout or disconnecting the power code during “rebuild” process

HDD reading / writing operation

At reading:
Data is read by HDD1 (master HDD) only

At writing:
The same data is written to each HDD at the same timing



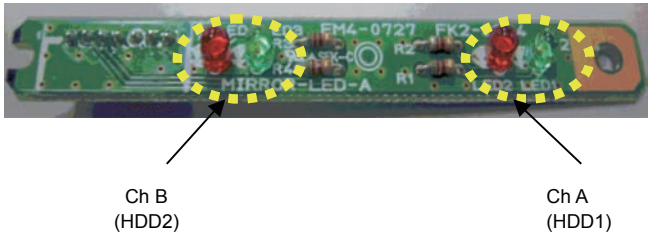
F-2-36

The ACT LED (green) on the LED PCB is lighted up / blinking if reading / writing to each HDD is performed properly.

In the case of failure:
- The LED (red) on the LED PCB is blinking. If only one HDD is faulty, the operation is continued by the other HDD.
- If both two HDDs are faulty, E602 error is shown on the control panel to stop the operation.

List of operation status (LED)

HDD operation statuses are indicated with 4 LEDs mounted on the LED PCB.
The green LED shows that the operation is normally in progress, while the red LED indicates any failures.



F-2-37

The table below lists HDD statuses indicated by each LED.
For example, when HDD1 is in access, the green LED on the side of HDD1 (ChA) blinks in a high speed.

Status	HDD 1 (Ch A)		HDD 2 (Ch B)		Name of Mode
	Green LED	Red LED	Green LED	Red LED	
Normal (standby)	---	---	---	---	Mirror mode
Accessing to HDD1	A (*1)	---	---	---	
Accessing to HDD2	---	---	A (*1)	---	
HDD1 failed	---	A	---	---	Degrade mode
HDD2 is faulty	---	---	---	A	Degrade mode
Copying data to HDD1 (Rebuild)	--- / A	B	--- / A	---	Rebuild mode
Copying data to HDD2 (Rebuild)	--- / A	---	--- / A	B	Halt mode
Both HDDs failed or Master HDD failed	--- (*2)	A	--- (*2)	A	Halt mode

T-2-17

--- : Not lit A : Lit B : Blinking at an interval of 0.5 seconds

*1: The LED is blinking in a high speed
*2: The green LED may be lit

Description of Modes

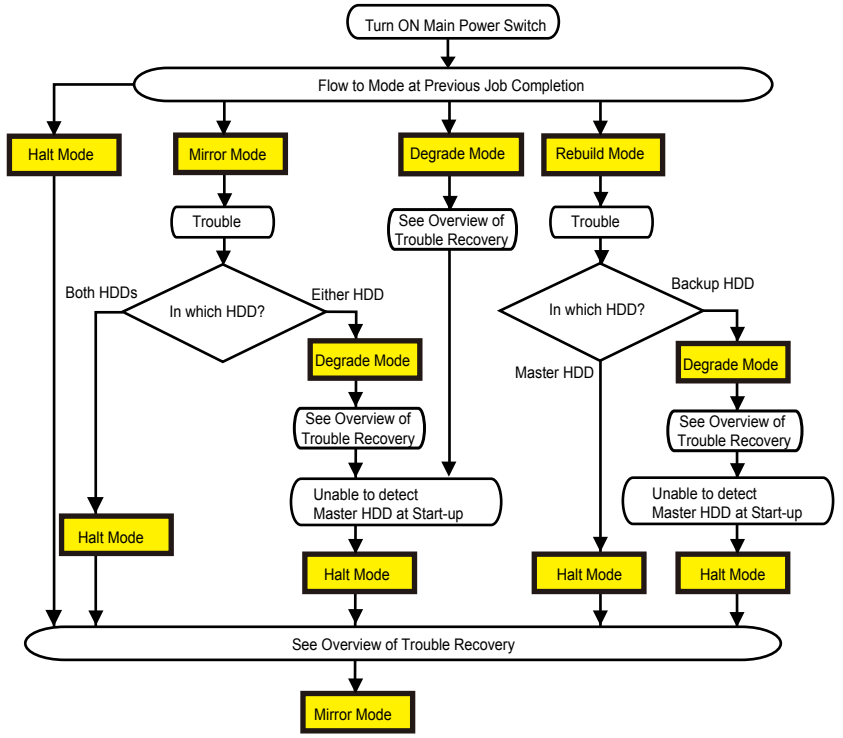
The mirroring system of this machine consists of 4 modes.
The modes in parentheses show the mirroring system statuses.
The status flows among the modes below during operation.
The table below lists descriptions of modes and operational overview.

Name of Mode	Description	Master HDD Status	Backup HDD Status
Mirror Mode	Both HDDs are normally operated	In normal operation	In normal operation
Degrade Mode	Any trouble occurred in the backup HDD suspends mirroring operation. The machine can be used under this condition, however, the backup HDD should be replaced at the earliest convenience.	In normal operation	With troubles (HDD not installed/ HDD in trouble)
Rebuild mode	The data of the master HDD is copied (rebuilt) to the backup HDD. The machine can be used under this condition.	In normal operation	In recovery from the trouble (Copying data of Master HDD)
Halt mode	Both HDDs are in trouble (see *1)	In trouble (HDD not installed/ HDD installed not registered/ HDD disconnected while the mirroring board is in operation)	With troubles (HDD not installed/ HDD installed not registered/ HDD disconnected while the mirroring board is in operation)

T-2-18

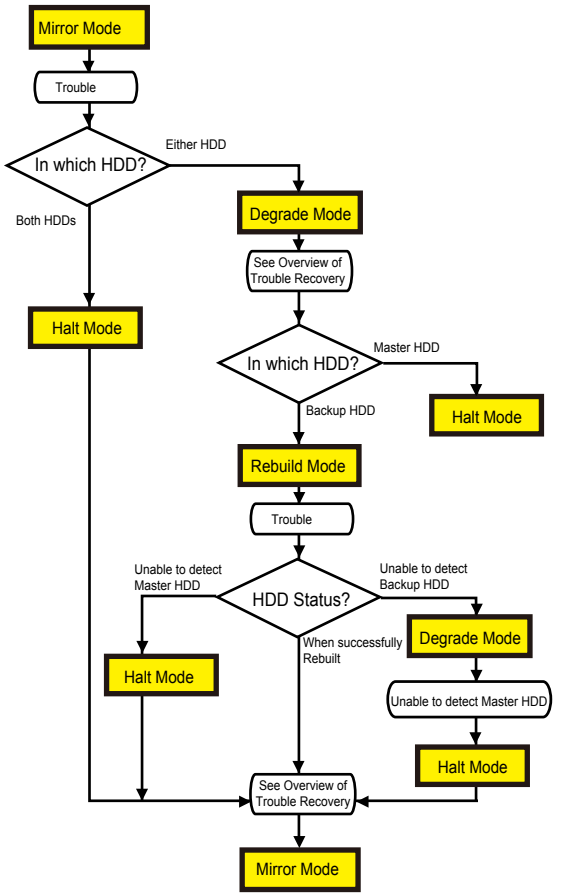
*1: Turn OFF/ ON the power in this mode, the mode returns to the previous mode.

Mode Flow at Start-up



F-2-38

Mode Flow during Operation



F-2-39

Overview of Trouble Recovery

When any trouble occurs in the mirroring system, take the action for recovery appropriate to each mode.

The HDD in trouble can be located by the red LED on the LED PCB.

In case the master HDD cannot be located, turn OFF/ ON the power to check whether the green LED is lit on the LED PCB.

The firstly blinked green LED (ChA or ChB) in a high speed tells the Master HDD, which is accessed firstly.

The green LED not lit on a channel tells the location of Backup HDD.

Name of Mode	Status	Action for Recovery	HDD1 (ChA) Red LED	HDD2 (ChB) Red LED
Mirror Mode	Normal (at standby)	Under normal operation	---	---
Degrade Mode (see*1)	HDD1 in trouble	1. Check the connection between HDD1 and Mirroring Board or Main Controller PCB 2. 2. When the trouble is not recovered, replace the HDD1.	A	---
	HDD2 in trouble	1. Check the connection between HDD2 and Mirroring Board or Main Controller PCB 2. 2. When the trouble is not recovered, replace HDD2.	---	A
Rebuild mode	Copying data to HDD1 (Rebuild)	Copying (under Rebuild)	B	---
	Copying Data to HDD2 (Rebuild)	Copying (under Rebuild)	---	B
Halt mode	Both HDDs in trouble	1. Check Master HDD and Backup HDD (see *2) 2. When the trouble is not recovered, replace the two HDDs (format the replaced HDD and download the system software).	A	A

T-2-19

---: Not lit A: Lit B: Blinking at an interval of 0.5 seconds

*1: This mode shows the message, “Need to replace hard disks (contact your service engineer)”, on the control panel. In addition, “310006” is indicated in CODE field of Alarm Log in service mode (COPIER > DISPLAY > ALARM-2).

*2: Never install the HDD used in the other model. The used HDD holds the ID specific to the firstly-installed machine, thus this machine is unable to recognize it. If done, you need to reinstall the HDD recognized in this machine.

Points to Note in Servicing concerning Mirroring Functionality

1. The modes other than Mirror Mode indicate troubles, which require swift recovery.
   The power can be turned OFF even during Rebuild process. However, it is recommended not to turn off the power and wait until the mode flows to Mirror Mode. In addition, HDD removal after power-OFF is guaranteed only in Mirror Mode.

2. The mirroring board controls Master HDD and Backup HDD. This control is performed based on the HDD serial number and the model serial number instead of slot locations.
   If HDDs are replaced in a careless manner during servicing in the field, the Master and Backup HDDs may be switched.
   Ex) When the master HDD is in trouble, the mirroring board automatically recognizes the backup HDD as the master. Thus, the master and backup HDDs are switched even without changing the slot locations.
   If the Master HDD cannot be located, turn OFF/ ON the power to check on which channel the green LED is lit on the LED PCB.
   The firstly-blinked LED (ChA or ChB) shows the Master HDD, which is accessed firstly after power-on.

3. For users who intend to use the removable and mirroring functionality concurrently, instruct them not to change the removable HDD location in advance.
   Change of HDD locations after power-OFF is allowed as specifications only in Mirror Mode. Otherwise, HDD removal or change of location is not guaranteed.

4. The following conditions are required to replace HDDs at power-ON.
   - Removable HDD is extended
   - Either HDD is in trouble

CAUTION:
Be sure to use a new HDD when replacing the HDD.

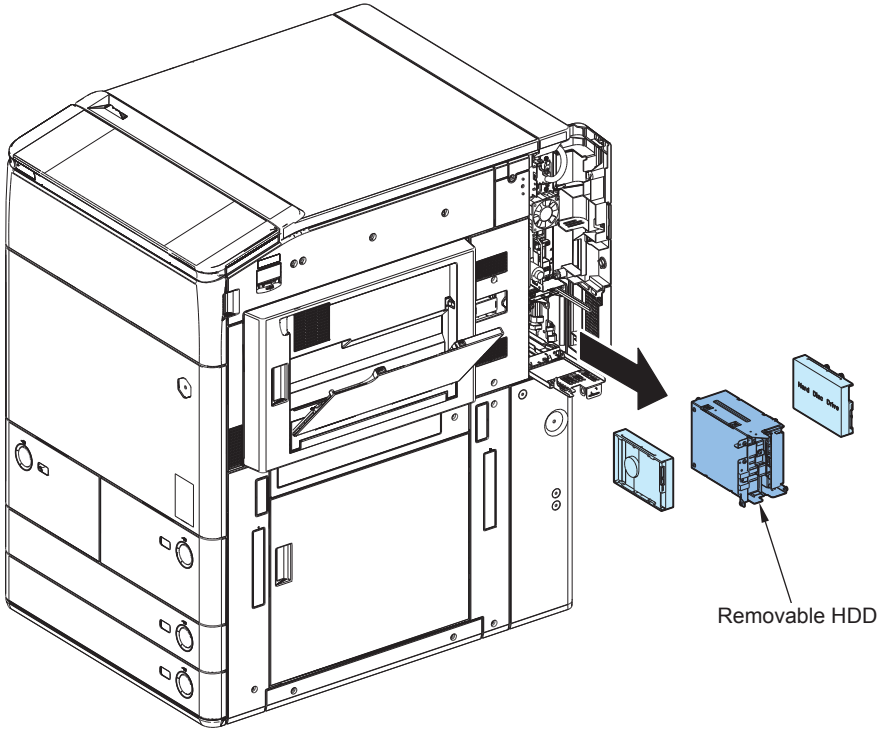
5. Upgrading should be done only in Mirror Mode while mirroring in ongoing. Upgrading in Degrade or Rebuild mode is basically prohibited. Always prioritize Mirror Mode when you take any actions.

Removable HDD (option)

With this option, users can easily install or remove the HDD (slot-in/out).

This option is assumed to be used for: enhancing information security at government/public offices or private companies.

- Remove the HDD after the close of work to be kept in a safe.
- Install the HDD at the start of work. Make the HDD locked during operation.



F-2-40

NOTE:
- To use this option, no setting is required with the software.
- The user needs to prepare a key because there is no key with this kit.

Service Operations

HDD

<Procedure of parts replacement>

Refer to Removing HDD

<Procedure of adjustment>

1. Before Replacing

Perform the following operations. Be sure to get an approval from the user beforehand.

Refer to "Back Up" row for data back up.

	Back Up	Restore/ Resetting	Object Item	Remarlks
Backup of data	Remote UI Settings/ Registration > Management Settings > Data Management > Back Up	Remote UI Settings/ Registration > Management Settings > Data Management > Restore	Mail Box Memory RX Inbox Confidential Fax Inbox Advanced Box Form for Composition	Cannot back up Advanced Box data to the SMB server when an optional HDD (except 160 GB) is installed.
Export of settings	Remote UI Settings/ Registration > Management Settings > Data Management > Export	Remote UI Settings/ Registration > Management Settings > Data Management > Import	Settings/Registration Basic Information Paper Type Management Settings Forwarding Settings Box Settings Department ID Management Settings Main Menu Settings Web Access Settings Favorite Settings Address Book User Access Control for Advanced Box Quick Menu Settings MEAP Application Setting Information User Setting Information iW Function Flow Settings Service Mode Settings	When exporting "Service Mode Settings", select Copier > Option > USER > SMD-EXPT > 1. SMD-EXPT cannot be exported, therefore the settings need to be made every time the HDD is replaced.
Backup of MEAP	SST (Meapback)	SST (Meapback)	MEAP application(SMS) User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	Meapback.bin can be restored after replacement or initialization of the HDD. [CAUTION] When the following service mode is executed, Meapback.bin cannot be restored. COPIER > FUNCTION > SYSTEM > CHK-TYPE > 7 COPIER > FUNCTION > SYSTEM > HD-CLEAR
TPM	Non	After restarting the device, execute "Initialize All Data/Settings", and perform backup with TPM [ON].	TPM setup	Backup data of the TPM key can be used only when replacing the TPM PCB. When replacing the HDD, perform backup with TPM [ON] again.
Service mode setting values (DC-CON)	Non	COPIER> FUNCTION> SYSTEM> DSRAMBUP	The set value of the DC controller	Since the backup data cannot be saved to a location outside of the device, it is recommended to perform backup again after replacing the HDD. When the DC Controller PCB needs to be replaced, in order to update the data to the latest one, perform backup again immediately before replacing the PCB.
Service mode setting values (R-CON)	Non	COPIER> FUNCTION> SYSTEM> RSRAMBUP	The set value of the Reader controller	Since the backup data cannot be saved to a location outside of the device, it is recommended to perform backup again after replacing the HDD. When the Reader Controller PCB needs to be replaced, in order to update the data to the latest one, perform backup again immediately before replacing the PCB.

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2. After Replacing

1) HDD format

1-1) Start with the safe mode. (While pressing 2 and 8 keys simultaneously, turn ON the main powerswitch.)

1-2) Use SST to format all partitions.

2) Downloading system software

2-1) Use SST to download the system software (System, LANG, RUI and others).

3) Initializing the key, certificate and CA certificate

(Lv.2) COPIER > FUNCTION > CLEAR > CA-KEY

4) Turning OFF and ON the main power switch

5) Restoring the backup data

Refer to "Restore/Resetting" row for data restore by a list of "<Procedure of adjustment>"

6) Resetting/registering the data

While referring to the list of set/registered data which was printed before replacement, reset/register the data.

7) When the user generates and adds the encryption key, certificate and/or CA ertificate, request the user to generate them again.

8) Executing “Auto Adjust Gradation (Full Adjust)”

Settings/Registration mode: Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation

When using the Card Reader and imageWARE Accounting Manager

Card ID used for imageWARE Accounting Manager is stored in the HDD, so NSA collection control is not enabledafter the HDD replacement. After the HDD is replaced, reinstall the card ID from imageWARE Accounting Manager using the following procedures.

1) Go to COPIER > FUNCTION> INSTALL > CARD and enter the numerical value of the leading card which is used for Department ID. Then, press “OK” button.(e.g.: If No.1 to No.1000 cards are used for Department ID, enter “1” of the leading card.)
2) After turning OFF and ON the main power switch, perform the following operations from Settings/Registration mode.
   In Management Settings > User Management > Department ID Management > Page Totals, be sure that “ID00000001” to “ID00001000” are created.
   Set the following: Preferences > Network > TCP / IP Settings > IPv4 Settings> IP Address Settings > IP Address, Gateway Address, Subnet Mask
   In Management Settings > User Management> System Manager Information Settings> System Manager ID and System PIN, register any number for them. Then, turn OFF and ON the main power switch.
   If “System Manager ID” and “System PIN” are not registered, “card registration to device” cannot be executed for the imageWARE Accounting Manager setting operation.
3) Download the card ID from imageWARE Accounting Manager to the Main Body again.
4) After downloading is completed, go to Management Settings > User Management > Department ID Management > Page Totals. Be sure that only the downloaded card ID is displayed.
5) Print using the user card registered from imageWARE Accounting Manager. Be sure that the card information used for the target devices of imageWARE Accounting Manager is collected.

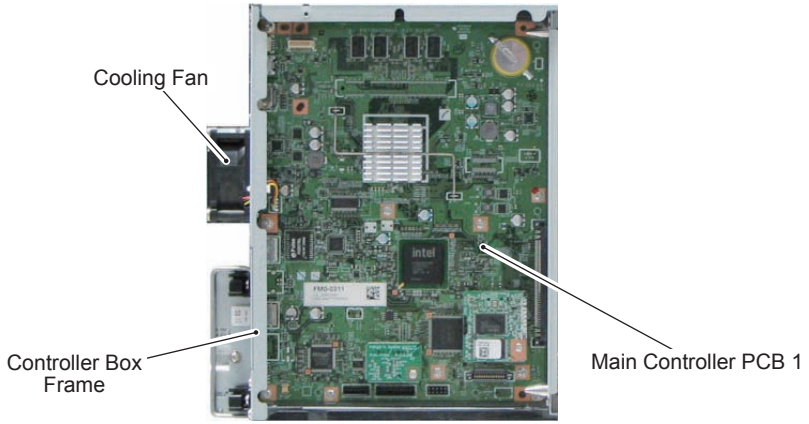
CAUTION:Points to Caution when Using the System Software-installed HDD

When using the HDD which was installed the system software of the other achine (different serial number), be sure to format the HDD after the installation. If the HDD is not formatted, the operation cannot be guaranteed.

Main Controller PCB 1

Service part:

- Setting unit: Main Controller PCB 1 + Controller Box Frame + Cooling Fan
- Parts number differs on a model basis (speed basis).



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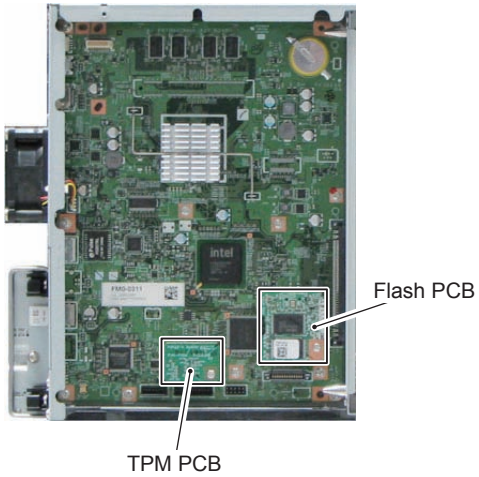
In order to secure the accuracy of connector connection when slotting in, this service part is provided with the PCB being installed to the frame.

1) Transferring the parts from old PCB to new PCB

- DDR2-SDRAM (2 pc.)
- Flash PCB
- TPM PCB



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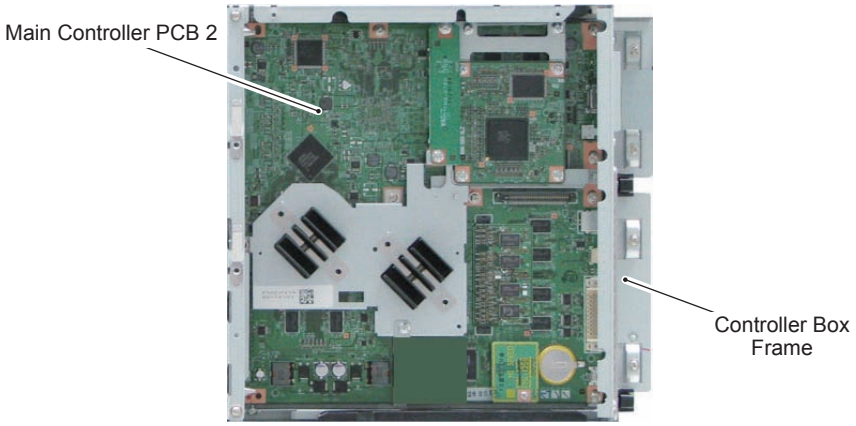
NOTE:
Resetting/registering the data is not necessary after Main Controller PCB 1 is replaced.

■ Main Controller PCB 2

Service part:

- Setting unit: Main Controller PCB 2 + Controller Box Frame



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In order to secure the accuracy of connector connection when slotting in, this service part is provided with the PCB being installed to the frame.

Backup the Settings/Registration data

Data in SRAM on the Main Controller PCB 2 can be backed up to a USB memory device or an HDD from download mode.

* However, if the HDD Encryption Board is installed, backup to an HDD is not possible. It is therefore recommended to perform backup to an USB memory device.

Operation method:

COPIER > FUNCTION > SYSTEM > DOWNLOAD

then,

Download Menu > Backup > SRAM(HDD/USB)

Note:

Download Menu is not intended for the "Settings/Registration > Paper Type Management Settings".

You need back up from:

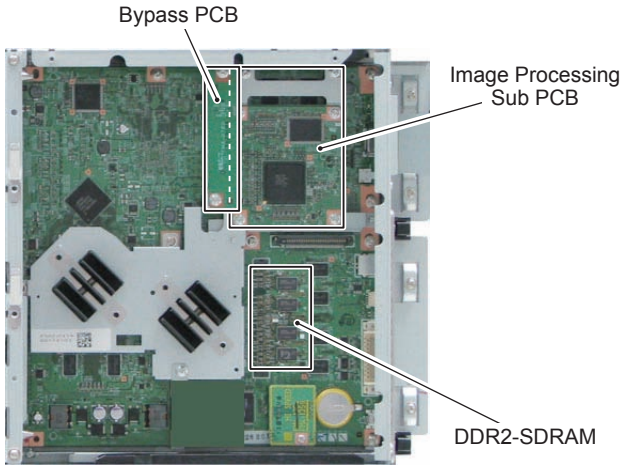
Remote UI

Settings/Registration > Management Settings > Data Management > Export

When Replacing

1) Transferring the parts from old PCB to new PCB

- Option DDR2-SDRAM (1 pc.)
- Bypass PCB
- Memory PCB



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Prohibited Operation:

Do not transfer the following parts to another model (which has a different serial number).

If you fail to do so, the Main Body does not activate normally and this might cause to fail the restoration.

- Main Controller PCB 1
- Main Controller PCB 2 (with Memory PCB installed)
- Memory PCB

<Actions after Parts Replacement>

1. Specify and register the data again of the Main Controller PCB 2.
1) While pressing 2 + 8 keys at the same time, turn ON the Main Power Switch.
2) The restore of backup data:
When Download Menu is displayed, connect USB memory to the main body.
Download Menu 2 > Restore
3) Specify and register the data again.
Import from:
Remote UI
Settings/Registration > Management Settings > Data Management > Import
4) When an encryption key/certificate/CA certificate has been generated or added by the user, ask the user to execute reinstallation.

● TPM PCB

When TPM setting is “OFF”
Any operation is not necessary at replacement.

When TPM setting is “ON”
It is necessary to restore the TPM key which was backed up after changing the setting to “ON”.

1) Removing the network cable
Until the TPM key is restored, information might be leaked due to the inappropriate access via network, so be sure to perform this operation appropriately.
2) Connecting the USB Memory after turning ON the main power switch
3) Restoring the TPM key
Management Settings > Data Management >TPM Settings> Restore of TPM Key
4) Turning OFF and ON the main power switch

● Flash PCB

Any operation is not necessary at replacement.

● Riser PCB

Any operation is not necessary at replacement.
Setting unit as a service part:
Riser PCB + Frame

● DC Controller PCB

Before replacing/clearing RAM
COPIER > FUNCTION > SYSTEM > DSRAMBUP
After replacing/clearing RAM:
COPIER > FUNCTION > SYSTEM > DSRAMRES

DCM

DCM

Overview

DCM (Device Configuration Management) is a function to migrate the setting values (of user mode and service mode). In terms of the description in the User's Guide, it is synonymous with "Import/Export All". Service mode setting values can be backed up/restored from the top screen of service mode.
By the conventional method for backing up SRAM of the Main Controller 2, data could be backed up/restored only for the same machine. DCM supports the following 3 patterns.

- The same machine (backup for the purpose of providing against emergency)
- A different machine of the same model (setting values are migrated collectively to multiple machines when replacing a host machine)
- A different model (e.g.: the setting values are copied from an old model to a new model)

Where data is stored

Store the backup data in the following location.

- User > PC (RUI)
- Service > USB memory device/HDD of the machine (top screen of service mode)

Setting values that can be backed up

The values changed by the user under [Settings/Registration] and those specified in service mode can be backed up.

Only setting values are backed up. Image data such as scanned image cannot be backed up.

- Setting values under [Settings/Registration]
- Service mode setting values

General limitations on DCM

- Service mode for FAX cannot be migrated.
- With DCM, stored data, MEAP application, and system option license cannot be migrated.
- A .dcm file exported to the internal HDD is not deleted even when the machine is restarted. Only 2 files at a maximum are stored in HDD. When there are more than 2 files, the old .dcm files are deleted from the oldest.
- Continuous import is not guaranteed. After importing a file, the machine must be restarted. If executing import without restart, NG is displayed and a file is not imported.
- When importing DCM file in service mode and user mode separately, perform it in the following procedures.
  1) Perform the import of the DCM data of the service mode earlier.
  2) Reboot the Host machine.
  3) Import the DCM data of the user mode.
- As for service mode, if the process is not completed within 5 minutes in the case of export and 15 minutes in the case of import, the item performed at that time is continued until it ends, but the final result becomes ERROR.
- Data to which no password is set when exporting service mode cannot be loaded from collective import from RUI. When assuming to perform collective import from RUI, password must be set to data to be exported.
- Following limitations are applied to password for DCM data:
  - Character string of software keyboard: 0 to 32 characters
  - No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
  - No space is allowed in the middle of a password.
  - Password is case sensitive.
- At the time of following setting, Host matchine does not recognize USB memory.The DCM function is not usable, too.
  - Settings/Registration > Preferences > External Interface > USB Settings > Use MEAP Driver for External USB Device = On

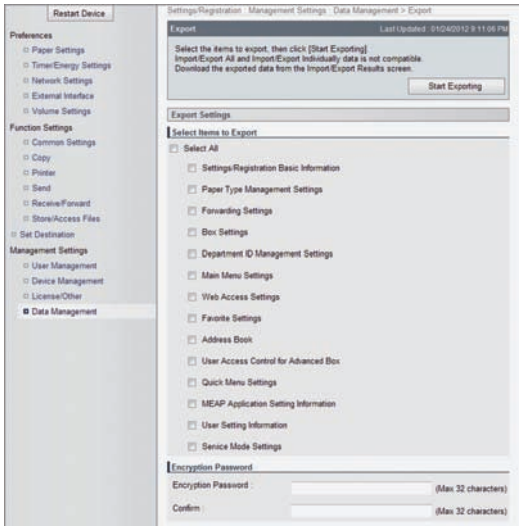
Restrictions about import/export

- An import/export process ends with error while the following specific job is executed;
  - Send job,
  - Forwarding job,
  - FAX reception job,
  - IFAX reception job
- If this function is executed with a print job simultaneously, it affects the operation such as; UI is locked, or a print job is cleared by reboot after import. So it requires careful operation.
- A device rejects an import/ export request during shut-down.
- If this function is executed with device information distribution or RUI import/ export (conventional function) simultaneously, the first coming job takes priority and they are controlled exclusively.
- If this function is executed with a firmware update by a CDS Updater simultaneously, a firmware update process takes priority, and this function is stopped temporarily by reboot.
- When error code is issued, this function ends with error.
- If the display language differs between export and import, a setting value of a text corrupts in some cases. The character corruption can be solved by changing the display language to the appropriate one.

Import/Export All from remote UI

The following settings information is available with the Import function in each case

- Settings/Registration Basic Information
- Box Settings
- Department ID Management Settings
- Main Menu Settings
- Favorite Settings
- Address Book
- Forwarding Settings
- Quick Menu Settings
- MEAP Application Setting Information
- Paper Type Management Settings
- User Access Control for Advanced Space
- Web Access Settings
- Service Mode Settings(Display/hide of the service mode settings on the export screen)



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Note:
Display/hide of the service mode settings on RUI can be switched by changing the setting in the following service mode.
Service mode L1 > Copier > Option > USER > SMD-EXPT
[0]: Hide the service mode settings. (Def.)
[1]: Display the service mode settings.

Collective Import Using Data Collectively Exported from RUI

For the reason of security, it is not appropriate that the user mode can be exported from service mode without user's permission. Because of that, it cannot be exported due to the specification However, it is possible to import the setting values of user mode exported from RUI.

Preparation

PC and web browser

USB memory device to store the data of reference machine

Overall flow

1. Complete the device setting as a reference machine.
2. Export the data of reference machine including service mode from RUI.
3. Copy the data to the root of the USB memory device using a PC.
4. Connect the USB memory device to the copy destination machine.
5. Execute import by specifying the target files from RESTORE in service mode.

The following cases may be possible for the Import All function.

Case A:Importing all to your machine (Restoring the settings information to your machine for backups)

Case B:Importing all to the same model machine (imageRUNNER ADVANCE C5255/C5255i/C5250/C5250i/C5240i/C5235i)

Case C:Importing all to the different model machine that supports the Import All function

Setting Information			Case A	Case B	Case C
Preferences	Paper Settings	Paper Settings	Yes	Yes	No
		Register Custom Size	Yes	Yes	No
	Display Settings	Default Screen after Startup/Restoration	Yes	Yes	Yes
		Default Screen (Status Monitor/Cancel)	Yes	Yes	Yes
		Copy Screen Display Settings	Yes	Yes	Yes
		Display Fax Function	Yes	Yes	Yes
		Store Location Display Settings	Yes	Yes	Yes
		Language/Keyboard Switch On/Off	Yes	Yes	Yes
		Language/Keyboard Switch	Yes	Yes	Yes
		Use Keyboard Shift Lock Feature	Yes	Yes	Yes
		Display Remaining Paper Message	Yes	Yes	Yes
		No. of Copies/Job Duration Status	Yes	Yes	Yes
		Display Original Scanning Cleaning Area	Yes	Yes	Yes
		Select Paper Screen Priority	Yes	Yes	Yes
		mm/Inch Entry Switch	Yes	Yes	Yes
		ID/User Name Display On/Off	Yes	Yes	Yes
		Display Remaining Toner Error Message	Yes	Yes	Yes
	Timer/Energy Settings	Time Format	Yes	Yes	Yes
		Quick Startup Settings for Main Power	Yes	Yes	Yes
		Auto Reset Time	Yes	Yes	Yes
		Restrict Auto Reset Time	Yes	Yes	Yes
		Function After Auto Reset	Yes	Yes	Yes
		Auto Shutdown Time	Yes	Yes	Yes
		Auto Shutdown Weekly Timer	Yes	Yes	Yes
		Auto Sleep Time	Yes	Yes	Yes
		Sleep Mode Energy Use	Yes	Yes	Yes
		Auto Sleep Weekly Timer	Yes	Yes	Yes
		Sleep Mode Exit Time Settings	Yes	Yes	Yes
	Network	Confirm Network Connection Set. Changes	Yes	Yes	Yes
		TCP/IP Settings			
		IPv4 Settings	Use IPv4	Yes	Yes	Yes
			IP Address Settings			
			IP Address	Yes	No	No
			Subnet Mask	Yes	Yes	Yes
			Gateway Address	Yes	Yes	Yes
			DHCP	Yes	Yes	Yes
			RARP	Yes	Yes	Yes
			BOOTP	Yes	Yes	Yes
			DHCP Option Settings	Yes	Yes	Yes
		IPv6 Settings	Use IPv6	Yes	Yes	Yes
			Stateless Address Settings	Yes	Yes	Yes
			Manual Address Settings	Yes	No	No
			Use DHCPv6	Yes	Yes	Yes
		DNS Settings	DNS Server Address Settings	Yes	Yes	Yes
			DNS Host/Domain Name Settings	Yes	No	No
			DNS Dynamic Update Settings	Yes	Yes	Yes
		WINS Settings		Yes	Yes	Yes
		LPD Print Settings		Yes	Yes	Yes
		RAW Print Settings		Yes	Yes	Yes
		SNTP Settings		Yes	Yes	Yes
		FTP Print Settings		Yes	Yes	Yes
		WSD Settings		Yes	Yes	Yes
		Use FTP PASV Mode		Yes	Yes	Yes
		Multicast Discovery Settings		Yes	Yes	Yes
		Use HTTP		Yes	Yes	Yes
		Use WebDAV Server		Yes	Yes	Yes
		Proxy Settings		Yes	Yes	Yes
		NetWare Settings		Yes	Yes	Yes
		AppleTalk Settings		Yes	No	No
		SMB Server Settings		Yes	No	No
		SNMP Settings		Yes	Yes	Yes
		Dedicated Port Settings		Yes	Yes	Yes
		Use Spool Function		Yes	Yes	Yes
		Startup Settings		Yes	Yes	Yes
		Ethernet Driver Settings		Yes	Yes	Yes

Setting Information			Case A	Case B	Case C
		Firewall Settings	Yes	Yes	Yes
	External Interface	USB Settings	Yes	Yes	Yes
	Accessibility	Key Repetition Settings	Yes	Yes	Yes
		Reversed Display (Color)	Yes	Yes	Yes
	Adjustment/Maintenance				
	Adjust Image Quality	Correct Density	Yes	Yes	Yes
		Full Color Printing Vividness Settings	Yes	No	No
		Fine Adjust Zoom	Yes	No	No
Function Settings	Common	Paper Feed Settings	Yes	Yes	No
		Print Settings			
		Text/Photo Priority When ACS Is Set to Black	Yes	Yes	No
		Output Report Default Settings	Yes	Yes	Yes
		Superimpose Image Quality Priority	Yes	Yes	Yes
		Register Characters for Page No./ Watermark	Yes	Yes	Yes
		Secure Watermark/Document Scan Lock	Yes	Yes	Yes
		Scan Settings			
		Streak Prevention	Yes	Yes	No
		Feeder Black Scan Speed/Image Qlty. Priority	Yes	Yes	No
		LTRR/STMT Original Selection	Yes	Yes	No
		Remote Scan Gamma Value	Yes	Yes	No
		Auto Online	Yes	Yes	Yes
		Auto Offline	Yes	Yes	Yes
		Generate File			
		High Compression Image Quality Level	Yes	Yes	Yes
		Compact PDF Settings for Text Original	Yes	Yes	Yes
		OCR (Text Searchable) Settings	Yes	Yes	Yes
		Trace & Smooth Settings	Yes	Yes	Yes
		OOXML Settings	Yes	Yes	Yes
		Include Background Images in Word File	Yes	Yes	Yes
		Specify Minimum PDF Version	Yes	Yes	Yes
		Format PDF to PDF/A	Yes	Yes	Yes
		Optimize PDF for Web	Yes	Yes	Yes
		256-bit AES Settings for Encrypted PDF	Yes	Yes	Yes
		Document Scan Lock Operational Settings	Yes	Yes	Yes
		Set Authentication Method	Yes	Yes	Yes

Setting Information				Case A	Case B	Case C
	Copy	Auto Collate		Yes	Yes	Yes
		Auto Orientation		Yes	Yes	Yes
		Select Color Settings for Copy		Yes	Yes	Yes
	Send	Common Settings		Yes	Yes	Yes
		E-Mail/I-Fax Settings				
		Register Unit Name		Yes	Yes	Yes
		Communication Settings	SMTP RX	Yes	Yes	Yes
			POP	Yes	Yes	Yes
			SMTP Server	Yes	Yes	Yes
			E-Mail Address	Yes	No	No
			POP Server	Yes	Yes	Yes
			POP Login Name	Yes	No	No
			POP Password	Yes	No	No
			POP Interval	Yes	Yes	Yes
		Authent./Encryption		Yes	Yes	Yes
		Confirm SSL Certificate for SMTP TX		Yes	Yes	Yes
		Confirm SSL Certificate for POP RX		Yes	Yes	Yes
		Maximum Data Size for Sending		Yes	Yes	Yes
		Default Subject		Yes	Yes	Yes
		Specify Authentication User Dest. to Reply		Yes	Yes	Yes
		Set Authentication User Dest. to Sender		Yes	Yes	Yes
		Allow Unregistered Users to Send E-Mail		Yes	Yes	Yes
		Full Mode TX Timeout		Yes	Yes	Yes
		Print MDN/DSN upon Receipt		Yes	Yes	Yes
		Use Send via Server		Yes	Yes	Yes
		Allow MDN Not via Server		Yes	Yes	Yes
		Restrict TX Destination Domain		Yes	Yes	Yes
		Autocomplete for Entering E-Mail Addresses		Yes	Yes	Yes
		Fax Settings				
		Default Screen		Yes	Yes	Yes
		Change Default Settings		Yes	Yes	Yes
		Register Options Shortcuts		Yes	Yes	Yes
		Register Sender Name (TTI)		Yes	Yes	Yes
		Use Auth. User Name as Sender Name		Yes	Yes	Yes
		ECM TX		Yes	Yes	Yes
		Set Pause Time		Yes	Yes	Yes
		Auto Redial		Yes	Yes	Yes

Setting Information				Case A	Case B	Case C
		Check Dial Tone Before Sending		Yes	Yes	Yes
		Fax TX Report		Yes	Yes	Yes
		Fax Activity Report		Yes	Yes	Yes
		Set Line	Line 1 to Line 2	Yes	Yes	Yes
			Register Unit Telephone Number	Yes	No	No
			Register Unit Name	Yes	No	No
			Select Line Type	Yes	Yes	Yes
			Select TX Line	Yes	Yes	Yes
		TX Start Speed		Yes	Yes	Yes
		R-Key Setting		Yes	Yes	Yes
		Confirm Entered Fax Number		Yes	Yes	Yes
		Allow Fax Driver TX		Yes	Yes	Yes
		Remote Fax TX Settings		Yes	Yes	Yes
		Remote Fax Settings		Yes	Yes	Yes
	Receive/Forward	Common Settings		Yes	Yes	Yes
		Fax Settings		Yes	Yes	Yes
	Store/Access Files	Mail Box Settings		Yes	Yes	Yes
		Advanced Space Settings		Yes	Yes	Yes
		Network Settings		Yes	Yes	Yes
		Memory Media Settings		Yes	Yes	Yes
	Secure Print	Simple Authentication Settings		Yes	Yes	Yes
		Only Allow Encrypted Print Jobs		Yes	Yes	Yes
Set Destination	Change Default Display of Address Book			Yes	Yes	Yes
	Address Book PIN			Yes	Yes	Yes
	Manage Address Book Access Numbers			Yes	Yes	Yes
	Include Pswd. When Exporting Address Book			Yes	Yes	Yes
	Register LDAP Server			Yes	Yes	No
	Auto Search When Using LDAP Server			Yes	Yes	Yes
	Change Default LDAP Search Conditions			Yes	Yes	Yes
	Register/Edit LDAP Search Conditions			Yes	Yes	No
	Acquire Remote Address Book	Acquire Address Book		Yes	Yes	Yes
		Remote Address Book Server Address		Yes	Yes	Yes
		Communication Timeout		Yes	Yes	Yes
		Fax TX Line Auto Select Adjustment		Yes	Yes	Yes
	Make Remote Add. Book Open	Make Address Book Open		Yes	Yes	Yes
Management Settings	Device Management	Device Information Settings		Yes	No	No

Setting Information				Case A	Case B	Case C
		Device Information Delivery Settings				
		Register Destinations		Yes	Yes	No
		Set Auto Delivery		Yes	Yes	No
		Restrict Receiving Device Information		Yes	Yes	Yes
		Restrict Receiving for Each Function		Yes	Yes	Yes
		Report Settings		Yes	Yes	Yes
		Display Job Status Before Authentication		Yes	Yes	Yes
		Display Log		Yes	Yes	Yes
		Audit Log Retrieval		Yes	Yes	Yes
		Format Encryption Method to FIPS 140-2		Yes	Yes	Yes
	License/Other	Message Board/Support Link		Yes	Yes	Yes
		Remote Operation Settings		Yes	Yes	Yes
	Data Management	Back Up/Restore Settings		Yes	Yes	Yes
		HDD Data Complete Deletion		Yes	Yes	Yes
Box Settings	Function Settings	Receive/Forward	Common Settings	Yes	Yes	Yes
		Store/Access Files	Mail Box Settings	Yes	Yes	Yes
	Access Stored Files	Mail Box (Print)	Color Balance (Options)	Yes	Yes	No
	Scan and Store	Advanced Space (Scan)	Custom (Scan Size)	Yes	Yes	No
Department ID Management Settings	Management Settings	User Management	System Manager Information Settings	Yes	Yes	Yes
			Department ID Management			
			Register PIN	Yes	Yes	Yes
Main Menu Settings	Main Menu Settings	Setting File		Yes	Yes	Yes
Favorite Settings	Copy	Register/Edit Favorite Settings		Yes	Yes	No
		Change Default Settings		Yes	Yes	No
		Register Options Shortcuts (Regular Copy)		Yes	Yes	No
		Register Options Shortcuts (Express Copy)		Yes	Yes	No
	Send	Common Settings		Yes	Yes	Yes
		Fax Settings		Yes	Yes	Yes
	Store/Access Files	Common Settings		Yes	Yes	No
	Copy Basic Features Screen	Color Balance (Options)		Yes	Yes	No

Setting Information				Case A	Case B	Case C
Address Book	Set Destination	Register Destinations		Yes	Yes	Yes
		Rename Address List		Yes	Yes	Yes
		Register One-Touch		Yes	Yes	Yes
Forwarding Settings	Function Settings	Receive/Forward	Common Settings	Yes	Yes	Yes
Quick Menu Settings	Quick Menu Settings	Button File		Yes	Yes	No
MEAP Application Setting Information	iW Function Flow	Flow Data File		Yes	Yes	Yes
		Operation Setting File		Yes	Yes	Yes
	MEAP User Setting Information	Data		Yes	Yes	Yes
	MEAP Application Setting Information	Data		Yes	Yes	Yes
Paper Type Management Settings	Preferences	Paper Settings	Paper Type Management Settings	Yes	Yes	Yes
User Access Control for Advanced Space	User Access Control for Advanced Space	User List		Yes	Yes	Yes
		Integrated Authentication Settings		Yes	Yes	Yes
		Authentication/Operation Log Management		Yes	Yes	Yes
Web Access Settings	Web Access Settings	Favorites		Yes	Yes	Yes
		Settings		Yes	Yes	Yes

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Service mode setting values that can be backed up by DCM

The numbers shown in the Compatibility level are explained in the table below.

Compatibility level (Lv)	Description
0	Not supported.
1	Can import to a device of the same model and same SN only.
	Usable for the purpose of backup/restore.
2	Can import to a device of a same model.
3	Can import to a device of a different model also.

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DCM list for Service Mode

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	ADJ-XY	ADJ-X	Yes		
COPIER	ADJUST	ADJ-XY	ADJ-Y	Yes		
COPIER	ADJUST	ADJ-XY	ADJ-Y-DF	Yes		
COPIER	ADJUST	ADJ-XY	STRD-POS	Yes		
COPIER	ADJUST	ADJ-XY	ADJ-X-MG	Yes		
COPIER	ADJUST	ADJ-XY	ADJY-DF2	Yes		
COPIER	ADJUST	ADJ-XY	ADJ-Y-MG	Yes		
COPIER	ADJUST	BLANK	BLANK-T	Yes		
COPIER	ADJUST	BLANK	BLANK-L	Yes		
COPIER	ADJUST	BLANK	BLANK-R	Yes		
COPIER	ADJUST	BLANK	BLANK-B	Yes		
COPIER	ADJUST	BLANK	BLANK-T2	Yes		
COPIER	ADJUST	BLANK	BLANK-B2	Yes		
COPIER	ADJUST	CCD	W-PLT-X	Yes		
COPIER	ADJUST	CCD	W-PLT-Y	Yes		
COPIER	ADJUST	CCD	W-PLT-Z	Yes		
COPIER	ADJUST	CCD	SH-TRGT	Yes		
COPIER	ADJUST	CCD	100-RG	Yes		
COPIER	ADJUST	CCD	100-GB	Yes		
COPIER	ADJUST	CCD	DFTAR-R	Yes		
COPIER	ADJUST	CCD	DFTAR-G	Yes		
COPIER	ADJUST	CCD	DFTAR-B	Yes		
COPIER	ADJUST	CCD	MTF2-M1	Yes		
COPIER	ADJUST	CCD	MTF2-M2	Yes		
COPIER	ADJUST	CCD	MTF2-M3	Yes		
COPIER	ADJUST	CCD	MTF2-M4	Yes		
COPIER	ADJUST	CCD	MTF2-M5	Yes		
COPIER	ADJUST	CCD	MTF2-M6	Yes		
COPIER	ADJUST	CCD	MTF2-M7	Yes		
COPIER	ADJUST	CCD	MTF2-M8	Yes		
COPIER	ADJUST	CCD	MTF2-M9	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	CCD	MTF2-S1	Yes		
COPIER	ADJUST	CCD	MTF2-S2	Yes		
COPIER	ADJUST	CCD	MTF2-S3	Yes		
COPIER	ADJUST	CCD	MTF2-S4	Yes		
COPIER	ADJUST	CCD	MTF2-S5	Yes		
COPIER	ADJUST	CCD	MTF2-S6	Yes		
COPIER	ADJUST	CCD	MTF2-S7	Yes		
COPIER	ADJUST	CCD	MTF2-S8	Yes		
COPIER	ADJUST	CCD	MTF2-S9	Yes		
COPIER	ADJUST	CCD	100DF2GB	Yes		
COPIER	ADJUST	CCD	100DF2RG	Yes		
COPIER	ADJUST	CCD	DFCH2R2	Yes		
COPIER	ADJUST	CCD	DFCH2R10	Yes		
COPIER	ADJUST	CCD	DFCH2B2	Yes		
COPIER	ADJUST	CCD	DFCH2B10	Yes		
COPIER	ADJUST	CCD	DFCH2G2	Yes		
COPIER	ADJUST	CCD	DFCH2G10	Yes		
COPIER	ADJUST	CCD	CCD-CHNG	Yes		
COPIER	ADJUST	CCD	MTF-M1	Yes		
COPIER	ADJUST	CCD	MTF-M2	Yes		
COPIER	ADJUST	CCD	MTF-M3	Yes		
COPIER	ADJUST	CCD	MTF-M4	Yes		
COPIER	ADJUST	CCD	MTF-M5	Yes		
COPIER	ADJUST	CCD	MTF-M6	Yes		
COPIER	ADJUST	CCD	MTF-M7	Yes		
COPIER	ADJUST	CCD	MTF-M8	Yes		
COPIER	ADJUST	CCD	MTF-M9	Yes		
COPIER	ADJUST	CCD	MTF-S1	Yes		
COPIER	ADJUST	CCD	MTF-S2	Yes		
COPIER	ADJUST	CCD	MTF-S3	Yes		
COPIER	ADJUST	CCD	MTF-S4	Yes		
COPIER	ADJUST	CCD	MTF-S5	Yes		
COPIER	ADJUST	CCD	MTF-S6	Yes		
COPIER	ADJUST	CCD	MTF-S7	Yes		
COPIER	ADJUST	CCD	MTF-S8	Yes		
COPIER	ADJUST	CCD	MTF-S9	Yes		
COPIER	ADJUST	CCD	DFCH-R2	Yes		
COPIER	ADJUST	CCD	DFCH-R10	Yes		
COPIER	ADJUST	CCD	DFCH-B2	Yes		
COPIER	ADJUST	CCD	DFCH-B10	Yes		
COPIER	ADJUST	CCD	DFCH-G2	Yes		
COPIER	ADJUST	CCD	DFCH-G10	Yes		
COPIER	ADJUST	CCD	MTF2-M10	Yes		
COPIER	ADJUST	CCD	MTF2-M11	Yes		
COPIER	ADJUST	CCD	MTF2-M12	Yes		
COPIER	ADJUST	CCD	MTF2-S10	Yes		
COPIER	ADJUST	CCD	MTF2-S11	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	CCD	MTF2-S12	Yes		
COPIER	ADJUST	CCD	MTF-M10	Yes		
COPIER	ADJUST	CCD	MTF-M11	Yes		
COPIER	ADJUST	CCD	MTF-M12	Yes		
COPIER	ADJUST	CCD	MTF-S10	Yes		
COPIER	ADJUST	CCD	MTF-S11	Yes		
COPIER	ADJUST	CCD	MTF-S12	Yes		
COPIER	ADJUST	CCD	DFCH2K2	Yes		
COPIER	ADJUST	CCD	DFCH2K10	Yes		
COPIER	ADJUST	CCD	DFCH-K2	Yes		
COPIER	ADJUST	CCD	DFCH-K10	Yes		
COPIER	ADJUST	CCD	DFTAR-BW	Yes		
COPIER	ADJUST	CCD	DFTBK-G	Yes		
COPIER	ADJUST	CCD	DFTBK-B	Yes		
COPIER	ADJUST	CCD	DFTBK-R	Yes		
COPIER	ADJUST	CCD	CCD-CHG2	Yes		
COPIER	ADJUST	CCD	DFTBK-BW	Yes		
COPIER	ADJUST	COLOR	ADJ-Y	Yes		
COPIER	ADJUST	COLOR	ADJ-M	Yes		
COPIER	ADJUST	COLOR	ADJ-C	Yes		
COPIER	ADJUST	COLOR	ADJ-K	Yes		
COPIER	ADJUST	COLOR	OFST-Y	Yes		
COPIER	ADJUST	COLOR	OFST-M	Yes		
COPIER	ADJUST	COLOR	OFST-C	Yes		
COPIER	ADJUST	COLOR	OFST-K	Yes		
COPIER	ADJUST	COLOR	LD-OFS-Y	Yes		
COPIER	ADJUST	COLOR	LD-OFS-M	Yes		
COPIER	ADJUST	COLOR	LD-OFS-C	Yes		
COPIER	ADJUST	COLOR	LD-OFS-K	Yes		
COPIER	ADJUST	COLOR	MD-OFS-Y	Yes		
COPIER	ADJUST	COLOR	MD-OFS-M	Yes		
COPIER	ADJUST	COLOR	MD-OFS-C	Yes		
COPIER	ADJUST	COLOR	MD-OFS-K	Yes		
COPIER	ADJUST	COLOR	HD-OFS-Y	Yes		
COPIER	ADJUST	COLOR	HD-OFS-M	Yes		
COPIER	ADJUST	COLOR	HD-OFS-C	Yes		
COPIER	ADJUST	COLOR	HD-OFS-K	Yes		
COPIER	ADJUST	COLOR	PL-OFS-Y	Yes		
COPIER	ADJUST	COLOR	PL-OFS-M	Yes		
COPIER	ADJUST	COLOR	PL-OFS-C	Yes		
COPIER	ADJUST	COLOR	PL-OFS-K	Yes		
COPIER	ADJUST	COLOR	PM-OFS-Y	Yes		
COPIER	ADJUST	COLOR	PM-OFS-M	Yes		
COPIER	ADJUST	COLOR	PM-OFS-C	Yes		
COPIER	ADJUST	COLOR	PM-OFS-K	Yes		
COPIER	ADJUST	COLOR	PH-OFS-Y	Yes		
COPIER	ADJUST	COLOR	PH-OFS-M	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	COLOR	PH-OFS-C	Yes		
COPIER	ADJUST	COLOR	PH-OFS-K	Yes		
COPIER	ADJUST	CST-ADJ	MF-A4R	Yes		
COPIER	ADJUST	CST-ADJ	MF-A6R	Yes		
COPIER	ADJUST	CST-ADJ	MF-A4	Yes		
COPIER	ADJUST	CST-ADJ	MDK1-A4	Yes		
COPIER	ADJUST	CST-ADJ	MDK1-A5R	Yes		
COPIER	ADJUST	CST-ADJ	MDK2-A4	Yes		
COPIER	ADJUST	CST-ADJ	MDK2-A5R	Yes		
COPIER	ADJUST	CST-ADJ	MDK3-A4	Yes		
COPIER	ADJUST	CST-ADJ	MDK3-A5R	Yes		
COPIER	ADJUST	DENS	REF-Y	Yes		
COPIER	ADJUST	DENS	REF-M	Yes		
COPIER	ADJUST	DENS	REF-C	Yes		
COPIER	ADJUST	DENS	SIGG-Y	Yes		
COPIER	ADJUST	DENS	SIGG-M	Yes		
COPIER	ADJUST	DENS	SIGG-C	Yes		
COPIER	ADJUST	DENS	SIGG-K	Yes		
COPIER	ADJUST	DENS	HLMT-PTY	Yes		
COPIER	ADJUST	DENS	HLMT-PTM	Yes		
COPIER	ADJUST	DENS	HLMT-PTC	Yes		
COPIER	ADJUST	DENS	LLMT-PTY	Yes		
COPIER	ADJUST	DENS	LLMT-PTM	Yes		
COPIER	ADJUST	DENS	LLMT-PTC	Yes		
COPIER	ADJUST	DENS	DMAX-Y	Yes		
COPIER	ADJUST	DENS	DMAX-M	Yes		
COPIER	ADJUST	DENS	DMAX-C	Yes		
COPIER	ADJUST	DENS	P-TG-Y	Yes		
COPIER	ADJUST	DENS	P-TG-M	Yes		
COPIER	ADJUST	DENS	P-TG-C	Yes		
COPIER	ADJUST	DENS	P-TG-K	Yes		
COPIER	ADJUST	DENS	ALF-C	Yes		
COPIER	ADJUST	DENS	P-K-Y	Yes		
COPIER	ADJUST	DENS	P-K-M	Yes		
COPIER	ADJUST	DENS	P-K-C	Yes		
COPIER	ADJUST	DENS	P-K-K	Yes		
COPIER	ADJUST	DENS	HLMT-PTK	Yes		
COPIER	ADJUST	DENS	LLMT-PTK	Yes		
COPIER	ADJUST	DENS	REF-K	Yes		
COPIER	ADJUST	DENS	DMLMT-HY	Yes		
COPIER	ADJUST	DENS	DMLMT-HM	Yes		
COPIER	ADJUST	DENS	DMLMT-HC	Yes		
COPIER	ADJUST	DENS	DMLMT-LY	Yes		
COPIER	ADJUST	DENS	DMLMT-LM	Yes		
COPIER	ADJUST	DENS	DMLMT-LC	Yes		
COPIER	ADJUST	DENS	CONT-Y	Yes		
COPIER	ADJUST	DENS	CONT-M	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	DENS	CONT-C	Yes		
COPIER	ADJUST	DENS	CONT-K	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-Y	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-M	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-C	Yes		
COPIER	ADJUST	EXP-LED	PR-EXP-K	Yes		
COPIER	ADJUST	FEED-ADJ	REGIST	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C1	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C2	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C3	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-C4	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-MF	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-DK	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-REFE	Yes		
COPIER	ADJUST	FEED-ADJ	REG-THCK	Yes		
COPIER	ADJUST	FEED-ADJ	REG-DUP1	Yes		
COPIER	ADJUST	FEED-ADJ	REG-DUP2	Yes		
COPIER	ADJUST	FEED-ADJ	LP-FEED1	Yes		
COPIER	ADJUST	FEED-ADJ	LP-MULT1	Yes		
COPIER	ADJUST	FEED-ADJ	LP-DUP1	Yes		
COPIER	ADJUST	FEED-ADJ	PFIX-FAN	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-MDK1	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-MDK2	Yes		
COPIER	ADJUST	FEED-ADJ	ADJ-MDK3	Yes		
COPIER	ADJUST	FEED-ADJ	REG-H2	Yes		
COPIER	ADJUST	FEED-ADJ	REG-S	Yes		
COPIER	ADJUST	FEED-ADJ	REG-MF	Yes		
COPIER	ADJUST	FEED-ADJ	REG-MFH1	Yes		
COPIER	ADJUST	FEED-ADJ	REG-MFH2	Yes		
COPIER	ADJUST	FEED-ADJ	REG-MFS	Yes		
COPIER	ADJUST	FEED-ADJ	PFIX-SPD	Yes		
COPIER	ADJUST	FEED-ADJ	EXT-SPD	Yes		
COPIER	ADJUST	FEED-ADJ	REG-DUPS	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGY	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGM	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGC	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGY2	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGM2	Yes		
COPIER	ADJUST	HV-PRI	DIS-TGC2	Yes		
COPIER	ADJUST	HV-PRI	OFSTAC-Y	Yes		
COPIER	ADJUST	HV-PRI	OFSTAC-M	Yes		
COPIER	ADJUST	HV-PRI	OFSTAC-C	Yes		
COPIER	ADJUST	HV-PRI	OFSTACY2	Yes		
COPIER	ADJUST	HV-PRI	OFSTACM2	Yes		
COPIER	ADJUST	HV-PRI	OFSTACC2	Yes		
COPIER	ADJUST	HV-PRI	OFSTACY3	Yes		
COPIER	ADJUST	HV-PRI	OFSTACM3	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	HV-PRI	OFSTACC3	Yes		
COPIER	ADJUST	HV-PRI	PRI-FREQ	Yes		
COPIER	ADJUST	HV-PRI	DHT-ON	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT1	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT2	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT3	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT4	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT5	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT6	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT7	Yes		
COPIER	ADJUST	HV-TR	2TR-TGT8	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR1	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR2	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR3	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR4	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR5	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR6	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR7	Yes		
COPIER	ADJUST	HV-TR	2TR-SHR8	Yes		
COPIER	ADJUST	HV-TR	TR-PPR1	Yes		
COPIER	ADJUST	HV-TR	TR-PPR2	Yes		
COPIER	ADJUST	HV-TR	TR-PPR3	Yes		
COPIER	ADJUST	HV-TR	TR-PPR4	Yes		
COPIER	ADJUST	HV-TR	TR-PPR5	Yes		
COPIER	ADJUST	HV-TR	TR-PPR6	Yes		
COPIER	ADJUST	HV-TR	TR-PPR7	Yes		
COPIER	ADJUST	HV-TR	TR-PPR8	Yes		
COPIER	ADJUST	HV-TR	TR-ENV1	Yes		
COPIER	ADJUST	HV-TR	TR-ENV2	Yes		
COPIER	ADJUST	HV-TR	TR-ENV3	Yes		
COPIER	ADJUST	HV-TR	TR-ENV4	Yes		
COPIER	ADJUST	HV-TR	TR-ENV5	Yes		
COPIER	ADJUST	HV-TR	TR-ENV6	Yes		
COPIER	ADJUST	HV-TR	TR-ENV7	Yes		
COPIER	ADJUST	HV-TR	TR-ENV8	Yes		
COPIER	ADJUST	HV-TR	TR-CLR1	Yes		
COPIER	ADJUST	HV-TR	TR-CLR2	Yes		
COPIER	ADJUST	HV-TR	TR-CLR3	Yes		
COPIER	ADJUST	HV-TR	TR-CLR4	Yes		
COPIER	ADJUST	HV-TR	TR-CLR5	Yes		
COPIER	ADJUST	HV-TR	TR-CLR6	Yes		
COPIER	ADJUST	HV-TR	TR-CLR7	Yes		
COPIER	ADJUST	HV-TR	TR-CLR8	Yes		
COPIER	ADJUST	HV-TR	TR-DUP1	Yes		
COPIER	ADJUST	HV-TR	TR-DUP2	Yes		
COPIER	ADJUST	HV-TR	TR-DUP3	Yes		
COPIER	ADJUST	HV-TR	TR-DUP4	Yes		
COPIER	ADJUST	HV-TR	TR-DUP5	Yes		
COPIER	ADJUST	HV-TR	TR-DUP6	Yes		
COPIER	ADJUST	HV-TR	TR-DUP7	Yes		
COPIER	ADJUST	HV-TR	TR-DUP8	Yes		
COPIER	ADJUST	HV-TR	1TR-TGY	Yes		
COPIER	ADJUST	HV-TR	1TR-TGM	Yes		
COPIER	ADJUST	HV-TR	1TR-TGC	Yes		
COPIER	ADJUST	HV-TR	1TR-TGK1	Yes		
COPIER	ADJUST	HV-TR	1TR-TGK4	Yes		
COPIER	ADJUST	HV-TR	2EL	Yes		
COPIER	ADJUST	HV-TR	POSTSW-K	Yes		
COPIER	ADJUST	HV-TR	2ELSW	Yes		
COPIER	ADJUST	HV-TR	1TR-TGY2	Yes		
COPIER	ADJUST	HV-TR	1TR-TGM2	Yes		
COPIER	ADJUST	HV-TR	1TR-TGC2	Yes		
COPIER	ADJUST	HV-TR	1TR-TK12	Yes		
COPIER	ADJUST	HV-TR	1TR-TGY3	Yes		
COPIER	ADJUST	HV-TR	1TR-TGM3	Yes		
COPIER	ADJUST	HV-TR	1TR-TGC3	Yes		
COPIER	ADJUST	HV-TR	1TR-TK13	Yes		
COPIER	ADJUST	HV-TR	1TR-TK42	Yes		
COPIER	ADJUST	HV-TR	1TR-TK43	Yes		
COPIER	ADJUST	IMG-REG	REG-H-Y	Yes		
COPIER	ADJUST	IMG-REG	REG-H-C	Yes		
COPIER	ADJUST	IMG-REG	REG-H-K	Yes		
COPIER	ADJUST	IMG-REG	REG-HS-Y	Yes		
COPIER	ADJUST	IMG-REG	REG-HS-C	Yes		
COPIER	ADJUST	IMG-REG	REG-V-Y	Yes		
COPIER	ADJUST	IMG-REG	REG-V-C	Yes		
COPIER	ADJUST	IMG-REG	REG-V-K	Yes		
COPIER	ADJUST	IMG-REG	REG-H-M	Yes		
COPIER	ADJUST	IMG-REG	REG-V-M	Yes		
COPIER	ADJUST	IMG-REG	REG-HS-M	Yes		
COPIER	ADJUST	IMG-REG	MAG-V	Yes		
COPIER	ADJUST	IMG-REG	LSR-H-1	Yes		
COPIER	ADJUST	IMG-REG	LSR-H-2	Yes		
COPIER	ADJUST	IMG-REG	LSR-V-Y	Yes		
COPIER	ADJUST	IMG-REG	LSR-V-M	Yes		
COPIER	ADJUST	IMG-REG	LSR-V-C	Yes		
COPIER	ADJUST	IMG-REG	LSR-V-K	Yes		
COPIER	ADJUST	MISC	SEG-ADJ	Yes		
COPIER	ADJUST	MISC	K-ADJ	Yes		
COPIER	ADJUST	MISC	ACS-ADJ	Yes		
COPIER	ADJUST	MISC	ACS-EN	Yes		
COPIER	ADJUST	MISC	ACS-CNT	Yes		
COPIER	ADJUST	MISC	ACS-EN2	Yes		
COPIER	ADJUST	MISC	ACS-CNT2	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	ADJUST	MISC	WT-ER-LV	Yes		
COPIER	ADJUST	MISC	REOS-PG	Yes		
COPIER	ADJUST	MISC	SEG-ADJ3	Yes		
COPIER	ADJUST	MISC	K-ADJ3	Yes		
COPIER	ADJUST	MISC	ACS-ADJ3	Yes		
COPIER	ADJUST	MISC	ACS-EN3	Yes		
COPIER	ADJUST	MISC	ACS-CNT3	Yes		
COPIER	ADJUST	MISC	SH-ADJ	Yes		
COPIER	ADJUST	MISC	SH-ADJ2	Yes		
COPIER	ADJUST	PASCAL	OFST-P-Y	Yes		
COPIER	ADJUST	PASCAL	OFST-P-M	Yes		
COPIER	ADJUST	PASCAL	OFST-P-C	Yes		
COPIER	ADJUST	PASCAL	OFST-P-K	Yes		
COPIER	ADJUST	V-CONT	VCONT-K	Yes		
COPIER	ADJUST	V-CONT	VBACK-Y	Yes		
COPIER	ADJUST	V-CONT	VBACK-M	Yes		
COPIER	ADJUST	V-CONT	VBACK-C	Yes		
COPIER	ADJUST	V-CONT	VBACK-K	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-Y	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-M	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-C	Yes		
COPIER	ADJUST	V-CONT	PT-VCT-K	Yes		
COPIER	ADJUST	V-CONT	VDGAIN-Y	Yes		
COPIER	ADJUST	V-CONT	VDGAIN-M	Yes		
COPIER	ADJUST	V-CONT	VDGAIN-C	Yes		
COPIER	ADJUST	V-CONT	LPGAIN-Y	Yes		
COPIER	ADJUST	V-CONT	LPGAIN-M	Yes		
COPIER	ADJUST	V-CONT	LPGAIN-C	Yes		
COPIER	ADJUST	V-CONT	VBACK2-Y	Yes		
COPIER	ADJUST	V-CONT	VBACK2-M	Yes		
COPIER	ADJUST	V-CONT	VBACK2-C	Yes		
COPIER	ADJUST	V-CONT	VBACK2-K	Yes		
COPIER	ADJUST	V-CONT	VBACK3-Y	Yes		
COPIER	ADJUST	V-CONT	VBACK3-M	Yes		
COPIER	ADJUST	V-CONT	VBACK3-C	Yes		
COPIER	ADJUST	V-CONT	VBACK3-K	Yes		
COPIER	FUNCTION	INSTALL	KEY	Yes		
COPIER	FUNCTION	INSTALL	E-RDS	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	RGW-PORT	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	RGW-ADR	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	CDS-CTL	Yes	Yes	Yes
COPIER	FUNCTION	INSTALL	BIT-SVC	Yes	Yes	Yes
COPIER	FUNCTION	MISC-R	1PCLBUDR	Yes		
COPIER	FUNCTION	MISC-R	1PCLBOVR	Yes		
COPIER	FUNCTION	SYSTEM	DEBUG-1	Yes	Yes	Yes
COPIER	OPTION	ACC	COIN	Yes		
COPIER	OPTION	ACC	DK-P	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	ACC	CARD-SW	Yes		
COPIER	OPTION	ACC	STPL-LMT	Yes	Yes	Yes
COPIER	OPTION	ACC	SC-TYPE	Yes		
COPIER	OPTION	ACC	CC-SPSW	Yes		
COPIER	OPTION	ACC	UNIT-PRC	Yes		
COPIER	OPTION	ACC	DA-PUCT	Yes	Yes	
COPIER	OPTION	ACC	MIN-PRC	Yes		
COPIER	OPTION	ACC	MAX-PRC	Yes		
COPIER	OPTION	ACC	MIC-TUN	Yes		
COPIER	OPTION	ACC	SRL-SPSW	Yes		
COPIER	OPTION	ACC	PDL-THR	Yes		
COPIER	OPTION	ACC	CR-TYPE	Yes	Yes	
COPIER	OPTION	BODY	MODEL-SZ	Yes		
COPIER	OPTION	BODY	SCANSLCT	Yes		
COPIER	OPTION	BODY	PASCAL	Yes		
COPIER	OPTION	BODY	DH-SW	Yes		
COPIER	OPTION	BODY	SENS-CNF	Yes		
COPIER	OPTION	BODY	CONFIG	Yes		
COPIER	OPTION	BODY	RAW-DATA	Yes	Yes	Yes
COPIER	OPTION	BODY	IFAX-LIM	Yes	Yes	Yes
COPIER	OPTION	BODY	W/SCNR	Yes		
COPIER	OPTION	BODY	SMTPTXPN	Yes	Yes	Yes
COPIER	OPTION	BODY	SMTPRXPN	Yes	Yes	Yes
COPIER	OPTION	BODY	POP3PN	Yes	Yes	Yes
COPIER	OPTION	BODY	ORG-LGL	Yes	Yes	
COPIER	OPTION	BODY	ORG-LTR	Yes	Yes	
COPIER	OPTION	BODY	ORG-B5	Yes	Yes	
COPIER	OPTION	BODY	UI-COPY	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-BOX	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-SEND	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-FAX	Yes	Yes	Yes
COPIER	OPTION	BODY	SCR-SLCT	Yes	Yes	
COPIER	OPTION	BODY	TMC-SLCT	Yes		
COPIER	OPTION	BODY	DEVL-VTH	Yes		
COPIER	OPTION	BODY	FTPTXPN	Yes	Yes	Yes
COPIER	OPTION	BODY	INTPPR-1	Yes		
COPIER	OPTION	BODY	PRN-FLG	Yes	Yes	
COPIER	OPTION	BODY	SCN-FLG	Yes	Yes	
COPIER	OPTION	BODY	INTROT-1	Yes		
COPIER	OPTION	BODY	INTROT-2	Yes		
COPIER	OPTION	BODY	INTROT-T	Yes		
COPIER	OPTION	BODY	NWERR-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	DEVL-PTH	Yes		
COPIER	OPTION	BODY	AUTO-DH	Yes		
COPIER	OPTION	BODY	STS-PORT	Yes	Yes	Yes
COPIER	OPTION	BODY	CMD-PORT	Yes	Yes	Yes
COPIER	OPTION	BODY	MODELSZ2	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	BODY	OHP-PTH	Yes		
COPIER	OPTION	BODY	UISW-DSP	Yes	Yes	Yes
COPIER	OPTION	BODY	DFDST-L1	Yes		
COPIER	OPTION	BODY	DFDST-L2	Yes		
COPIER	OPTION	BODY	NS-CMD5	Yes	Yes	Yes
COPIER	OPTION	BODY	NS-GSAPI	Yes	Yes	Yes
COPIER	OPTION	BODY	NS-NTLM	Yes	Yes	Yes
COPIER	OPTION	BODY	NS-PLNWS	Yes	Yes	Yes
COPIER	OPTION	BODY	NS-PLN	Yes	Yes	Yes
COPIER	OPTION	BODY	NS-LGN	Yes	Yes	Yes
COPIER	OPTION	BODY	T-CRG-SW	Yes		
COPIER	OPTION	BODY	MEAP-PN	Yes	Yes	Yes
COPIER	OPTION	BODY	TNR-DWN	Yes		
COPIER	OPTION	BODY	TMIC-BK	Yes	Yes	
COPIER	OPTION	BODY	SVMD-ENT	Yes	Yes	Yes
COPIER	OPTION	BODY	DH-MODE	Yes		
COPIER	OPTION	BODY	ENVP-INT	Yes	Yes	Yes
COPIER	OPTION	BODY	PCHINT-1	Yes		
COPIER	OPTION	BODY	PCHINT-V	Yes		
COPIER	OPTION	BODY	FXWRNLVL	Yes		
COPIER	OPTION	BODY	FXMSG-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	CHNG-STS	Yes	Yes	Yes
COPIER	OPTION	BODY	CHNG-CMD	Yes	Yes	Yes
COPIER	OPTION	BODY	ANIM-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	MEAP-SSL	Yes	Yes	Yes
COPIER	OPTION	BODY	SC-L-CNT	Yes	Yes	
COPIER	OPTION	BODY	DH-TMG	Yes		
COPIER	OPTION	BODY	MIX-FLG	Yes	Yes	
COPIER	OPTION	BODY	REPORT-Z	Yes	Yes	
COPIER	OPTION	BODY	IFXEML-Z	Yes	Yes	
COPIER	OPTION	BODY	BMLNKS-Z	Yes	Yes	
COPIER	OPTION	BODY	KSIZE-SW	Yes	Yes	
COPIER	OPTION	BODY	LPD-PORT	Yes	Yes	Yes
COPIER	OPTION	BODY	ORG-A4R	Yes	Yes	
COPIER	OPTION	BODY	PDF-RDCT	Yes	Yes	Yes
COPIER	OPTION	BODY	REDU-CNT	Yes		
COPIER	OPTION	BODY	REBOOTSW	Yes	Yes	Yes
COPIER	OPTION	BODY	VP-ART	Yes		
COPIER	OPTION	BODY	VP-TXT	Yes		
COPIER	OPTION	BODY	UI-PRINT	Yes	Yes	Yes
COPIER	OPTION	BODY	WUEV-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	WUEV-INT	Yes	Yes	Yes
COPIER	OPTION	BODY	WUEV-POT	Yes	Yes	Yes
COPIER	OPTION	BODY	WUEV-RTR	Yes	Yes	Yes
COPIER	OPTION	BODY	SJB-UNW	Yes	Yes	Yes
COPIER	OPTION	BODY	IMGC-ADJ	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-RSCAN	Yes	Yes	Yes

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	BODY	UI-EPRNT	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-WEB	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-HOLD	Yes	Yes	Yes
COPIER	OPTION	BODY	WEBV-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	PASCL-TY	Yes	Yes	
COPIER	OPTION	BODY	CARD-RNG	Yes	Yes	
COPIER	OPTION	BODY	WUEN-LIV	Yes	Yes	Yes
COPIER	OPTION	BODY	COMP-PRT	Yes	Yes	Yes
COPIER	OPTION	BODY	ARCDT-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	ADJ-VPP	Yes		
COPIER	OPTION	BODY	AST-SEL	Yes		
COPIER	OPTION	BODY	REGM-SEL	Yes		
COPIER	OPTION	BODY	2TR-RVON	Yes		
COPIER	OPTION	BODY	SJOB-CL	Yes	Yes	Yes
COPIER	OPTION	BODY	TNR-WARN	Yes	Yes	Yes
COPIER	OPTION	BODY	DHCP-12	Yes	Yes	Yes
COPIER	OPTION	BODY	DHCP-81	Yes	Yes	Yes
COPIER	OPTION	BODY	IFX-CHIG	Yes	Yes	Yes
COPIER	OPTION	BODY	USB-RCNT	Yes	Yes	Yes
COPIER	OPTION	BODY	UNLMTBND	Yes		
COPIER	OPTION	BODY	SCANTYPE	Yes	Yes	
COPIER	OPTION	BODY	DNSTRANS	Yes	Yes	Yes
COPIER	OPTION	BODY	MIBCOUNT	Yes	Yes	Yes
COPIER	OPTION	BODY	DRY-CISU	Yes		
COPIER	OPTION	BODY	RMT-CNSL	Yes	Yes	Yes
COPIER	OPTION	BODY	MEAP-PRI	Yes	Yes	Yes
COPIER	OPTION	BODY	EVLP-SPD	Yes		
COPIER	OPTION	BODY	PROXYRES	Yes	Yes	Yes
COPIER	OPTION	BODY	WOLTRANS	Yes	Yes	Yes
COPIER	OPTION	BODY	DF2DSTL1	Yes		
COPIER	OPTION	BODY	DF2DSTL2	Yes		
COPIER	OPTION	BODY	802XTOUT	Yes	Yes	Yes
COPIER	OPTION	BODY	IKERETRY	Yes	Yes	Yes
COPIER	OPTION	BODY	SPDALDEL	Yes	Yes	Yes
COPIER	OPTION	BODY	NCONF-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	ABK-TOOL	Yes	Yes	Yes
COPIER	OPTION	BODY	DMX-OF-Y	Yes		
COPIER	OPTION	BODY	DMX-OF-M	Yes		
COPIER	OPTION	BODY	DMX-OF-C	Yes		
COPIER	OPTION	BODY	DMX-OF-K	Yes		
COPIER	OPTION	BODY	IKEINTVL	Yes	Yes	Yes
COPIER	OPTION	BODY	IPSDEBLV	Yes	Yes	Yes
COPIER	OPTION	BODY	SP-LINK	Yes	Yes	Yes
COPIER	OPTION	BODY	W/RAID	Yes	Yes	
COPIER	OPTION	BODY	PSWD-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	SM-PSWD	Yes	Yes	Yes
COPIER	OPTION	BODY	DEV-SP1	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	BODY	DEV-SP2	Yes		
COPIER	OPTION	BODY	RPT2SIDE	Yes	Yes	Yes
COPIER	OPTION	BODY	AFS-JOB	Yes	Yes	Yes
COPIER	OPTION	BODY	AFC-EVNT	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-SBOX	Yes	Yes	Yes
COPIER	OPTION	BODY	UI-MEM	Yes	Yes	Yes
COPIER	OPTION	BODY	ILOGMODE	Yes	Yes	Yes
COPIER	OPTION	BODY	ILOGKEEP	Yes	Yes	Yes
COPIER	OPTION	BODY	PSCL-MS	Yes		
COPIER	OPTION	BODY	DMX-DISP	Yes		
COPIER	OPTION	BODY	UI-NAVI	Yes	Yes	Yes
COPIER	OPTION	BODY	ERS-SEL	Yes		
COPIER	OPTION	BODY	STND-PNL	Yes	Yes	
COPIER	OPTION	BODY	INVALPDL	Yes	Yes	
COPIER	OPTION	BODY	IMGCNTPR	Yes	Yes	
COPIER	OPTION	BODY	CDS-FIRM	Yes	Yes	Yes
COPIER	OPTION	BODY	CDS-MEAP	Yes	Yes	Yes
COPIER	OPTION	BODY	CDS-UGW	Yes	Yes	Yes
COPIER	OPTION	BODY	LOCLFIRM	Yes	Yes	Yes
COPIER	OPTION	BODY	RSHDW-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	FX-WUT	Yes		
COPIER	OPTION	BODY	TMP-P1-1	Yes		
COPIER	OPTION	BODY	TMP-P1-2	Yes		
COPIER	OPTION	BODY	TMP-P2-1	Yes		
COPIER	OPTION	BODY	TMP-P2-2	Yes		
COPIER	OPTION	BODY	TMP-H1-1	Yes		
COPIER	OPTION	BODY	TMP-H1-2	Yes		
COPIER	OPTION	BODY	TMP-H2-1	Yes		
COPIER	OPTION	BODY	TMP-H2-2	Yes		
COPIER	OPTION	BODY	TMP-H3-1	Yes		
COPIER	OPTION	BODY	TMP-H3-2	Yes		
COPIER	OPTION	BODY	TMP-H4-1	Yes		
COPIER	OPTION	BODY	TMP-H4-2	Yes		
COPIER	OPTION	BODY	TMP-THIN	Yes		
COPIER	OPTION	BODY	DWN-TMP	Yes		
COPIER	OPTION	BODY	ARC-INT1	Yes		
COPIER	OPTION	BODY	ARC-INT2	Yes		
COPIER	OPTION	BODY	SCR-SW	Yes		
COPIER	OPTION	BODY	DEV-SP3	Yes		
COPIER	OPTION	BODY	DEV-SP4	Yes		
COPIER	OPTION	BODY	DEV-SP5	Yes		
COPIER	OPTION	BODY	DEV-SP6	Yes		
COPIER	OPTION	BODY	DEV-SP7	Yes		
COPIER	OPTION	BODY	DEV-SP8	Yes		
COPIER	OPTION	BODY	IPTBROAD	Yes	Yes	Yes
COPIER	OPTION	BODY	TMP-R1-1	Yes		
COPIER	OPTION	BODY	TMP-R2-1	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	BODY	TMP-R1-2	Yes		
COPIER	OPTION	BODY	TMP-R2-2	Yes		
COPIER	OPTION	BODY	FCOT-DSP	Yes	Yes	Yes
COPIER	OPTION	BODY	MC-FANSW	Yes	Yes	Yes
COPIER	OPTION	BODY	PFWFTPRT	Yes	Yes	Yes
COPIER	OPTION	BODY	BXNUPLOG	Yes	Yes	Yes
COPIER	OPTION	BODY	TFL-RTC	Yes	Yes	
COPIER	OPTION	BODY	UI-CUSTM	Yes	Yes	Yes
COPIER	OPTION	BODY	BUSI-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	SDLMTWRN	Yes	Yes	Yes
COPIER	OPTION	BODY	JLK-PWSC	Yes	Yes	Yes
COPIER	OPTION	BODY	CNTCNFSW	Yes		
COPIER	OPTION	BODY	USZ-FEED	Yes	Yes	Yes
COPIER	OPTION	BODY	IPMTU	Yes	Yes	Yes
COPIER	OPTION	BODY	DDNSINTV	Yes	Yes	Yes
COPIER	OPTION	BODY	ITB-TYPE	Yes		
COPIER	OPTION	BODY	FAX-INT	Yes	Yes	Yes
COPIER	OPTION	BODY	PDL-Z-LG	Yes	Yes	
COPIER	OPTION	BODY	CDS-LVUP	Yes	Yes	Yes
COPIER	OPTION	BODY	AMSOFFSW	Yes	Yes	Yes
COPIER	OPTION	BODY	USEUPTNR	Yes		
COPIER	OPTION	BODY	UA-OFFSW	Yes	Yes	Yes
COPIER	OPTION	BODY	MIB-NVTA	Yes	Yes	
COPIER	OPTION	BODY	MIB-EXT	Yes	Yes	
COPIER	OPTION	BODY	SCT-BTN	Yes	Yes	Yes
COPIER	OPTION	BODY	DFEJCLED	Yes		
COPIER	OPTION	BODY	SVC-RUI	Yes	Yes	
COPIER	OPTION	BODY	PSCL-TBL	Yes		
COPIER	OPTION	BODY	BGE-OFS	Yes		
COPIER	OPTION	BODY	USER-DSP	Yes	Yes	Yes
COPIER	OPTION	BODY	LCDSFLG	Yes	Yes	Yes
COPIER	OPTION	BODY	STNDBY-A	Yes	Yes	
COPIER	OPTION	BODY	SDTM-DSP	Yes	Yes	Yes
COPIER	OPTION	BODY	BXSHIFT	Yes	Yes	Yes
COPIER	OPTION	BODY	HOME-SW	Yes	Yes	Yes
COPIER	OPTION	BODY	NO-LGOUT	Yes	Yes	Yes
COPIER	OPTION	BODY	T-DLV-BK	Yes		
COPIER	OPTION	BODY	JM-ERR-D	Yes		
COPIER	OPTION	BODY	JM-ERR-R	Yes		
COPIER	OPTION	BODY	LOW-SEQ	Yes		
COPIER	OPTION	BODY	FX-WAIT	Yes		
COPIER	OPTION	BODY	TMPC1A-2	Yes		
COPIER	OPTION	BODY	TMPC1B-2	Yes		
COPIER	OPTION	BODY	TMPC1C-2	Yes		
COPIER	OPTION	BODY	TMP-C2-1	Yes		
COPIER	OPTION	BODY	TMP-C2-2	Yes		
COPIER	OPTION	BODY	TMP-C3-1	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	BODY	TMP-C3-2	Yes		
COPIER	OPTION	BODY	TMP-C4-1	Yes		
COPIER	OPTION	BODY	TMP-C4-2	Yes		
COPIER	OPTION	BODY	TMPC5A-1	Yes		
COPIER	OPTION	BODY	TMPC5A-2	Yes		
COPIER	OPTION	BODY	TMPC5B-1	Yes		
COPIER	OPTION	BODY	TMPC5B-2	Yes		
COPIER	OPTION	BODY	TMPC5C-1	Yes		
COPIER	OPTION	BODY	TMPC5C-2	Yes		
COPIER	OPTION	BODY	TMPOHT-1	Yes		
COPIER	OPTION	BODY	TMPOHT-2	Yes		
COPIER	OPTION	BODY	FX-CU-P1	Yes		
COPIER	OPTION	BODY	FX-CU-P2	Yes		
COPIER	OPTION	BODY	FX-CU-R1	Yes		
COPIER	OPTION	BODY	FX-CU-R2	Yes		
COPIER	OPTION	BODY	FX-CU-TN	Yes		
COPIER	OPTION	BODY	FX-CU-OT	Yes		
COPIER	OPTION	BODY	WEB-PRS	Yes		
COPIER	OPTION	BODY	WEB-TMP	Yes		
COPIER	OPTION	BODY	EF-TMP11	Yes		
COPIER	OPTION	BODY	EF-TMP21	Yes		
COPIER	OPTION	BODY	EF-TMP22	Yes		
COPIER	OPTION	BODY	EF-TMP23	Yes		
COPIER	OPTION	BODY	DWN-TMP2	Yes		
COPIER	OPTION	BODY	IHOFFTMP	Yes		
COPIER	OPTION	BODY	FX-L-CHG	Yes		
COPIER	OPTION	BODY	WEB-FEED	Yes		
COPIER	OPTION	BODY	CORE-CLN	Yes		
COPIER	OPTION	BODY	COL-SHRT	Yes		
COPIER	OPTION	BODY	COL-LONG	Yes		
COPIER	OPTION	BODY	FX-MIX1	Yes		
COPIER	OPTION	BODY	FX-MIX2	Yes		
COPIER	OPTION	BODY	FX-MIX3	Yes		
COPIER	OPTION	BODY	WEB-CLN	Yes		
COPIER	OPTION	BODY	CF-TMP11	Yes		
COPIER	OPTION	BODY	CF-TMP12	Yes		
COPIER	OPTION	BODY	CF-TMP13	Yes		
COPIER	OPTION	BODY	CF-TMP14	Yes		
COPIER	OPTION	BODY	CF-TMP21	Yes		
COPIER	OPTION	BODY	CF-TMP23	Yes		
COPIER	OPTION	BODY	CF-TMP24	Yes		
COPIER	OPTION	BODY	CF-TMP25	Yes		
COPIER	OPTION	BODY	CF-TMP26	Yes		
COPIER	OPTION	BODY	CF-TMP27	Yes		
COPIER	OPTION	BODY	FX-CU-13	Yes		
COPIER	OPTION	BODY	FIX-MODE	Yes		
COPIER	OPTION	BODY	FIX-RCPR	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	BODY	FX-MIX4	Yes		
COPIER	OPTION	BODY	FX-MIX5	Yes		
COPIER	OPTION	BODY	FX-MIX6	Yes		
COPIER	OPTION	BODY	FX-MIX7	Yes		
COPIER	OPTION	BODY	TR-BND3	Yes		
COPIER	OPTION	BODY	TR-BND4	Yes		
COPIER	OPTION	BODY	TRCLN3-P	Yes		
COPIER	OPTION	BODY	TRCLN4-P	Yes		
COPIER	OPTION	BODY	KIN-SW1	Yes		
COPIER	OPTION	BODY	KIN-SW2	Yes		
COPIER	OPTION	BODY	KIN-SW3	Yes		
COPIER	OPTION	BODY	TMPC1A-1	Yes		
COPIER	OPTION	BODY	TMPC1B-1	Yes		
COPIER	OPTION	BODY	TMPC1C-1	Yes		
COPIER	OPTION	BODY	TMP-THN2	Yes		
COPIER	OPTION	CST	U1-NAME	Yes	Yes	Yes
COPIER	OPTION	CST	U2-NAME	Yes	Yes	Yes
COPIER	OPTION	CST	U3-NAME	Yes	Yes	Yes
COPIER	OPTION	CST	U4-NAME	Yes	Yes	Yes
COPIER	OPTION	CST	CST3-P1	Yes		
COPIER	OPTION	CST	CST3-P2	Yes		
COPIER	OPTION	CST	CST4-P1	Yes		
COPIER	OPTION	CST	CST4-P2	Yes		
COPIER	OPTION	CST	CST3-U1	Yes		
COPIER	OPTION	CST	CST3-U3	Yes		
COPIER	OPTION	CST	CST4-U1	Yes		
COPIER	OPTION	CST	CST4-U3	Yes		
COPIER	OPTION	INT-FACE	IMG-CONT	Yes		
COPIER	OPTION	INT-FACE	AP-OPT	Yes		
COPIER	OPTION	INT-FACE	AP-ACCNT	Yes		
COPIER	OPTION	INT-FACE	AP-CODE	Yes		
COPIER	OPTION	INT-FACE	NWCT-TM	Yes		
COPIER	OPTION	USER	COPY-LIM	Yes	Yes	
COPIER	OPTION	USER	SLEEP	Yes	Yes	Yes
COPIER	OPTION	USER	SIZE-DET	Yes		
COPIER	OPTION	USER	COUNTER1	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER2	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER3	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER4	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER5	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER6	Yes	Yes	Yes
COPIER	OPTION	USER	DATE-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	MB-CCV	Yes		
COPIER	OPTION	USER	CONTROL	Yes		
COPIER	OPTION	USER	B4-L-CNT	Yes	Yes	
COPIER	OPTION	USER	TRY-STP	Yes		
COPIER	OPTION	USER	MF-LG-ST	Yes	Yes	Yes

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	USER	CNT-DISP	Yes	Yes	Yes
COPIER	OPTION	USER	COPY-JOB	Yes	Yes	
COPIER	OPTION	USER	OP-SZ-DT	Yes	Yes	
COPIER	OPTION	USER	NW-SCAN	Yes	Yes	Yes
COPIER	OPTION	USER	INS-C-S	Yes		
COPIER	OPTION	USER	HDCR-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	JOB-INVL	Yes	Yes	Yes
COPIER	OPTION	USER	LGSW-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	TAB-ROT	Yes	Yes	
COPIER	OPTION	USER	PR-PSESW	Yes	Yes	Yes
COPIER	OPTION	USER	IDPRN-SW	Yes	Yes	
COPIER	OPTION	USER	CPRT-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	PCL-COPY	Yes	Yes	Yes
COPIER	OPTION	USER	CNT-SW	Yes	Yes	Yes
COPIER	OPTION	USER	TAB-ACC	Yes	Yes	Yes
COPIER	OPTION	USER	BCNT-AST	Yes	Yes	Yes
COPIER	OPTION	USER	PRJOB-CP	Yes	Yes	Yes
COPIER	OPTION	USER	DFLT-CPY	Yes	Yes	Yes
COPIER	OPTION	USER	DFLT-BOX	Yes	Yes	Yes
COPIER	OPTION	USER	DOC-REM	Yes	Yes	Yes
COPIER	OPTION	USER	DPT-ID-7	Yes	Yes	Yes
COPIER	OPTION	USER	RUI-RJT	Yes	Yes	Yes
COPIER	OPTION	USER	SND-RATE	Yes	Yes	Yes
COPIER	OPTION	USER	CTM-S06	Yes	Yes	Yes
COPIER	OPTION	USER	FREG-SW	Yes	Yes	Yes
COPIER	OPTION	USER	IFAX-SZL	Yes	Yes	Yes
COPIER	OPTION	USER	IFAX-PGD	Yes	Yes	Yes
COPIER	OPTION	USER	MEAPSAFE	Yes	Yes	
COPIER	OPTION	USER	TRAY-FLL	Yes	Yes	Yes
COPIER	OPTION	USER	PRNT-POS	Yes	Yes	Yes
COPIER	OPTION	USER	AFN-PSWD	Yes	Yes	Yes
COPIER	OPTION	USER	PTJAM-RC	Yes	Yes	Yes
COPIER	OPTION	USER	PDL-NCSW	Yes	Yes	
COPIER	OPTION	USER	SLP-SLCT	Yes	Yes	
COPIER	OPTION	USER	PS-MODE	Yes	Yes	Yes
COPIER	OPTION	USER	CNCT-RLZ	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER7	Yes	Yes	Yes
COPIER	OPTION	USER	COUNTER8	Yes	Yes	Yes
COPIER	OPTION	USER	2C-CT-SW	Yes	Yes	Yes
COPIER	OPTION	USER	LDAP-SW	Yes	Yes	Yes
COPIER	OPTION	USER	FROM-OF	Yes	Yes	Yes
COPIER	OPTION	USER	DOM-ADD	Yes	Yes	Yes
COPIER	OPTION	USER	FILE-OF	Yes	Yes	Yes
COPIER	OPTION	USER	MAIL-OF	Yes	Yes	Yes
COPIER	OPTION	USER	IFAX-OF	Yes	Yes	Yes
COPIER	OPTION	USER	LDAP-DEF	Yes	Yes	Yes
COPIER	OPTION	USER	FREE-DSP	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
COPIER	OPTION	USER	TNRB-SW	Yes	Yes	Yes
COPIER	OPTION	USER	CLR-TIM	Yes	Yes	Yes
COPIER	OPTION	USER	HDCR-DSW	Yes	Yes	Yes
COPIER	OPTION	USER	SNMP-COA	Yes	Yes	
COPIER	OPTION	USER	SNMP-COU	Yes	Yes	
COPIER	OPTION	USER	BWCL-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	SCALL-SW	Yes	Yes	Yes
COPIER	OPTION	USER	SCALLCMP	Yes	Yes	Yes
COPIER	OPTION	USER	USBH-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBM-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBI-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	CTCHKDSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBB-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	USBR-DSP	Yes	Yes	Yes
COPIER	OPTION	USER	POL-SCAN	Yes	Yes	Yes
COPIER	OPTION	USER	JA-SBOX	Yes	Yes	Yes
COPIER	OPTION	USER	JA-DFAX	Yes	Yes	Yes
COPIER	OPTION	USER	JA-REP	Yes	Yes	Yes
COPIER	OPTION	USER	JA-FREP	Yes	Yes	Yes
COPIER	OPTION	USER	JA-BOX	Yes	Yes	Yes
COPIER	OPTION	USER	JA-FORM	Yes	Yes	Yes
COPIER	OPTION	USER	JA-PREV	Yes	Yes	Yes
COPIER	OPTION	USER	JA-PULL	Yes	Yes	Yes
COPIER	OPTION	USER	JA-PDLB	Yes	Yes	Yes
COPIER	OPTION	USER	JA-JOBK	Yes	Yes	Yes
COPIER	OPTION	USER	JA-JDF	Yes	Yes	Yes
COPIER	OPTION	USER	JA-RUI	Yes	Yes	Yes
COPIER	OPTION	USER	JA-WEB	Yes	Yes	Yes
COPIER	OPTION	USER	CS-ACC	Yes	Yes	
COPIER	OPTION	USER	EXP-CRYP	Yes	Yes	Yes
COPIER	OPTION	USER	SLEEP1SW	Yes	Yes	Yes
COPIER	OPTION	USER	CNCL-ATH	Yes	Yes	Yes
COPIER	OPTION	USER	EZY-SCRP	Yes	Yes	Yes
COPIER	OPTION	USER	DMN-MTCH	Yes	Yes	Yes
COPIER	OPTION	USER	SNDSTREN	Yes	Yes	Yes
COPIER	OPTION	USER	FAXSTREN	Yes	Yes	Yes
FEEDER	ADJUST		DOCST	Yes		
FEEDER	ADJUST		LA-SPEED	Yes		
FEEDER	ADJUST		DOCST2	Yes		
FEEDER	ADJUST		LA-SPD2	Yes		
FEEDER	ADJUST		ADJMSCN1	Yes		
FEEDER	ADJUST		ADJMSCN2	Yes		
FEEDER	ADJUST		ADJSSCN1	Yes		
FEEDER	ADJUST		ADJSSCN2	Yes		
SORTER	ADJUST		PNCH-HLE	Yes		
SORTER	ADJUST		PNCH-Y	Yes		
SORTER	ADJUST		PF-A3Z1	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
SORTER	ADJUST		PF-A3Z2	Yes		
SORTER	ADJUST		PF-B4Z1	Yes		
SORTER	ADJUST		PF-B4Z2	Yes		
SORTER	ADJUST		PF-A4RZ1	Yes		
SORTER	ADJUST		PF-A4RZ2	Yes		
SORTER	ADJUST		PF-LDRZ1	Yes		
SORTER	ADJUST		PF-LDRZ2	Yes		
SORTER	ADJUST		PF-LGLZ1	Yes		
SORTER	ADJUST		PF-LGLZ2	Yes		
SORTER	ADJUST		PFLTRRZ1	Yes		
SORTER	ADJUST		PFLTRRZ2	Yes		
SORTER	ADJUST		PF-A4RC1	Yes		
SORTER	ADJUST		PF-A4RC2	Yes		
SORTER	ADJUST		PFLTRRC1	Yes		
SORTER	ADJUST		PFLTRRC2	Yes		
SORTER	ADJUST		PF-A4R31	Yes		
SORTER	ADJUST		PF-A4R32	Yes		
SORTER	ADJUST		PFLTRR31	Yes		
SORTER	ADJUST		PFLTRR32	Yes		
SORTER	ADJUST		PF-A4R41	Yes		
SORTER	ADJUST		PF-A4R42	Yes		
SORTER	ADJUST		PFLTRR41	Yes		
SORTER	ADJUST		PFLTRR42	Yes		
SORTER	ADJUST		PF-A4R21	Yes		
SORTER	ADJUST		PFLTRR21	Yes		
SORTER	ADJUST		PRCS-ALG	Yes		
SORTER	ADJUST		STP-F1	Yes		
SORTER	ADJUST		STP-F2	Yes		
SORTER	ADJUST		STP-R1	Yes		
SORTER	ADJUST		STP-R2	Yes		
SORTER	ADJUST		STP-2P	Yes		
SORTER	ADJUST		BFF-SFT	Yes		
SORTER	ADJUST		PNCH-X	Yes		
SORTER	ADJUST		TRM-RG1	Yes		
SORTER	ADJUST		TRM-RG2	Yes		
SORTER	ADJUST		TRM-CUT1	Yes		
SORTER	ADJUST		TRM-CUT2	Yes		
SORTER	ADJUST		BFF-SFT2	Yes		
SORTER	ADJUST		SDL-STP	Yes		
SORTER	ADJUST		SDL-FLD	Yes		
SORTER	ADJUST		SDL-ALG	Yes		
SORTER	ADJUST		SDL-RLPT	Yes		
SORTER	ADJUST		SDL-RLFD	Yes		
SORTER	ADJUST		SDL-RLHD	Yes		
SORTER	ADJUST		BFR-UPA4	Yes		
SORTER	ADJUST		BFR-UPB5	Yes		
SORTER	ADJUST		BFR-UPLT	Yes		

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
SORTER	ADJUST		RTR-DWA4	Yes		
SORTER	ADJUST		RTR-DWB5	Yes		
SORTER	ADJUST		RTR-DWLT	Yes		
SORTER	ADJUST		BF-SB-A4	Yes		
SORTER	ADJUST		BF-SB-B5	Yes		
SORTER	ADJUST		BF-SB-LT	Yes		
SORTER	ADJUST		RTR-UPA4	Yes		
SORTER	ADJUST		RTR-UPB5	Yes		
SORTER	ADJUST		RTR-UPLT	Yes		
SORTER	ADJUST		PUNCH-SB	Yes		
SORTER	ADJUST		ST-ALG1	Yes		
SORTER	ADJUST		ST-ALG2	Yes		
SORTER	ADJUST		STP-F3	Yes		
SORTER	ADJUST		STP-F4	Yes		
SORTER	ADJUST		STP-R3	Yes		
SORTER	ADJUST		STP-R4	Yes		
SORTER	ADJUST		SW-UP-RL	Yes		
SORTER	ADJUST		PRCS-RET	Yes		
SORTER	ADJUST		UP-CL	Yes		
SORTER	ADJUST		DW-CL	Yes		
SORTER	ADJUST		THC-CL	Yes		
SORTER	ADJUST		THC-PUSH	Yes		
SORTER	ADJUST		OFST-STC	Yes		
SORTER	ADJUST		THN-STC	Yes		
SORTER	ADJUST		STP-P-CH	Yes		
SORTER	ADJUST		TRY-NIS	Yes		
SORTER	ADJUST		TRY-SU	Yes		
SORTER	ADJUST		FIN-NIS	Yes		
SORTER	ADJUST		1SHT-SHF	Yes		
SORTER	ADJUST		SDL-SWCH	Yes		
SORTER	ADJUST		SDL-ALM	Yes		
SORTER	ADJUST		Z-FL-CH	Yes		
SORTER	ADJUST		THN-STCL	Yes		
SORTER	ADJUST		SW-ADJ	Yes		
SORTER	ADJUST		GRP-ALG	Yes		
SORTER	ADJUST		PRTN-ALG	Yes		
SORTER	ADJUST		BFF-SFT3	Yes		
SORTER	ADJUST		BFF-SFT4	Yes		
SORTER	OPTION		BLNK-SW	Yes		
SORTER	OPTION		MD-SPRTN	Yes		
SORTER	OPTION		BUFF-SW	Yes		
SORTER	OPTION		TRY-OVER	Yes	Yes	
SORTER	OPTION		PUCH-SW	Yes	Yes	
SORTER	OPTION		ALG-IMPR	Yes	Yes	
SORTER	OPTION		BUFF-SW2	Yes	Yes	
SORTER	OPTION		1SHT-SRT	Yes	Yes	
SORTER	OPTION		SD-LMTLS	Yes	Yes	

Initial screen	Large	Middle	Small			
			Import	Lev1	Lev2	Lev3
SORTER	OPTION		SD-STCNB	Yes	Yes	
SORTER	OPTION		BUFF-THK	Yes	Yes	
SORTER	OPTION		PRCS-SP1	Yes		
SORTER	OPTION		PRCS-SP2	Yes	Yes	
SORTER	OPTION		BUFF-MX1	Yes	Yes	
SORTER	OPTION		BUFF-MX2	Yes	Yes	
SORTER	OPTION		PRCS-MX1	Yes	Yes	
SORTER	OPTION		PRCS-MX2	Yes	Yes	
SORTER	OPTION		BUF-THK1	Yes	Yes	
SORTER	OPTION		PRD-PRTY	Yes	Yes	
SORTER	OPTION		STCR-DWN	Yes		
SORTER	OPTION		PRCS-SP3	Yes		
SORTER	OPTION		NSRT-STC	Yes		
SORTER	OPTION		THN-TRSW	Yes		
SORTER	OPTION		THN-SW	Yes		
SORTER	OPTION		SWGUP-SW	Yes		
SORTER	OPTION		CALG-SW	Yes		

T-2-23

■ Import/export by service mode (external)

The following shows the procedure for importing and exporting the service mode setting values in service mode. With export by which data is collected from the machine, service mode setting values can be backed up. With import, data backed up from service mode and that backed up from remote UI can be restored.
The save destination of backup data can be selected from either a USB memory device or HDD of the machine.

● Export

Preparation

- USB memory device
  * Required when exporting to an external USB memory device.
  It needs to have been formatted to be recognized by the device. No firmware registration is necessary.

Overall flow

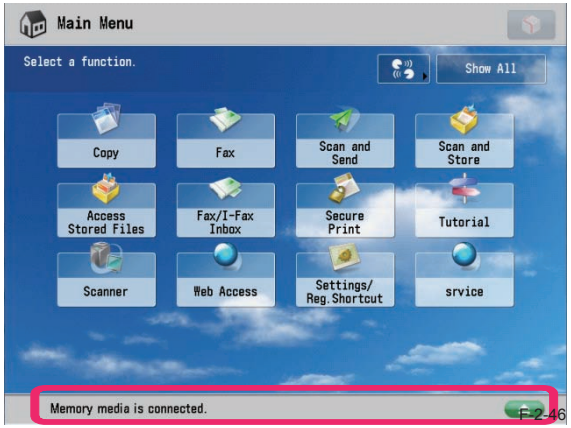
Select the save destination between the internal HDD or external USB memory device depending on the use case.

Procedure

1. Select external USB memory device as save destination (LIST=1)
2. Register password
3. Export to external USB memory device
4. Remove USB memory device

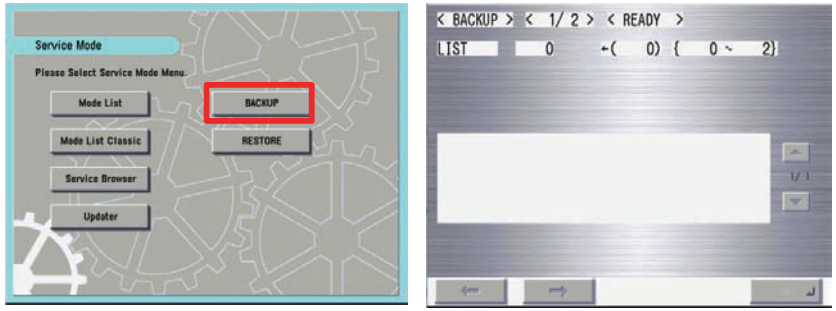
Exporting data to an external USB memory device

1. Connect the USB memory device and check that it has been mounted. (When using the external USB memory device)



F-2-46

2. Log in to service mode and press BACKUP.

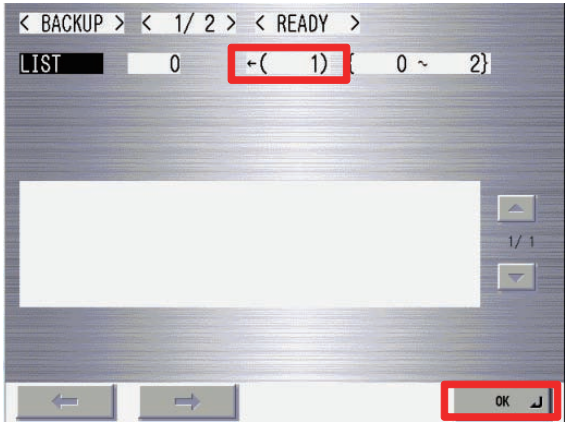


F-2-47

3. Select LIST after the screen moves to <BACKUP>.

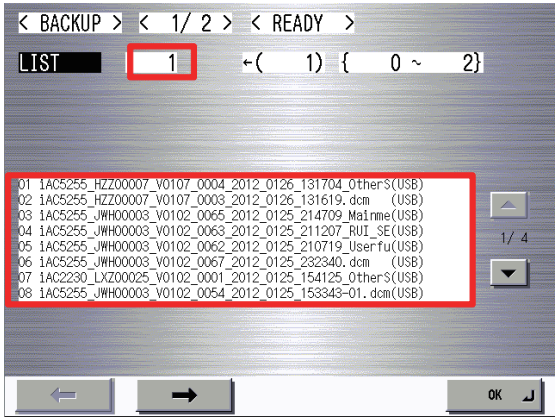
F-2-48

4. When saving to the external USB memory device, select 1 and press OK.



F-2-49

5. The names of .dcm files saved in the external USB memory device are displayed.



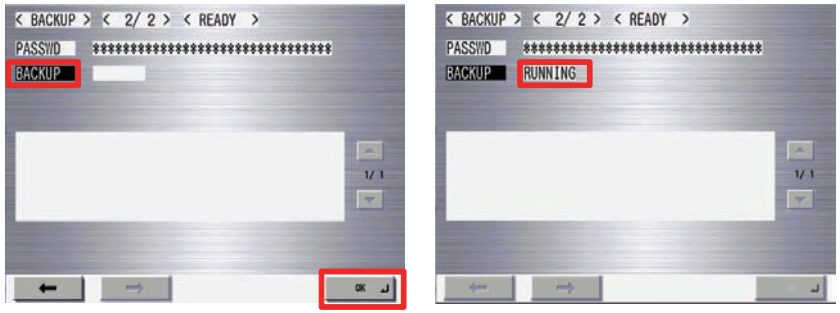
F-2-50

6. Select PASSWD, enter a password from the software keyboard, and then press OK.

F-2-51

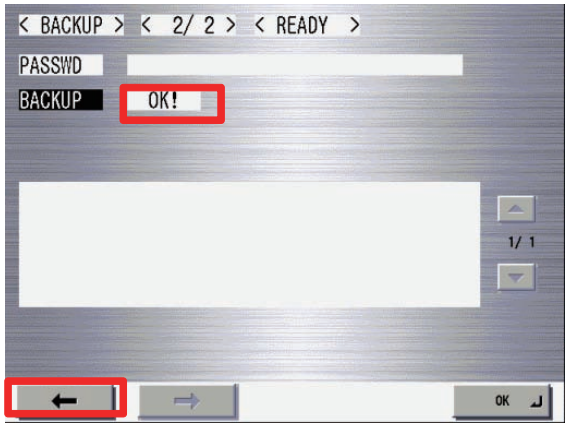
Note:
Limitations regarding the DCM data password
- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
- No space is allowed in the middle of a password.
- Password is case sensitive.

7. After registering the password, select BACKUP. Press OK to execute export.



F-2-52

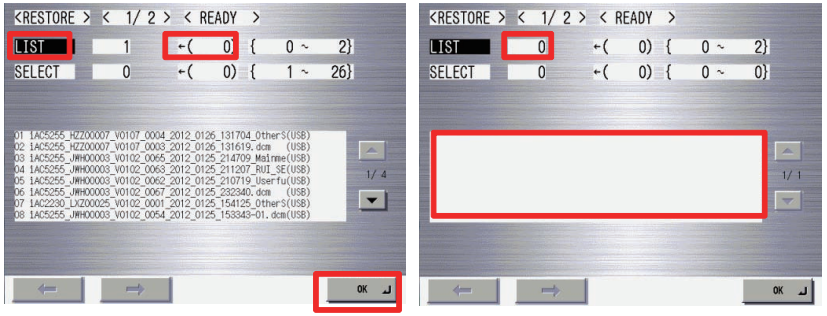
8. OK!" is displayed in the status column when the processing is successfully completed. Press <-.



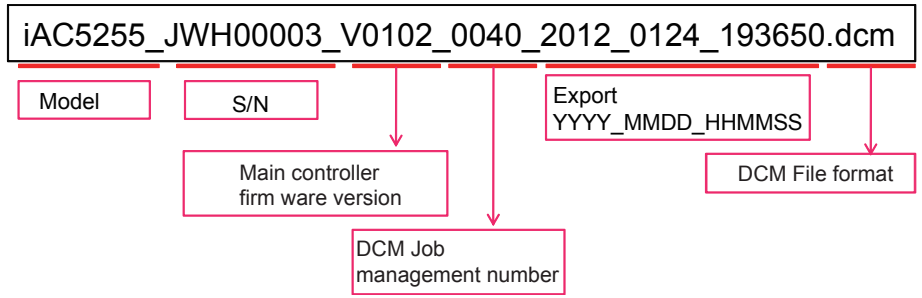
F-2-53

9. After access to the USB memory device has occurred, select LIST=0 and press OK. Unmount the USB memory device.

It can also be removed by pressing the Remove button on the main menu.



Reference:



F-2-54

Import

Preparation

- USB memory device
  * Required when importing from an external USB memory device.
- It needs to have been formatted to be recognized by the device. No firmware registration is necessary.
- When necessary, copy the files which you want to import using a PC in advance.
- Be sure to store them in the root folder of the USB memory device.
- Do not change the extension from .dcm. (only .dcm files can be recognized.)
- It is desirable to connect the USB memory device before entering service mode.

Overall flow

Procedure for restoring data from an external USB memory device.

Procedure

1. Select external USB memory device as save destination (LIST=1)
2. Names of saved DCM data files are displayed
3. Register password
4. Import from external USB memory device

5. Remove USB memory device
6. Specification of export file name

Procedure for restoring data from an external USB memory device

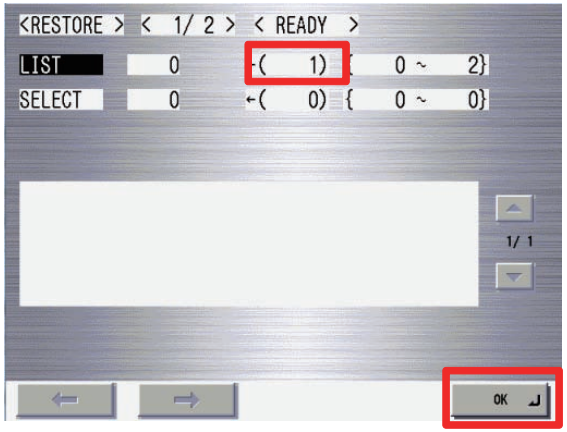
1. Connect the USB memory device. (When using the external USB memory device)
2. Log in to service mode and press RESTORE.

F-2-55

3. Select LIST after the screen moves to <RESTORE>.

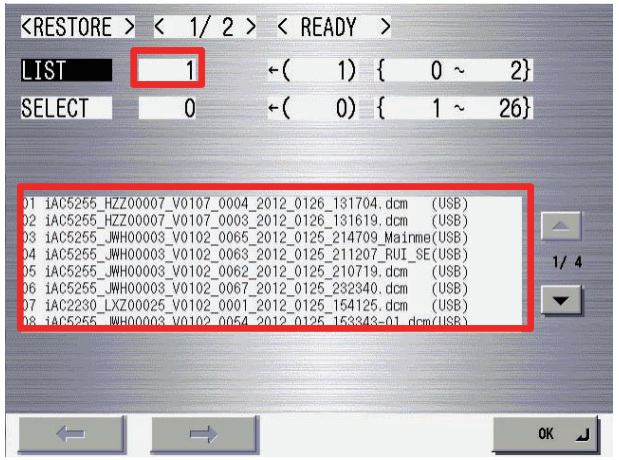
F-2-56

4. When referring to the external USB memory device, select 1 and press OK.



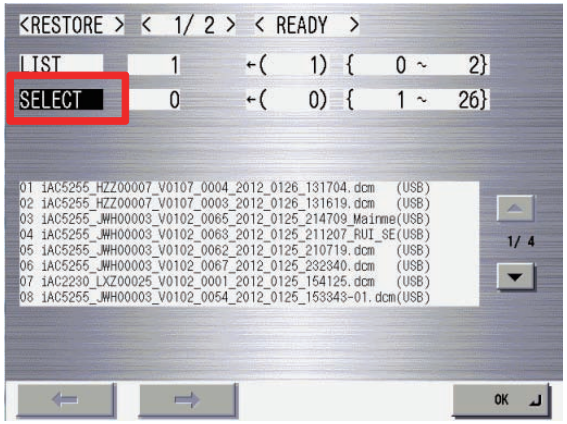
F-2-57

5. The names of .dcm files referred to in the external USB memory device are displayed.



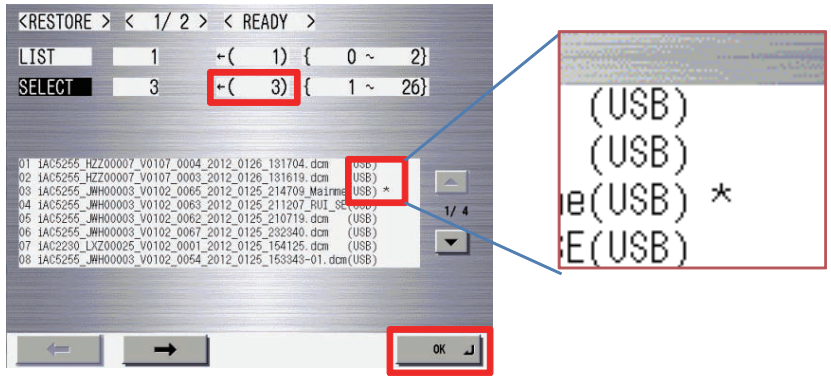
F-2-58

6. Select SELECT.



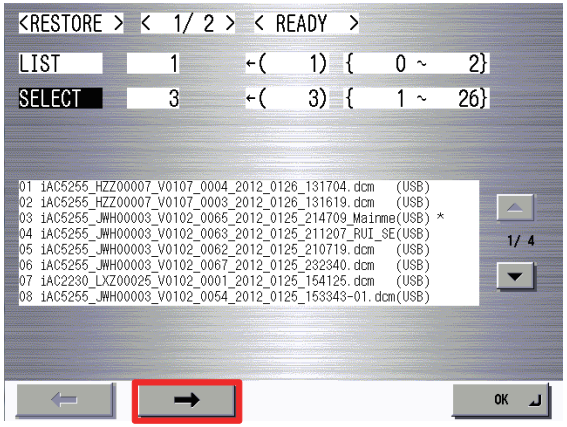
F-2-59

7. Enter the selection number displayed on the left side of the file to be selected and press OK.



F-2-60

8. When the correct file is displayed, press ->.



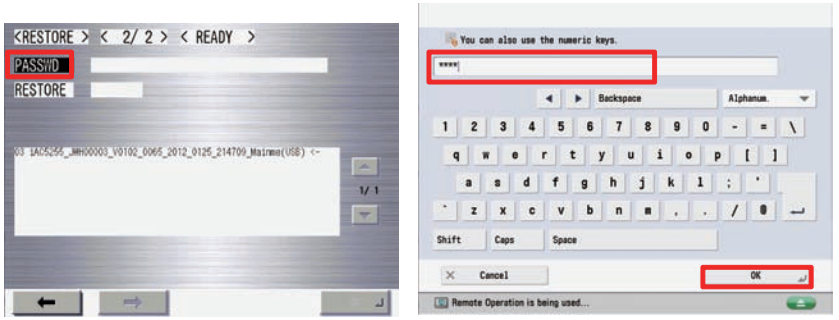
F-2-61

Note:

Specification of file selection display

- "*" is displayed on the right side of the file to indicate that the file has been selected in SELECT.
- USB memory device: Up to 8 files are displayed in a screen.

9. Select PASSWD, enter a password from the software keyboard, and then press OK.



F-2-62

F-2-63

Note:

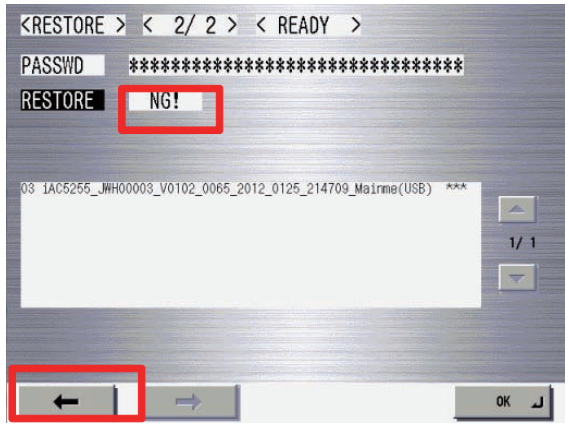
Specification of file selection display

- "<-" is displayed on the right side of the file to indicate that the selection of the file has been confirmed.
- "***" is displayed after the password is entered.

10. After registering the password, select RESTORE. Press OK to execute import.

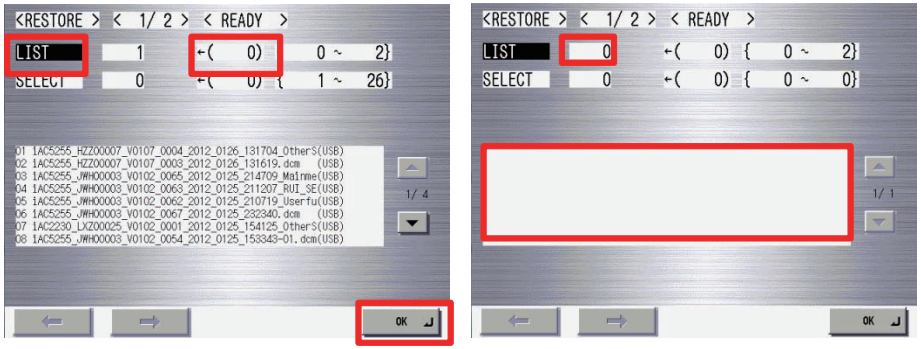
F-2-64

11. OK!" is displayed in the status column when the processing is successfully completed.
Press <-.



F-2-65

12. After access to the USB memory device has occurred, select LIST=0 and press OK.
Unmount the USB memory device.
It can also be removed by pressing the Remove button on the main menu.



F-2-66

■ Import/export by service mode (internal)

When selecting the HDD of the machine at execution of BACKUP from the top screen of service mode, service mode settings can be saved. Setting values of Main Controller 2, Reader Controller, DC Controller, etc. can be collectively saved. It can be used when recovering the initial status after having tried multiple setting changes temporarily for troubleshooting, etc.

Note:
DCM must not be used when replacing a PCB.
Be sure to use a method such as backup of SRAM of the Main Controller 2/service mode backup of DCON/RCON.
DCM enables to back up only service mode setting values. There is still necessary information other than setting values when replacing a PCB.
SRAM backup or service mode backup enables to save data other than setting values.

● Export

Preparation

There is no need to newly prepare for saving data to the HDD of the machine.

Overall flow

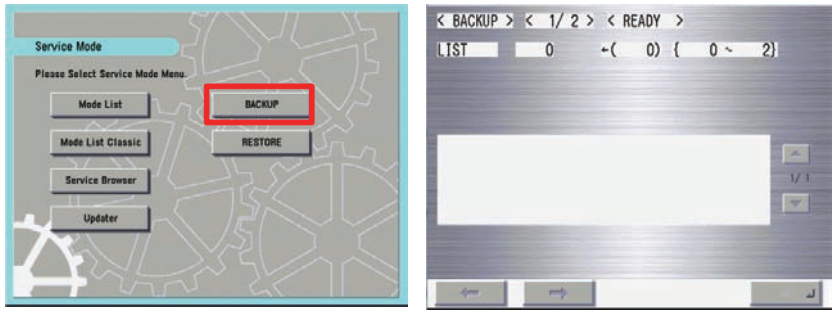
Here is a procedure for exporting data of the HDD of the machine.

Procedure

1. Select internal HDD as save destination (LIST=2)
2. Register password
3. Import from the internal HDD

Procedure for backing up data to the HDD of the machine

1. Select LIST after the screen moves to <BACKUP>.



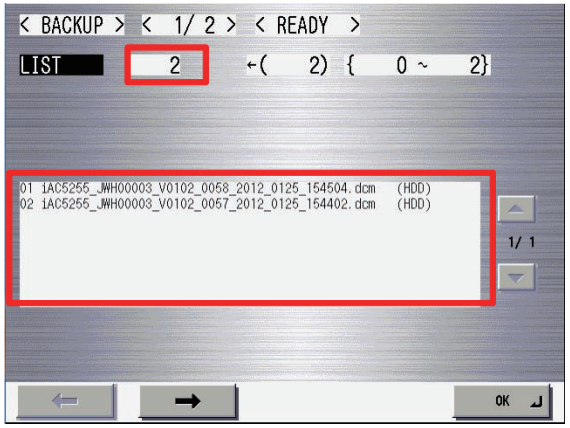
F-2-67

2. Select LIST after the screen moves to <BACKUP>.

F-2-68

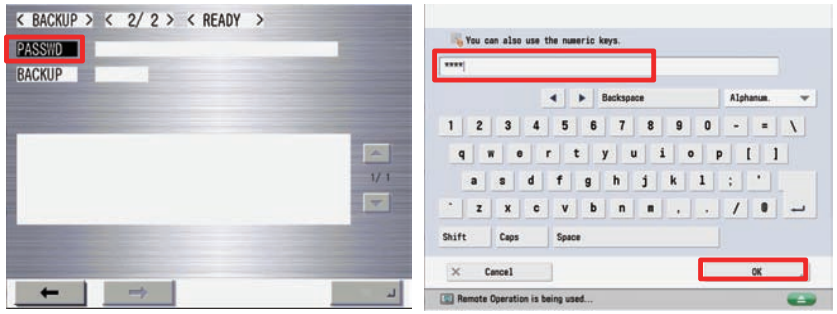
3. When saving to the internal HDD, select 2 and press OK.

4. The names of .dcm files saved in the internal HDD are displayed. F-2-69



F-2-70

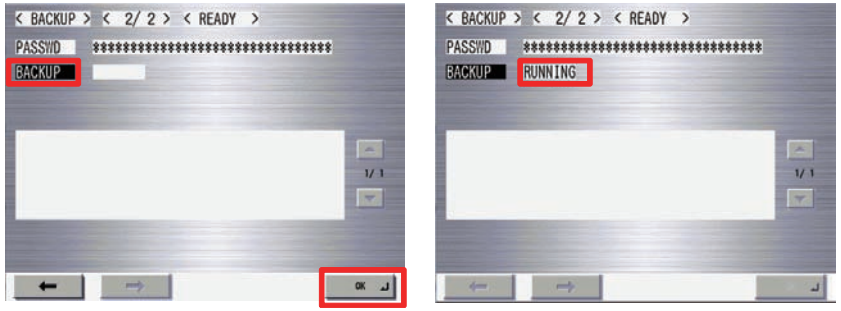
5. Select PASSWD, enter a password from the software keyboard, and then press OK.



F-2-71

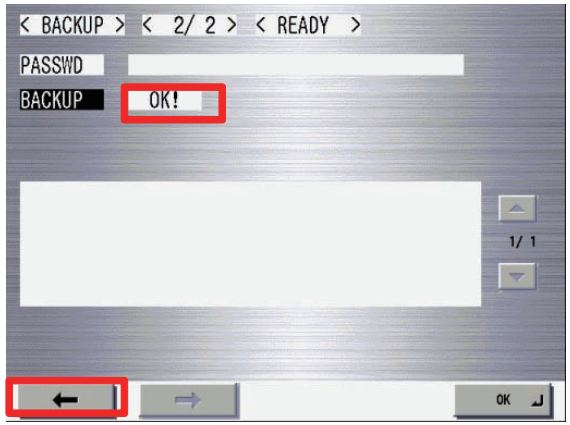
Note:
Limitations regarding the DCM data password
- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered. (The setting in which no password is set is allowed only for service mode.)
- No space is allowed in the middle of a password.
- Password is case sensitive.

6. After registering the password, select BACKUP. Press OK to execute export.



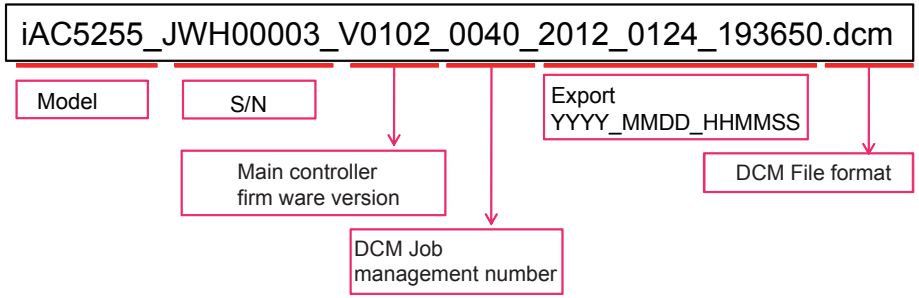
F-2-72

7. OK!" is displayed in the status column when the processing is successfully completed. Press <-.



F-2-73

Reference:



F-2-74

● Import

Preparation

There is no need to newly prepare for saving data to the HDD of the machine.

Overall flow

Here is a procedure for Importing data of the HDD of the machine.

Procedure

1. Select internal HDD as save destination (LIST=2)
2. Register password
3. Import from the internal HDD

Import from the internal HDD

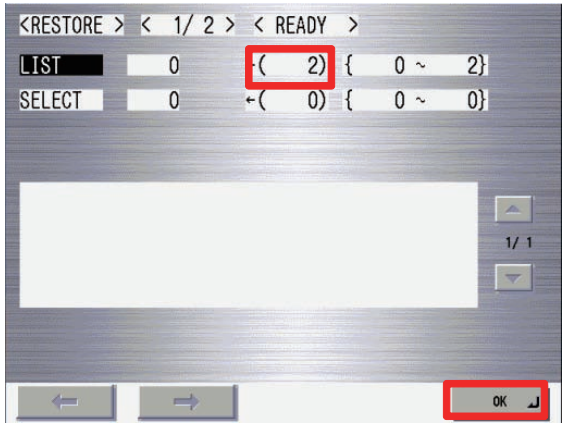
1. Log in to service mode and press RESTORE.

F-2-75

2. Select LIST after the screen moves to <RESTORE>.

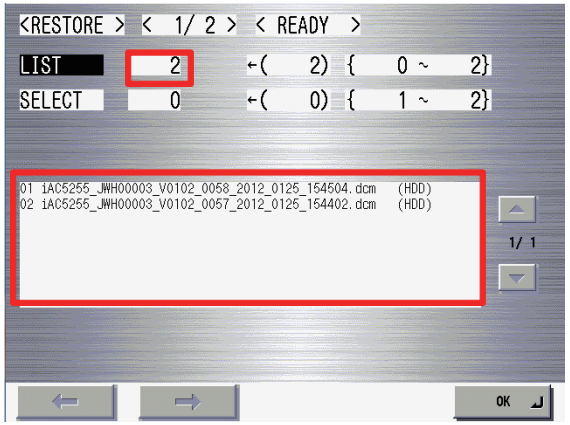
F-2-76

3. When referring to the internal HDD, select 2 and press OK.



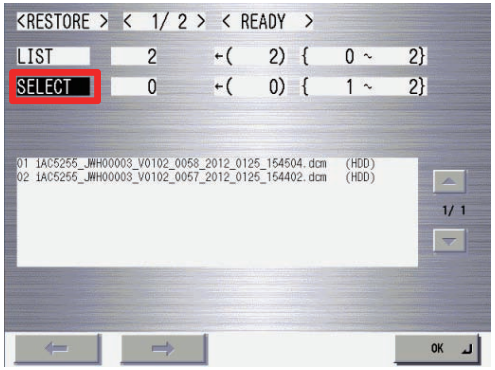
F-2-77

4. The names of .dcm files referred to in the internal HDD are displayed.



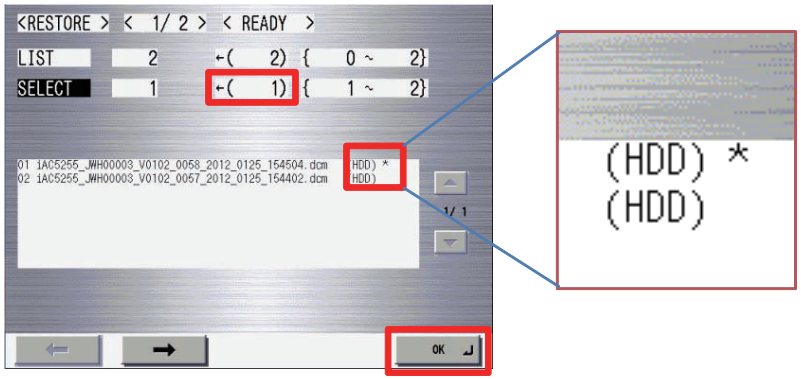
F-2-78

5. Select PASSWD.



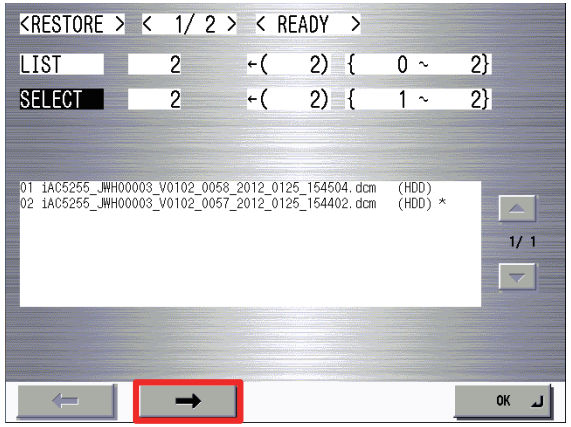
F-2-79

6. Enter the selection number displayed on the left side of the file to be selected.



F-2-80

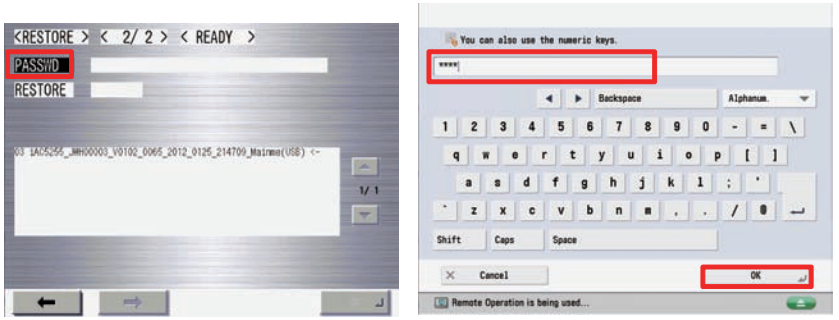
7. When the correct file is displayed, press ->.



F-2-81

Note:
Specification of file selection display
- " *" is displayed on the right side of the file to indicate that the file has been selected in SELECT.
- HDD : Up to 2 files are displayed in a screen.

8. Select PASSWD, enter a password from the software keyboard, and then press OK.



F-2-82

F-2-83

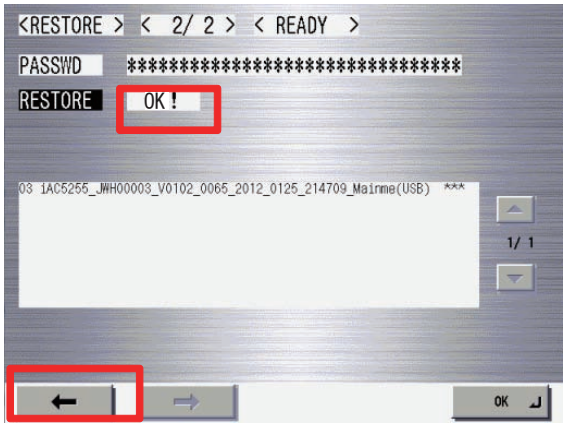
Note:
Specification of file selection display

- "<-" is displayed on the right side of the file to indicate that the selection of the file has been confirmed.
- "***" is displayed after the password is entered.

9. After registering the password, select RESTORE. Press OK to execute import.

F-2-84

10. OK!" is displayed in the status column when the processing is successfully completed. Press <-.



F-2-85

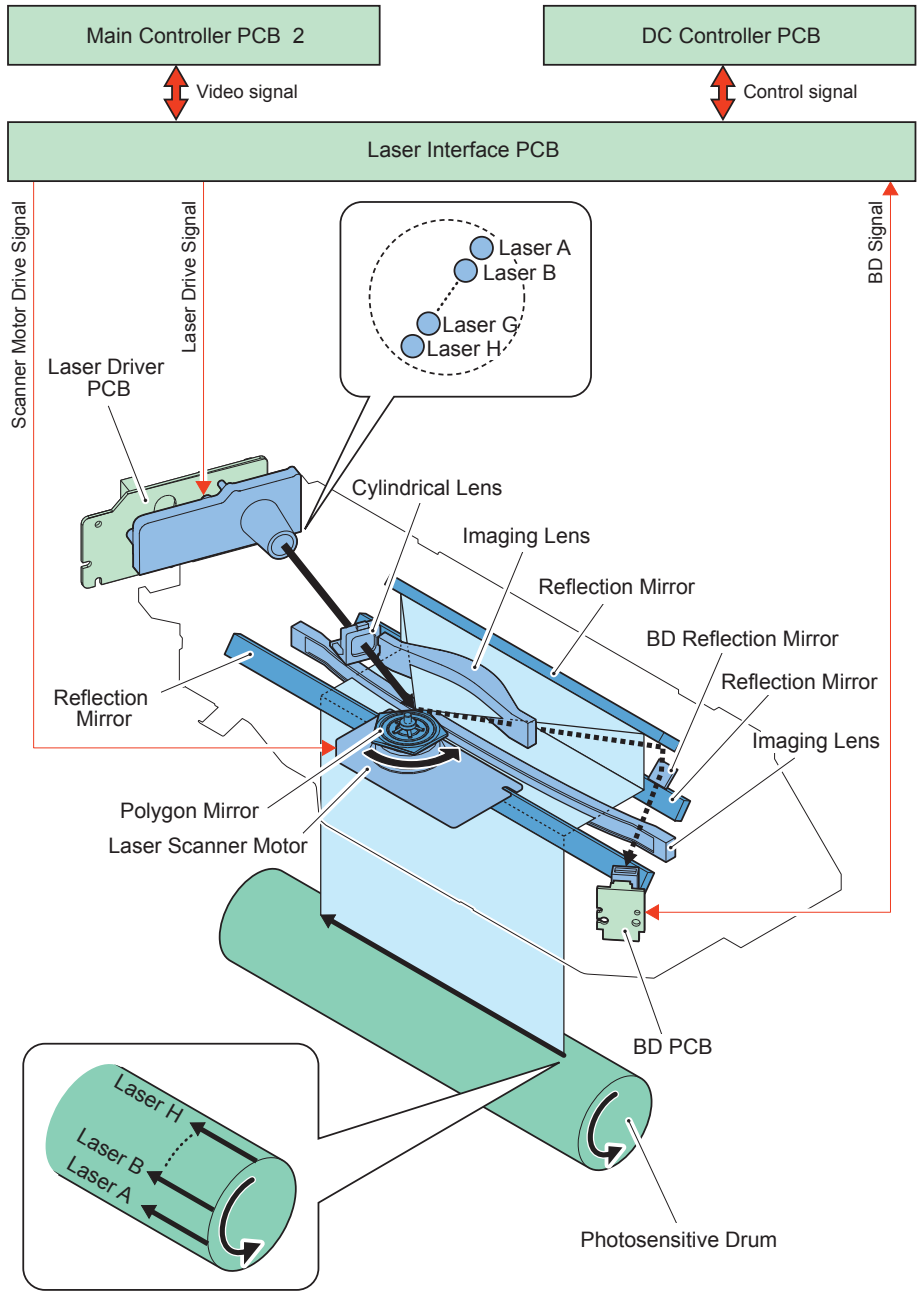
Laser Exposure System

Overview

Overview

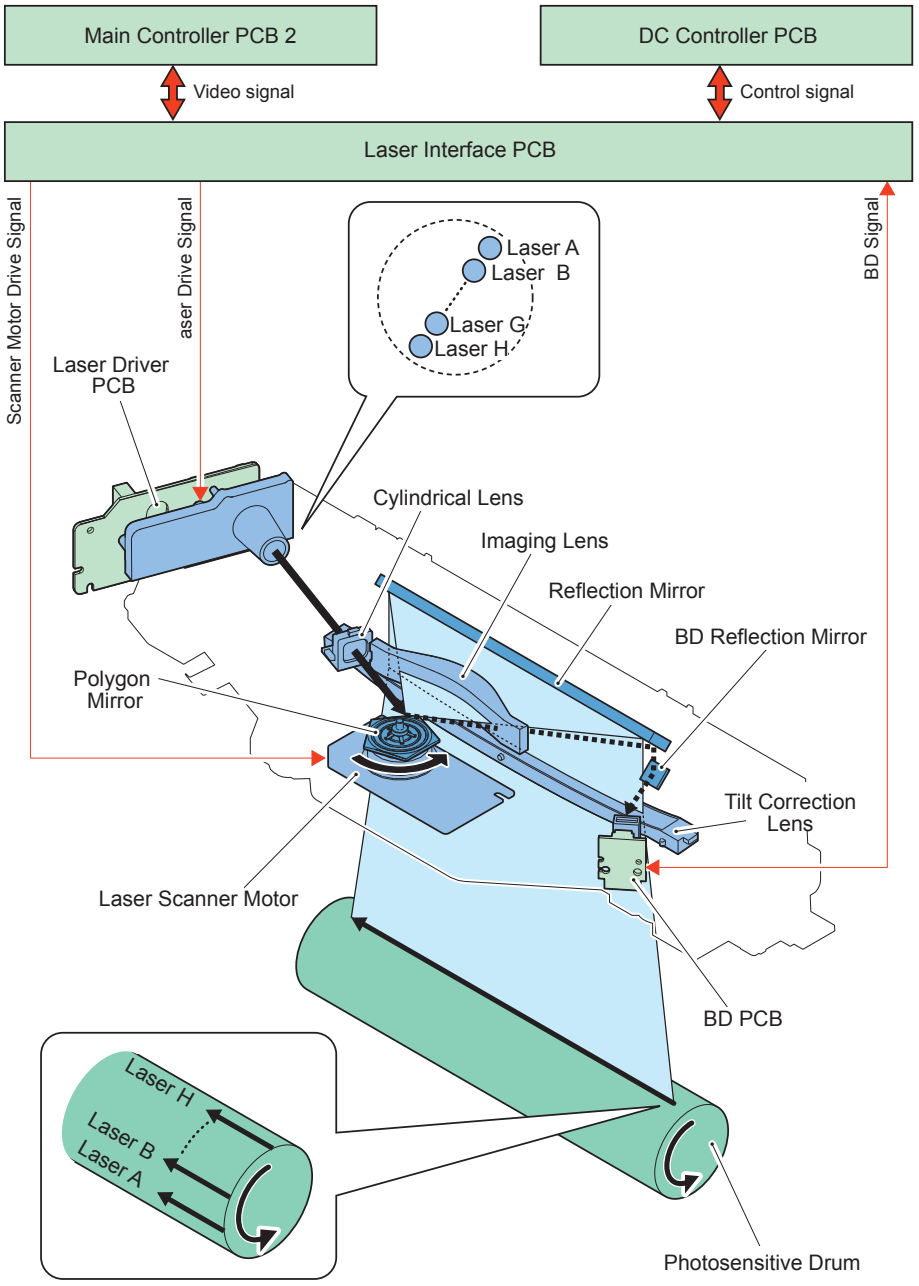
This machine has four laser scanner units at the upper side of each color station.
To realize high productivity, eight laser beams are provided by the unit, and simultaneously exposed in eight lines in one scanning operation.
In this machine, it is unnecessary to input correction values for laser magnification and laser phase among laser scanner units, which needed to be adjusted at the time of replacement of the laser scanner units in the conventional method.

<Bk>



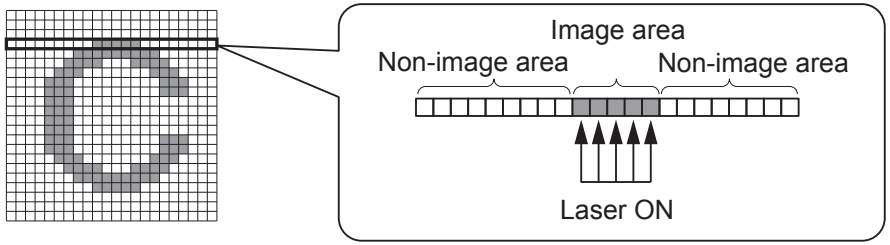
F-2-86

<CL>



F-2-87

On this machine, the laser is emitted to the image part on the Drum that is negatively charged.



Enlarged view

F-2-88

Specifications

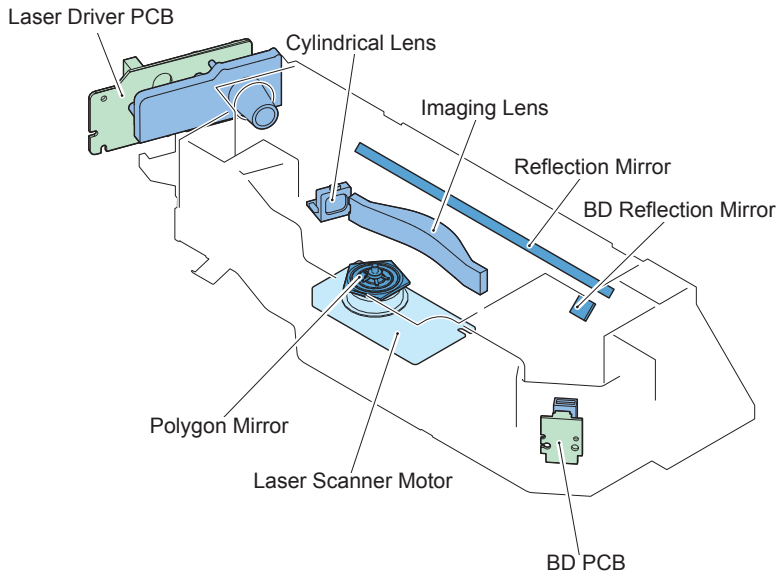
Item		Description
Laser team	Wave length	670nm
	Laser type	Red color laser
	Laser output	7mW
	Number of laser beams	8 beams
Resolution		1200dpi
Scanner motor	Type	Brushless motor
	Number of rotations	iR-ADV C9xxx Series: Approx. 22700rpm iR-ADV C7xxx Series: Approx. 19800rpm
Number of scanner mirror (polygon) surfaces		5
Controls	Laser ON timing control	Laser ON/OFF control Main scanning synchronization control Sub scanning synchronization control
	Laser beam intensity control	APC control
		PWM control
	Image position correction control	Correction of write start position in horizontal scanning direction (To be explained in Image Formation.)
		Correction of write start position in vertical scanning direction (To be explained in Image Formation.)
		Skew correction in horizontal scanning direction
		Correction of magnification in horizontal scanning direction (To be explained in Image Formation.)
		Correction of magnification in vertical scanning direction (To be explained in Image Formation.)
		Duplex print magnification correction
	Others	Laser scanner motor control
		Laser shutter control

T-2-24

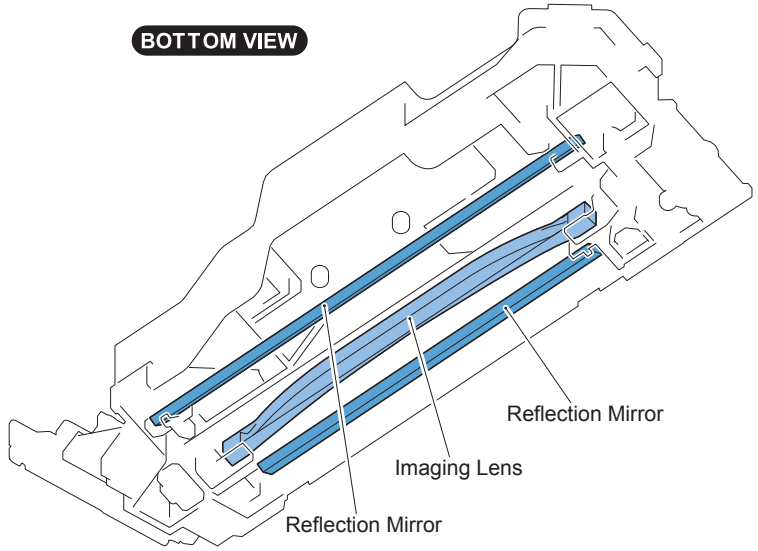
Parts Configuration

Overall Configuration

<Bk>

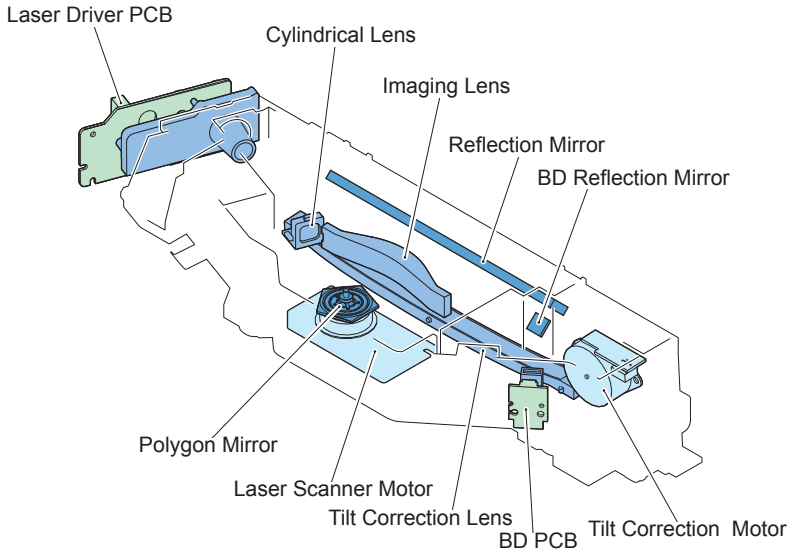


F-2-89



F-2-90

<CL>



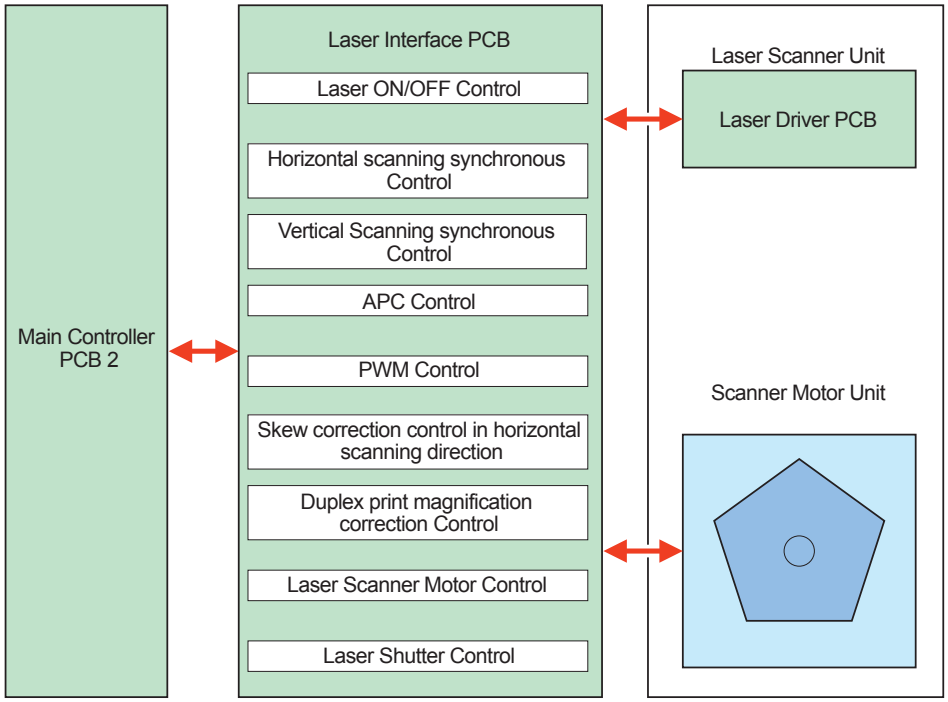
F-2-91

Name	Role
Laser driver	Output a laser beam.
Polygonal mirror	Perform scanning with a laser beam in the main scanning direction.
Reflection mirror	Reflect a laser team to the drum.
Correction lens	Correct a main-scanning tilt of the laser beam coming from the folding mirror.
Tilt correction motor	Correct a main-scanning tilt by moving the correction lens.
BD PCB	Detect a laser beam as a BD signal.
BD reflection mirror	Reflect a laser beam in the direction of the BD detection PCB.

T-2-25

Controls

Overview



F-2-92

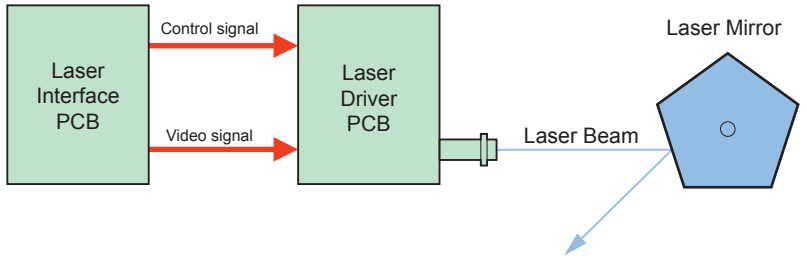
tem		Purpose/Description
Laser ON timing control	Laser ON/OFF control	Turn ON/OFF a laser beam according to the combination of laser control signals.
	Main scanning synchronization control	Performed to adjust the writing position in the main scanning direction.
	Sub scanning synchronization control	Performed to adjust the writing position in the sub scanning direction.
Laser beam intensity control	APC control	Performed to keep a specified level of laser beam for each line.
	PWM control	Determine the laser ON time and the image density according to the image data.
Skew correction control in horizontal scanning direction		Based on the skew level, lens is shifted and laser light path is corrected.
Duplex print magnification correction control		By adding image data, magnification of 1st and 2nd sides is corrected.
Laser scanner motor control		Performed to rotate the scanner mirror at a specified speed.
Laser shutter control		Prevent irradiation of a laser beam in the machine.

T-2-26

Laser ON Timing Control

Laser ON/OFF Control

This control is performed to turn ON/OFF a laser beam according to the combination of laser control signals.



F-2-93

<Timing of Execution>

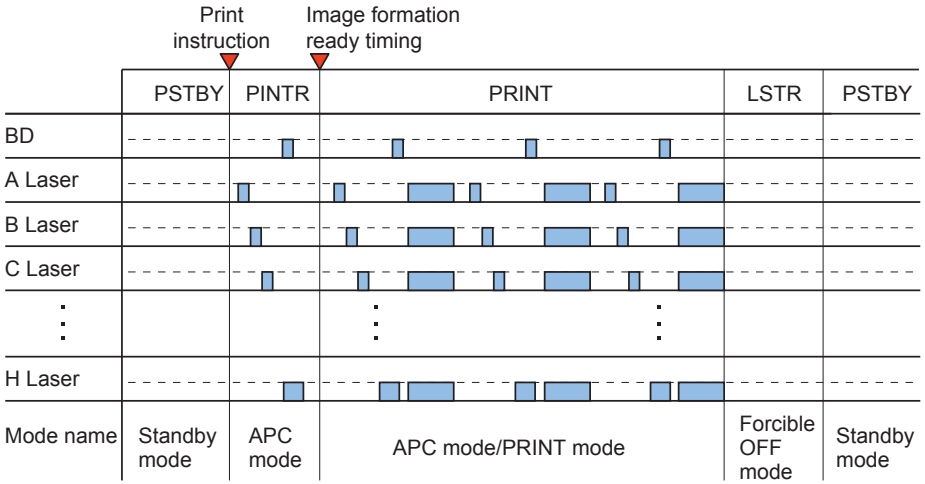
After the power is turned ON

<Details of the Control>

The DC controller switches the mode among four modes (Forcible OFF mode, APC mode, Print mode, Standby mode) according to the laser control signal.

Mode	Laser status	Remarks
Forcible OFF	OFF	Clear the laser beam intensity setting determined by APC.
APC	ON	Adjust the laser beam intensity.
Print mode	OFF/ON	Irradiate a laser beam according to the video signal.
Standby mode	OFF	The main unit is placed in the standby status.

T-2-27



F-2-94

Main Scanning Synchronization Control

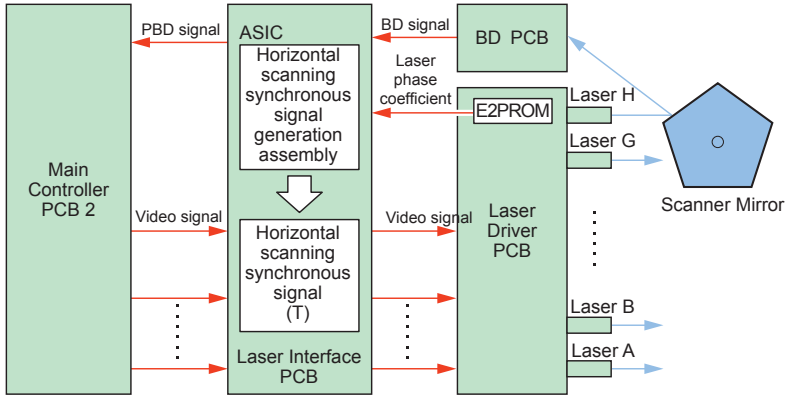
This control is performed to adjust the writing position in the main scanning direction.

Timing of Execution

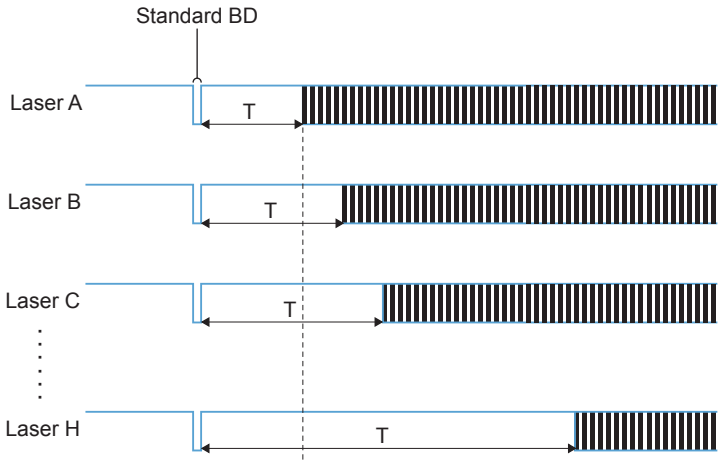
For every eight lines

Details of the Control

1) The laser phase coefficient in the ROM on the laser driver is sent to the video PCB.
2) The video PCB forcibly irradiates the laser diode of Laser H in the laser driver PCB by setting the Laser H laser control signal to APC mode.
3) The Laser H laser beam irradiates into the BD PCB, which is mounted in the scanning light path.
4) The BD PCB detects the Laser H laser beam, creates a standard BD signal, and sends it to the video PCB.
5) The video PCB creates a main scanning synchronization signal for every eight lines based on the laser phase coefficient and the standard BD signal.
6) The video signal sent from the main controller is output to the laser driver PCB according to the main scanning synchronization signal.



F-2-95



F-2-96

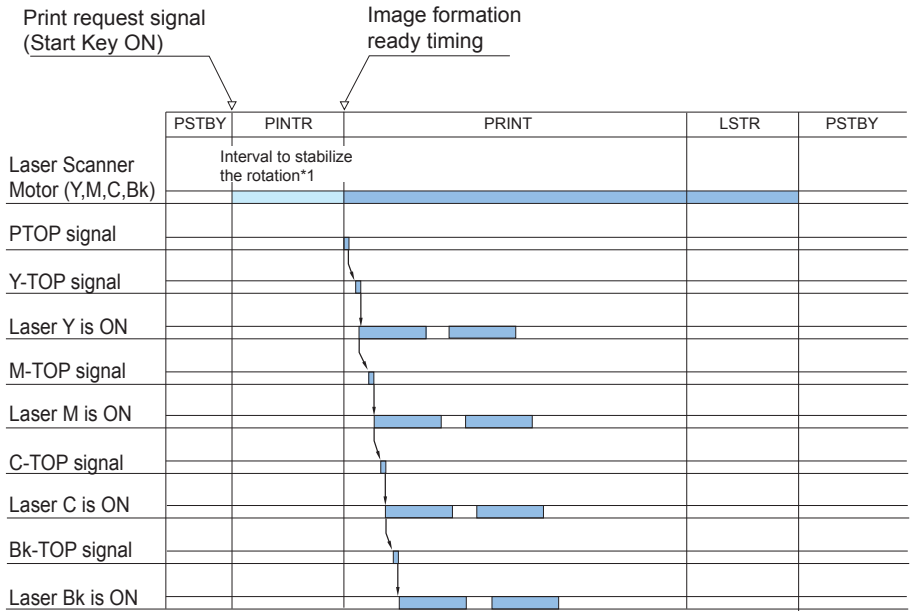
Sub Scanning Synchronization Control

This control is performed to adjust the writing position in the sub scanning direction.

<Timing of Execution>
For every printing operation

<Details of the Control>

- Synchronization control in the sub scanning direction is performed based on the PTOP signal (image formation start signal).
- When the machine is ready to form an image, a PTOP signal (image formation start signal) is created. Based on this signal, each color laser beam is turned on at the delayed timing of drum interval.



F-2-97

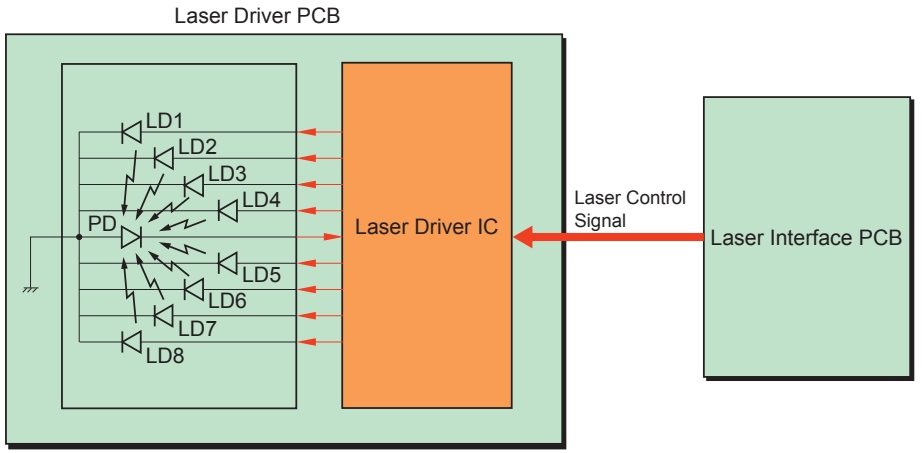
Laser Beam Intensity Control

APC (Auto Power Control) Control

This control is performed to keep laser beam intensity at every 8 beams (every 1BD) at a specified level.

<Timing of Execution>
Every 8 beams (every 1BD)

<Details of the Control>
1) The video PCB outputs a laser control signal to the laser driver IC in the laser driver PCB.
2) The APC mode is set for the laser driver IC, and laser diodes (LD1 to LD8) are emitted forcibly and sequentially. The laser driver IC also monitors the laser diodes (LD1 to LD8) by the photo diode (PD) at the same time, and adjusts the output of the laser diodes until they reach a specified level of intensity.



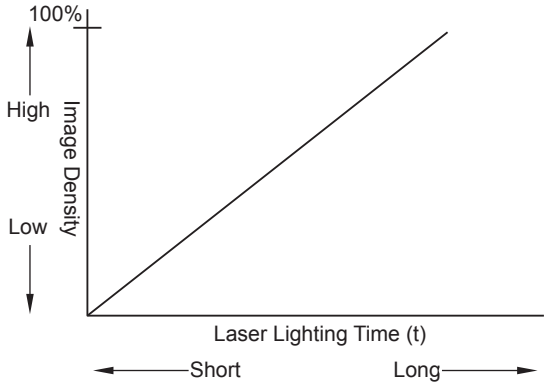
F-2-98

PWM Control

This control is performed to determine the laser ON time and the image density according to the image data.

<Details of the Control>

The laser ON time is selected by the video PCB. One pattern is selected from 16-level patterns for each pixel.



F-2-99

NOTE: Relationship between the laser ON time and the density
In this machine, a laser beam irradiates to an image section (dark section), but does not irradiate to a non-image section (bright section).
When the image density is increased, the laser ON time is increased. On the other hand, when the image density is decreased, the laser ON time is shortened.

Skew correction in horizontal scanning direction

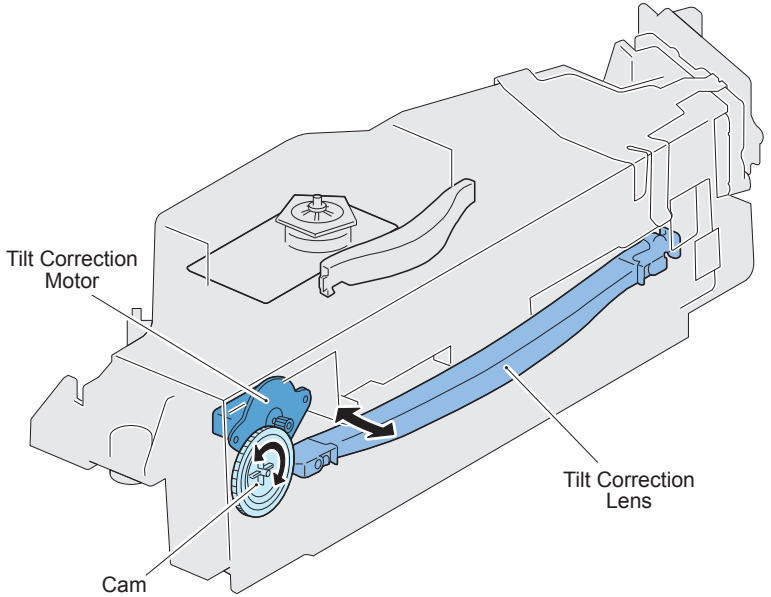
Based on Bk laser, skew of color laser irradiation is prevented.

<Execution timing >

- At the time of recovery from a jam (Fixing temperature at lower than 100 degree C
- Paper interval / last rotation (at the time of automatic adjustment when the accumulated sheet count reached 1000 or more since the last image position adjustment)

<Description of control >

1) DC Controller Interface PCB forms the patch pattern on ITB.
2) DC Controller Interface PCB reads this patch pattern using Patch Sensor and detects the degree of skew based on Bk.
3) Based on the foregoing detection result, Skew Correction Motor is driven and Skew Correction Lens is shifted, so that irradiation angle is corrected.



F-2-100

Related service mode

COPIER>FUNCTION>LASER>LD-ADJ-Y/M/C: Adjusting initial position of Skew Correction Motor

Related alarm code

34-0004: When the correction count value of Skew Correction Motor exceeds specific

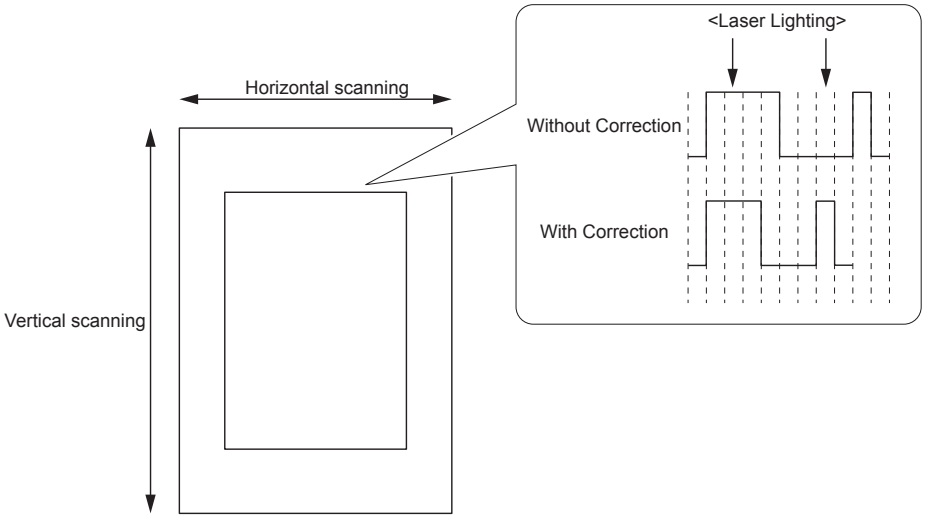
Duplex print magnification correction

Magnification difference between 1st and 2nd sides due to the different amount of paper shrinkage between 1st and 2nd sides is corrected.
As for the duplex print, when the paper passes through the fixing assembly after the image formation on the 1st side, it is shrunk temporarily. After the image is formed on the 2nd side and the paper is ejected from the main body, the 2nd side image is enlarged when the paper size is returned. That is, the image size of the 2nd side becomes larger than the 1st side, so the magnification mismatch occurs.

Execution timing
When forming the image on the 2nd side at duplex print

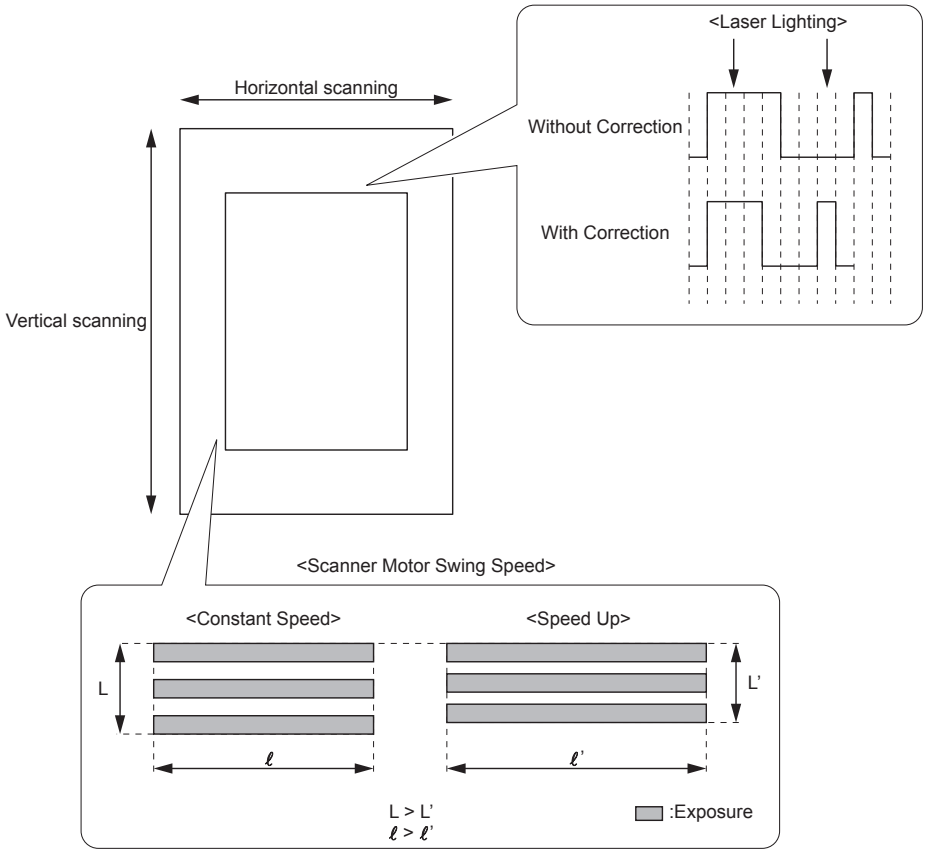
Description of control
Considering the paper shrinkage level, conduct the following control for the 2nd side image formation.

Horizontal scanning direction:
By skipping the image data pixel, image in horizontal scanning direction is shrunk.
When enlarging the image, enlarge it in horizontal scanning direction by adding image data.



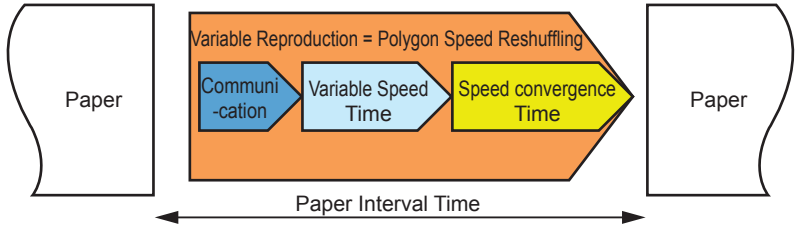
F-2-101

Vertical scanning direction:
Rotation speed of Scanner Motor is accelerated to shrink the image.
Since magnification in horizontal scanning direction is changed to be increased, accommodate magnification by shrinking the image with image data skipping in horizontal scanning direction.



F-2-102

When magnification is corrected, changing the Scanner Motor speed between sheets might be slower depending on the speed, so productivity might be reduced.



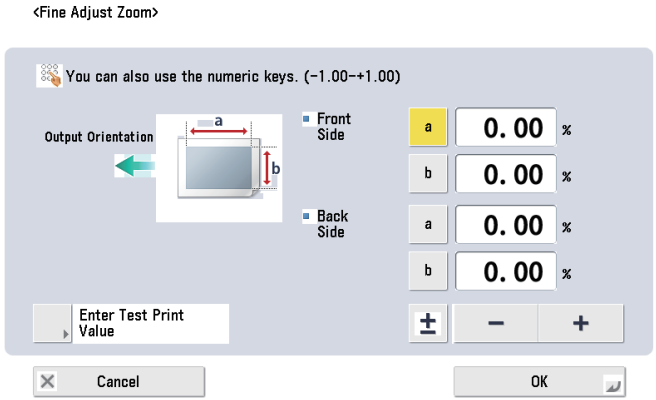
F-2-103

Variable speed Wide	PPM			
	75ppm	70ppm	65ppm	55ppm
-0.3%	88%	94%	91%	100%
-0.6%	88%	94%	91%	100%
-1.0%	85%	91%	89%	100%

* In the actual use, it is assumed that changing speed over 0.6% is rarely seen. T-2-28

Related service mode
COPIER>OPTION>DSPLY-SW>IMGC-ADJ: Image adjustment-related items in “Settings/Registration” are displayed/not displayed.

Related “Settings/Registration” mode
Settings/Registration > Preferences > Paper Settings > Paper Type Management Settings >Details/Edit > Adjust Image position > Fine Adjust Zoom



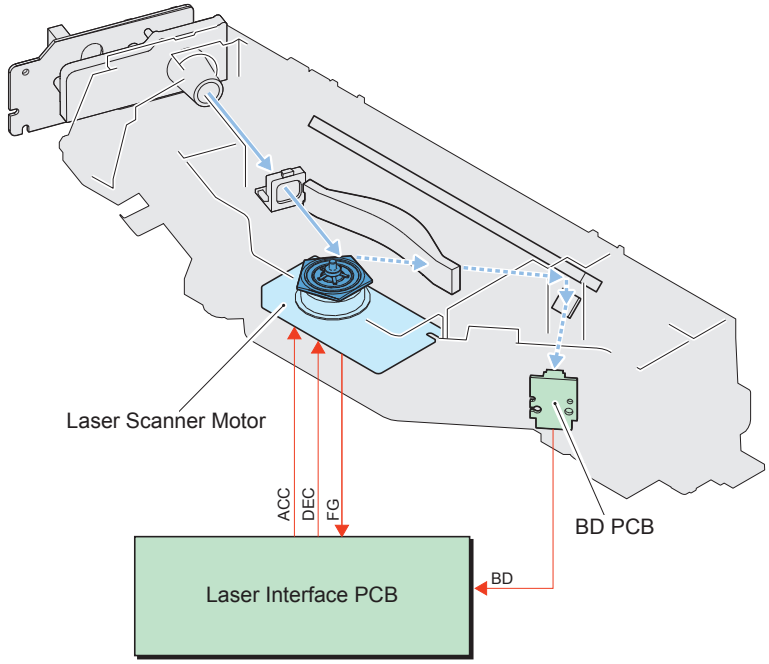
F-2-104

Laser Scanner Motor Control

This control is performed to rotate the scanner mirror at a specified speed.

<Timing of Execution>
At the time of power-on/start-up

<Details of the Control>
1) The motor speed control unit in the DC controller PCB forcibly rotates the motor.
2) When a speed detection signal (FG, BD) is detected, the unit compares it with the standard signal created by the standard signal creation unit, and controls the acceleration signal (ACC) and deceleration signal (DEC) to keep a specified speed.



F-2-105

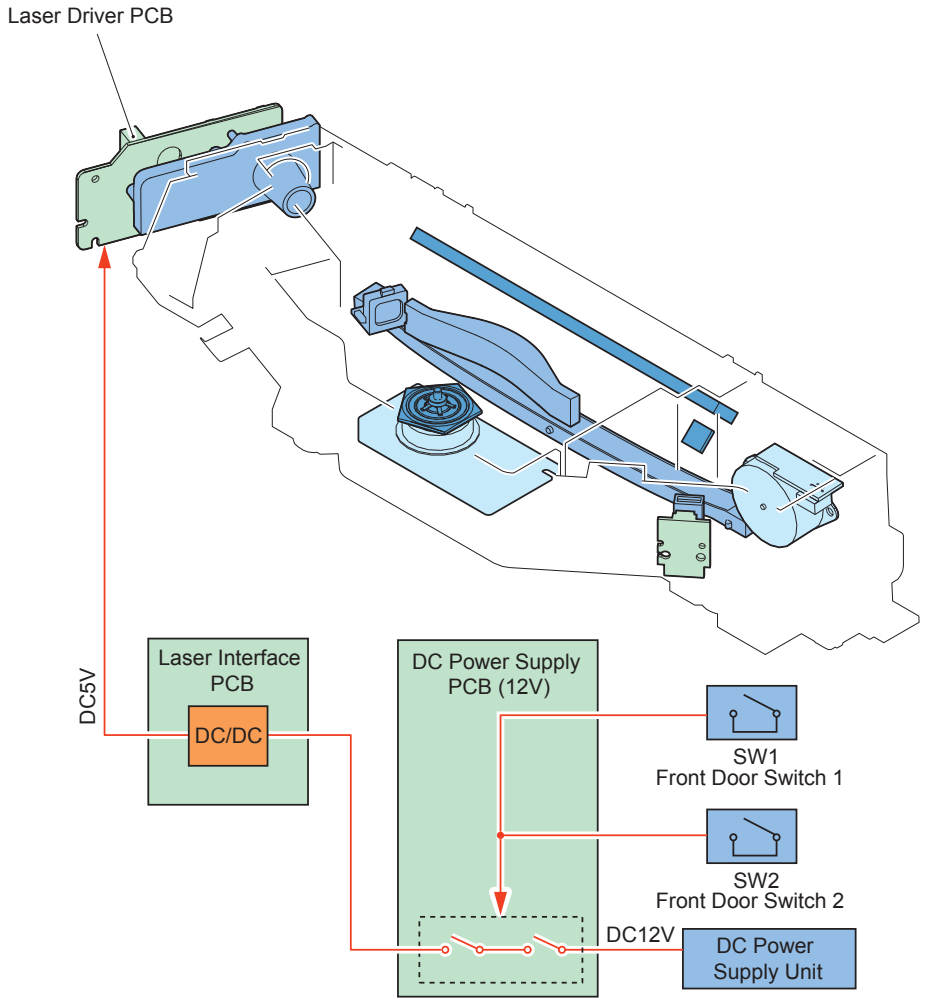
Related Error Code
E100: Failure to detect PLOCK signal during BD rotation
E110: Failure to detect VLOCK signal during FG rotation

Laser Shutter Control

This control is performed to prevent irradiation of a laser beam in the machine.

<Timing of Execution>
At the time of power-on/startup

<Details of the Control>
When the front cover is opened, the DC controller stops power supply and an output signal from the laser driver. This prevents irradiation of a laser beam.



F-2-106

Servicing

Periodically Replaced Parts

None

Consumable Parts

None

Periodical Servicing List

Parts name	Qty	Cleaning interval	Remarks
Dust-proof glass	4	150K	<YMK> Use the cleaning tool for Dust-proof Glass equipped inside the machine. <Bk> Use lint-free paper to clean. Be sure to replace the Dustproof Glass Cleaning Pad (FL2-4425) when itis soiled.

T-2-29

<Bk>

<CL>

F-2-107

When Replacing Parts

Actions Bfor Parts Replacement

No.	Parts name	When replacing parts
1	Laser Scanner Unit	1) Execute initial position adjustment of Skew Correction Motor. (COPIER>FUNCTION>LASER>LD-ADJ-Y/M/C)

T-2-30

Actions after Parts Replacement

No.	Parts name	When replacing parts
1	Laser Scanner Unit	1) Execute color displacement correction (Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Correct Color Mismatch).

T-2-31

Major Adjustments

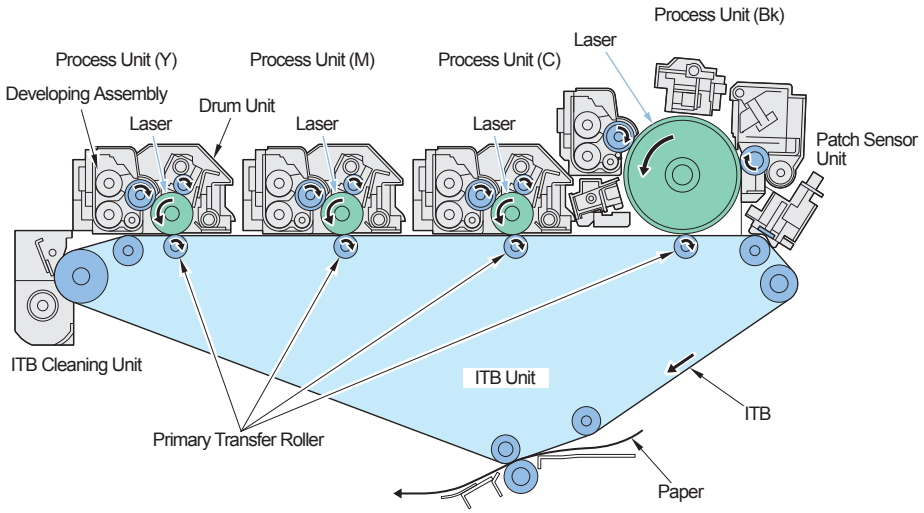
N/A

Image Formation System

Overview

Overview

For the image formation system, this machine uses "four OPC drums (four FLAT4 engines), fully utilizing conventional color MFP technologies" and "intermediate transfer method".
The machine performs the primary transfer attachment and detachment method, in which YMC primary transfer rollers are disengaged at Bk single-color mode to prolong the life of the image formation unit, detects the drum rotation speed, and executes automatic cleaning of the primary grid plate (Bk) for image stabilization.
For the color process unit, separated process units (the developing assembly and the drum unit) are introduced to realize high-level durability suitable for a light production machine.



F-2-108

Specifications

Specifications

Basic Specification

Item			Function/Method
Process unit (Bk)	Configuration		Drum unit (drum, charging assembly, cleaner) + Developing assembly
	Photosensitive drum	Material	OPC
		Drum diameter	φ84
		Cleaning	Drum Cleaning Blade
		Process speed	Refer to page 2-73
	Developing assembly	Developing method	Dry, 2-component toner projection
		Toner	Nonmagnetic negative toner
		Developing cylinder diameter	φ20
		Toner density detection	Provided (Magnetic sensor)
	Primary charging	Charging method	Indirect corona charging (1 wire + grid plate)
		Cleaning	Provided (Cleaning pad) Cleaning is performed to both of the wire and the grid plate.
process unit(CL)	Configuration		P-CRG as a unit (The developing assembly and the drum unit can be separated.)
	Options		Drum heater (Service Parts)
	Photosensitive drum	Material	OPC
		Drum diameter	φ30.6
		Cleaning	Cleaning blade
		Process speed	Refer to page 2-73
	Developing assembly	Developing method	Dry, 2-component toner projection
		Toner	Nonmagnetic negative toner
		Cylinder diameter	φ20
		Toner density detection	Provided (Magnetic sensor)
	Primary charging	Charging method	Direct roller charging (φ14)
		Cleaning	Provided (Brush roller)

Item			Function/Method
ITB unit	Transfer method		Intermediate transfer (ITB)
	ITB	Material	PI (polyimide), Seamless
		Circumferential length/width	1148.3 mm / 360 mm
		Cleaning	Cleaning blade
		Belt displacement correction	Provided (Light reception sensor)
	Primary transfer	Transfer method	Transfer roller (Sponge roller/φ16)
		Disengagement mechanism	Provided (Color only)
	Patch sensor		Provided
	Secondary transfer assembly	Transfer method	Roller (Sponge roller/φ24.3)
		Cleaning	Static electricity cleaning method
		Disengagement mechanism	Provided
	Separation method		"Curvature separation + Static eliminator" method
Others	Process unit presence detection		Not provided
	Process unit old/new detection		Not provided
	Process unit life detection		Not provided (Life (total charging time) can be checked in Service Mode)
	Toner container	Container presence detection	Not provided
		Old/new detection	Not provided
		Toner level detection	Not provided
	Waste toner container	Capacity	Equivalent to 50,000 images in A4/4-color/5% image printing
		Full level detection	Provided

T-2-32

Process Speed

	Model A	Model B	Model C	Model D
JP	iR-ADV C9280 PRO	-	iR-ADV C9270 PRO/ C7270	iR-ADV C7260
USA	iR-ADV C9280 PRO	iR-ADV C9270 PRO	iR-ADV C7270	iR-ADV C7260
EU	iR-ADV C9280 PRO/ C2180i	iR-ADV C7270i	-	iR-ADV C7260i
CA	iR-ADV C9280PRO	iR-ADV C9270 PRO/ C7270	-	iR-ADV C7260
ASIA	iR-ADV C9280 PRO	iR-ADV C7270	-	iR-ADV C7260
CCN/TW	iR-ADV C9280 PRO	iR-ADV C9270 PRO	-	-
KR	iR-ADV C9280 PRO	iR-ADV C7270	-	iR-ADV C7260

T-2-33

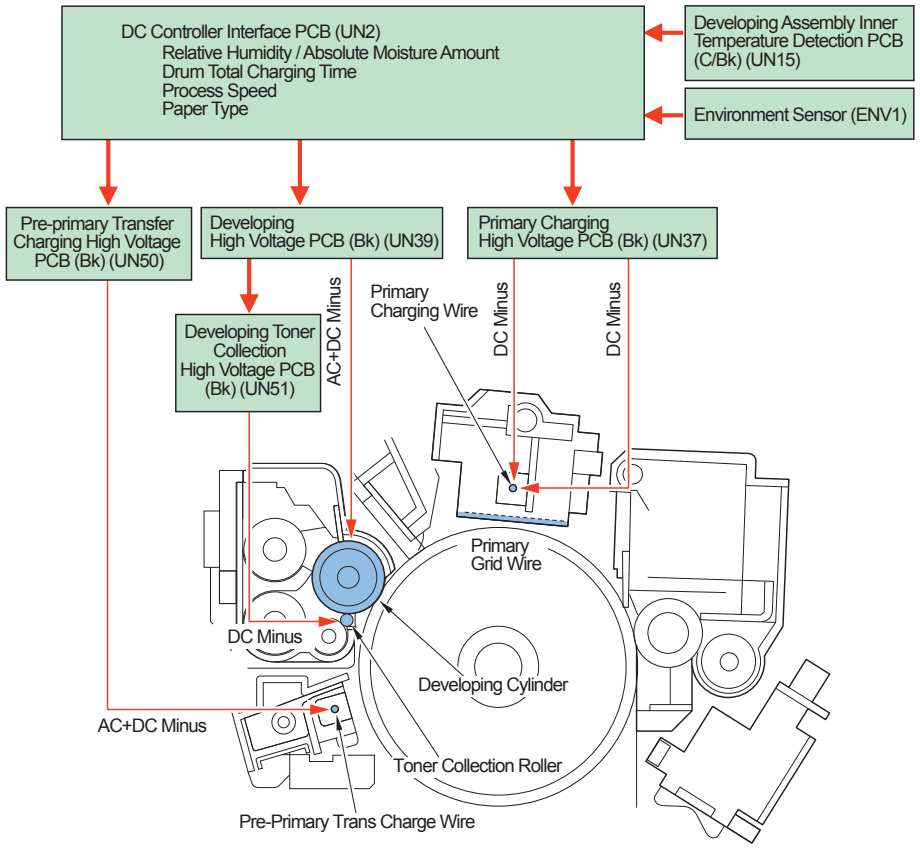
Speed	Paper type	Model A	Model B/C/D
1/1 speed	Thin paper (52 to 63g/m^2)	321mm/sec	280mm/sec
	Plain paper 1(64 to 90g/m^2)		
	Plain paper 2(91 to 105g/m^2)		
	Recycled paper 1(64 to 90g/m^2)		
	Recycled paper 2(91 to 105g/m^2)		
	Color paper (64 to 90g/m^2)		
	Tracing paper		
	bond paper		
	Pre-punched paper		
1/2 speed	Heavy paper 1(106 to 150g/m^2)	160mm/sec	140mm/sec
	Heavy paper 2(151 to 220g/m^2)		
	Texture paper 1(106 to 150g/m^2)		
	Texture paper 2(151 to 220g/m^2)		
	Transparency		
	Labels		
	Tab paper 1		
	Tab paper 2		
	Postcard		
	Letter head		
	Envelope		
1/3 speed	Heavy paper 3(221 to 256g/m^2)	107mm/sec	93mm/sec
	Heavy paper 4(257 to 300g/m^2)		
	Texture paper 3(221 to 256g/m^2)		
	Texture paper 4(257 to 300g/m^2)		
	1-sided coated paper 1(106 to 180g/m^2)*	93mm/sec (1/3 speed slow)	
	2-sided coated paper 1(106 to 180g/m^2)*		
	1-sided coated paper 2(181 to 220g/m^2)		
	2-sided coated paper 2(181 to 220g/m^2)		
	1-sided coated paper 3(221 to 256g/m^2)		
	2-sided coated paper 3(221 to 256g/m^2)		
	1-sided coated paper 4(257 to 300g/m^2)		
	2-sided coated paper 4(257 to 300g/m^2)		

T-2-34

* In Settings/Registration (Function Settings > Common > Print Settings > Coated Productivity/Image Quality Priority), the speed can be changed to 1/2 speed. (It is required to set the following: COPIER > OPTION > FUC-SW > CKT-LANG: "1".)

Charging Specifications

Process Unit (Bk)

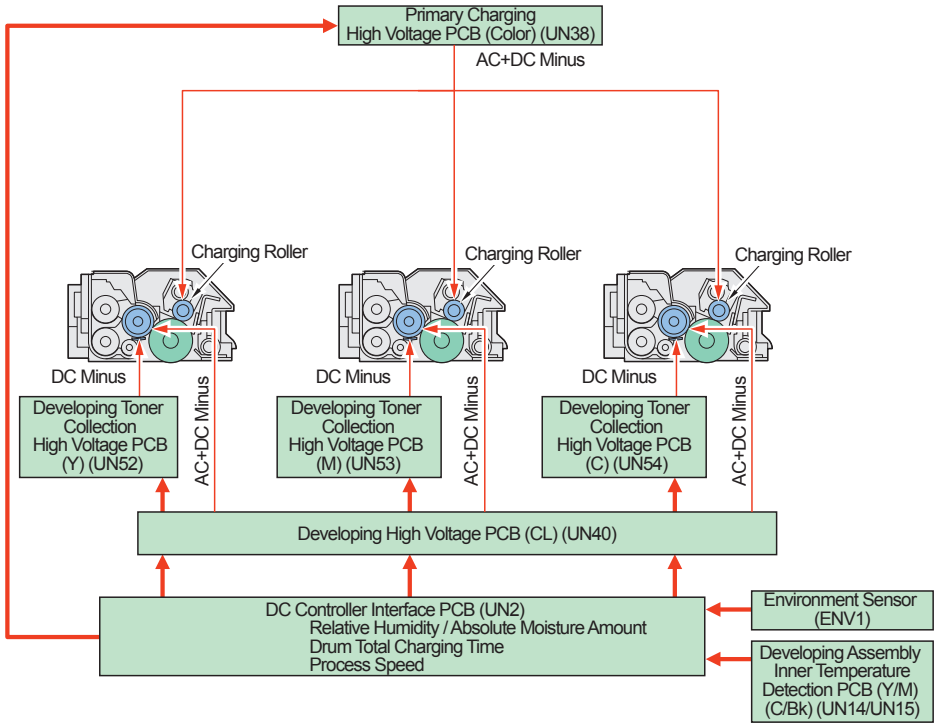


F-2-109

Item		Specifications
Primary charging bias	Charging method	Indirect corona charging
	DC component rated voltage use range	-600 to -1000 µA
	DC component voltage correction factor	Absolute water volume (ENV1), Total drum charging time, Process speed
Grid bias	DC component rated voltage use range	-500 to -1000 V (Potential control (Bk))
	DC component voltage correction factor	Absolute water volume (ENV1), Process speed
Developing bias	AC component standard value	1600 Vpp (Model A) , 1400 Vpp (Model B,C.D)
	DC component rated voltage use range	-200 to -800 V
	DC component voltage correction factor	Relative humidity (UN15), Total drum charging time, Charging DC bias
Toner collection roller	DC component rated voltage use range	-1300 V (Fixed)
Primary pre-transfer charging bias	Charging method	Corona discharge
	AC component standard value	5500 Vpp (fixed)
	DC component rated voltage use range	0 to -600 µA (Constant current)
	DC component voltage correction factor	Absolute water volume (ENV1), Relative humidity (UN15), Paper type

T-2-35

Color Process Unit

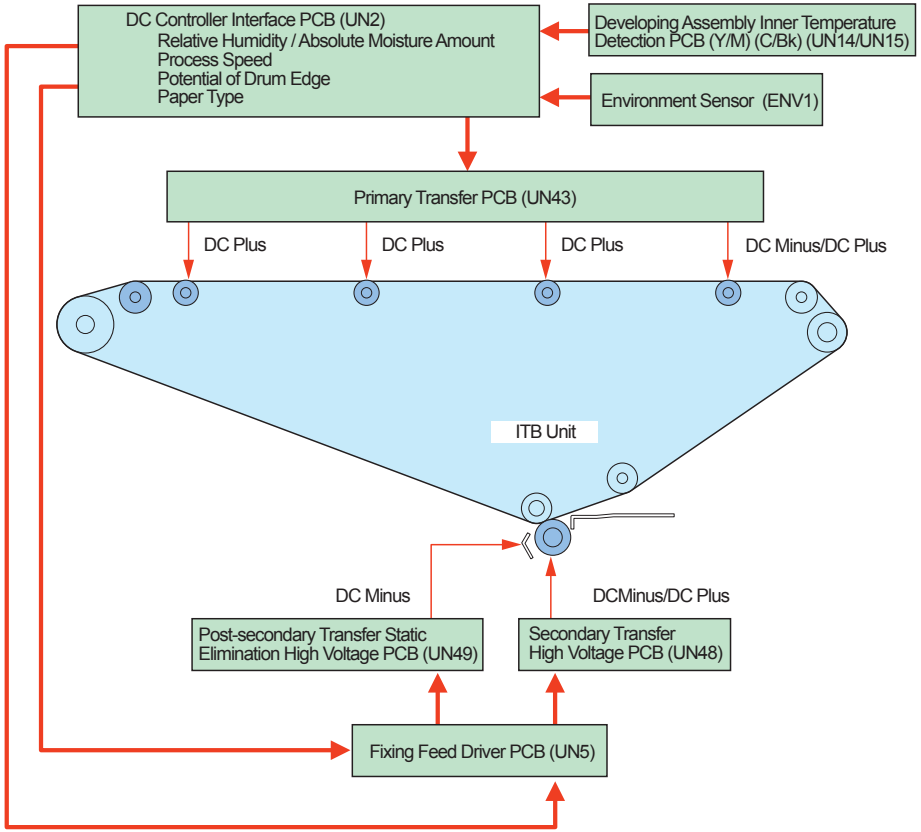


F-2-110

Item		Specifications
Charging bias	Charging method	Direct roller charging
	AC component standard value	1300 to 2500 Vpp (Discharged current control)
	AC component voltage correction factor	Absolute water volume (ENV1), Total drum charging time, Process speed, Machine Inner Temperature
	DC component rated voltage use range	0 to -1000 V
	DC component voltage correction factor	Absolute water volume (ENV1), Process speed, Machine Inner Temperature
Developing bias	AC component standard value	1600 Vpp (Model A) , 1400 Vpp (Model B,C,D)
	DC component rated voltage use range	-200 to -800V
	DC component voltage correction factor	Relative humidity (UN14/UN15), Total drum charging time, Charging DC bias
Toner collection sheet bias	DC component rated voltage use range	-1300V (Fixed)

T-2-36

Transfer Assembly



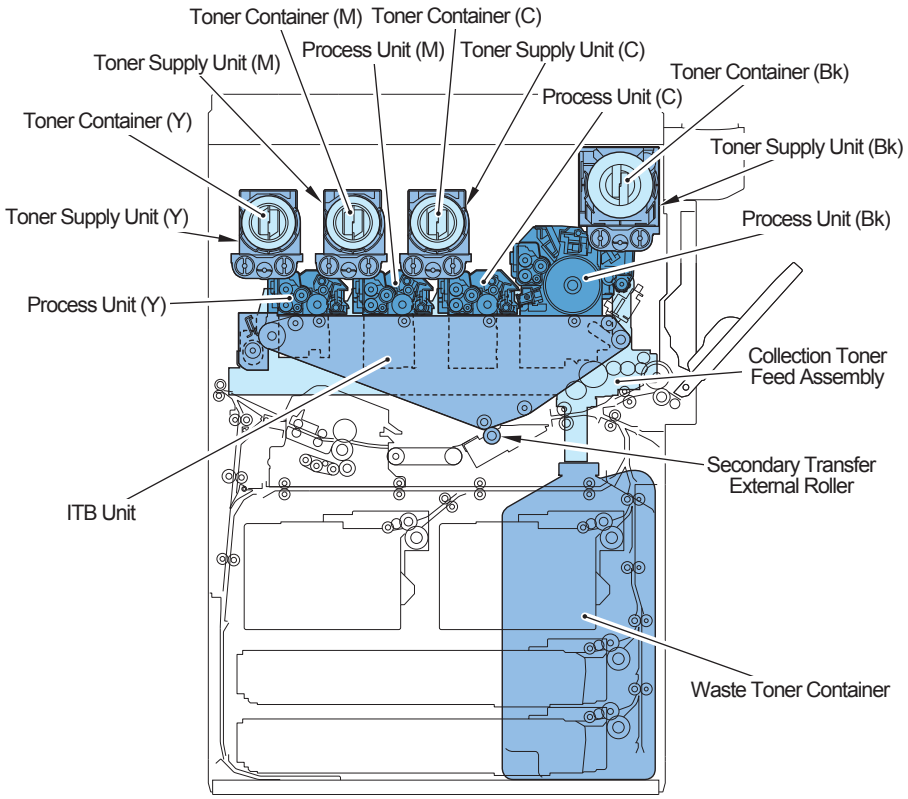
F-2-111

Item		Specifications
Primary transfer bias	Transfer method	Roller transfer
	Target of transfer	Intermediate Transfer Belt (ITB)
	DC component rated voltage use range	0 to 5000 V (YMC), -1000 to 5000 V (Bk)
	DC component voltage correction factor	Absolute water volume (ENV1), Relative humidity (UN14/UN15), Process speed, Drum dark section potential (Vd)
Secondary transfer external roller cleaning bias	DC component rated voltage use range	-40 to 0 µA (Constant current)
	DC component voltage correction factor	Absolute water volume (ENV1), Process speed
Secondary transfer bias	Transfer method	Roller transfer
	Target of transfer	Paper (Transfer material)
	DC component rated voltage use range	0 to 7000 V
	DC component voltage correction factor	Absolute water volume (ENV1), Process speed, Paper type
Secondary post-transfer static eliminator bias	DC component rated voltage use range	0 to -4000 V
	DC component voltage correction factor	Absolute water volume (ENV1), Paper type

T-2-37

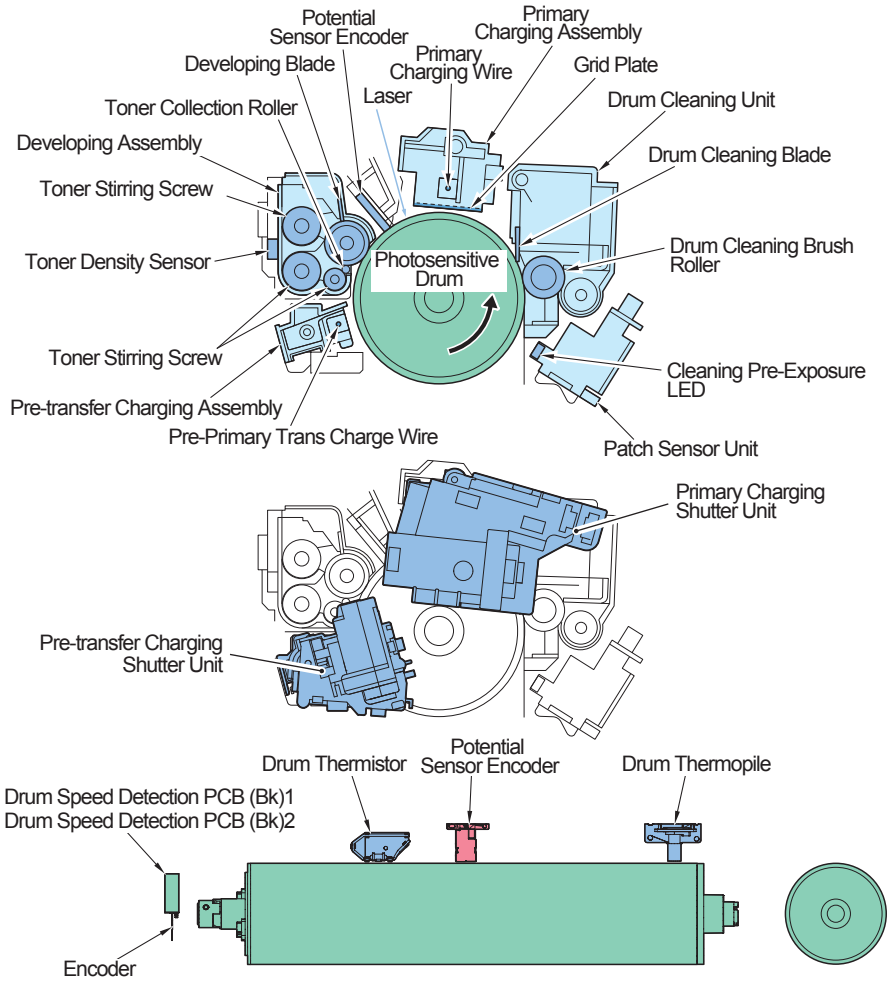
Parts Configuration

Overall Configuration



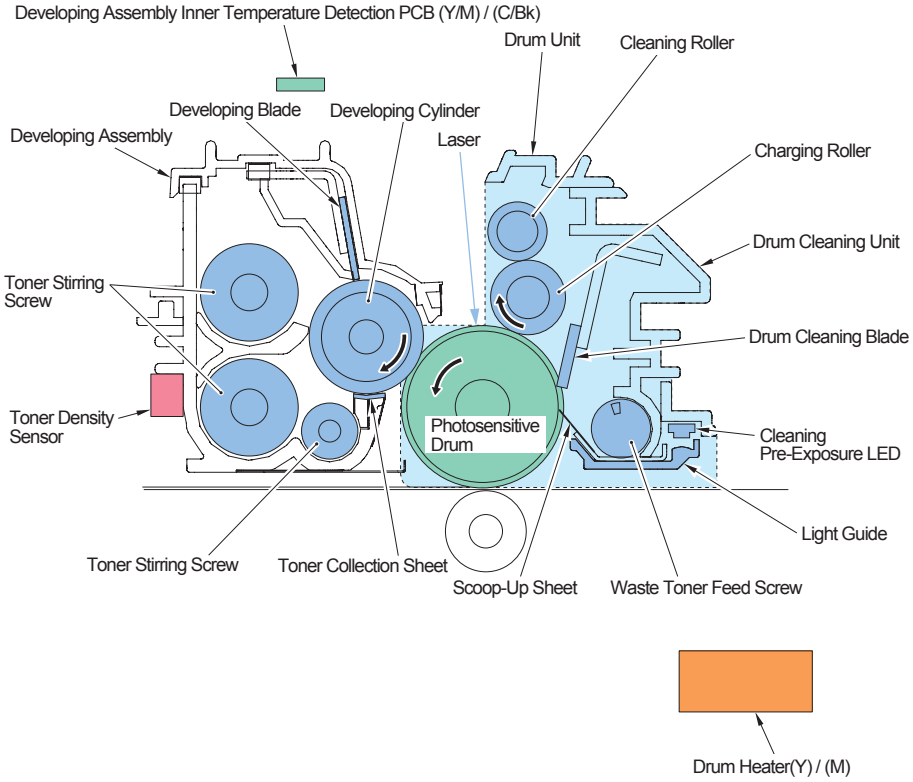
F-2-112

Process Unit (Bk)



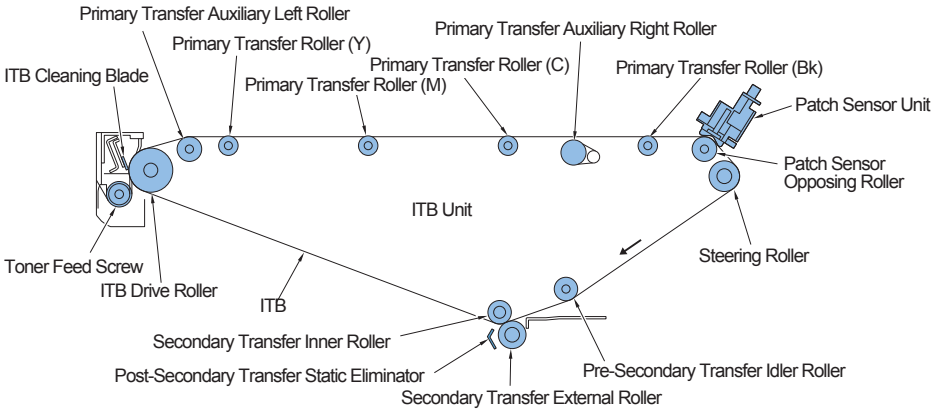
F-2-113

Process Unit (CL



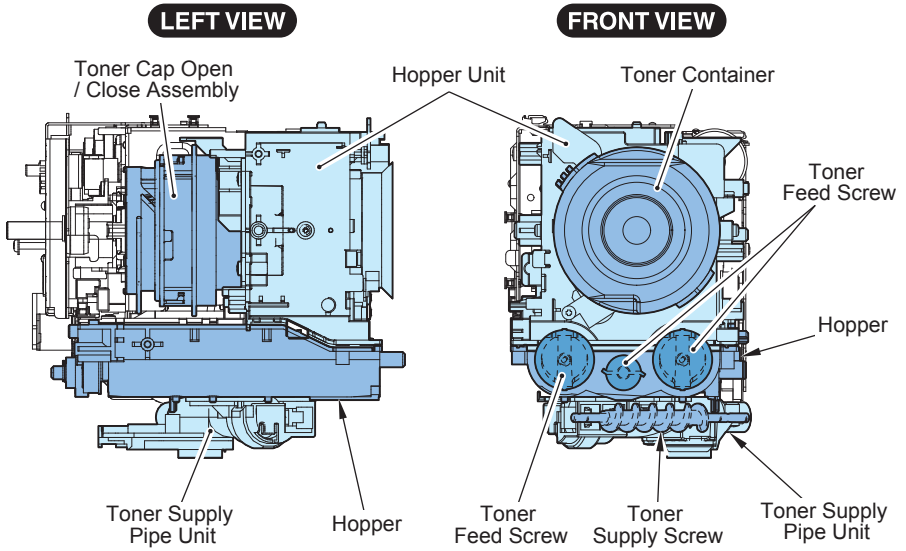
F-2-114

Transfer Assembly



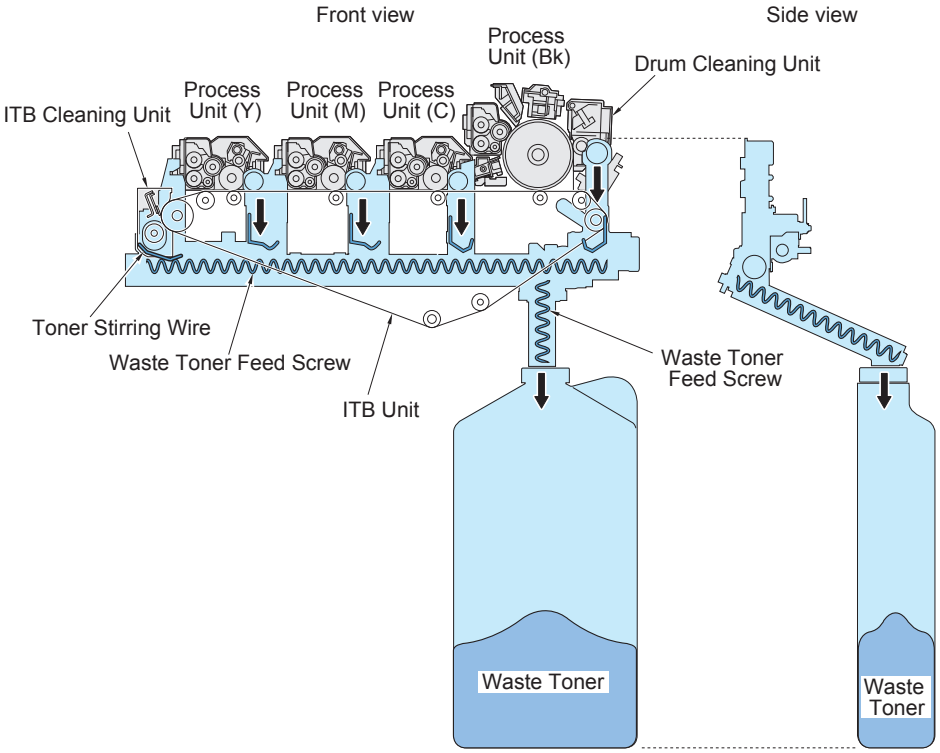
F-2-115

Toner Supply Assembly



F-2-116

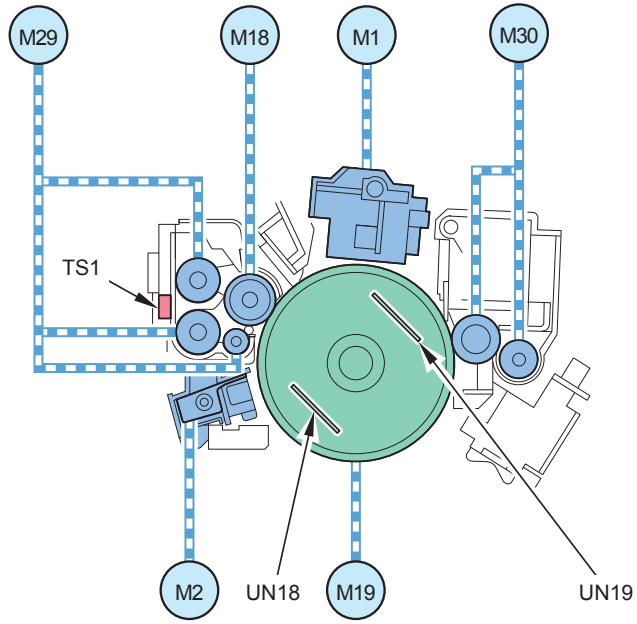
● Waste Toner Feed Assembly



F-2-117

■ Drive Configuration

● Process Unit (Bk)



F-2-118

Code	Name	Role
M1	Primary charging wire cleaning motor	Drive the primary charging wire/grid plate cleaning pad.
M2	Primary pre-transfer charging wire cleaning motor	Drive the primary pre-transfer charging wire cleaning pad.
M18	Developing sleeve drive motor (Bk)	Drive the developing sleeve.
M19	Drum motor (Bk)	Drive the drum.
M29	Developing stirring motor (Bk)	Drive the toner stirring screw.
M30	Drum cleaning/water toner feed drive motor	Drive the drum cleaning fur brush and the waste toner screw.
UN18	Drum speed detection PCB (Bk) 1	Detect the drum rotation speed.
UN19	Drum speed detection PCB (Bk) 2	Detect the drum rotation speed.

T-2-38

<Related Error Codes>

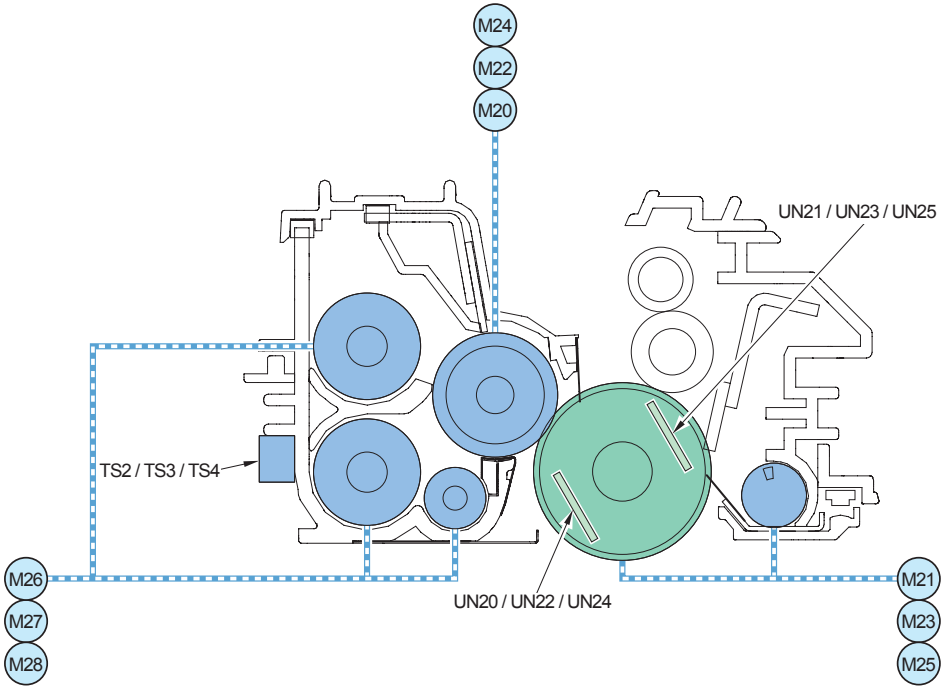
E012: error in drum/ITB drive motor

E021: error in developing sleeve drive motor

E022: error in drum cleaning/waste toner feed drive motor

E023: error in developing stirring motor

Process Unit (CL)



F-2-119

Code	Parts name	Role
M20/M22/M24	Developing sleeve drive motor (Y)/(M)/(C)	Drive the developing sleeve.
M21/M23/M25	Drum motor (Y)/(M)/(C)	Drive the drum.
M26/M27M28	Developing stirring motor (Y)/(M)/(C)	Drive the toner stirring screw.
UN14/UN15	Developing assembly inner temperature detection PCB (Y/M)/(C/Bk)	Detect the temperature in the developing assembly.
UN20/UN22/UN24	Drum speed detection PCB (Y)/(M)/(C) 1	Detect the drum rotation speed.
UN21/UN23/UN25	Drum speed detection PCB (Y)/(M)/(C) 2	Detect the drum rotation speed.

T-2-39

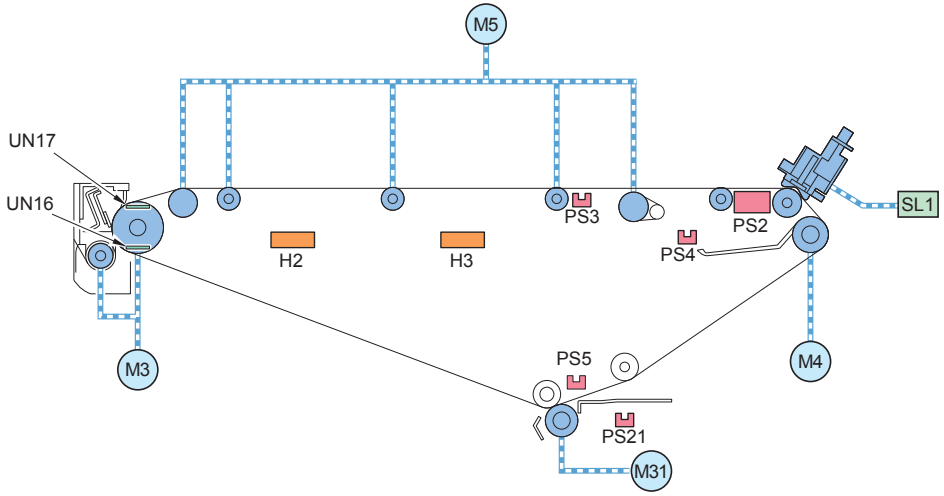
<Related Error Codes>

E012: error in drum/ITB drive motor

E021: error in developing sleeve drive motor

E023: error in developing stirring motor

Transfer Assembly



F-2-120

Code	Parts name	Role
M3	ITB drive motor	Drive the ITB drive roller.
M4	Steering drive motor	Move the steering roller.
M5	Primary Transfer Roller Detachment Motor	Engage/disengage the primary transfer roller (Y/M/C).
M31	Secondary Transfer Roller Detachment Motor	Engage/disengage the secondary transfer external roller.
PS2	ITB displacement sensor	Detect the position of the ITB belt.
PS3	Stirring drive HP sensor	Detect the position of the steering roller.
PS4	Primary transfer roller attachment/ detachment HP sensor	Detect the home position of the primary transfer roller.
PS5	ITB HP sensor	HP sensor of the ITB
SL1	Patch shutter open/close solenoid	Open/close the patch shutter.
UN16	ITB drive roller speed detection A	Detect the rotation speed of the ITB
UN17	ITB drive roller speed detection B	Detect the rotation speed of the ITB
H2	Drum heater (Y/M)	Heat the drum (Y) and the drum (M).
H3	Drum heater (M/C)	Heat the drum (M) and the drum (C).

T-2-40

<Related Error Codes>

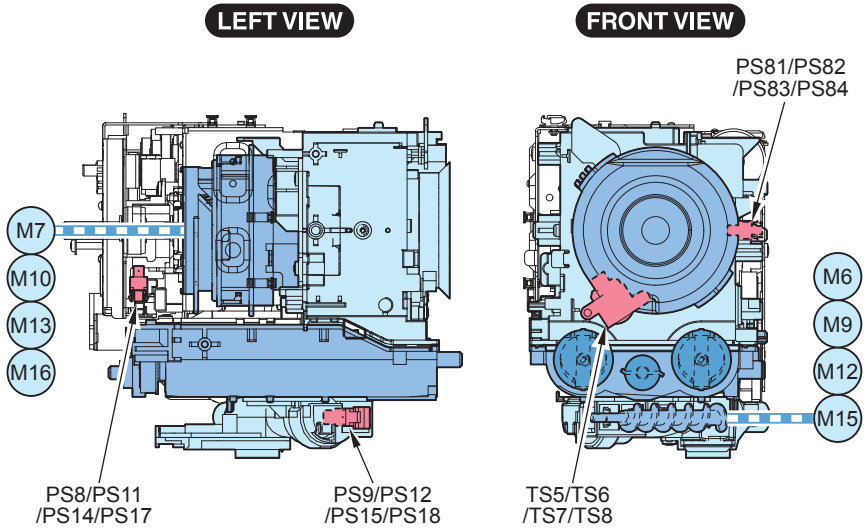
E012: error in drum/ITB drive motor

E074: Primary transfer roller detachment/attachment error

E075: error in ITB displacement control

E077: Secondary transfer external roller detachment/attachment error

Toner Supply Assembly



F-2-121

Code	Parts name	Role
M6/M9/M12/M15	Hopper/stirring supply motor (Y)/(M)/(C)/(Bk)	Drive the toner stirring screw.
M7/M10/M13/M16	Toner container drive motor (Y)/(M)/(C)/(Bk)	Drive the toner supply drive unit.
M8/M11/M14/M17	Wiper rotation motor (Y)/(M)/(C)/(Bk)	Drive the wiper.
TS6/TS7/TS8/TS9	Hopper toner level sensor (Y)/(M)/(C)/(Bk)	Detect the toner level in the hopper.
PS8/PS11/PS14/PS17	Release holder shift cam HP sensor (Y)/(M)/(C)/(Bk)	Detect the home position of the release holder shift cam.
PS9/PS12/PS15/PS18	Screw rotation sensor (Y)/(M)/(C)/(Bk)	Drive the toner feed screw.
PS81/PS82/PS83/PS84	Release holder shift cam phase sensor (Y)/(M)/(C)/(Bk)	Detect the release holder shift cam phase.

T-2-41

<Related Error Codes>

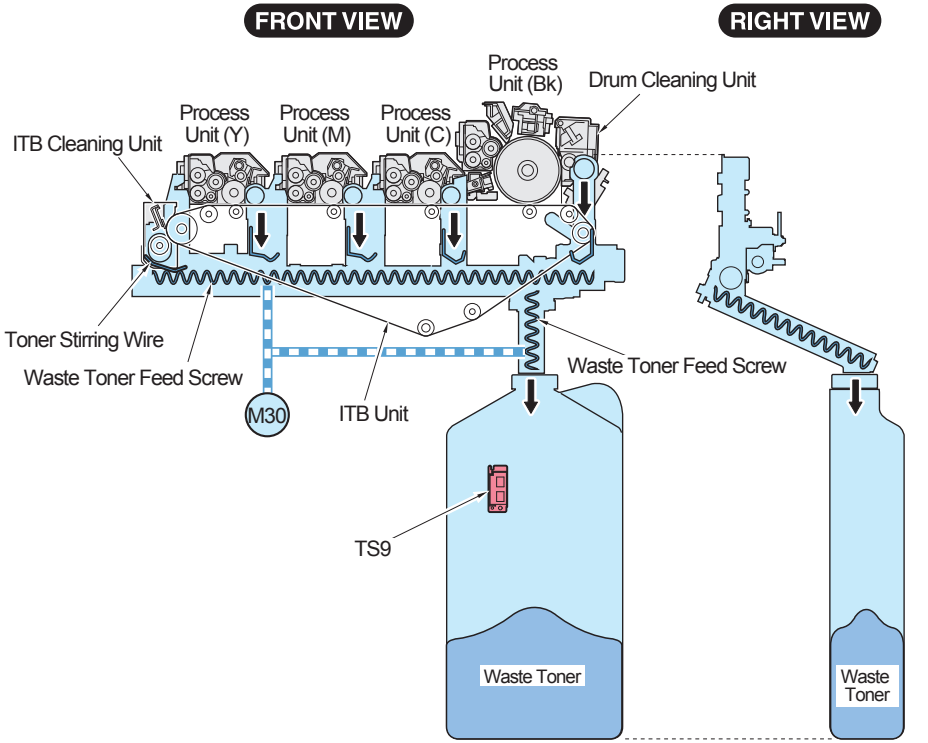
E025-0x00: Toner container drive motor lock error

E025-0x02: Block supply timeout error

E025-0x10: Toner container sealing/release holder shift cam HP sensor timeout error

E025-0x20: Toner container/toner container inserting inlet phase error

Waste Toner Feed Assembly



F-2-122

Code	Parts name	Role
M30	Drum cleaning/waste toner feed drive motor	Drive the drum cleaning fur brush and the waste toner feed screw.
TS9	Waste toner full level sensor	Detect the waste toner container full level.

T-2-42

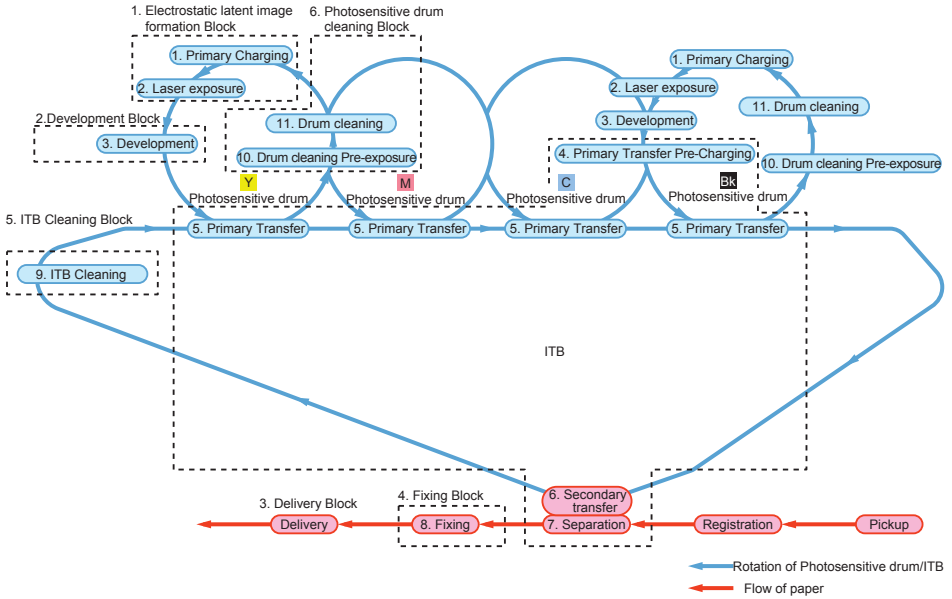
<Related Error Codes>

E013-0001: error in waste toner full level

Printing Process

Static electricity formation block	1	Primary charging	Charge the photosensitive drum surface with a uniform negative potential. The process unit (Y/M/C) uses the direct charging roller method, in which charges are directly applied from the charging roller to the photosensitive drum. The process unit (Bk) uses the primary charging method, in which charges are indirectly applied from the charging wire.
	2	Laser exposure	Form a latent image on the photosensitive drum surface by irradiating a laser beam. When a laser beam irradiates to the negatively charged photosensitive drum surface, the negative potential in the irradiated area is neutralized.
Developing block	3	Development	Attach negatively charged toner to the static latent image on the photosensitive drum surface from the developing cylinder by dry 2-component toner projection so that it becomes visualized.
Transfer block	4	Primary pre-transfer charging (Bk)	Charge the toner on the photosensitive drum with a uniform potential.
	5	Primary transfer	Apply a positive potential to the primary transfer roller, and transfer the toner on the photosensitive drum to the ITB.
	6	Secondary transfer	Apply a positive charge to the secondary transfer external roller, and transfer the toner on the ITB to the paper.
	7	Separation	Separate the paper from the ITB by curvature separation. Application of a negative charge to the static eliminator according to the paper type makes it easier to separate paper from the ITB.
Fixing block	8	Fixing	Melt and adhere the toner on paper to the paper by heat and pressure.
ITB cleaning block	9	ITB cleaning	Remove the residual toner on the ITB by the cleaning blade.
Drum cleaning block	10	Drum cleaning pre-exposure	Remove the drum charging memory on the photosensitive drum surface by irradiating light from the drum cleaning pre-exposure LED to prevent dirt on the photosensitive drum.
	11	Drum cleaning	Remove the residual toner on the photosensitive drum by the cleaning blade

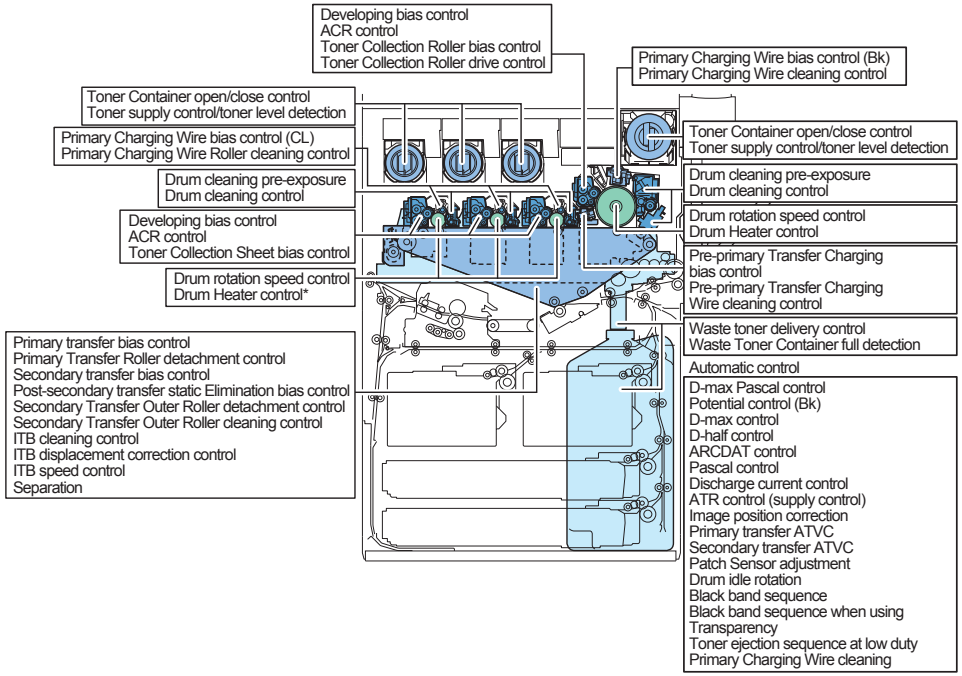
T-2-43



F-2-123

Controls

Overview



* The Drum Heater is located in the ITB Unit.

F-2-124

Control Name	Bk	CL	Description
Primary charging			
Primary Charging Wire bias control (Bk)	○		Controls to apply the negative charge to Primary Charging Wire and Grid Plate.
Primary Charging Wire bias control (CL)		○	Controls to apply the negative charge to Primary Charging Roller.
Primary Charging Wire cleaning control	○		Controls to clean Primary Charging Wire and Grid Plate.
Primary Charging Wire Roller cleaning control		○	Controls to clean Primary Charging Wire Roller.
Developing			
Developing bias control	Common		Controls to apply the negative charge to Developing Cylinder in order to deposit toner on the Developing Cylinder to the surface of Photosensitive Drum.
Toner Collection Roller bias control	○		Controls to apply the negative charge to Toner Collection Roller.
Toner Collection Sheet bias control		○	Controls to apply the negative charge to Toner Collection Sheet.
ACR control	Common		Controls to maintain the ratio (T/D ratio) of toner and carrier in Developing Assembly.
Pre-primary transfer charging			
Pre-primary Transfer Charging bias control	○		Controls to charge the toner to negative evenly in order to improve the stability of transfer.
Pre-primary Transfer Charging Wire cleaning control	○		Controls to clean Pre-primary Transfer Charging Wire.
Drum cleaning			
Drum cleaning pre-exposure	○	○	Controls to emit Pre-exposure LED in order to remove the drum memory on the surface of Photosensitive Drum.
Drum cleaning control	○	○	Controls to remove the residual toner on Photosensitive Drum.
Others			
Drum rotation speed control	Common		Controls to maintain the constant rotation speed in order to set the same drum rotation speed for each color.
Drum Heater control	○	○	Controls to activate Drum Heater (ON/OFF) according to the environment.

Control Name	Bk	CL	Description
Transfer			
Primary transfer bias control			Controls to apply the positive charge to Primary Transfer Roller in order to transfer the toner on Photosensitive Drum to ITB.
Primary Transfer Roller disengagement control			Controls to disengage Primary Transfer Roller.
Primary transfer bias control			Controls to apply the positive charge to Secondary Transfer Outer Roller in order to transfer the toner on ITB to the paper.
Post-secondary transfer static Elimination bias control			Controls to apply the negative charge to Static Eliminator in order to easily separate the paper from ITB.
Secondary Transfer Outer Roller disengagement control			Controls to engage/disengage Secondary Transfer Outer Roller to/from ITB.
Secondary Transfer Outer Roller cleaning control			Controls to remove the residual toner on Secondary Transfer Outer Roller in order to prevent any failure due to toner stain from Secondary Transfer Outer Roller.
ITB cleaning control			Controls to remove the toner on ITB.
ITB displacement correction control			Controls to correct the ITB displacement.
ITB speed control			Controls to maintain the constant ITB rotation speed.
Separation			Controls to separate the paper from ITB.
Toner supply			
Toner Container open/close control			Controls to open/close the cap of Toner Container.
Toner supply control/toner level detection			Detects the toner level of Toner Container and Hopper Assembly, and controls to supply the toner to Hopper Assembly and Developing Assembly.
Waste toner delivery			
Waste toner delivery control			Controls to deliver the toner collected at Drum cleaning and ITB cleaning to Waste Toner Container.
Waste Toner Container full detection			Controls to detect whether Waste Toner Container is full.

Control Name	Bk	CL	Description
Automatic control			
D-max Pascal control			Forms the maximum density patch on the paper, reads this patch from Reader and corrects the target density of D-max control.
Potential control (Bk)			Optimizes the values of grid voltage, developing DC bias and laser power in order to set Vbak and Vcont of Process Unit (Bk) to the target values.
D-max control (Y/M/C)			Form a solid patch on the ITB and scan it with the Patch Sensor to determine the charging bias (Vd), developing bias (Vdc), and laser power to achieve the target density.
D-half control			Form a halftone patch on the ITB and scan it with the Patch Sensor to correct the halftone.
ARCDAT control			Corrects a whole halftone by referring to the density of 1 halftone patch.
Pascal control			Reads the gradation pattern from Reader to make correction.
Discharge current control			Optimizes the charging AC current value in order to reach the target discharge current value from the Charging Roller of Process Unit (color) to Drum.
ATR control (supply control)			Corrects the target T/D ratio in Developing Assembly in order to achieve the target image density.
Image position correction			Reads the registration patch from Patch Sensor, detects the image displacement from Bk and corrects the write start position in horizontal/vertical scanning direction and image skew magnification.
Primary transfer ATVC			Optimizes the primary transfer DC bias value in order to reach the target primary transfer current.
Secondary transfer ATVC			Optimizes the secondary transfer DC bias value in order to reach the target secondary transfer current.
Patch Sensor adjustment			Adjusts the light intensity to achieve the target reading performance of Patch Sensor and performs sampling of ITB background.
Drum idle rotation			Controls to rotate Drum without applying high voltage in order to remove the discharge generated on the drum surface.
Black band sequence			A control for preventing bend/peel of the ITB cleaning blade to create solid image on the ITB to be removed by the ITB cleaning blade.
Black band sequence when using Transparency			Controls to form the solid image on ITB to remove the surface active agent, etc. on ITB when feeding Transparency and remove using ITB Cleaning Blade.
Toner ejection sequence at low duty			Controls to form the solid image on ITB and consume (eject) the toner forcibly when low duty image is continuously printed.

T-2-44

■ Process Unit (Bk)

● Primary Charging

Primary Charging Wire Bias Control

The primary charging bias charges the photosensitive drum surface with a uniform negative potential.

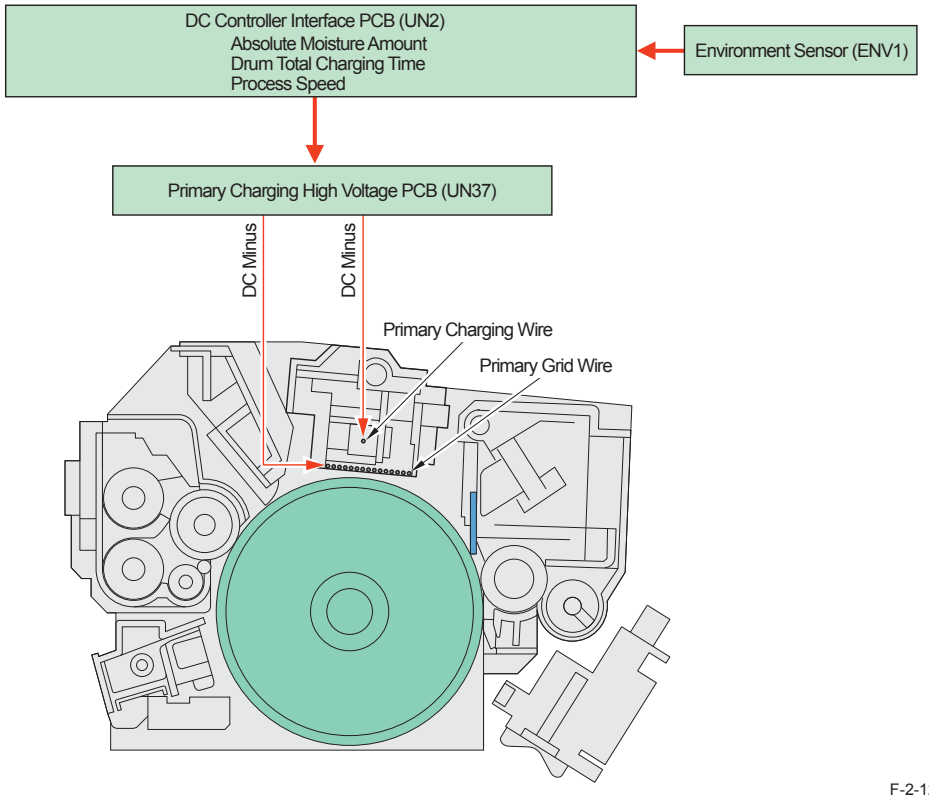
The primary charging bias (DC negative) created by the primary charging high voltage PCB (Bk) (UN37) is applied to the primary charging wire and the grid plate.

Primary charging DC bias: Applied to the primary charging wire (Constant current)

Grid DC bias: Applied to the grid plate

The value of the primary charging DC bias is determined based on the absolute water volume and process speed.

The value of the grid DC bias is determined by potential control (Bk) based on the fogging removal potential (Vback) and the contrast potential (Vcont), which are determined based on the absolute water volume and process speed. (See "Potential Control (Bk)" for the details.)



F-2-125

<Related Service Modes>

COPIER>DISPLAY>DPOT>DPOT-K: display of Bk drum surface potential

COPIER>DISPLAY > HV-STS >PRI-GRID: display of the primary charging current

COPIER>DISPLAY > HV-STS >PR-GRI-K: display of the primary charging assembly grid voltage

Primary Charging Wire Cleaning Control

This control is performed to prevent a charging failure caused by dirt on the primary charging wire and the grid plate.

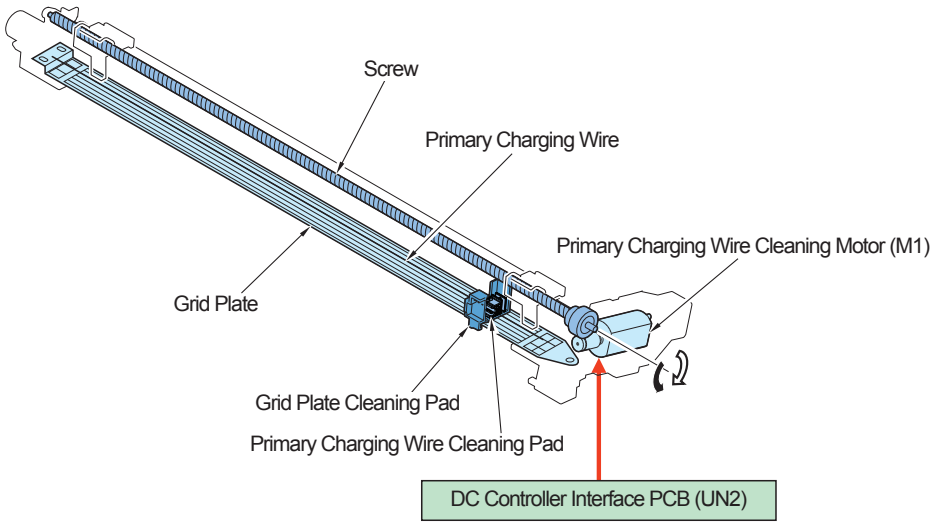
<Timing of Execution>

- At the time of automatic adjustment of paper interval (Every printing of 4000 images on an accumulation basis)
- At the time of automatic adjustment of last rotation (Every printing of 2000 images on an accumulation basi
- At the time of multiple initial rotations(Fixing temperature is less than100 deg C/Total 2000-sheet from previous D-half control)
- When "Wire Cleaning" is executed via the user mode

<Details of the Control>

When the cleaner screw rotates normally/in reverse driven by the primary charging cleaning motor (M1), the primary charging cleaning pad and the grid plate cleaning pad move back and forth, and clean the primary charging wire and the grid plate.

NOTE:
This machine does not have a HP sensor for the cleaning pad. The position of the cleaning pad is detected based on the drive time of the primary charging wire cleaning motor (M1).



F-2-126

<Related Service Mode>

COPIER>FUNCTION>CLEANING>WIRE-CLN or WIRE-EX:cleaning of all charging wires (1 round-trip)

COPIER>OPTION> CLEANING >W-CLN-P:setting for cleaning interval of the post-rotation charging wire (2000)

COPIER>OPTION> CLEANING >INTPPR-1:setting for cleaning interval of paper interval charging wire (4000)

COPIER>OPTION> CLEANING >W-CLN-PH: ON/OFF for auto-cleaning of the Charging Wire

<Related error code>

E060-0011: Primary Charging Wire Shutter error 1 when cleaning the Primary Charging Wire

E060-0012: Primary Charging Wire Shutter error 2 when cleaning the Primary Charging Wire

Primary Charging Shutter Control

To prevent uneven potential on the Photosensitive Drum caused by discharge products (nitrogen oxide) accumulated on the Primary Charging Assembly.

NOTE:
In an environment where moisture content is low, the Drum Heater is turned OFF in sleep mode after a specified period of time has passed to meet energy saving mode. Discharge product (nitrogen oxide) which is generated at the Charging Assembly when image is formed is deposited on the drum when the time has passed. When the Drum Heater is OFF, the discharge product (nitrogen compound) on the drum surface has a chemical reaction with the moisture in the air and the resistance value on the drum surface is decreased, causing the image failure.

<Conditions for execution>

- Drum Heater is OFF.
- During sleep mode

<Control description>

The shutter is opened or closed by the cleaning mechanism of the Primary Charging Wire.
The Primary Charging Shutter is made of fiber and usually taken up by the bobbin.
The drive of the Primary Charging Wire Cleaning Motor (M1) moves the Cleaning Pad to the rear and the shutter taken up by the bobbin becomes extended to make the shutter closed.
Because the shutter comes between the Grid Plate and the Photosensitive Drum, discharge products from the Primary Charging Assembly do not reach the Photosensitive Drum.
The Primary Charging Shutter Position Sensor (PS92) detects open/close of the shutter.

<Related error code>
E060-0001: Primary Charging Assembly Shutter home position open error (The shutter was not closed.)
E060-0002: Primary Charging Assembly Shutter home position close error (The shutter was not opened.)

Development

Developing Bias Control

This control is performed to apply a developing bias (AC component, DC negative component) to the developing cylinder and attach the toner on the developing cylinder to the photosensitive drum (bright section) to form a toner image.

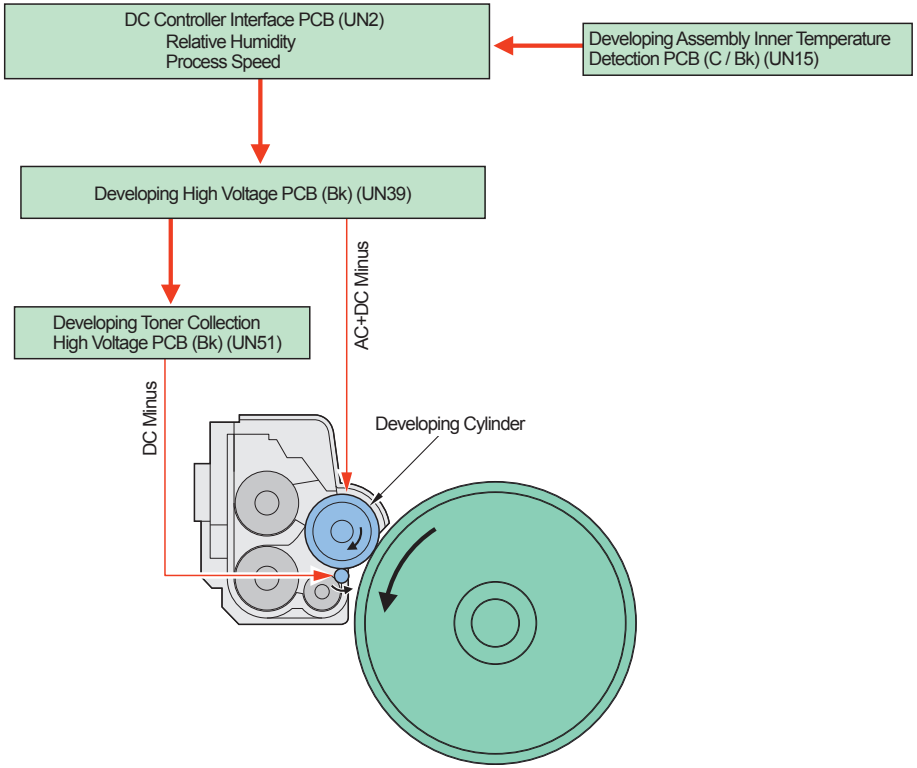
- Developing DC bias
  This bias generates a potential difference against the photosensitive drum.
  The bias value is determined by the relative humidity and process speed based on the charging DC bias (Vd) determined by potential control (Bk).
- Developing AC bias
  This bias improves an image quality.
  The developing AC bias of 1600Vpp, which is a fixed value, is applied.

<Related Service Mode>
COPIER>DISPLAY >DENS>DEV-DC-K: display of developing DC bias (Bk)

Collection Roller Bias Control

This control is performed to return the toner floating on the photosensitive drum during development to the developing assembly cylinder by the collection roller bias.

The collection roller bias (DC negative) created by the developing toner collection high voltage PCB (Bk) (UN51) is applied to the collection roller.
The collection roller bias of -1300V, which is a fixed value, is applied.

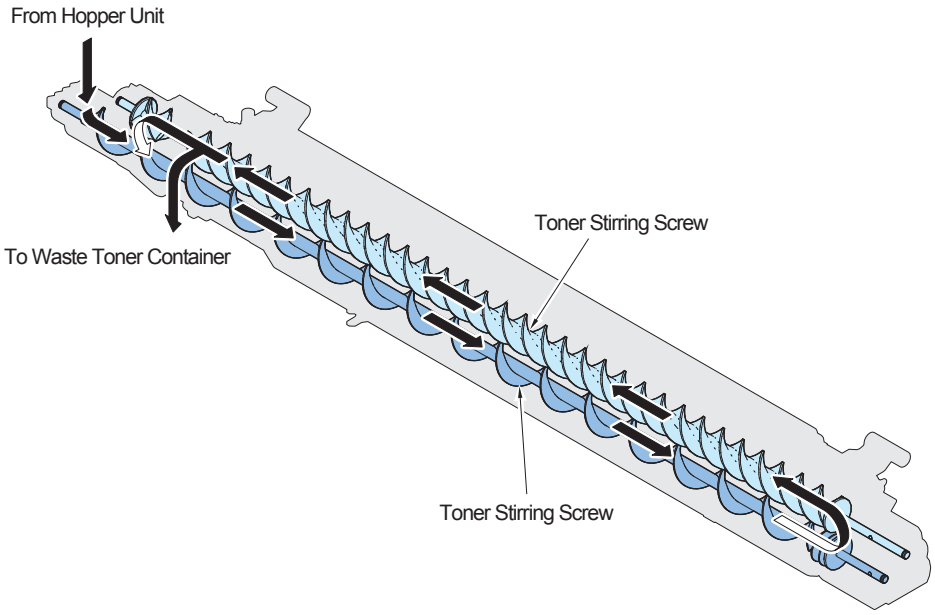


F-2-127

ACR Control

The purpose of ACR (Auto Carrier Refresh) control is to keep long life of the developer, and developer is supplied from the toner container while gradually discharging developer in the developing assembly.

The exit slot is located at the downstream side of the developer. The developer is discharged when the volume of the developer increases.
The same control is performed in the developing assembly of the Process Unit (CL).



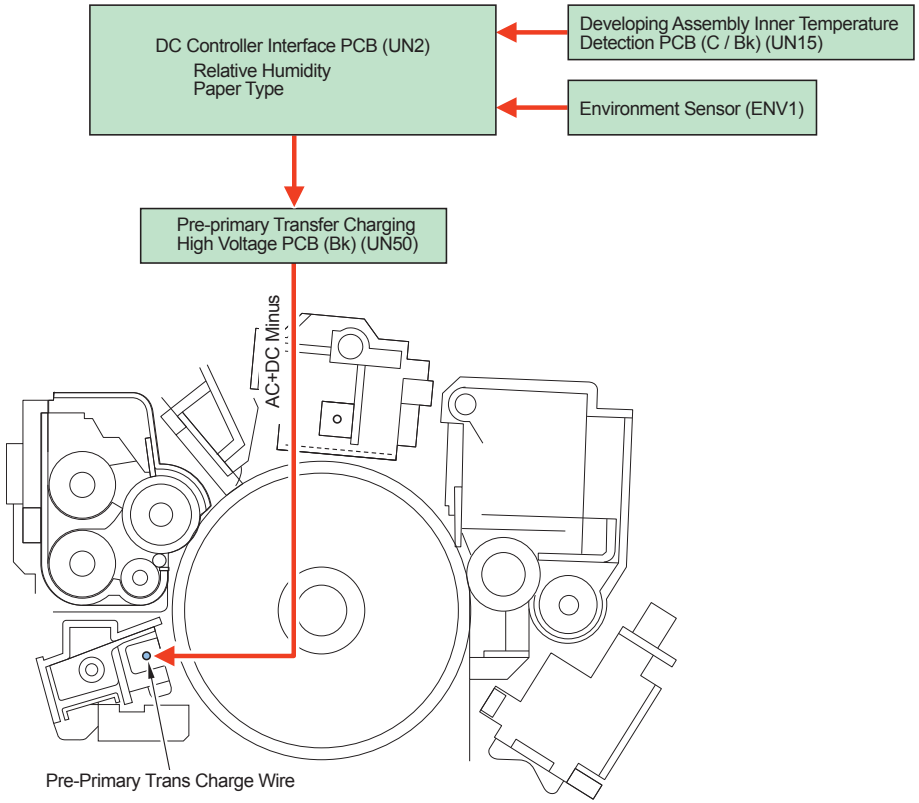
F-2-128

Pre-transfer Charging

Primary Pre-transfer Charging bias control

This control is performed to increase transfer efficiency by securing a proper toner charging volume on the photosensitive drum.

The pre-primary transfer charging AC bias (5500Vpp) and the pre-primary transfer DC bias (0 to -600muA), which are generated on the pre-primary transfer charging high voltage PCB (Bk), are applied to the pre-primary transfer charging wire.
The primary pre-transfer charging bias value is determined based on the absolute water volume, relative humidity, and paper type.



F-2-129

<Related Service Mode>
COPIER>DISPLAY>HV-STS>PRE-TR: display of the pre-primary transfer charging DC current

Primary Pre-transfer Charging Wire Cleaning Control

This control is performed to prevent a charging failure caused by dirt on the primary pre-transfer charging wire.

<Timing of Execution>
- At the time of automatic adjustment of paper interval (Every printing of 4000 images on an accumulation basis)
- At the time of automatic adjustment of last rotation (Every printing of 2000 images on an accumulation basi
- At the time of multiple initial rotations(Fixing temperature is less than100 deg C/Total 2000-sheet from previous D-half control)
- When "Wire Cleaning" is executed via the user mode

<Details of the Control>
When the screw rotates normally/in reverse driven by the primary pre-transfer charging wire cleaning motor (M2), the primary pre-transfer charging wire cleaning pad moves back and forth and cleans the primary pre-transfer charging wire.

<Related Service Mode>
COPIER>FUNCTION>CLEANING>WIRE-CLN: cleaning of all charging wires (1 round-trip)
COPIER>FUNCTION>CLEANING>WIRE-EX: cleaning of all charging wires (5 round-trip)
COPIER>OPTION> CLEANING >W-CLN-T: setting for cleaning interval of the post-rotation charging wire (2000)
COPIER>OPTION> CLEANING >INTPPR-1: setting for cleaning interval of paper interval charging wire (4000)
COPIER>OPTION> CLEANING >W-CLN-PH: ON/OFF for automatic cleaning of the charging wire
To prevent uneven potential on the Photosensitive Drum caused by discharge products (nitrogen oxide) accumulated on the Pre-transfer Charging Assembly.

<Execution timing>
To be executed together with the Pre-transfer Charging Wire cleaning control at the same time.

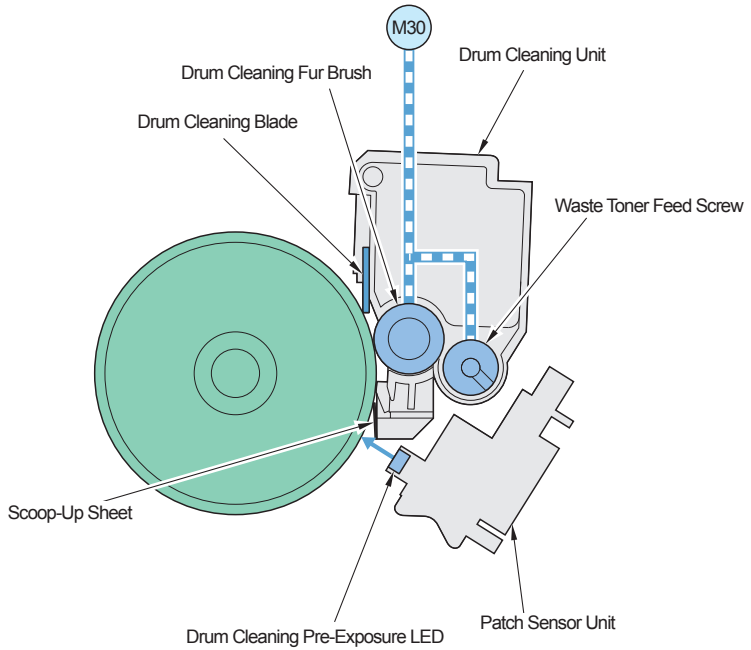
<Control description>
The shutter is opened or closed by the cleaning mechanism of the Pre-transfer Charging Wire.
The Pre-transfer Charging Shutter is made of fiber and usually taken up by the bobbin.
The drive of the Pre-transfer Charging Wire Cleaning Motor (M2) moves the Cleaning Pad to the rear and the shutter taken up by the bobbin becomes extended to make the shutter closed.
Because the shutter comes between the Pre-transfer Charging Wire and the Photosensitive Drum, discharge products from the Pre-transfer Charging Wire do not reach the Photosensitive Drum.
The Pre-transfer Charging Wire Shutter HP Sensor (PS93) detects open/close of the shutter.

<Related error code>
E066-0001: Pre-transfer Charging Wire Shutter home position open error (The shutter was not closed.)
E066-0002: Pre-transfer Charging Wire Shutter home position close error (The shutter was not opened.)

● Cleaning

Overview

This control is performed to remove residual toner on the photosensitive drum.



F-2-130

Parts name		Role
Drum cleaning unit		Scrape and collect the residual toner on the drum.
	Drum cleaning fur brush	Polish surface of the photosensitive drum to form a thin toner coated layer.
	Drum cleaning blade	Scrape the toner adhered to the drum surface.
	Waste toner feed screw	Feed the waste toner on the drum cleaning unit.
	Scoop-up sheet	Scoop up the waste toner which dropped from the drum cleaning unit.

T-2-45

Parts name		Role
M30	Drum cleaning/waste toner feed drive motor	Drive the drum cleaning fur brush and the waste toner feed screw.
LED1	Drum cleaning pre-exposure LED	Remove the drum memory on the photosensitive drum surface.

T-2-46

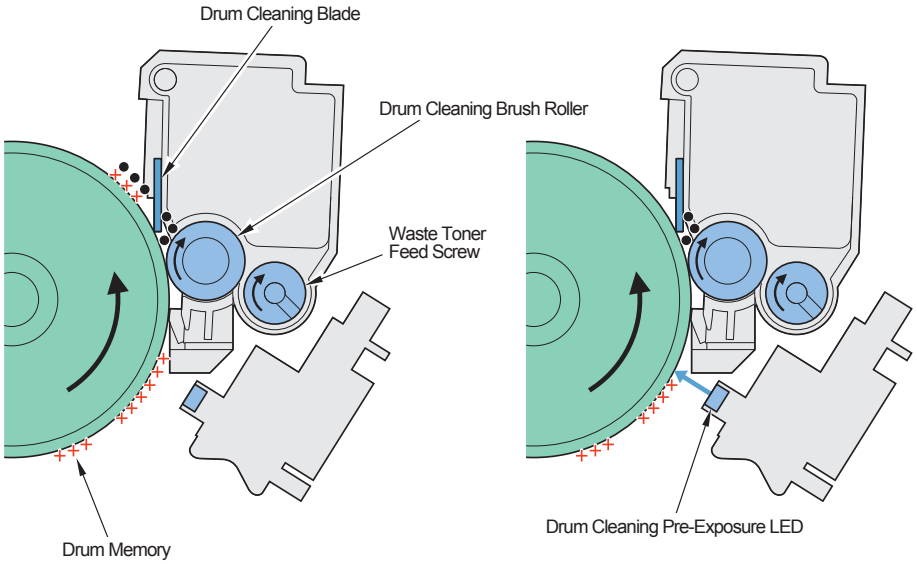
Drum Cleaning Pre-exposure

This control is performed to emit light from the pre-exposure LED to remove the drum memory on the photosensitive drum surface.

<Details of the Control>

Light is emitted from the drum cleaning pre-exposure LED on the patch sensor unit to remove the drum memory on the photosensitive drum surface so that dirt on the surface is prevented.

NOTE:
A potential difference at the edges of the toner layer transferred onto the ITB at primary transfer forms a minute gap between the photosensitive drum and the ITB, making a discharge symptom occur. This causes drum memory to occur on the photosensitive drum. The residual toner adhered to the cleaning blade is attracted to the drum memory, causing dirt on the photosensitive drum.



< Without Pre-Exposure > < With Pre-Exposure >

F-2-131

Drum Cleaning Control

This control is performed to remove residual toner on the photosensitive drum by the blade engaged with the drum.

<Details of the Control>

1) The drum cleaning fur brush rotates, driven by the drum cleaning/waste toner feed drive motor (M30).
2) The drum cleaning fur brush polishes the surface of the photosensitive drum to form a thin toner coated layer.
3) The drum cleaning blade scrapes the residual toner on the drum surface.
4) The scraped waste toner is fed to the waste toner container by the waste toner feed screw.

NOTE:
Two sheets of Scoop-up Sheet are used to prevent the toner scraped by the drum cleaning blade from spilling into the unit.

<Related Service Mode>

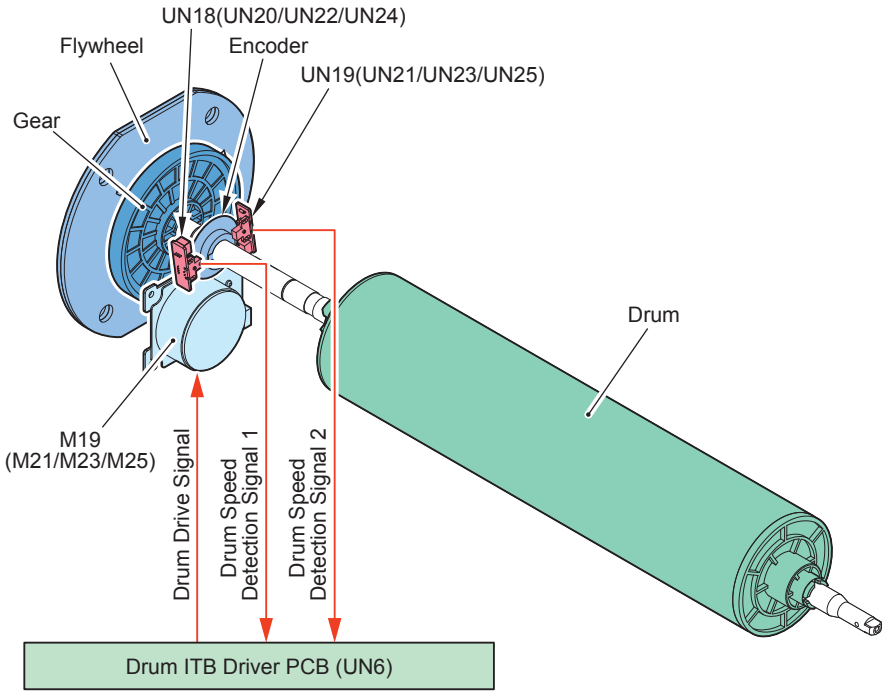
COPIER>FUNCTION>CLEANING>BK-BNDEX: supply of the photosensitive drum toner

Drum Rotation Speed Control

This control is performed to keep a uniform drum rotation speed in order to increase accuracy of the image position (color displacement).

<Details of the Control>

1) The drum rotates, driven by the drum motors (Y: M19 / M: M20 / C: M21 / Bk: M22).
2) There is an encoder on the drum shaft, of which rotation is monitored by the two drum speed detection PCBs (Bk: UN18/19, Y: UN20/21, M: UN22/23, C: UN24/25).
3) The drum speed detection PCB counts the drum count based on a pulse, and feeds back the drum rotation speed to the drum ITB driver PCB (UN6) to perform speed control.



F-2-132

Drum Heater Control

This control is performed to keep the temperature of the photosensitive drum at a specified level and stabilize potential characteristics of charging and exposure, etc.

<Details of the Control>

The temperature of the photosensitive drum is controlled by the drum heater mounted inside of the photosensitive drum and by the drum thermo pile and the drum thermistor mounted on the photosensitive drum surface.

Operation Condition

		Main power SW	
		ON	OFF
Environment heater SW	ON	Follow the Environment Control.	ON*
	OFF	Follow the Environment Control.	OFF

T-2-47

* When a power plug is inserted into the power outlet

Environment Control

- When absolute moist volume is 18g or more (high temperature/high humidity environment), this control is ON at anytime other than when formulating image.
- When absolute moist volume is 5.8g or more and less than 18g (normal temperature/ normal humidity environment), the control is ON for 2 minutes and 30 seconds in the case of pre-rotation by turning ON the main power.
- When absolute moist volume is less than 5.8g (normal temperature/low humidity environment), this control is OFF.

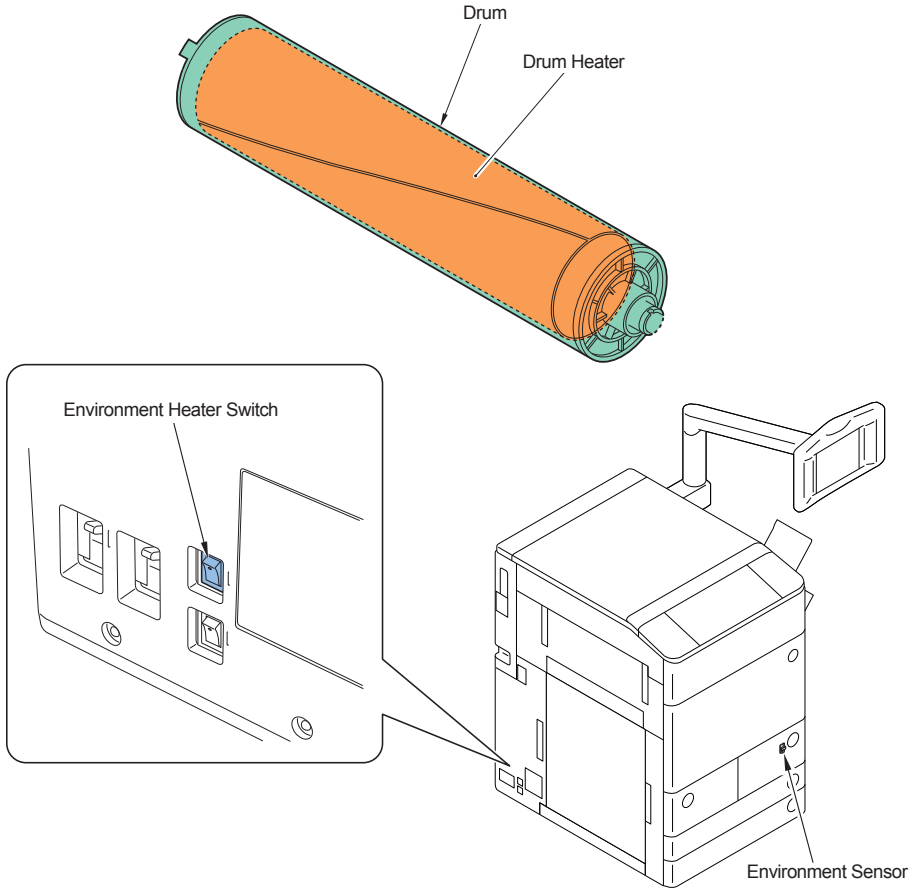
<Related Service Mode>

COPIER>ADJUST>HV-PRI>DHT-ON: Drum Heater (Bk) is ON forcibly.

<Details of the Control>

1) The temperature on the drum surface is detected by the thermo pile.
2) The drum heater ON/OFF operation is repeated based on the detected temperature on the drum surface so that the temperature is kept at a specified level (42.5 degree C).
3) When the upper limit temperature (50 degree C) is detected by the drum thermistor, the drum heater is turned OFF.

NOTE:
A thermo pile is an infrared sensor, which generates thermo electromotive force according to the amount of energy when receiving an infrared ray irradiated from an individual substance on a noncontact basis. The thermo pile enables accurate detection of the temperature on the drum surface.



F-2-133

Process Unit (CL)

Charging

Primary Charging Roller Bias Control

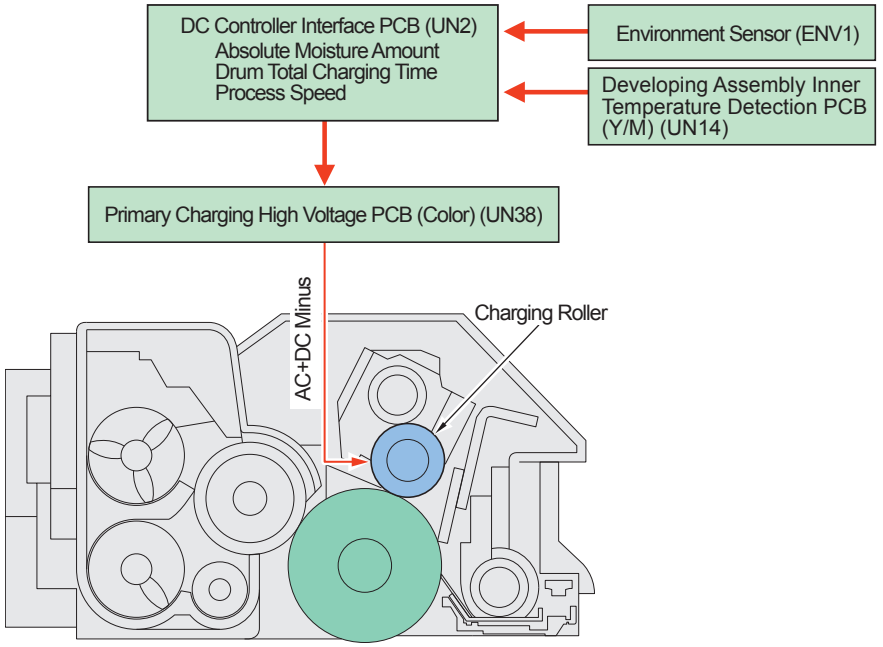
The primary charging bias (CL) charges the photosensitive drum surface with a uniform negative potential.

The primary charging bias (AC component, DC negative) created by the primary charging high voltage PCB (CL) (UN38) is applied to the primary charging roller.

Primary charging DC bias (CL): DC bias applied to the primary charging roller

Primary charging AC bias (CL): AC bias applied to the primary charging roller

The primary charging DC bias is determined based on the absolute water volume (ENV1), total drum charging time, and process speed. The primary charging AC bias is dependent on the absolute water volume (ENV1), total drum charging time, and process speed, and the bias value is determined by discharged current control. (See "Discharged Current Control (CL)" for the details.)



F-2-134

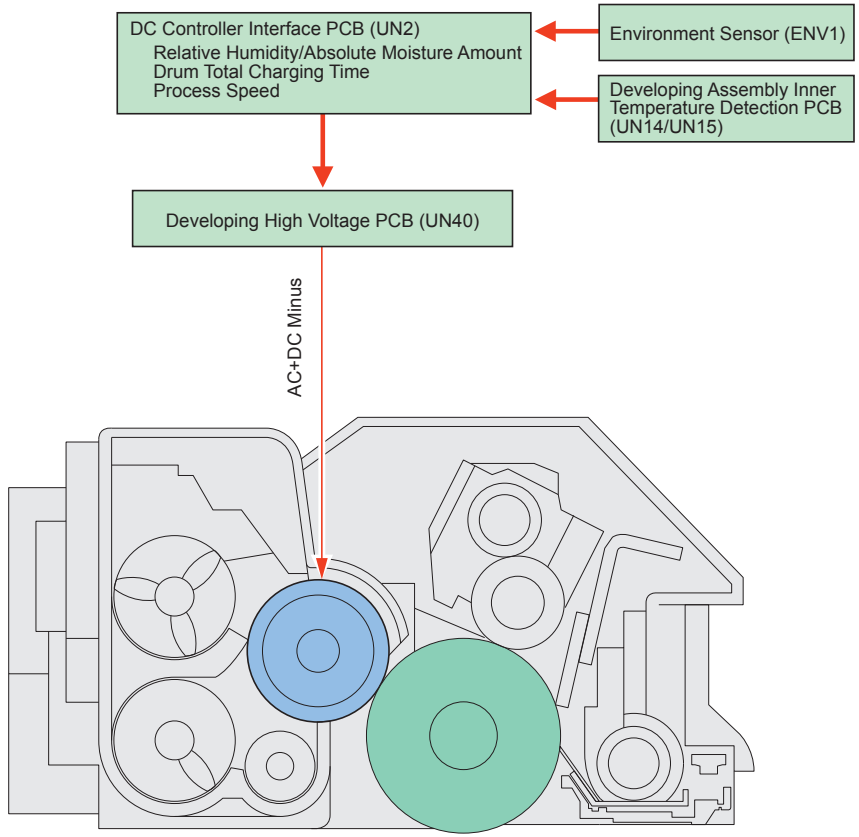
<Related Service Mode>
COPIER>DISPLAY>HV-STS> PRIACV-Y/M/C: display of discharge current control setting AC voltage

Development

Developing Bias Control (CL)

This control is performed to apply the developing bias (AC component, DC negative) to the developing cylinder and to adhere the toner on the developing cylinder to the photosensitive drum (bright section) to form a toner image.

- Developing DC Bias
  The developing DC bias generates a potential difference against the photosensitive drum.
  The developing DC bias is determined based on the relative humidity (UN14/UN15), total drum charging time, and charging DC bias.
- Developing AC Bias
  The developing AC bias improves the image quality.
  The developing AC bias of 1600Vpp, which is a fixed value, is applied.



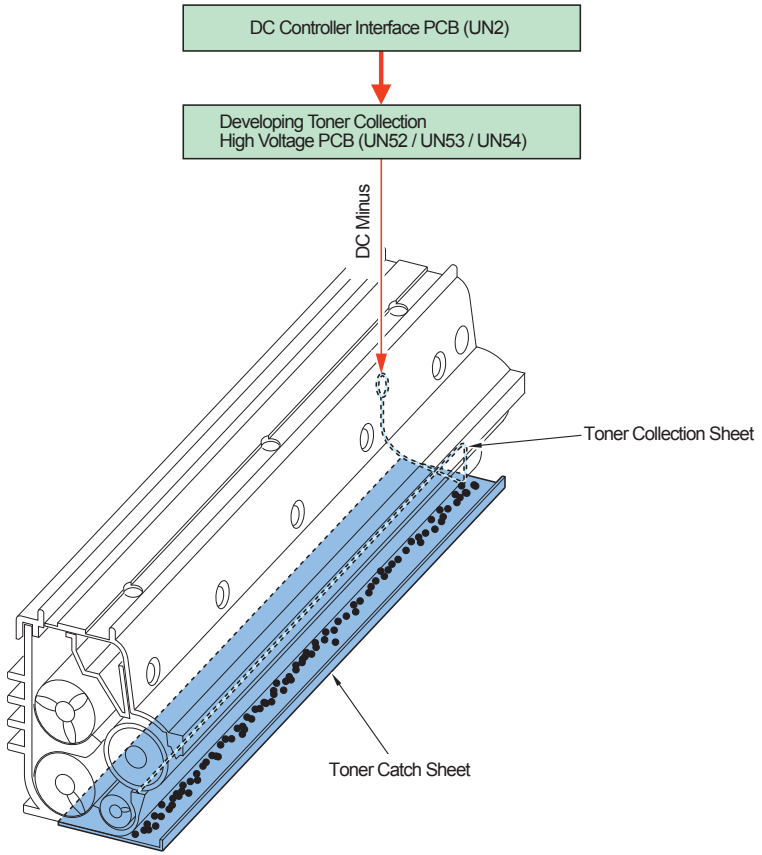
F-2-135

<Related Service Mode>
COPIER>DISPLAY >DENS>DEV-DC-Y/M/C: display of developing DC voltage

Toner Collection Sheet Bias Control

This control is performed to put back the toner floating on the photosensitive drum during development to the developing cylinder by the toner collection sheet bias.

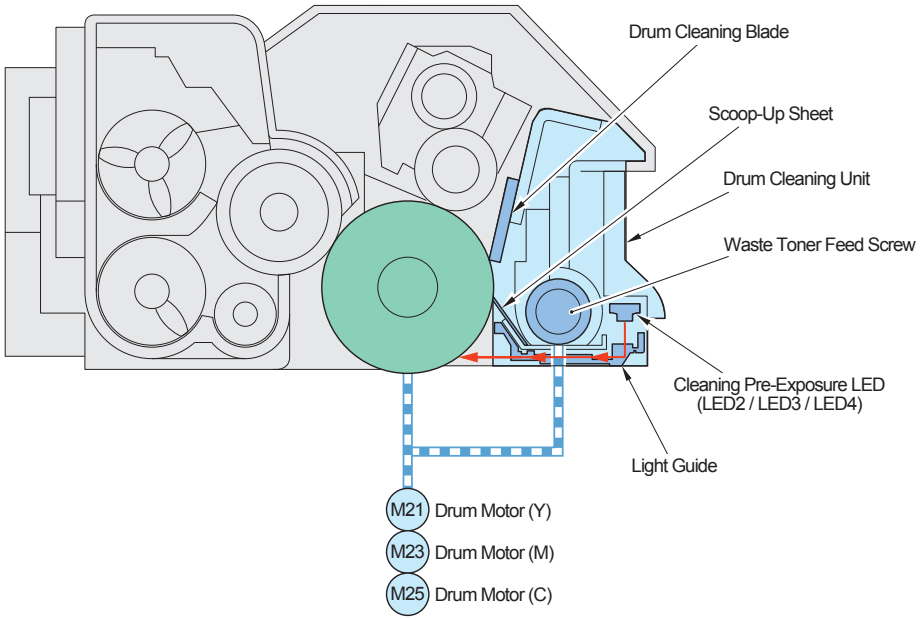
<Details of the Control>
The toner collection sheet bias (DC negative) created by the developing toner collection high voltage PCB (Y) / (M) / (C) is applied to the toner collection sheet.
The collection sheet bias of -1300V, which is a fixed value, is applied.
The toner dropped from the toner collection sheet is accumulated in the toner catch sheet located under the developing assembly.



F-2-136

Cleaning

Overview



F-2-137

Parts name		Role
Drum cleaning assembly		Scrape and collect the residual toner adhered to the drum.
	Drum cleaning blade	Scrape the toner adhered to the drum surface.
	Waste toner feed screw	Feed the waste toner in the drum cleaning unit.
	Scoop-up sheet	Scoop up the waste toner dropped from the drum cleaning unit.
	Light guide	Carry the light irradiated by the LED to the drum surface.

T-2-48

Parts name		Role
M30	Drum cleaning/waste toner feed drive motor	Drive the drum cleaning fur brush and the waste toner feed screw.
LED1	Drum cleaning pre-exposure LED	Remove the drum memory on the photosensitive drum surface.

T-2-49

Drum Cleaning Pre-exposure (CL)

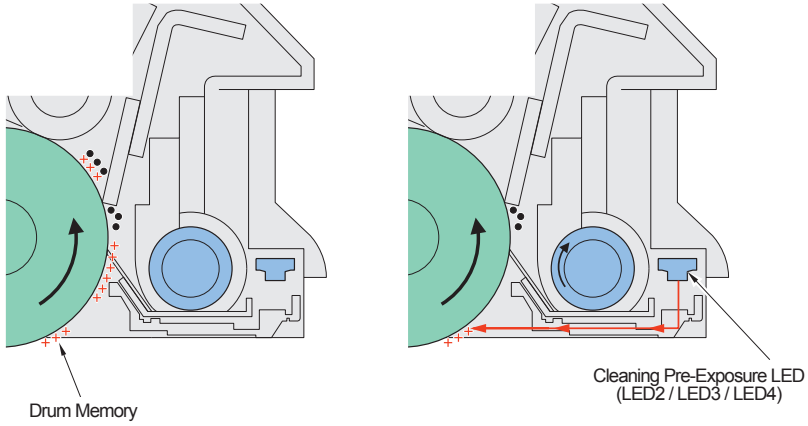
This control is performed to prevent reverse transfer of toner on the cleaning blade caused by drum memory.

<Details of the Control>

Light is emitted from the drum cleaning pre-exposure LEDs (LED 2 to 4) in the ITB cleaning unit to remove the drum memory on the photosensitive drum surface and prevent dirt on the surface.

The light emitted from the drum cleaning pre-exposure LEDs (LED 2 to 4) is exposed to the drum surface via the light guide.

NOTE:
A potential difference at the edges of toner layer transferred onto the ITB at primary transfer forms a minute gap between the photosensitive drum and the ITB, making a discharge symptom occur. This causes drum memory to occur on the photosensitive drum. When the residual toner adhered to the cleaning blade is attracted to the drum memory, causing dirt on the photosensitive drum.



< Without Pre-Exposure > < With Pre-Exposure >

F-2-138

Process Unit Presence Detection

This machine does not perform process unit presence detection.

Drum Unit Old/New Detection

This machine does not have a mechanism to detect whether the drum unit is old or new.

NOTE:
The drum unit potential characteristics (durability) change according to the total drum charging time.
Therefore, the total charging time is internally maintained and used for bias control, etc.
The charging time can be checked via the following service mode. When replacing the drum unit, the total charging time needs to be cleared via the service mode.

<Related Service Mode>

COPIER>FUNCTION>DPC>DRMRSETY/M/C/K: Forcible execution of the drum replacement mode. Clear the total drum charging time.

COPIER>DISPLAY>DPC>D-CONT-Y/M/C/K: Display the total drum charging time.

Drum Heater Control

The drum heater is installed in the ITB unit to realize stable charging and exposure to deal with environmental changes in the machine.

Operation Condition

- Same as the operation condition of the Bk drum heater

<Details of the Control>

The drum heater is a self-temperature-control-type heater, of which temperature is controlled at 70 degree C. The peripheral temperature is controlled at 40 degree C.

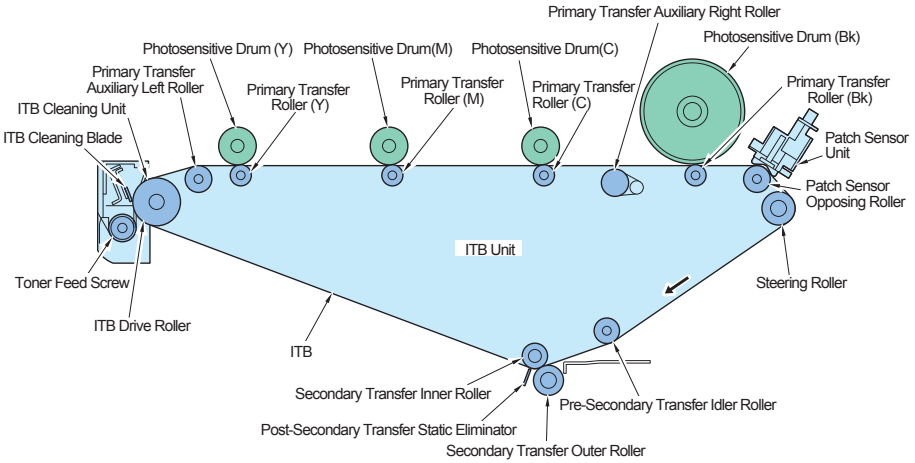
<Related Service Mode>

COPIER>ADJUST>HV-PRI>DHT-ON: Drum Heater (Bk) is ON forcibly.

Transfer Assembly

Overview

Toner on the photosensitive drum is transferred to the paper.



F-2-139

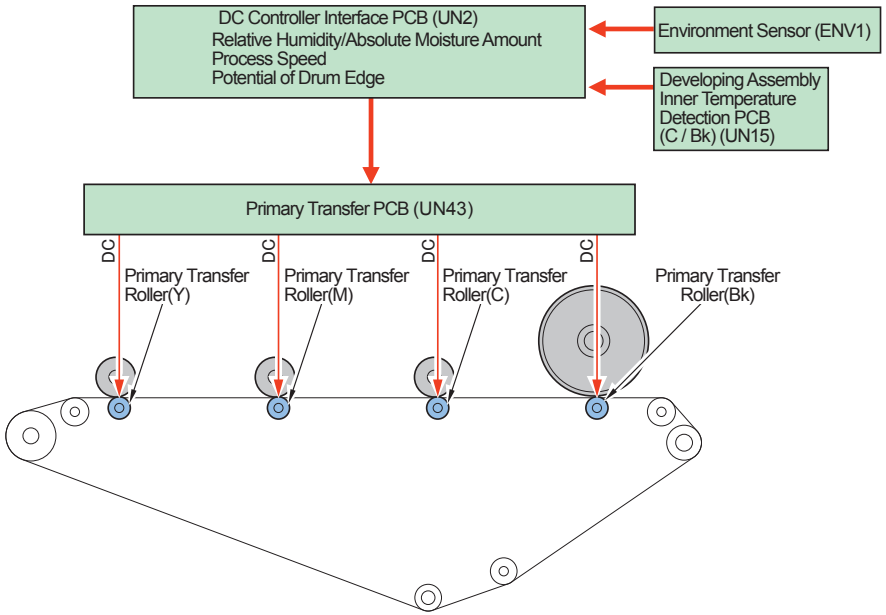
Parts name	Role
ITB unit	Transfer the toner on the photosensitive drum to the paper.
ITB (Intermediate Transfer Belt)	Transfer the toner on the photosensitive drum.
Primary transfer roller	Attract the toner on the photosensitive drum to the ITB.
ITB drive roller	Rotate the ITB.
Primary transfer auxiliary roller (left)	Form the ITB surface against the drum.
Primary transfer auxiliary roller (right)	Form the ITB surface against the drum (when the primary transfer roller is disengaged).
Steering roller	Correct the ITB displacement.
ITB cleaning blade	Scrape the toner on the ITB.
ITB cleaning screw	Feed the waste toner in the ITB cleaning unit.
Secondary pre-transfer slave roller	Stabilize the belt operation by belt displacement control.
Patch sensor unit	Detect the image density and registration patch for the patch image on the ITB.
Secondary transfer unit	Transfer the toner on the ITB to the paper.
Secondary transfer external roller	Feed the paper transferred. The roller is disengaged from the ITB when scanning a patch image.
Secondary transfer static eliminator	Remove a potential on the paper after secondary transfer is performed.

T-2-50

Primary Transfer

Primary Transfer Bias Control

This control is performed to transfer the toner on the photosensitive drum to the ITB.
The primary transfer bias (DC positive, DC negative (Bk)) created by the primary transfer high voltage PCB (UN43 to UN46) is applied to the primary transfer roller.
The primary transfer bias is dependent on the absolute water volume (ENV1), relative humidity (UN14/UN15), process speed, and drum dark section potential (Vd), and the bias value is determined by primary transfer ATVC control.



F-2-140

<Related Service Mode>
COPIER>DISPLAY>DPOT>1TR-DC-Y/M/C/K: display of the primary transfer voltage
COPIER>FUNCTION>MISC-P>1ATVC-EX: execution of the primary transfer ATVC

Primary Transfer Roller Disengagement Control

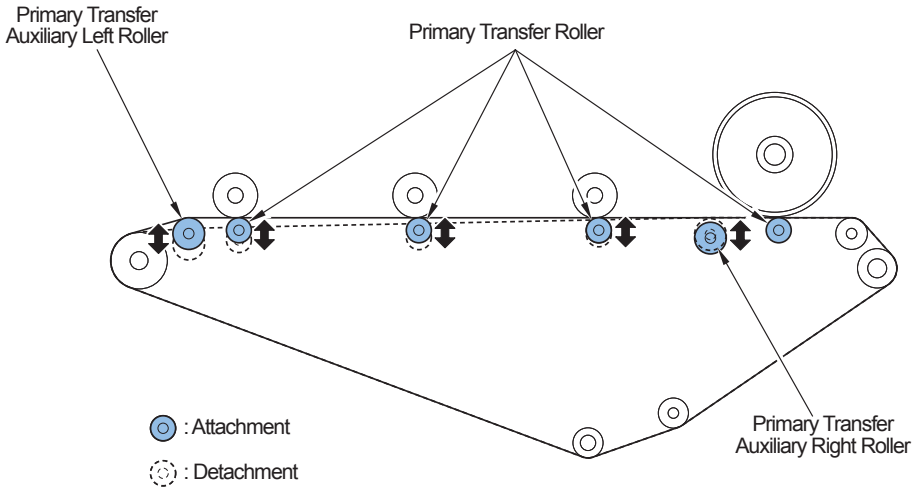
To prolong the life of image formation parts (photosensitive drum, ITB), the primary transfer roller for color is disengaged at Bk single-color mode.

Engagement/Disengagement Condition
Engagement: When a color mode is specified
Disengagement: At the timing other than that mentioned above. However, disengagement operation is not performed when the machine starts up with 4-color mode and the mode is switched to Bk single-color mode. (High voltage is turned off.)

Mode	Bk		YMC	
	Roller	High voltage	Roller	High voltage
Bk single-color mode	Engagement	ON	Disengagement	OFF
Color mode	Engagement	ON	Engagement	ON
Bk single-color mode (disengagement) -> Color mode	Engagement ->Engagement	ON->ON	Disengagement -> Engagement	OFF->ON
Color mode -> Bk mode	Engagement ->Engagement	ON->ON	Engagement ->Engagement	ON->OFF
Bk single-color mode (engagement) -> Color mode	Engagement ->Engagement	ON->ON	Engagement ->Engagement	OFF->ON

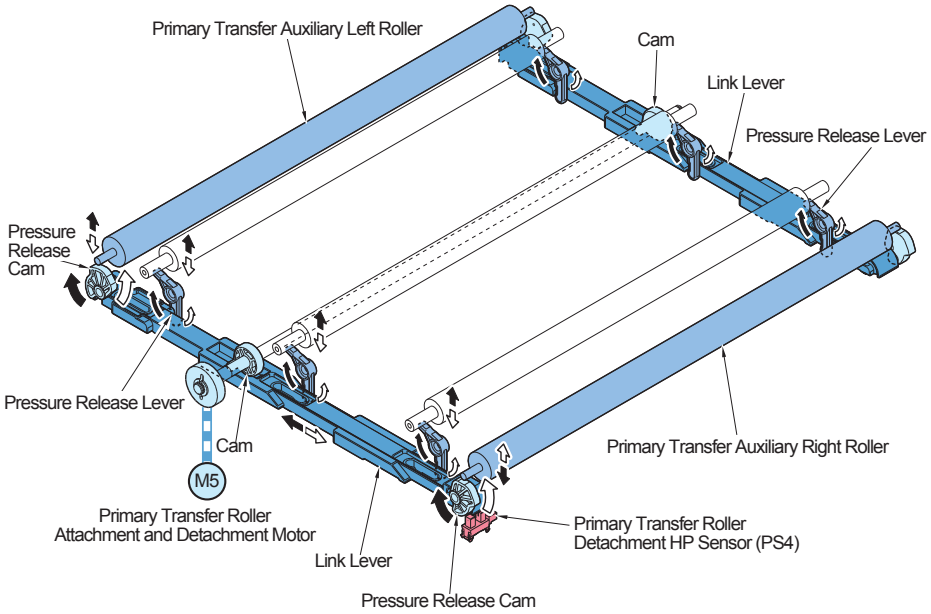
T-2-51

* When the mode is switched from Bk mode (disengagement) to 4-color mode, the drive of the Bk drum and ITB is stopped and then engagement operation is performed.



F-2-141

<Details of the Control>
1) The cam rotates, driven by the primary transfer roller disengagement motor (M5).
2) The link lever slides, driven by the rotation force of the cam.
3) The pressure release lever rotates when the link lever slides, and the primary transfer roller for color is disengaged from the ITB.
4) At the same time, the pressure release cam also rotates. The primary transfer auxiliary roller (right) moves up and the primary transfer auxiliary roller (left) moves down.
5) The position of the primary transfer roller is detected by the primary transfer roller attachment/detachment HP sensor (PS5).



F-2-142

<Related Error Codes>
E074: Primary transfer roller detachment/attachment error

<Related Service Mode>
COPIER>OPTION>FNC-SW>T1HP-POS: determine the primary transfer roller engagement/disengagement HP

<Related User Mode>
Settings/Registration>Adjustment/Maintenance>Adjust Action>First Print Time>B/W Priority

Secondary Transfer

Secondary Transfer Bias Control

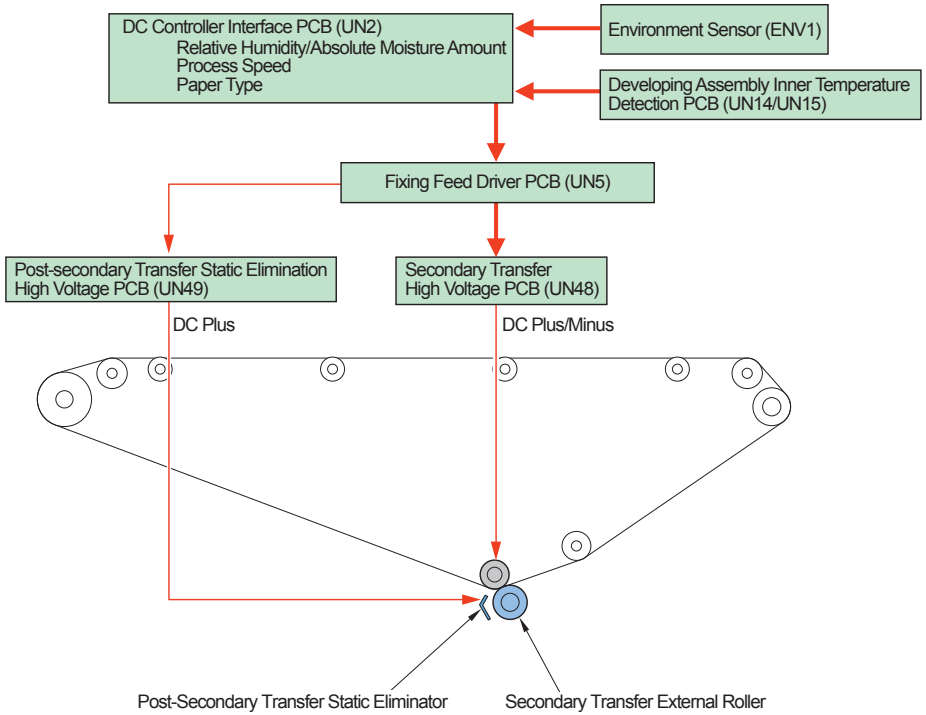
This control is performed to transfer the toner on the ITB to the paper.
The secondary transfer bias (DC positive) created by the secondary transfer high voltage PCB (UN48) is applied to the secondary transfer external roller.
The secondary transfer bias is dependent on the absolute water volume (ENV1), process speed, and paper type, and determined by secondary transfer ATVC control.

<Related Service Mode>
COPIER>DISPLAY>DPOT>2TR-PPR: display of the secondary transfer ATVC paper shared voltage
COPIER>DISPLAY>DPOT> 2TR-BASE: display of the secondary transfer ATVC base voltage

Secondary Post-transfer Static Eliminator Bias Control

This control is performed to make it easier to separate the paper from the ITB.
The secondary transfer static eliminator bias (DC negative) created by the secondary post-transfer static eliminator high voltage PCB (UN49) is applied to the secondary post-transfer static eliminator.
The secondary transfer static eliminator bias (DC negative) is determined based on the absolute water volume (ENV1) and paper type.
Only the second side of thin paper (52g to 63g) is applied -3000V under all environments.

<Related Service Mode>
COPIER>DISPLAY>HV-STS>2EL: display of the secondary transfer static eliminator voltage



F-2-143

Secondary Transfer External Roller Disengagement Control

This control is performed to prevent dirt on the secondary transfer external roller.

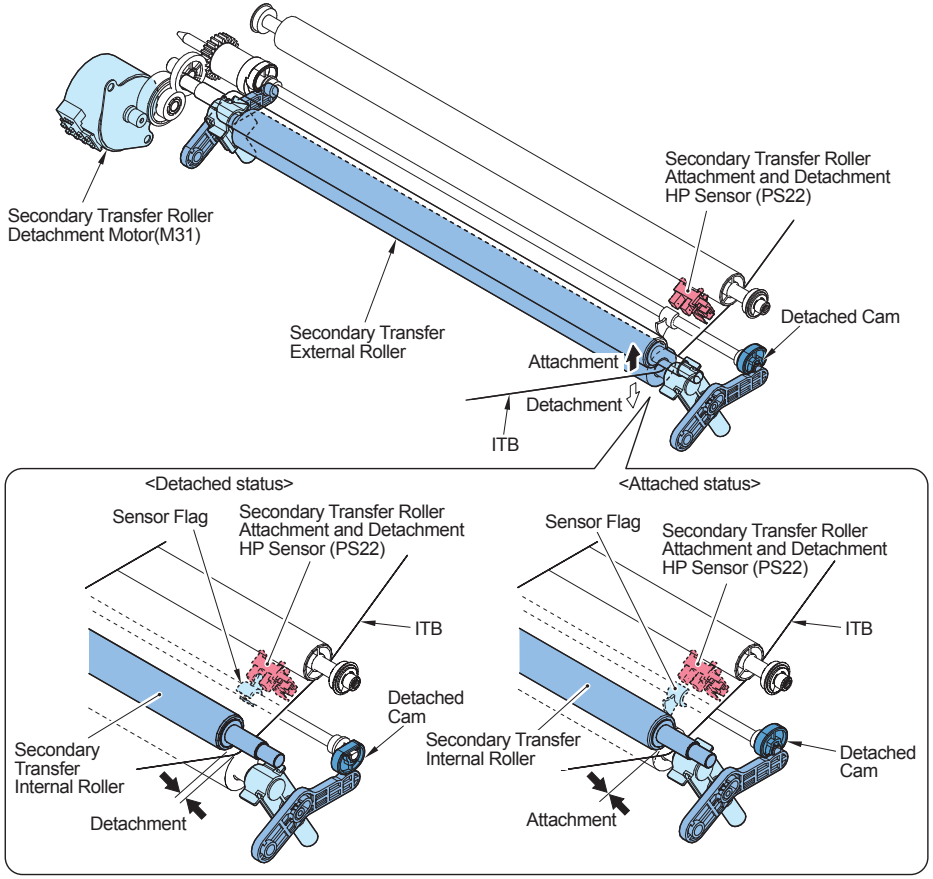
<Timing of Execution>

Engagement: At the time of printing, cleaning of the secondary transfer roller

Disengagement: At the timing other than that mentioned above

<Details of the Control>

1) The detachment cam rotates, driven by the secondary transfer external roller detachment motor (M31).
2) When the detachment cam rotates, the secondary transfer external roller is engaged with and disengaged from the ITB.
3) The position of the secondary transfer external roller is detected by the secondary transfer external roller detachment HP sensor (PS22).



F-2-144

<Related Error Codes>

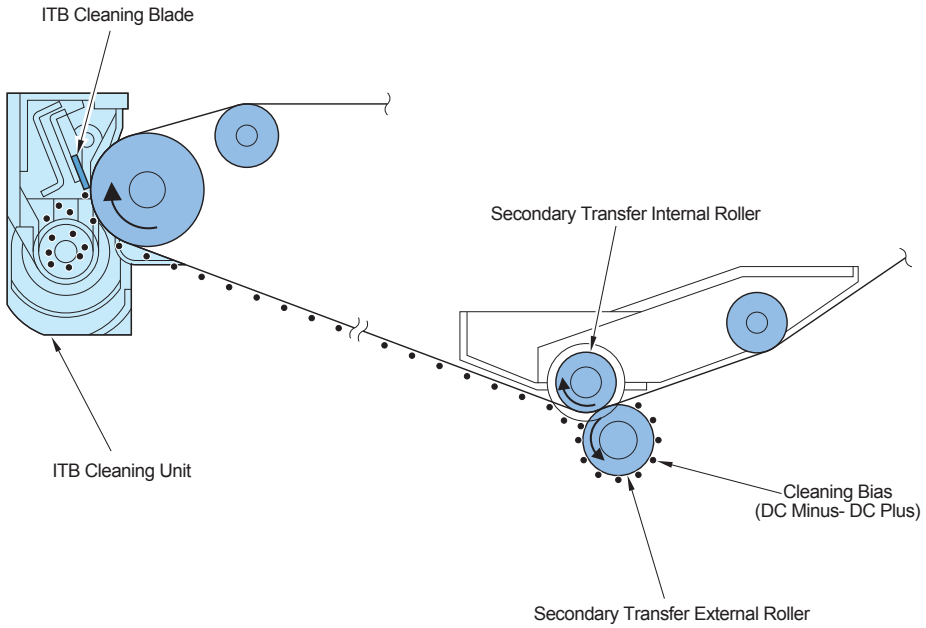
E077: Secondary transfer external roller detachment/attachment error

Secondary Transfer External Roller Cleaning Control

This control is performed to prevent dirt on the backside of paper caused by dirt on the secondary transfer external roller.

<Timing of Execution>
- At the time of initial rotation
- At the time of last rotation
- During printing

<Details of the Control>
1) The secondary transfer cleaning bias (DC positive, DC negative) created by the secondary transfer high voltage PCB (UN48) is alternately applied to the secondary transfer external roller.
2) The toner on the secondary transfer external roller adheres to the ITB, and is collected by the ITB cleaning unit.



F-2-145

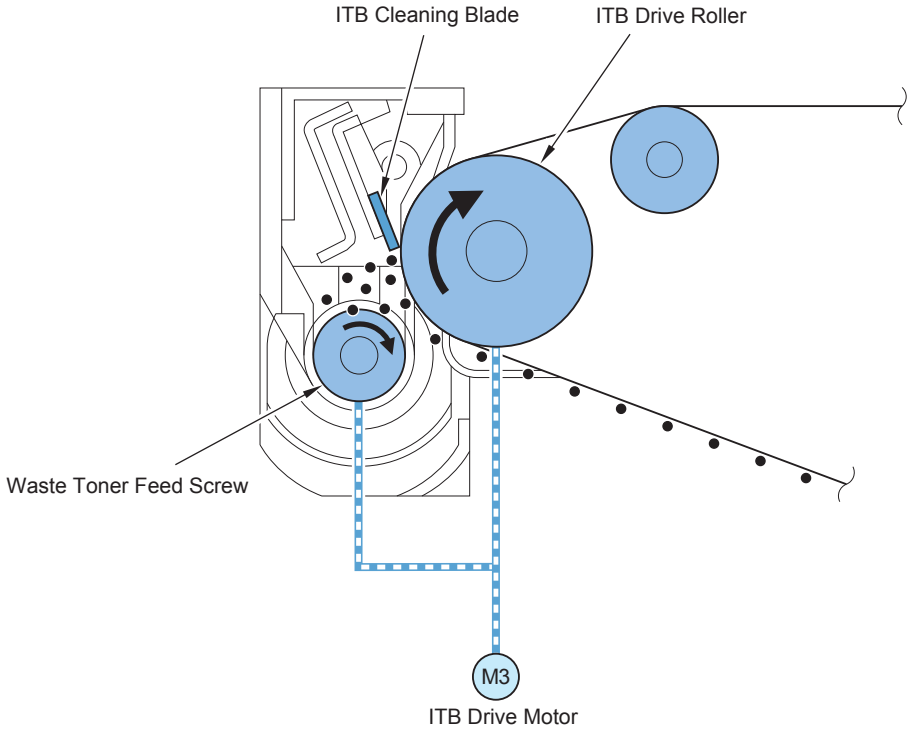
<Related Service Mode>
COPIER>FUNCTION>CLEANING>2TR-CLN:Clean of Secondary Transfer Outer Roller

Cleaning

ITB Cleaning Control

This control is performed to remove the residual toner on the ITB.

<Details of the Control>
1) The toner on the ITB is scraped by the ITB cleaning blade.
2) The scraped toner is fed into the waste toner container.



F-2-146

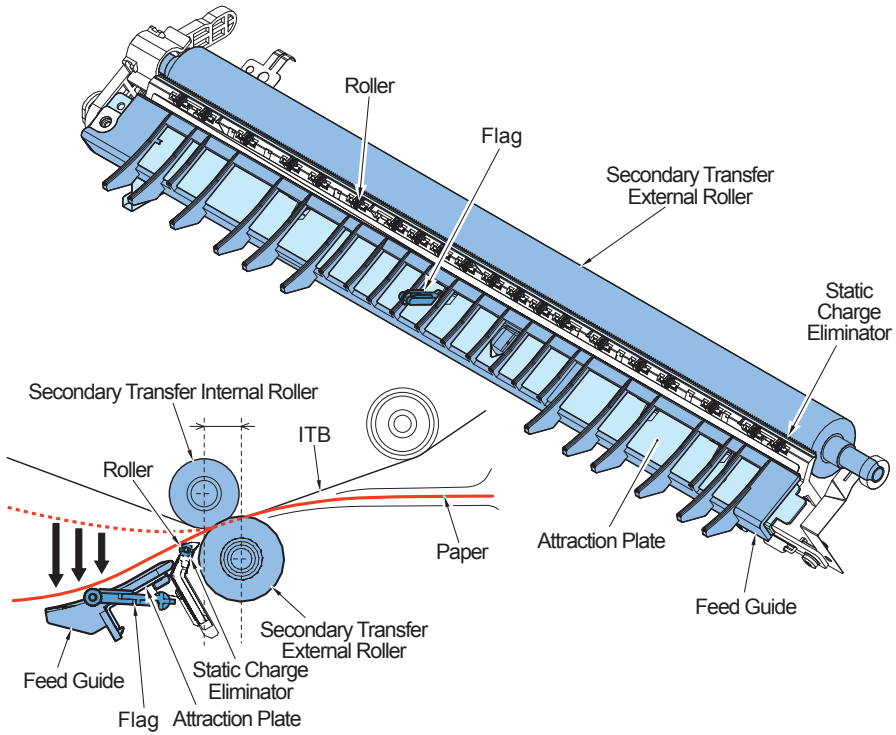
<Related Service Mode>
COPIER>FUNCTION>CLEANING>TBLT-CLN: cleaning the ITB
COPIER>FUNCTION>CLEANING>TB-INSD: cleaning inside the ITB

Separation

Overview

Paper is separated from the ITB.

Separation is performed with the curvature separation mechanism (mechanical) and static eliminator (electrostatic).
A DC bias is applied to the static eliminator so that an extra potential on paper is absorbed and paper is easily separated. The DC bias for the static eliminator changes according to the absolute water volume (ENV1), paper type, and process speed.
A bias is only applied to the static eliminator only when thin paper (weight of 52 to 110g) is printed.
The static eliminator bias (-3000V) is applied only for the 2nd side of thin paper (52g to 63g) at all environments.
An absorption sheet metal is connected to ground so that paper is attracted to the sheet metal side.



F-2-147

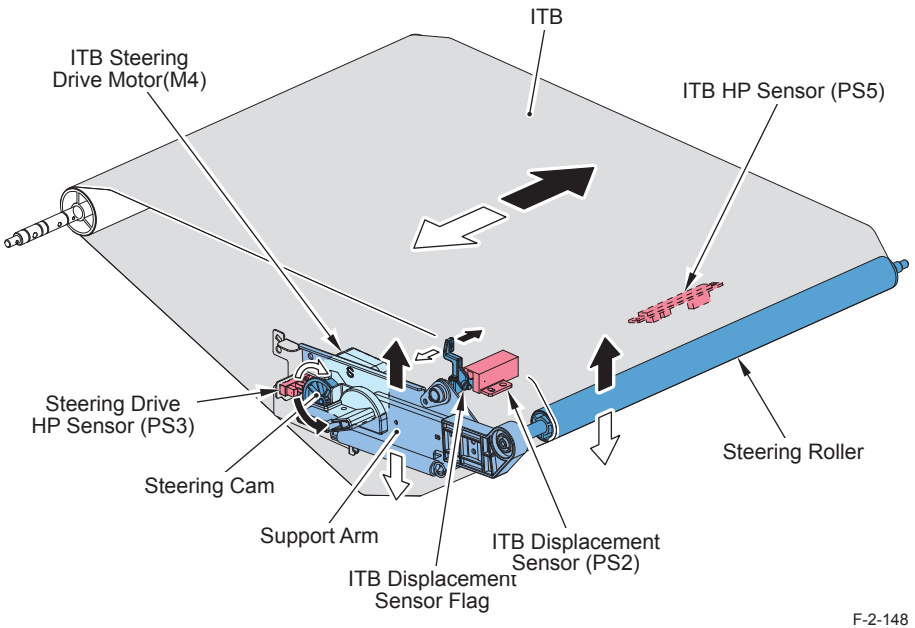
<Related Service Mode>
COPIER>DISPLAY>HV-STS>2EL: display of the secondary transfer static eliminator voltage

ITB Displacement Correction Control

This control is performed to prevent damage to the ITB caused by ITB displacement.

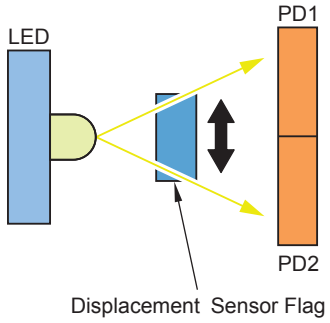
<Timing of Execution>
During ITB rotation

<Details of the Control>
1) When the ITB is displaced to the front side or rear side, the edge of the ITB activates the ITB displacement sensor flag.
2) The position of the ITB Displacement sensor flag is detected by the ITB displacement sensor (PS2) (Refer to <Detection of ITB position>). The ITB steering motor (M4) is driven according to the position of the ITB.
3) When M4 is driven, the steering cam rotates and the support arm moves up and down. This operation tilts the steering roller.
4) When the steering roller tilts, a difference of tension is generated on the ITB, and the ITB moves to the front side or rear side.
5) The operation from Step 1 to 4 is repeatedly performed to correct ITB displacement.
6) The position of the steering roller is detected by the steering roller HP sensor (PS3).
7) The HP mark (white) on inside of the ITB is used when correcting unevenness on the edge of the ITB that is detected by PS3 (Refer to <Profile of ITB edge shape>).



F-2-148

<Detection of ITB position>
ITB Displacement Sensor (PS2) consists of LED and 2 Photo Diodes (PD). Due to the position of ITB Displacement Sensor Flag, photo intensity of 2 PDs in ITB Displacement Sensor (PS2) varies. By detecting this photo intensity, the belt position is grasped.



F-2-149

<Profile of ITB edge shape>
ITB edge is shaped in the wavy line, not in the straight line. Therefore, if the ITB position is detected without considering this ITB edge shape, the correct position cannot be detected. This edge shape varies in each ITB.
At ITB replacement, the profile of ITB edge shape is created using the service mode and recorded. By referring to this profile and measurement result by ITB Displacement Sensor, the correct ITB position is detected.
ITB HP Sensor (PS5) detects the HP mark (white) on inside of the ITB, creates the profile and recognizes the standard position at ITB displacement correction.

NOTE:
When replacing the belt, be sure that the HP mark (white) is located on the rear side.

<Neutral position of Steering Roller>
This control shifts ITB by tilting Steering Roller. Neutral position of Steering Roller is memorized and ITB displacement is corrected by tilting Steering Roller. This neutral position is detected and recorded by executing the service mode.

NOTE:
- Because the ITB edge shape differs depending on the ITB, a profile for the edge shape needs to be created via the service mode when replacing the ITB. The ITB HP sensor (PS5) detects the standard position for profile creation and ITB displacement correction.
  ITB displacement is corrected by matching the profile with the result of measurement by the ITB displacement sensor.
- In this control, ITB movement is determined by the tilt of the steering roller. The neutral position of the steering roller is memorized, and the steering roller is slanted to correct ITB displacement.

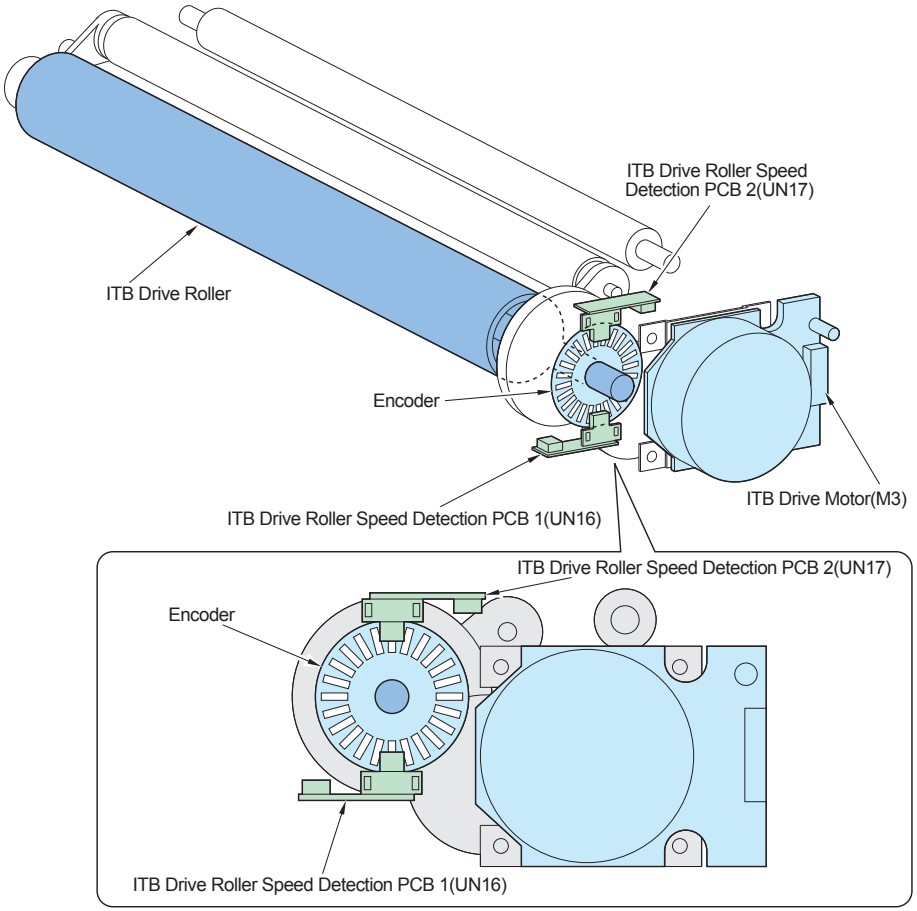
<Related Error Codes>
E075: error in ITB displacement correction control

<Related Service Mode>
Acquisition of the profile for the ITB edge shape / Acquisition of the neutral position of the steering roller
:COPIER > FUNCTION > INSTALL > INIT-ITB

ITB Speed Control

This control is performed to keep a constant ITB speed to increase accuracy of the image position.

To keep a constant ITB speed, the encoder connected to the ITB drive roller is monitored. The rotation of the encoder is counted by the ITB drive roller speed detection PCB 1/2 (UN16/UN17) on a pulse basis so that the rotation volume of the ITB drive roller is fed back to the DC controller interface PCB (UN2) for speed control.



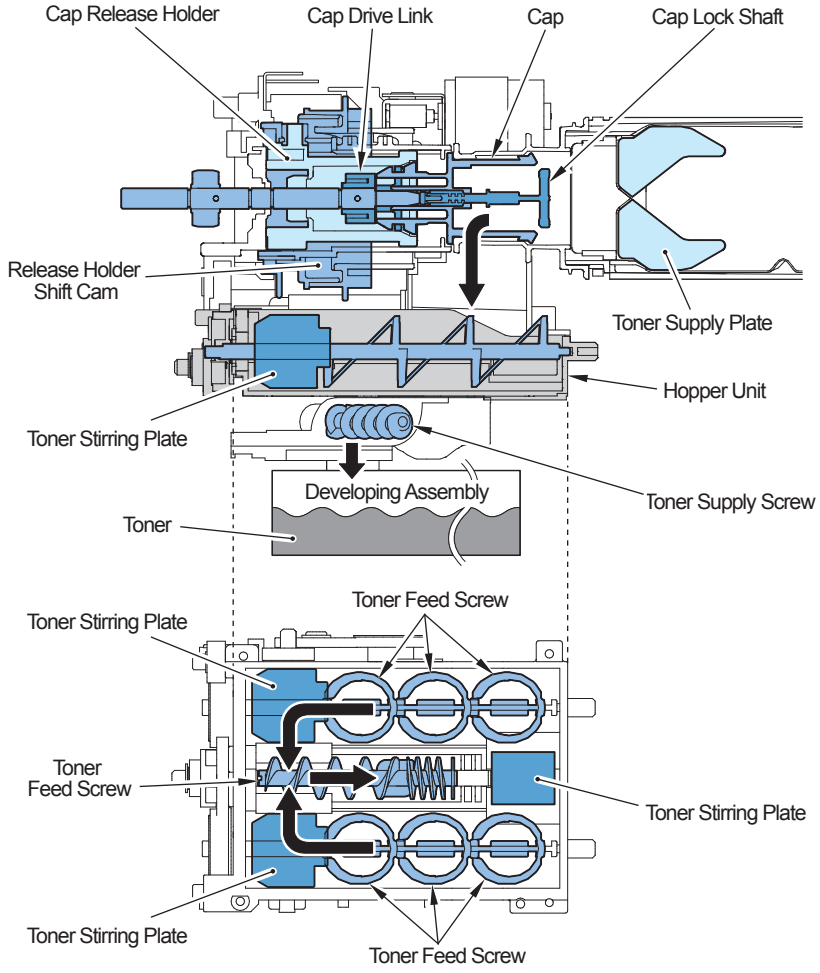
F-2-150

Toner Supply Assembly

Overview

Toner in the toner container is supplied to the developing assembly.

Open/close operation of Toner Container is executed automatically. Therefore, Toner Container cannot be normally installed/removed before the toner in the Toner Container runs out.



F-2-151

Parts name	Role
Toner supply drive unit	Supply the toner in the toner container to the hopper unit.
Cap drive link	Connect to the toner cap to open/close the toner cap.
Cap release holder	Release the connection between the toner cap and the cap drive link.
Release holder shift cam	Send the motor rotation drive to the cap drive link as back-and-forth movement.
Hopper unit	Supply the toner in the hopper unit to the developing assembly.
Toner feed screw	Feed the toner in the hopper unit.
Stirring plate	Stir the toner in the hopper unit.
Toner supply screw	Supply toner to the developing assembly.
Toner container	Supply the toner in the toner container to the hopper unit, driven by the toner supply drive unit.
Cap lock shaft	Lock the toner cap.
Toner supply plate	Pump the toner in the toner container.

T-2-52

Toner Container Presence Detection

This machine does not perform toner container presence detection.

Toner Cap Automatic Open/Close Control

This control is performed to automatically open and close the toner container cap.

<Timing of Execution>

At the time of replacement of the toner container

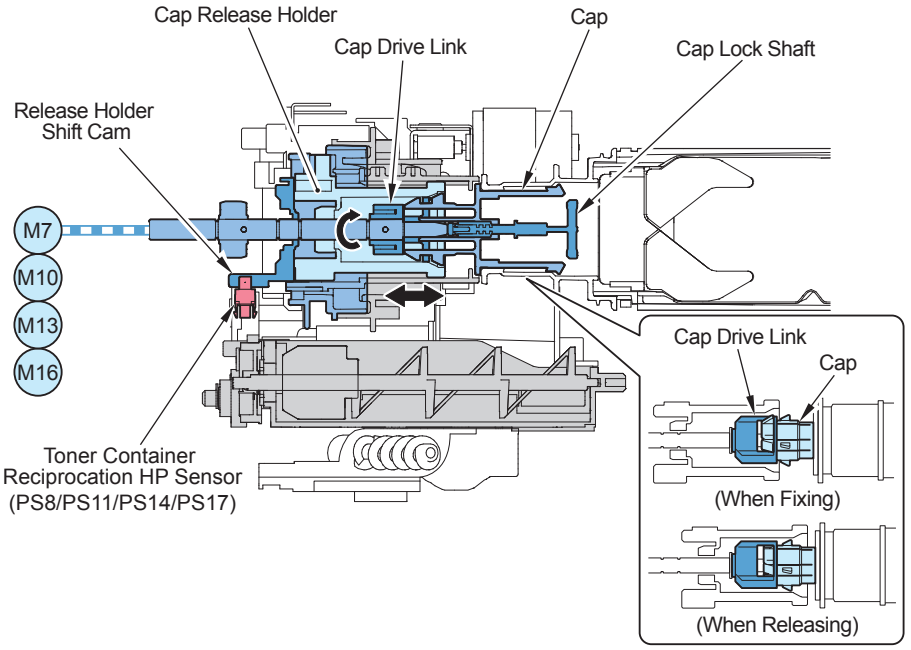
<Details of the Control>

<Opening Operation>

1) The toner cap HP sensors (PS8/PS11/PS14/PS17) detect the toner cap position, and the toner cap rotation phase sensors (PS81 to PS84) detect the phase of the toner cap and the cap release holder against the toner container.
2) When the toner container drive motors (M7/M10/M13/M16) are driven re-clockwise, the cap drive link and the cap release holder move to the right side (to the toner container side).
3) The toner cap is fixed with the cap drive link. At the same time, the cap lock shaft is pressed to the right side, and the cap is unlocked.
4) The toner container drive motors (M7/M10/M13/M16) are further driven, and the cap release holder and the cap drive link move to the left side in this order.

<Closing Operation>

1) When the toner container drive motors (M7/M10/M13/M16) are driven re-clockwise, the cap drive link and the cap release holder move to the right side (to the toner container side).
2) The toner cap is closed to the toner container. At the same time, the cap release holder bends the cap release claw, and the cap fixed to the cap drive link is released.
3) The motor is driven, and the cap drive link and the release holder move to the left so that the toner container can be removed.



F-2-152

	Release holder shift cam HP sensor	Toner cap rotation phase sensor
Closed	Light shielding	Light shielding
Moving (Closed =>Opened)	Transmission	Transmission
Opened	Light shielding	Transmission
Moving (Opened =>Closed)	Transmission	Light shielding

T-2-53

<Related Error Codes>

E025-0x00: Toner container drive motor lock error

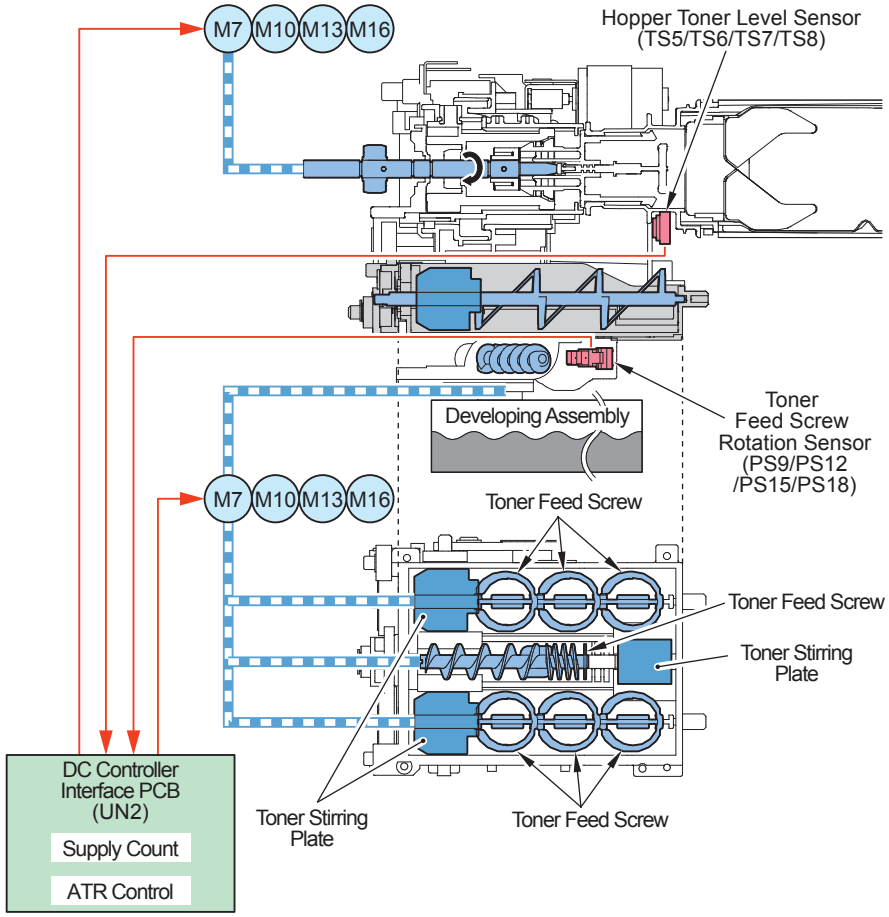
E025-0x10: Toner container sealing/release holder shift cam HP sensor timeout error

E025-0x20: Toner container/toner container inserting inlet phase error

Toner Level Detection / Toner Supply Control

Toner supply control

This control is performed to supply the toner in the toner container to the developing assembly.

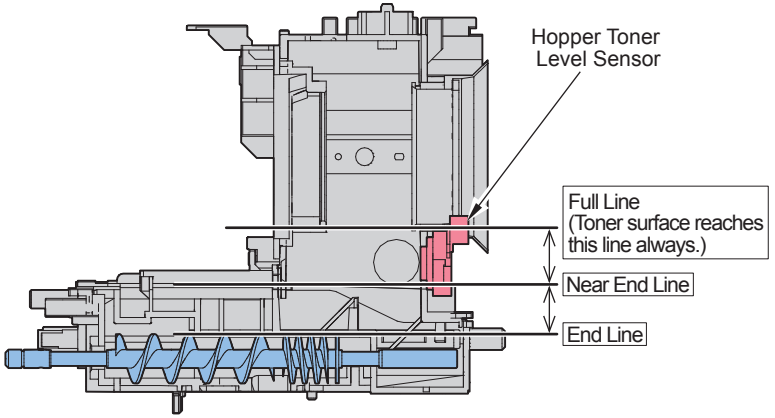


F-2-153

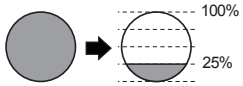
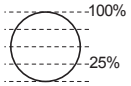
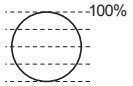
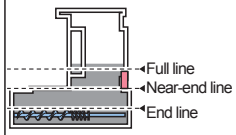
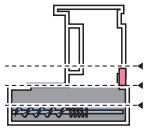
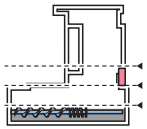
Title	Explanation	Supply timing	Main unit operation
Supply to the hopper	Supply the developer in the toner container to the hopper unit.	When the detection result by the hopper toner level sensors (TS5 to 8) is changed from H to L	The toner container drive motors (M7/M10/M13/M16) are driven for two seconds. *1
Supply to the developing assembly	Supply the developer in the hopper unit to the developing assembly.	When it is judged that the developer needs to be supplied based on the ATR control result	The hopper/stirring supply motors (M6/M9/M12/M15) are driven for a specified period.

T-2-54

Toner Level Detection



F-2-154

State	Container full	Near-end	End
Toner Level	100% to 25%	0%	0%
Toner Level inside. Toner Container			
Toner Level inside Hopper			
LUI Display	None	The toner container can be replaced (continuous print is available)	Please replace a toner container (the main unit stops the operation) *4
Detection Method	-	Hopper Toner Level Sensor *3	Toner Supply Count *1*2

F-2-155

*1 The counter counts 1 up when Toner Supply Screw rotates once. (Approx. 0.3g)
*2 Estimation based on the toner supply count accumulation value
*3 Detection by Hopper Toner Level Sensor. Even the sensor output changes from H to L and Toner Container Drive Motor is driven, the sensor output remains to be L. Toner Container Drive Motor drives for 2 seconds and stops for 1 second, and these operations are repeated 20 times at maximum. (Repeated operation)
*4 Timing to display the message differs between the Bk toner container and the color toner container. (See "Toner Level and User replacement flow" for details)
*5 Position of near-end line varies due to the number of prints and image duty during repeated operation. Approximately 1,500 prints can be made from near-end line to end line (A4; 5% image).

<Related Service Mode>
Timing to display the Toner Container preparation message:
COPIER>OPTION> DSPLY-SW > T-LW-LVL (Level2) 5% to 100%

Toner Level and User replacement flow

<Forced replacement mode>
Operation: Pop-up message indicates to prompt the forcible replacement. (Operation cannot be continued.)
How to clear the pup-up message: Replace the target Toner Container.

<Optional replacement mode>
Operation: Warning message indicates to prompt the optional replacement. (Operation can be continued.)
How to clear the warning message display: Replace the target Toner Container.

<Halfway replacement mode>
Operation: Even toner remains, Toner Container can be replaced.

		Forcible replacement mode	Optional replacement mode	Halfway replacement mode
When toner of all colors remains		×	×	yes*1*2
YMC	Near-end line	×	yes*3	
	End line			
	Job reception after toner runs out (End line)	yes*3	×	
BK	End			

T-2-55

×: Not provided yes: Provided
*1 Only when setting in the service mode
*2 When the used Toner Container is replaced, the empty toner warning message 2 (Refer to Toner Level Detection.) might be displayed without displaying the empty toner warning message.
*3 Even non-target toner can be replaced optionally.

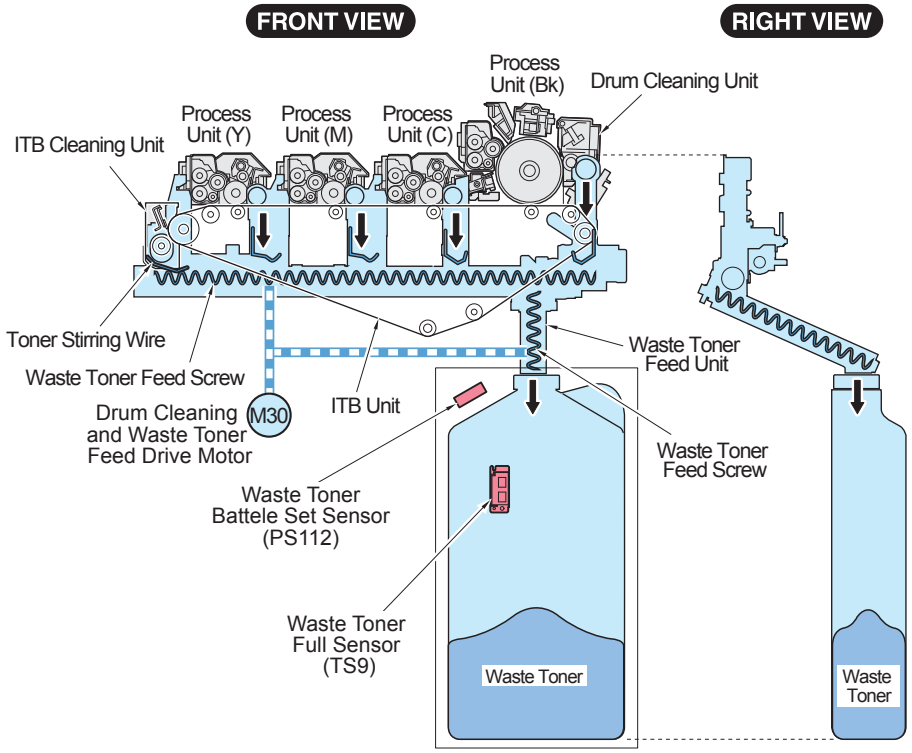
<Related Service Mode>
Mode switch to replace Toner Container in the middle: COPIER > OPTION > DSPLY-SW > T-CRG-SW

<Related User Mode>
Additional Functions > Adjustment/Maintenance > Maintenance > Optional toner replacement

Waste Toner Feed Assembly

Overview

The waste toner in the drum cleaning unit and the ITB cleaning unit is fed to the waste toner container.



F-2-156

Parts name	Role
Waste toner feed unit	Feed the waste toner to the waste toner container.
Toner stirring wire	Loosen the toner fed from the cleaning unit.
Waste toner feed screw	Feed the toner in the waste toner feed unit.
Waste toner container	Store the waste toner.

T-2-56

Waste Toner Full Level Detection

The following two types of detection are performed to detect the volume of the waste toner collected into the waste toner bottle.

- Detection by the waste toner counter (Count-up Sheets)
- Detection by the waste toner full level sensor (TS9)

Message type	Machine operation	Waste toner level	Detection condition
Advanced notice for full level waste toner	"Waste toner is near full. Replacement not yet needed." is displayed on the Control Panel	80%	-In case of reaching stated sheets*1 of waste toner counter [count-up sheets] or -In case of detection of the toner by waste toner full sensor [TS9] [5% manuscript notes of average image duty are equivalent to 50,000 sheets.]
Full level waste toner	"Waste toner reached the full level is displayed, and the machine operation stops.	100%	When 1000 sheets are printed after the advanced notice for full level waste toner was displayed. Near full counter (internal counter)

T-2-57

The DC controller checks TS9 and the Near full counter (internal counter) every time when the power is turned on and the front door is opened/closed, and it sends the two types of messages (Advanced notice for full level waste toner, Full level waste toner) to the main controller.

When the Waste Toner Bottle is replaced with a new one after it was detected full, the waste toner counter (COPIER/COUNTER/DRBL-1/WST-TNR) and near full counter (internal counter) are automatically cleared.

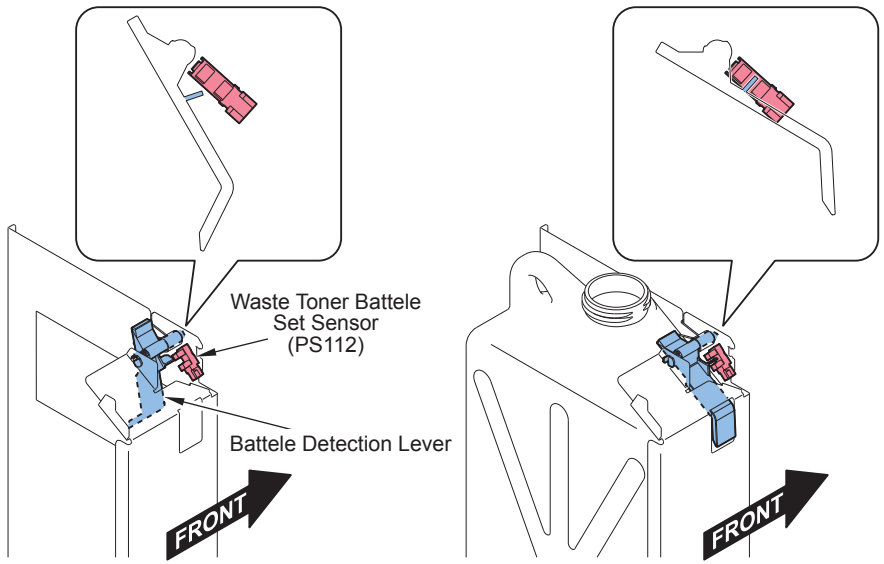
<Related Error Codes>

E013-0001: error in the waste toner feed screw lock detection

Waste Toner Container Presence Detection

This machine performs waste toner container presence detection.

Detection method



Waste Toner Battele OFF　　Waste Toner Battele ON

F-2-157

When printing is performed without a Waste Toner Bottle installed, an alarm (00-0B00) occurs.

Also, "Insert the waste toner container." is displayed on the screen.

Changing the specification to that for user replacement of Waste Toner Container

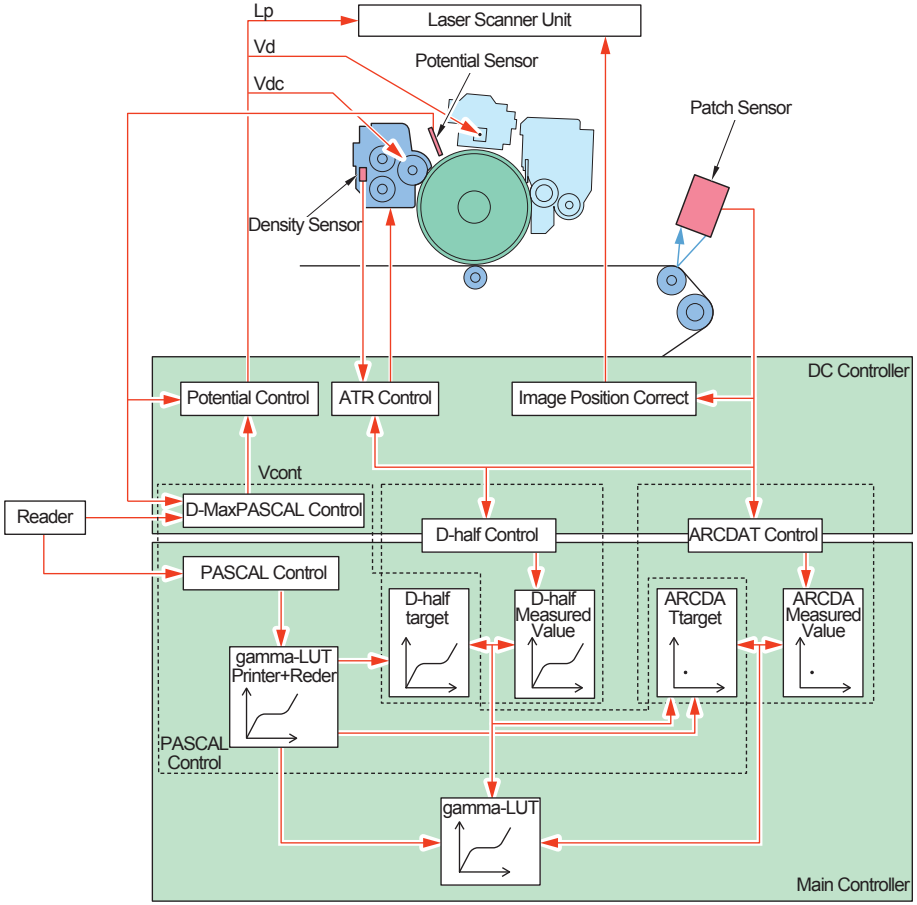
By setting COPIER > OPTION > USER > W-TN-DSP to 1 in service mode, the specification of the machine is switched to that for user replacement, and the procedure for replacing the Waste Toner Container is displayed in the animation.

Image Stabilization Control

Overview

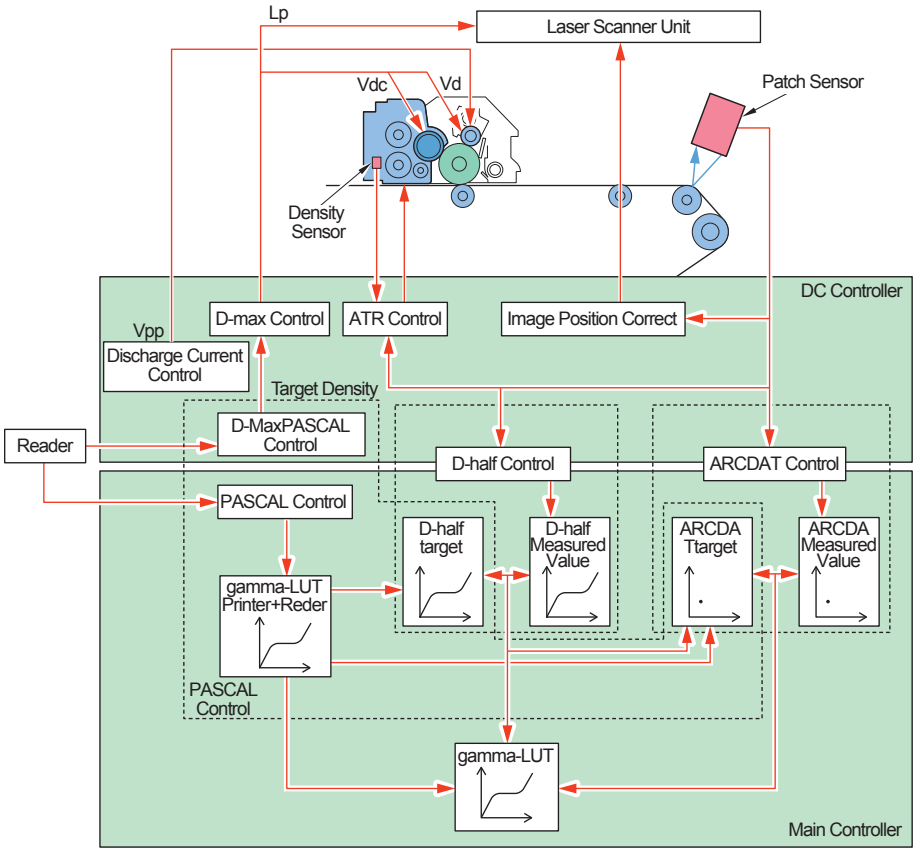
This control is performed to prevent an image failure caused by environmental changes and deterioration of the photosensitive drum, etc. so that stable printing operation can be performed.

<Bk >



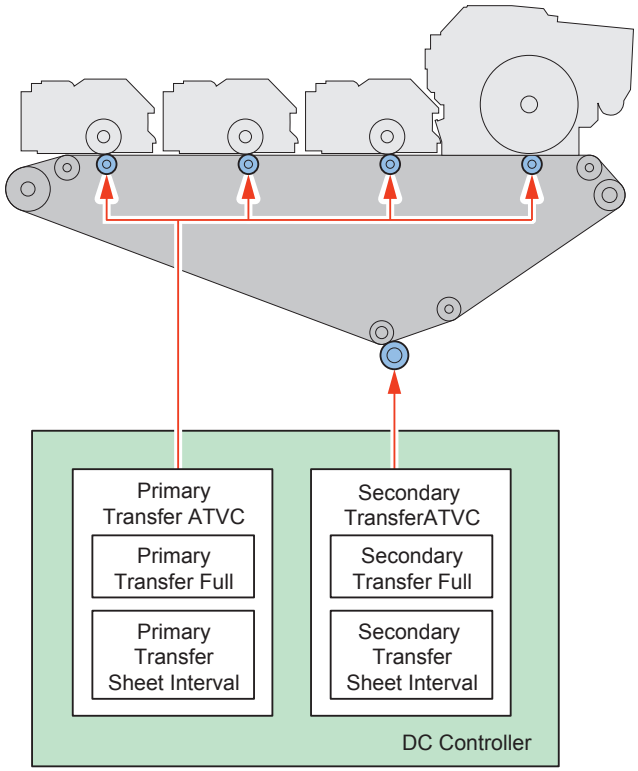
F-2-158

<CL>



F-2-159

< Transfer >



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Timing of Control

Model A : iR-ADV C9075 / iR-ADV C9070 , Model B : Models other than Model A

A: Execute, B: Not execute the operation if it is already executed with the paper interval adjustment count. C: Normally not execute due to no synchronous. .

Adjustment name	Condition*7 (In case of plain paper)	Time required (second)*3		Potential control	Discharge current control	D-max control	D-half control	ARCDAT control	Primary transfer ATVC	Image position correction*6	Patch Sensor adjustment	Drum/Developing Ass'y idle rotation	Drum idle rotation	Cleaning of Primary Charging Wire	Black band sequence	ATR(patch formation)*4	ACR toner ejection	Low Duty toner ejection*8	Related service mode
		Model A	Model B																
Auto adjustment of paper interval (during job execution)	Accumulation of 112*1	4	5					A											*10
	Accumulation of 200*1	7	8					C							A	A	A		*11
	Accumulation of 1000*1	14	16					C		A					B	B	A		
	Accumulation of 4000*1	46	48					C		B				A	B	B	A		*12
	Depending on average image Duty*5	3	4															A	
Auto adjustment of last rotation (after job completion)	Accumulation of 28*2	4	5					A											*13
	Accumulation of 50*2	5	6					A								A			*14
	Accumulation of 70*2	6	7					A							A	A			*15
	Accumulation of 400*2	13	14		A			B	A						B	B			*16
	Accumulation of 1000*2	35	40	A	A			B	A	B					B	B			
	Accumulation of 2000*2	67	72	A	A			B	A	B				A	B	B			
	Accumulation of 6000*2	73	79	A	A			B	A	B	A			B	B	B			*17
	Accumulation of 15000*2	93	101	A	A	A	A	B	A	B	A			B	B	B			
	Depending on average image Duty*5	3	4															A	
Full correction (Settings/Registration)	Full correction	-	-	Foregoing controls are not performed.															
Quick correciton (Settings/Registration)	Quick correction	-	-			A	A												
Warm-up rotation auto adjustment (Power ON)	Fixing temperature is less than 100 deg. C.	61	65	A	A				A	A	A	A	A	A		A			
	Total 2000-sheet from previous D-half control	77	84	A	A	A	A	A	A			A	A	A		A			
	Fixing temperature is 100 deg. C or higher.	-	-	Foregoing controls are not performed.															

T-2-58

*1 Unit: Image

*2 Unit: Image Execute at the last rotation when exceeding the accumulation of image.

*3 Time indicated above does not include the transition time before starting the adjustment (delivery time of preceding paper, last rotation cleaning).

*4 Execute only when the conditions are fulfilled. As for the conditions, refer to the ATR Control. When the average image Duty is high, frequency increases.

*5 Operation may be executed when it is over 120 images(paper INterval) / 100 image (last latation).

*6 To be executed together with other adjustments. (At 1/2 speed and 1/3 speed, the control is executed when the number of papers fed reaches 1/2 or 1/3 of the stack capacity respectively.)

*7 When the length in feeding direction is longer than 215.9mm (LTR), count as 2 images. The same is true on the paper which size is larger than LDR (extra length paper size).

*8 Execute when the average image Duty is 1% and less (5% at high temperature).
*9 COPIER > OPTION > IMG-SPD > ARC-INT1 :
Set of ARCDAT interruption interval <set range 0-1000(Def 100)>
COPIER > OPTION > IMG-FIX > TRCLN2-P :
Set of ITB toner supply intvl: ppr intvl <set range 1-1000(Def 100)>
*10 COPIER > OPTION > IMG-FIX > PCHINT-2 :
To adjust the paper interval which patch detection is performed by ATR control. (2nd limit)<set range 100-500(Def 200)>
COPIER > OPTION > IMG-FIX > INTROT-1 :
To set the paper interval to execute process auto adjustment (analog patch sequence, etc.) at initial/last rotation. <set range 50-1000(Def 200)>
*11 COPIER > OPTION > IMG-DEV > INTPPR-1 :
To set the paper interval for automatic cleaning of the Primary Charging Wire and Pre-transfer Charging Wire.<set range 0-9999(Def 4000)>
*12 COPIER > OPTION > IMG-DEV > DEVL-VTH :
To set the threshold value of the image duty, which is the condition to perform the low duty toner ejection sequence. <set range 1-5(Def 1)>
COPIER > OPTION > IMG-DEV > DEVL-PTH :
To set the threshold value of the total duty, which is the condition to perform the low duty toner ejection sequence.<set range 50-250(Def 100)>
*13 COPIER > OPTION > IMG-SPD > ARC-INT2 : T
o set the number of sheets which ARCDAT control is not executed, from the start of a job.<set range 0-1000(Def 25)>
*14 COPIER > OPTION/IMG-FIX > PCHINT-1 :
To adjust the paper interval which patch detection is performed by ATR control. (1st limit)<set range 25-200(Def 50)>
*15 COPIER > OPTION/IMG-FIX > TRCLN1-P :
At last rotation, the toner band formed on the ITB is removed by the ITB Cleaning Blade to decrease the friction between them. <set range 1-1000(Def 70)>
*16 COPIER > OPTION/IMG-LSR > CHG-INT :
To set the number of sheets as the intervals at which discharge current control for Y, M, and C is executed at last rotation. <set range 0-10000(Def 400)>
*17 COPIER > OPTION/CLEANING > W-CLN-P :
To set ON/OFF of automatic cleaning of the Primary Charging Wire and Pre-transfer Charging Wire.<set range 50-10000(Def 2000)>

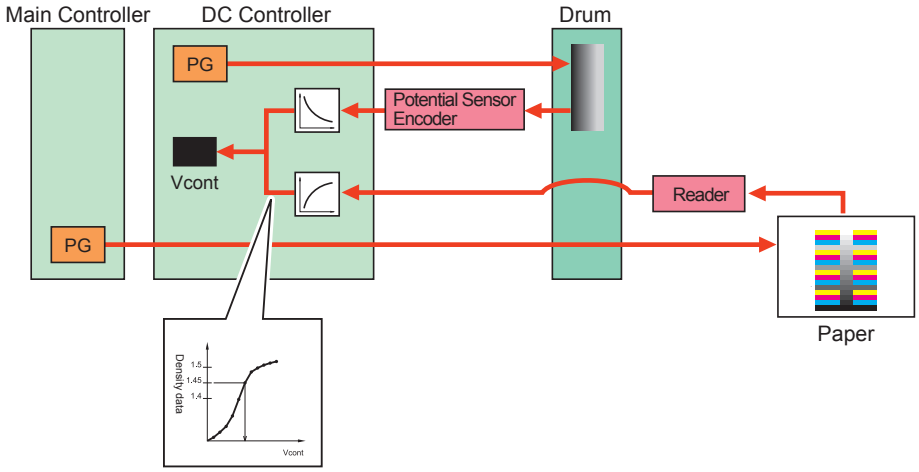
D-maxPASCAL Control

This control is performed to correct the target density for D-max control.

<Timing of Execution>

At the time of PASCAL control (1st page in test print)

For Bk



F-2-161

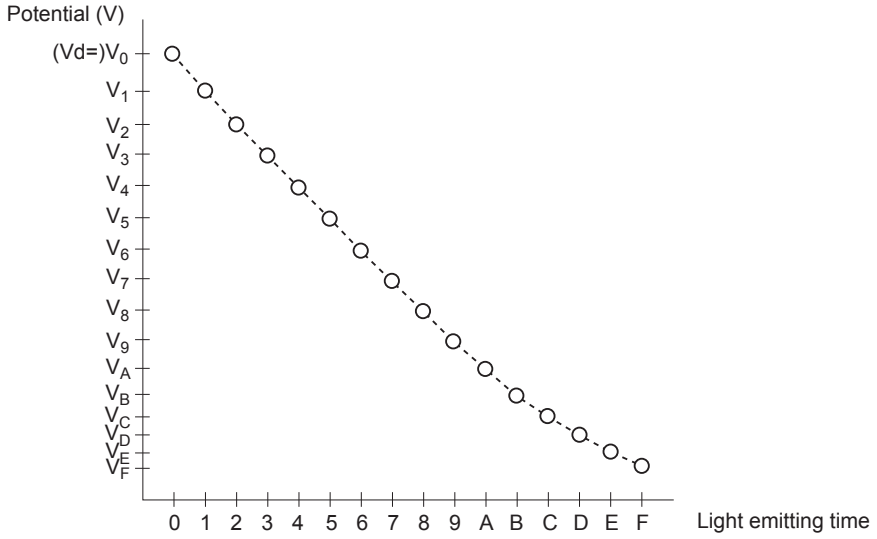
<Details of the Control>

1. Measuring the bright section potential

A halftone image (test print) created by the DC controller is formed on the photosensitive drum.

While changing the laser emission time (PWM control) by 16 levels (halftone), the potential sensor measures the bright section potential.

The DC controller calculates the laser emission time and the bright section potential (VL) according to the measurement result.



F-2-162

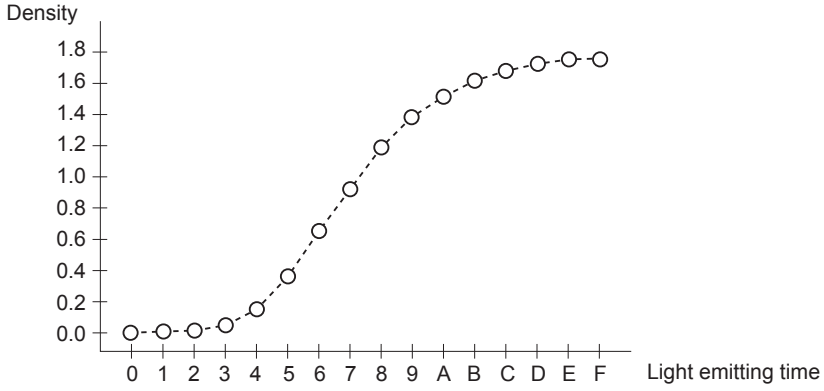
2. Measuring the patch density

A halftone image (test print) created by the main controller is printed.

While changing the laser emission time by 16 levels, a halftone image is formed.

The halftone image is read by the reader and reported to the DC controller.

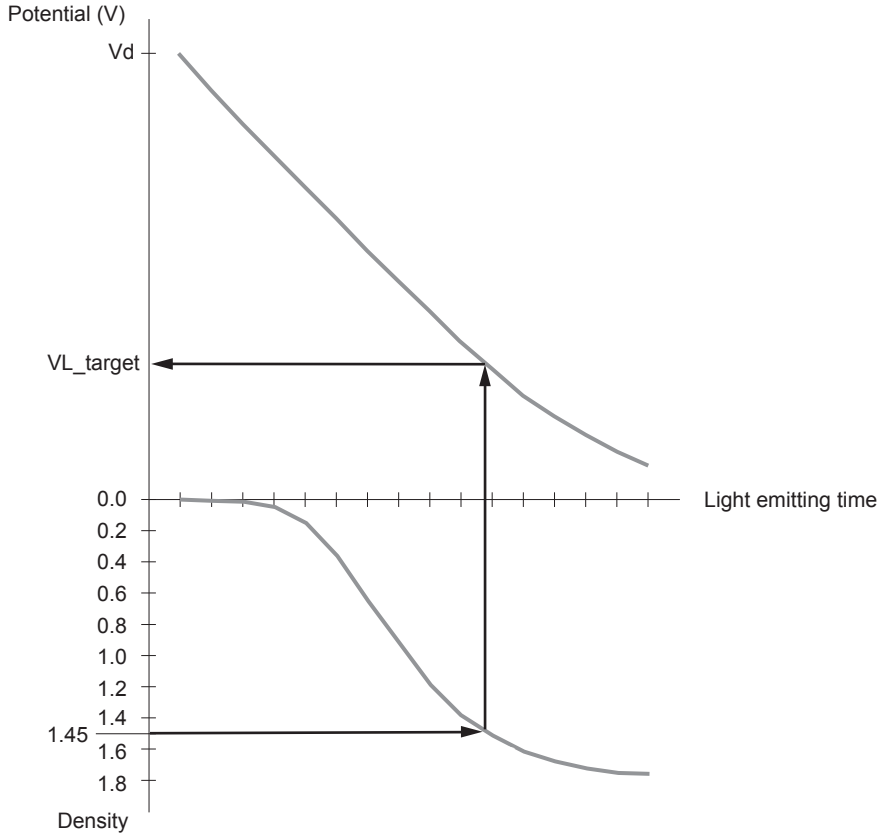
The DC controller calculates the laser emission time and the characteristics of the density.



F-2-163

3. Determining the target density "Vcont" for D-max control

The bright section potential "VL_target" needed to obtain the target density (1.45) is calculated based on the two characteristics calculated in the above-mentioned procedure.



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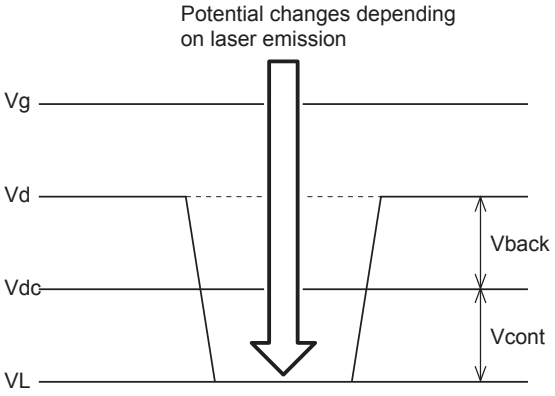
The target density "Vcont" for D-max control is calculated based on VL_target.
Vcont=Vd-VL_target-Vback
Vd: Bright section potential
Vback: Voltage to remove fogging in copy operation

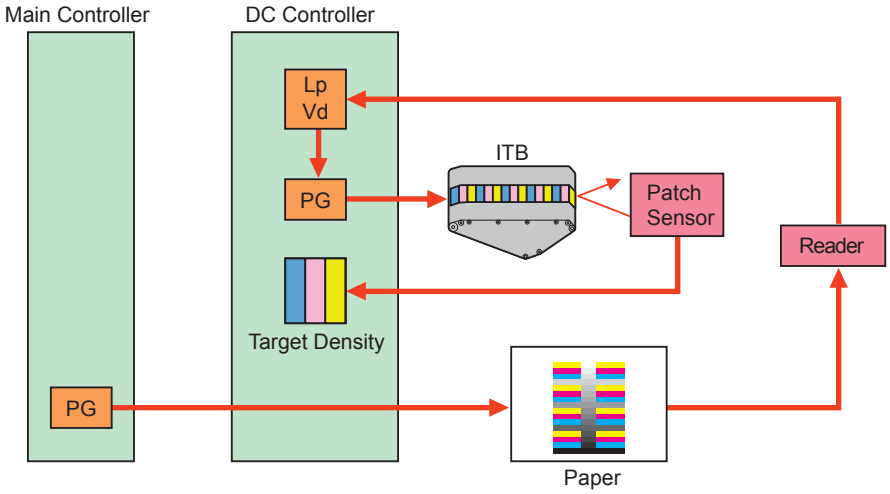


Vg : Grid potential
Vd : Dark area potential
VL : Light area potential
Vdc : Developing DC potential
Vcont : Contrast potential
Vback : Fogging removal potential

F-2-165

<Related Service Mode>
COPIER>DISPLAY>DPOT>VCONT-K: display setting value of Bk contrast potential
COPIER>DISPLAY>DPOT>VRATE-K: display Vd gain value in Bk specified by D-maxPASCAL
COPIER>OPTION>FUN-SW> DMX-DISP: ON/OFF of D-max PASCAL control at the time of auto gradation correction
COPIER>OPTION>FUN-SW> DMX-DISP: ON/OFF of D-max PASCAL control at the time of auto gradation correction

For Color

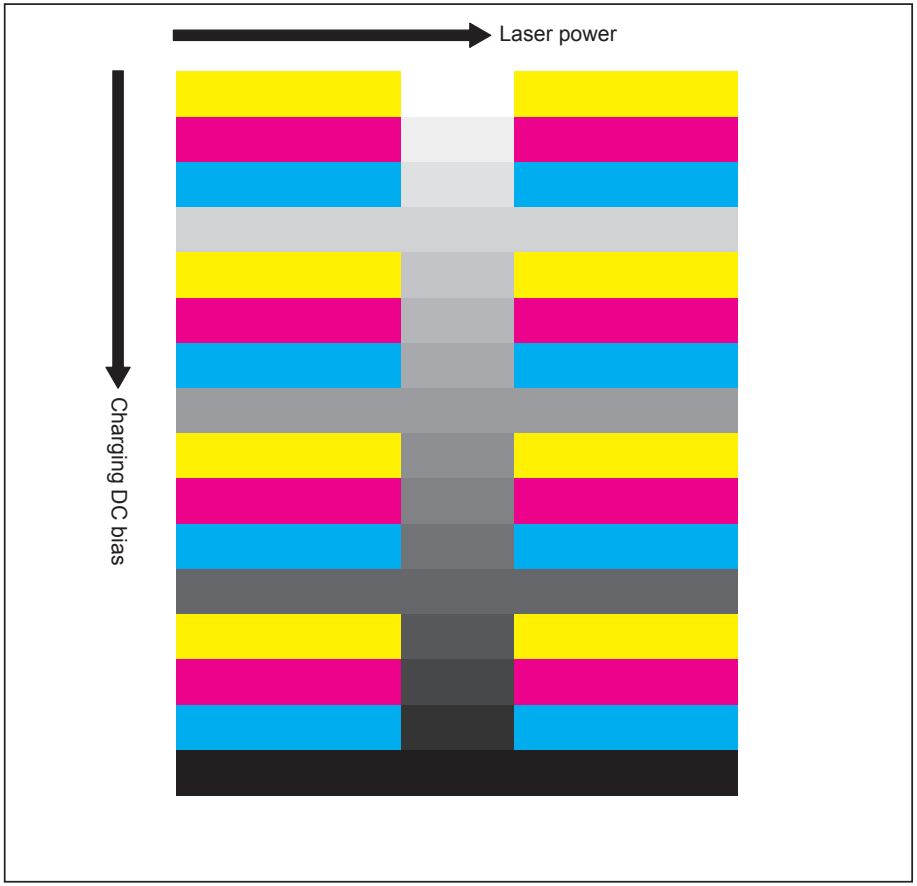


F-2-166

<Details of the Control>
1. Measuring the patch density
A solid image (test print) created by the main controller is printed.
The solid image is read by the reader and reported to the DC controller.
The DC controller determines the laser power and the charging DC bias so that the density of 1.45 can be obtained.

2. A patch is formed on the ITB based on the determined laser power and charging DC bias, and read by the patch sensor.

3. The DC controller PCB memorizes the read density as the target density.



F-2-167

Test Print

For automatic gradation correction, test print is performed to 4 sheets. Dmax-Pascal control is performed, using 1 out of these 4 sheets.

<Related Service Mode>

COPIER>DISPLAY>DPOT >VRATE-Y/M/C: display Vd gain value specified by D-max

COPIER>OPTION>FUN-SW> DMX-DISP: ON/OFF of D-max PASCAL control at the time of auto gradation correction

Potential Control (Bk)

A potential on the photosensitive drum surface changes due to factors of static latent images such as deterioration in sensitivity of the photosensitive drum and environmental changes, etc., even when the same voltage is applied.

Changes due to factors of static latent images are corrected by potential control so that stable printing operation is performed.

In potential control, a laser power where the target contrast potential (Vcont) is obtained is determined by measuring a potential while changing laser power (Lp) after charging the photosensitive drum surface with a uniform potential.

<Execution timing>

- At the time of post-rotation automatic adjustment (on accumulated 1000-image basis)
- At the time of warm-up rotation automatic adjustment (fixing temperature is less than100 deg C/Total 2000-sheet from previous D-half control)

<Details of the Control>

1. Determining the grid bias (Vg_target)

   Vg_target is the grid bias required to set the target potential on the drum surface (approx. -650V) to Vd_target. Vd_target varies depending on the environment and process speed.

   Vd_rgh is the result of measurement by the potential sensor when Vg_rgh=Vg_target-100 (V) is applied to the primary grid plate.

   The grid bias Vg_target is determined based on the ratio of this measurement result and the target potential.

   Vg: Vd=Vg_target: Vd_target=Vg_rgh: Vd_rgh

   Vg_target=Vd_target*Vg_rgh/Vd_rgh

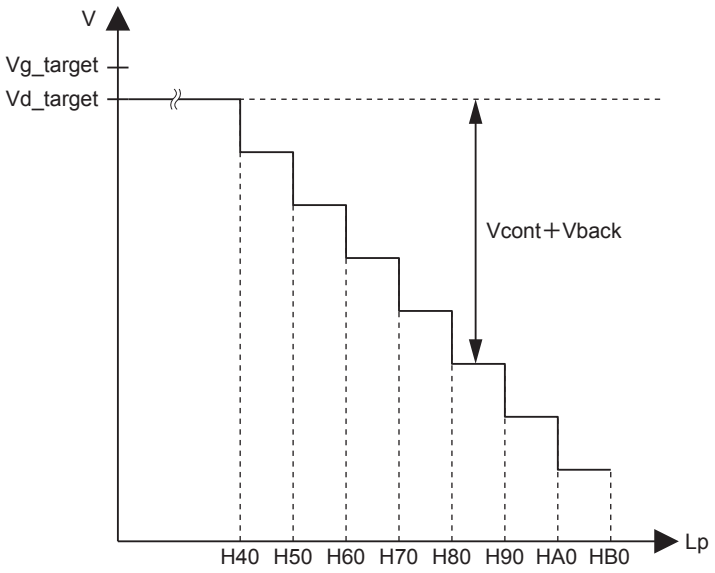
2. Determining the laser power (Lp) and the developing DC bias (Vdc)

   Exposure is performed while changing the laser power (Lp) by 8 levels (H40 to HB0), and a potential in the bright section (VL) is measured by the potential sensor.

   The laser power (Lp) where the target contrast potential (Vcont) can be obtained is determined.

   VL=Vd_target+(Vcont*+Vback*)

   *Determined by D-maxPascal control and the environmental table



F-2-168

NOTE:
When the laser power (Lp) where the target contrast potential (Vcont) can be obtained is not available, set the laser power (Lp) by increasing Vd_target and performing Steps 1 and 2 again.

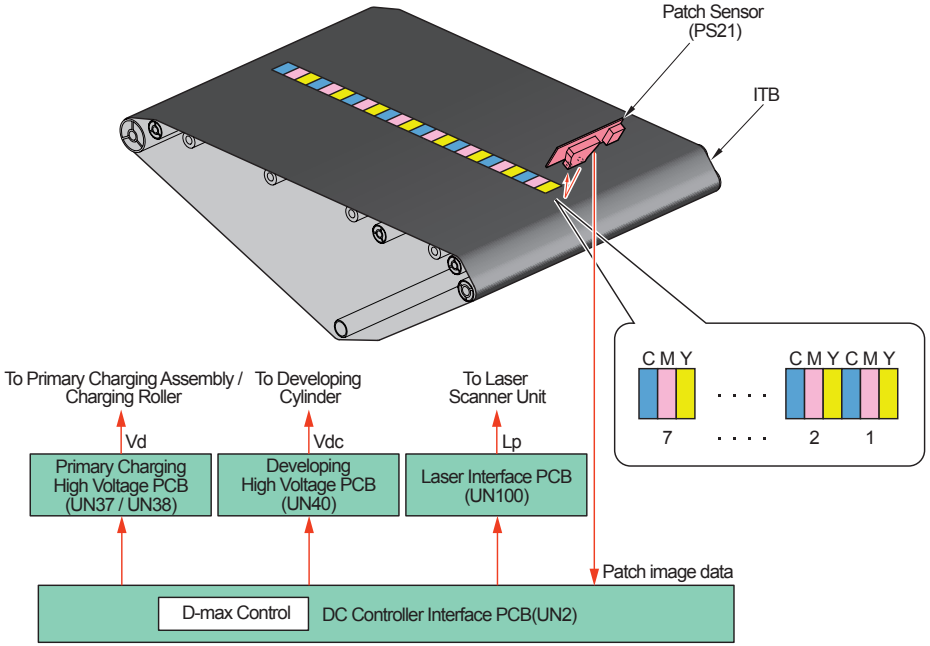
<Related Error Codes>
E061: error in potential control

<Related Service Mode>
COPIER>DISPLAY > HV-STS >PR-GRI-K: display the primary charging assembly grid voltage
COPIER>DISPLAY >DPOT> LPWR-K: display laser power (Bk)
COPIER>DISPLAY >DENS>DEV-DC-K: display developing DC voltage (Bk)
COPIER>FUNCTION>DPC>DPC: execute potential control
COPIER>OPTION>FNC-SW>PO-CNT: ON/OFF of potential control function

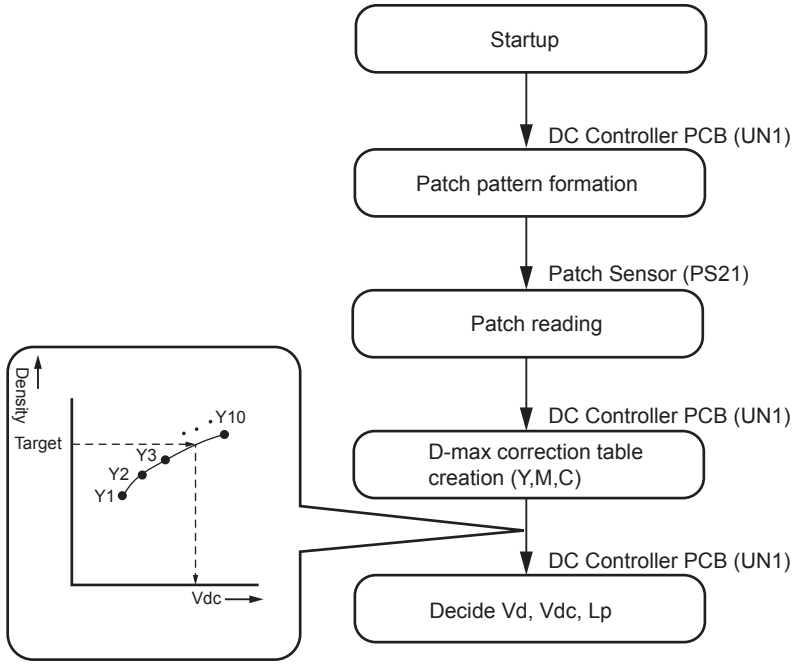
D-max Control (Only for Y/M/C)

This control is performed to determine the charging DC bias (Vd), the developing DC bias (Vdc), and the laser power (Lp) so that the target density determined by D-maxPascal control can be obtained.

<Timing of Execution>
- At the time of automatic adjustment of last rotation (For every 15000 images on an accumulation basis)
- At the time of PASCAL control (User mode > Automatic gradation correction > Quick correction)
- At the time of recovery from a jam (Fixing temperature at lower than 100 degree C)



F-2-169



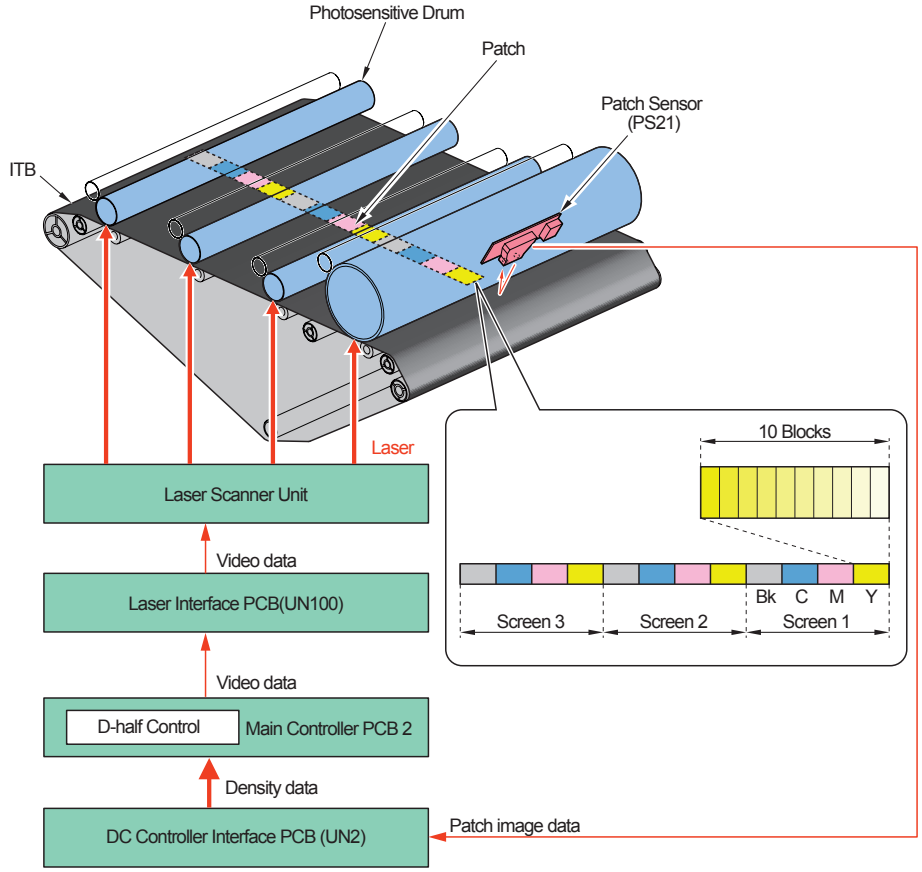
F-2-170

<Related Service Mode>
COPIER>DISPLAY >DPOT> LPWR-Y/M/C: display laser power
COPIER>DISPLAY >DENS>DEV-DC-Y/M/C: display developing DC voltage
COPIER>OPTION>FNC-SW>INTROT-2: setting for execution timing of post-rotation auto gradation correction

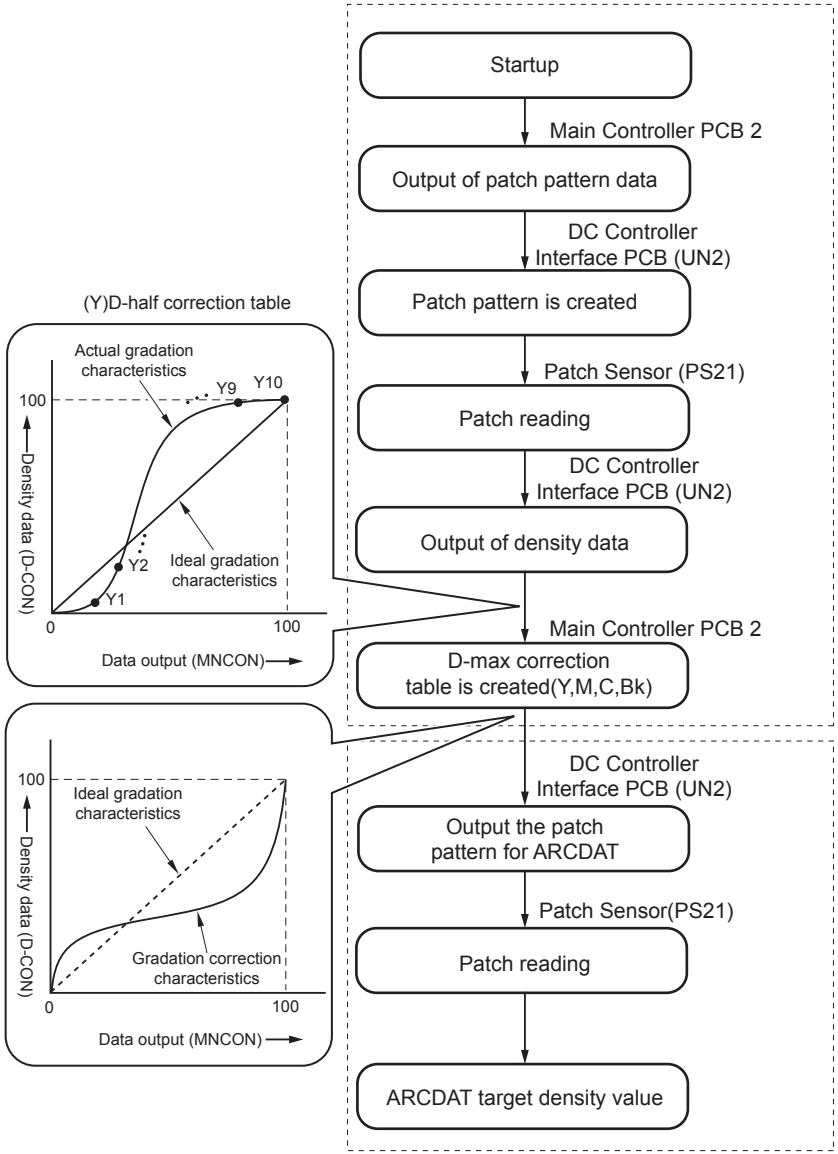
D-half Control

This control is performed to determine appropriate image gradation.

<Timing of Execution>
- At the time of automatic adjustment of last rotation (For every 15000 images on an accumulation basis)
- At the time of PASCAL control (User mode > Automatic gradation correction > Quick correction)
- At the time of recovery from a jam (Fixing temperature at lower than 100 degree C)



F-2-171



F-2-172

<Related Service Mode>

COPIER>OPTION>FNC-SW> DH-SW: ON/OFF of automatic D-half control

COPIER>OPTION>FNC-SW> DH-TMG: setting for execution interval of D-half control

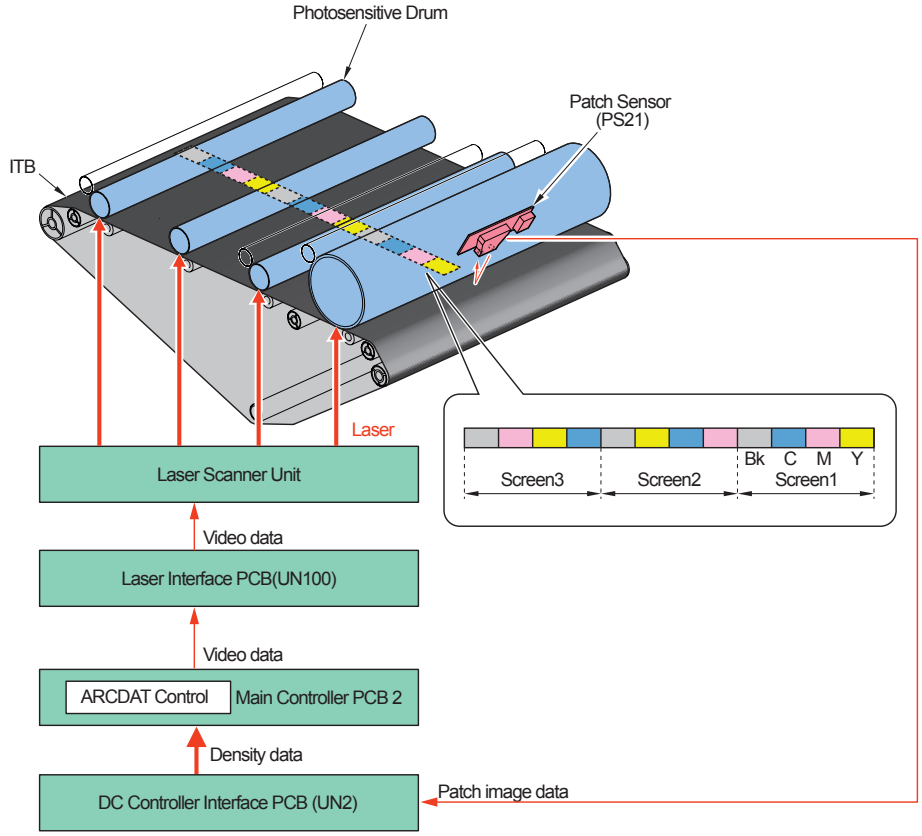
COPIER>OPTION>FNC-SW>INTROT-2: setting for execution timing of post-rotation auto gradation correction

ARCDAT Control

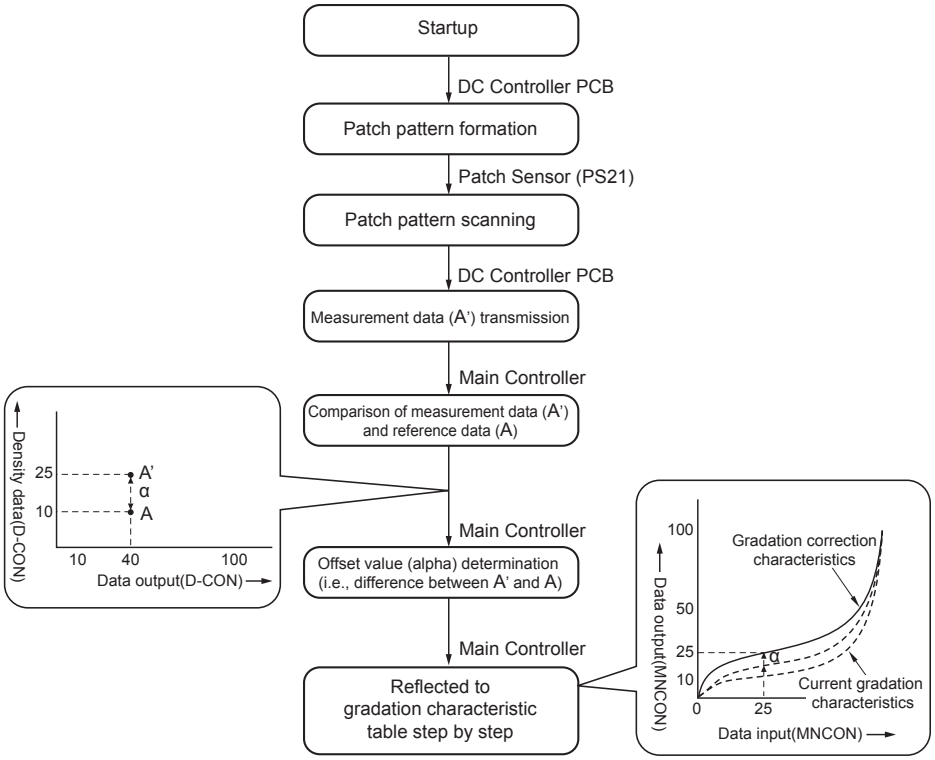
This control is performed to realize ideal gradation characteristics while attempting to decrease downtime.

<Timing of Execution>

- At the time of automatic adjustment of paper interval (For every 112 images)
- At the time of automatic adjustment of last rotation (Every 28 images)
- At the time of recovery from a jam (Fixing temperature at lower than 100 degree C)



F-2-173



F-2-174

<Related Service Mode>
COPIER>DISPLAY>HT-C> TGT-A/B/C-Y/M/C/K: display of target value for each color of ARCDAT screen A/B/C
COPIER>DISPLAY>HT-C> SUM- A/B/C-Y/M/C/K: display control difference for each color of ARCDAT screen A/B/C
COPIER>DISPLAY>HT-C> SGNL- A/B/C-Y/M/C/K: display patch current value for each color of ARCDAT screen A/B/C
COPIER>OPTIN>FNC-SW>ARC-INT1: setting for the number of sheets to be interrupted in ARCDAT (100)
COPIER>OPTIN>FNC-SW>ARC-INT2: setting for the number of sheets to execute at the time of ARCDAT post-rotation (28)

PASCAL Control

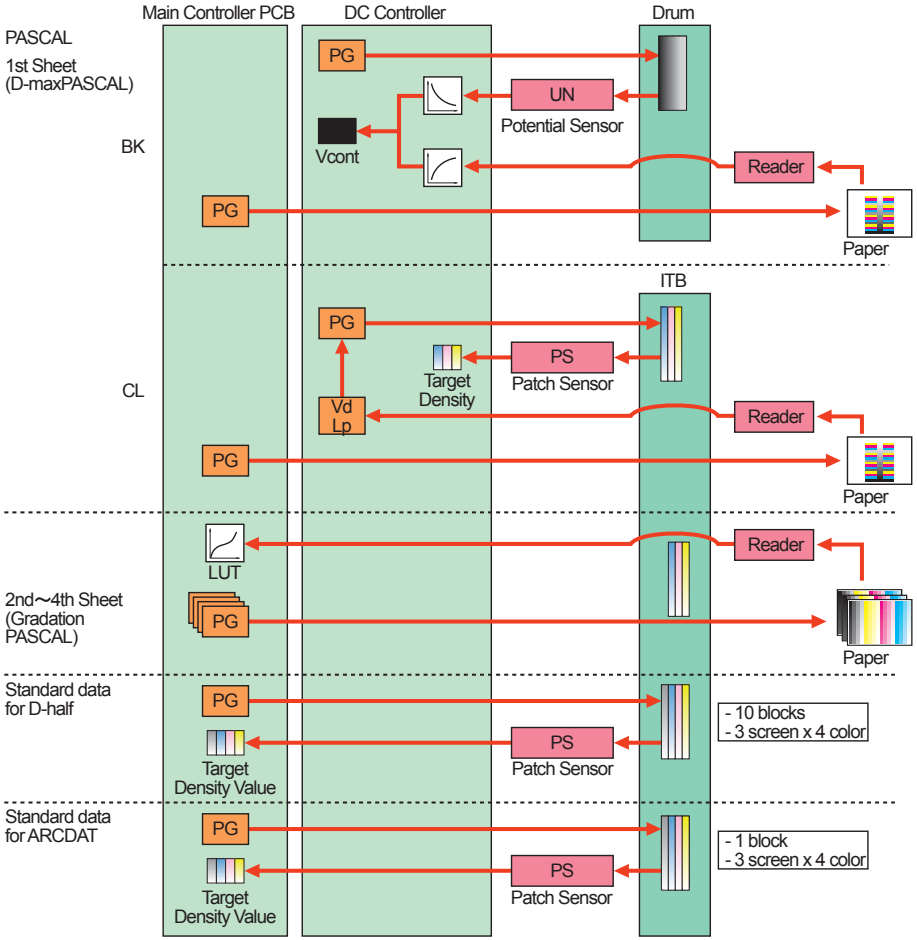
This control is performed to stabilize characteristics of image gradation density.
When "Automatic gradation correction =>Full correction" is selected in the user mode, this control is executed. The patch pattern printed by test print is read by the reader, and an image density correction table is created.
This enables to correct characteristics of image gradation density caused by environmental changes and deterioration of the photosensitive drum.

<Timing of Execution>
During execution of "Automatic gradation correction =>Full correction" in the user mode

NOTE:
Test Print
1st page: D-maxPASCAL test pattern (Y/M/C: 32-patch, Bk: 64-patch)
2nd page: Test pattern for copy operation (64-patch for each color)
3rd page: Test pattern for photo (64-patch for each color)
4th page: Test pattern for text (64-patch for each color)

<Related Service Mode>
COPIER>OPTION>FNC-SW> DMX-DISP: ON/OFF of D-max PASCAL control at the time of auto gradation correction
COPIER>OPTION>FNC-SW>PASCAL: setting to use/not to use the auto gradation correction data
COPIER>OPTION>FNC-SW>PSCL-MS: selecting the target process speed executing the auto gradation correction

<Automatic Gradation Correction>



F-2-175

Discharged Current Control (CL)

This control is performed to obtain an appropriate discharged current according to temperature/humidity changes.

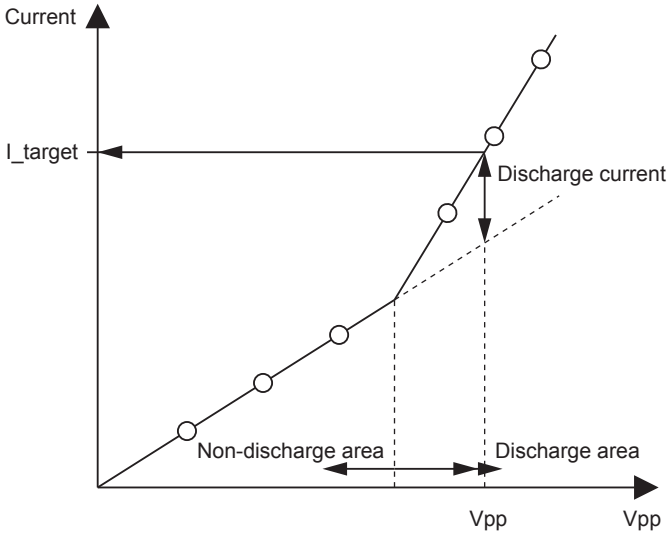
When the charging AC bias (Vpp) is increased, the field is changed from a non-discharge field to a discharge field. When an AC bias in the discharge field is applied in addition to the DC bias, the charging condition becomes stable, but, unless the discharged current volume reaches the specified level, it causes an image failure. To prevent it, this control is performed to determine a charging AC current value so that a constant discharged current volume is secured.

<Timing of Execution>

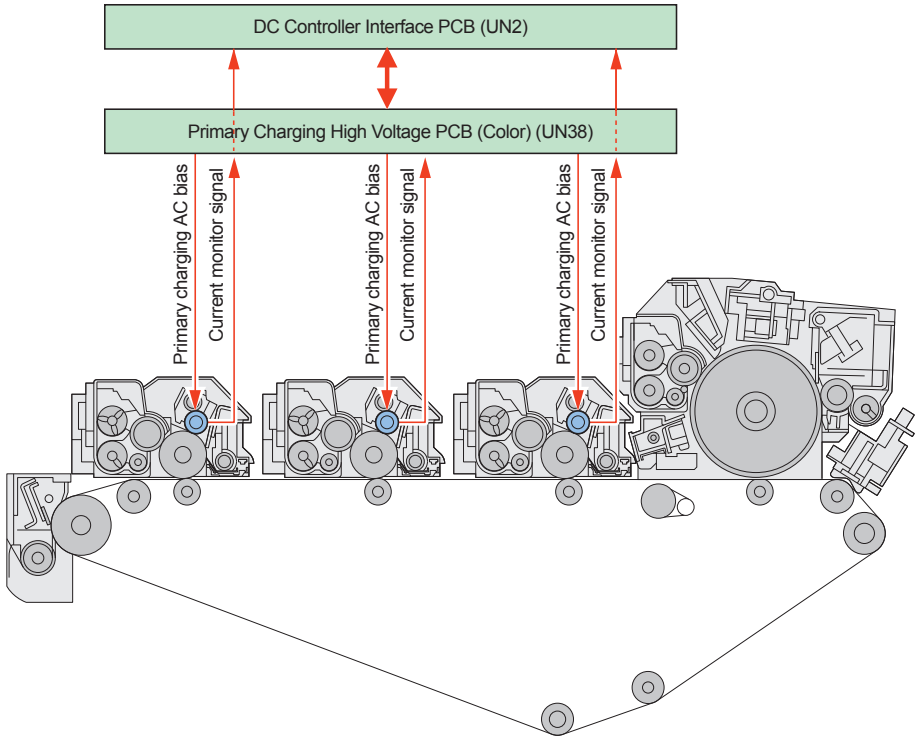
- At the time of automatic adjustment of last rotation (Every time when 400 images are printed on an accumulation basis).
- At the time of warm-up rotation automatic adjustment .

<Details of the Control>

1) 3 AC biases (Vpps) are output in the non-discharge field, and 3 AC biases (Vpps) in are output in the discharge field, which totals 6 Vpps. Then, the current value (I) is detected by the developing high voltage PCBs (UN39 to UN42).
2) The graph of the "VPP" and "I" values is created in each of the non-discharge field and the discharge field.
   A difference in these two lines is a discharged current volume.
3) The AC bias (Vpp_target) where the discharged current volume reaches the specified level* is found, and the current value "I_target" against the Vpp_target is determined.
   *Determined according to the environment.
4) The primary charging bias is corrected so that the current, which runs to the charging roller, becomes the current value I_target determined by discharge current control.



F-2-176



F-2-177

<Related Service Mode>

COPIER>DISPLAY>HV-STS>PRIACV-Y/M/C: display discharge current control setting voltage

COPIER>DISPLAY>HV-STS>PRISMP-Y/M/C: display sampling point of discharge current control

COPIER>FUNCTION>MISC-P>DISCHG: execute discharge current control

COPIER>OPTION>FNC-SW>CHG-INT: setting for the number of sheets to execute at the time of discharge current control post-rotation

ATR Control

This control is performed to supply developer so that an ideal ratio of the toner and carrier (T/D ratio) can be obtained in the developing assembly.

Timing of Activation

a. Control of the supply volume by video count: Executed for each print during printing
b. Correction by the toner density sensor for the developing assembly: Executed for each print during printing
c. Correction by the patch sensor

- At the time of power-on (Fixing temperature at lower than 100 degree C)
- Last rotation auto adjustment (equivalent to 50 images on an accumulation basis or more than 3-sheet of A4 size solid images with the accumulation video count)
- Paper interval (equivalent to 200 images on an accumulation basis or more than 10-sheet of A4 size solid images with the accumulation video count)

<Details of the Control>

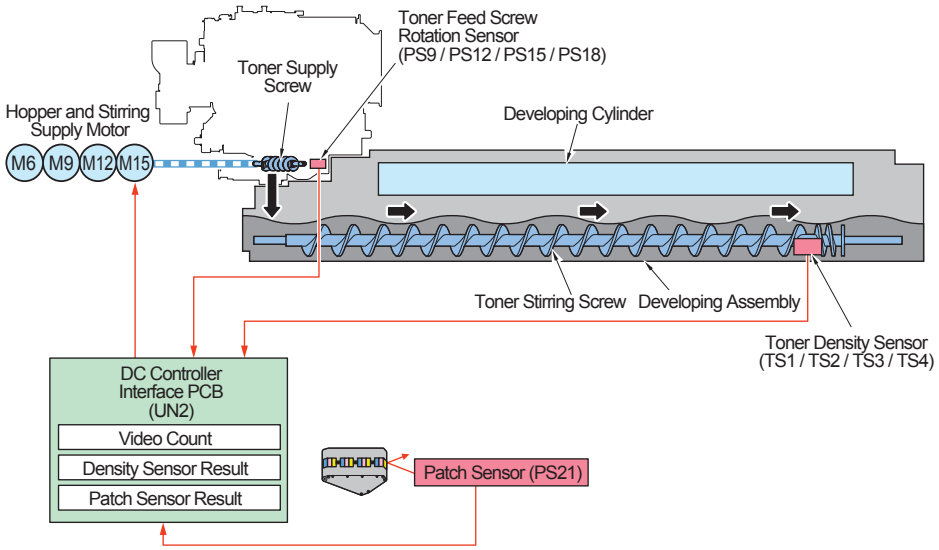
Developer is supplied to the developing assembly so that an ideal T/D ratio can be obtained. The DC controller interface PCB (UN2) judges the toner supply volume based on the following three types of data.

- Video count
- Density sensor
- Patch sensor

When the DC controller interface PCB (UN2) judges that toner needs to be supplied, it drives the hopper stirring/supply motors (M6/M9/M12/M15) and rotates the toner supply screw to supply toner into the developing assembly. When the number of rotations of the screw is detected by the toner feed screw rotation sensors (PS9/PS12/PS15/PS18), the toner supply volume can be detected.

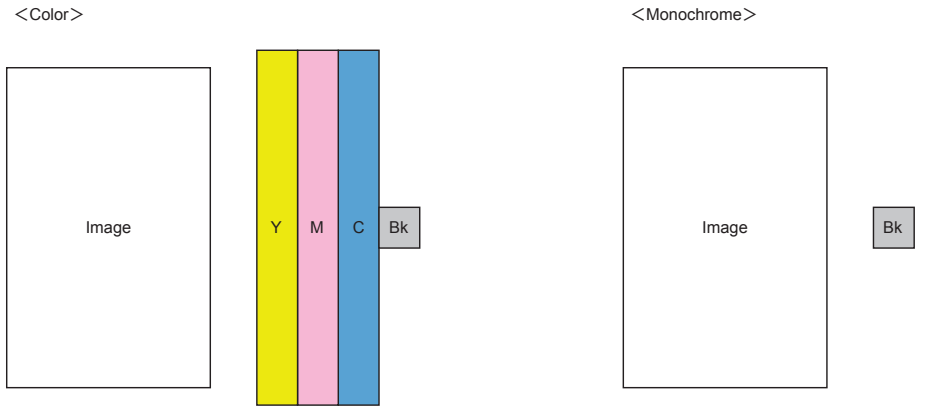
<Related Service Mode>

COPIER>DISPLAY>DENS> DENS-S-Y/M/C/K: display patch density created by ATR control
COPIER>FUNCTION>MISC-P> ATR-EX: forced execution of ATR
COPIER>OPTION>FNC-SW>PCHINT-1: adjustment of ATR patch interval (the 1st limit)
COPIER>OPTION>FNC-SW>PCHINT-2: adjustment of ATR patch interval (the 2nd limit)



F-2-178

<ATR Patch Image>



F-2-179

Image Position (Color Displacement) Correction

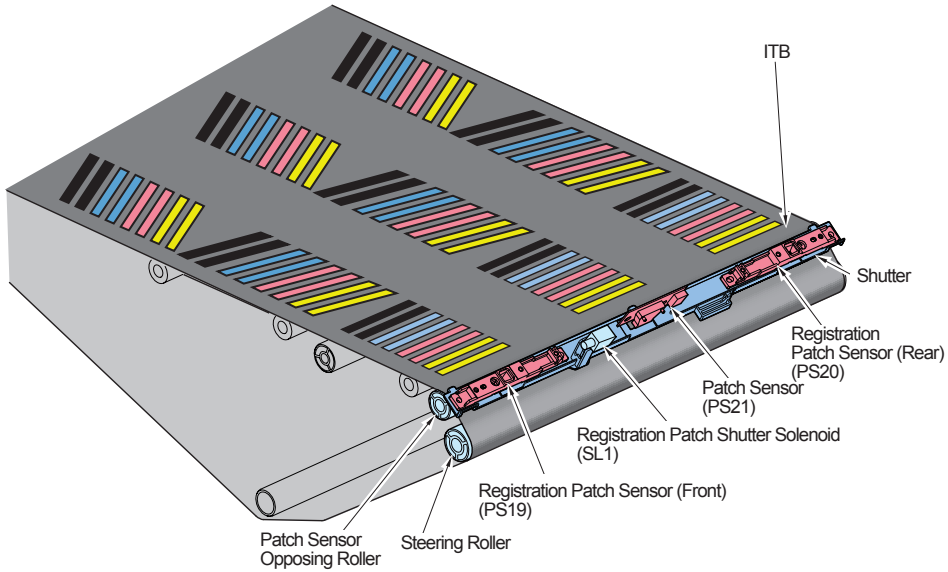
This control is performed to correct color displacement caused by uneven irradiation by the laser scanner unit or uneven rotation of the drum and ITB.

<Timing of Execution>

- At warm-up rotation
  1) At execution of control for the first time in the day
  2) When temperature of the Laser Scanner Unit has decreased by 10 deg C since the last execution of control
- At the time of automatic adjustment of last rotation(at the time of automatic adjustment when the accumulated sheet count reached 1000 or more since the last image position adjustment)

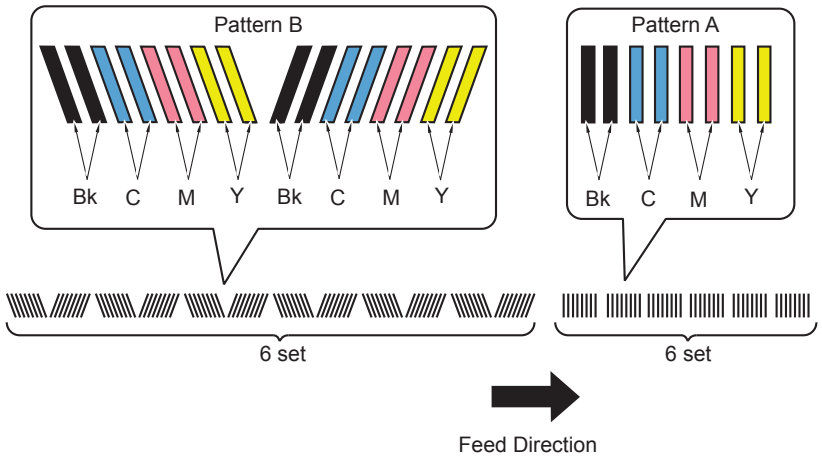
<Description of control>

Base is the Bk pattern. Displacement level of patch pattern (each color) is detected and image position is corrected.



F-2-180

<Patch>



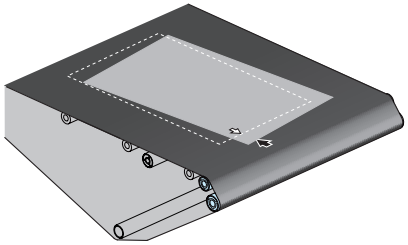
F-2-181

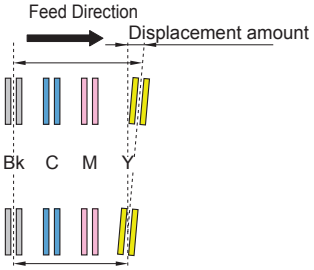
Patch pattern to be used

Type of the control	<Details of the Control>	Patch pattern to be used	
Correction of the writing position in the main scanning direction	Change the timing of laser writing.	B	Rear/Front
Correction of the writing position in the sub scanning direction	Change the timing of writing in the sub scanning direction (TOP signal).	A	Rear/Front
Correction of image tilt	Change the rotation volume of the tilt correction motor.	A	Rear/Front
Correction of the magnification in the main scanning direction	Increase/decrease the number of pixels in the main scanning direction overall.	B	Rear/Front
Correction of the single magnification in the main scanning direction	Partially increase/decrease the number of pixels in the main scanning direction.	B	Rear/Front/ Center

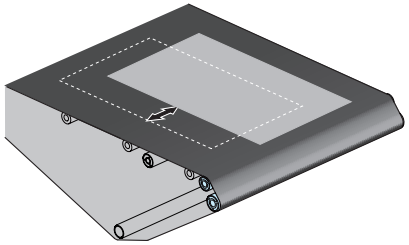
T-2-59

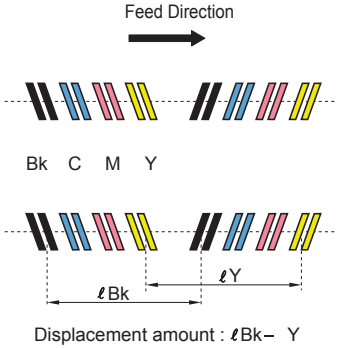
< Tilt >





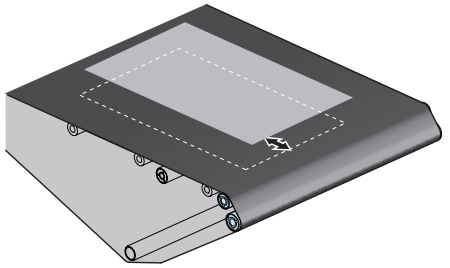
< Horizontal Scanning >

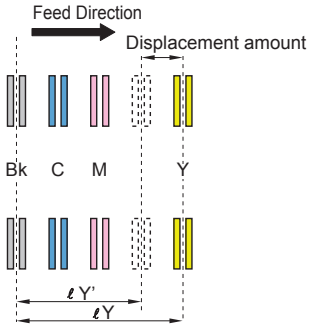




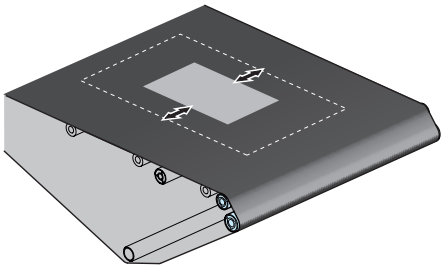
F-2-182

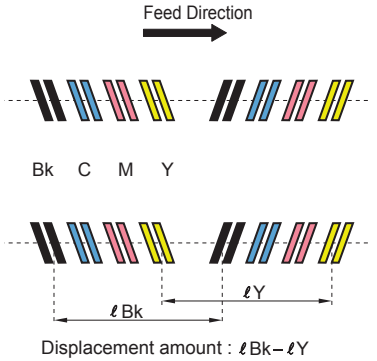
< Vertical Scanning >



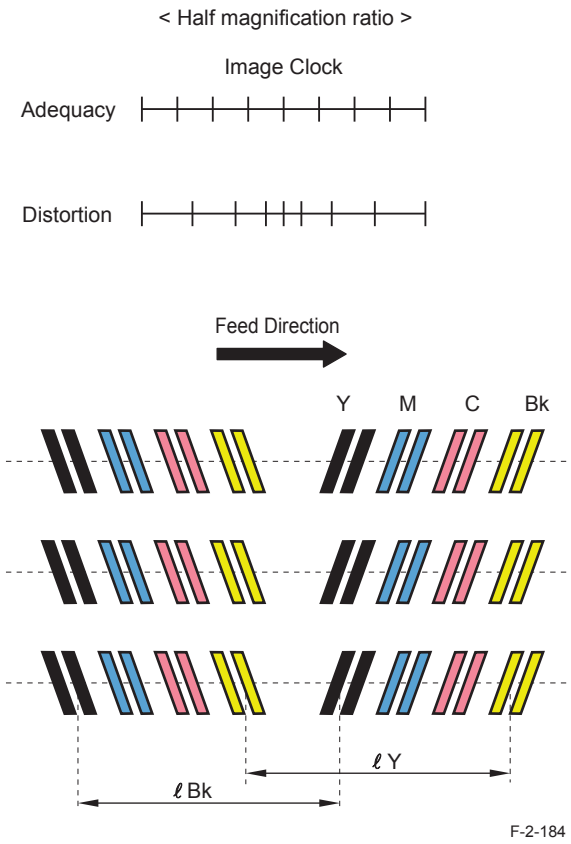


< Magnification >





F-2-183



F-2-184

<Related Alarm Codes>
34-0001: when the patch sensor's detection data exceeds the limit
34-0002: when the patch pattern failed to be detected
34-0003: when the detected number of the patches is insufficient
34-0004: when exceeding the correction range (limiter) of the skew correction motor
34-0005: when exceeding the correction range (limiter) of the write-start position in sub (vertical) scanning direction
34-0006: when exceeding the correction range (limiter) of the magnification ratio in main (horizontal) scanning direction
34-0007: when exceeding the correction range (limiter) of the write-start position in main (horizontal) scanning direction

Primary Transfer ATVC Control

This control is performed to determine an appropriate transfer bias to prevent a transfer failure caused by environmental changes and durability variation of the primary transfer roller. Two types of primary transfer ATVC are performed. One is the primary transfer full ATVC, which is performed at the time of last rotation or initial rotation, and the other is the primary transfer paper interval ATVC, which is performed in paper interval.

Primary transfer FullATVC: to determine the primary transfer bias to run the target current
Primary transfer paper interval ATVC: transfer bias calculated by the primary transfer FullATVC is corrected at paper interval to run the target primary transfer current

Primary Transfer Full ATVC

<Timing of Execution>

- At the time of automatic adjustment of last rotation (Every time 400 images are printed on an accumulation basis)
- At the time of multiple initial rotations (Fixing temperature at lower than 100 degree C)

<Details of the Control>

1. Determining the target current

The target current "Itarget" is determined based on the temperature/humidity information obtained from the absolute water volume (ENV1) and relative humidity (UN14/UN15).

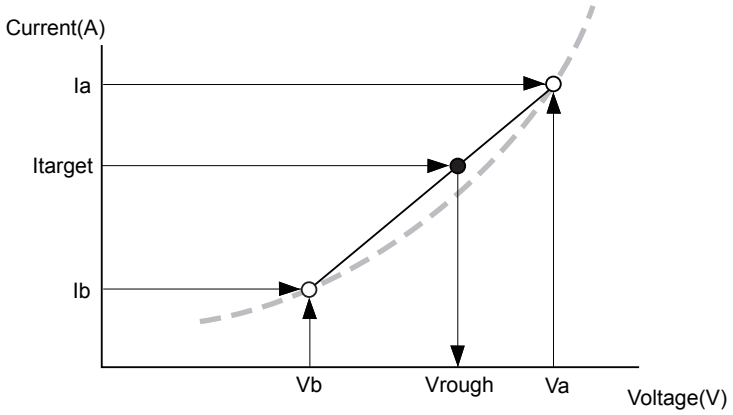
2. Obtaining the approximate voltage value

The current value "Ia", which is obtained when the voltage "Va" considered close to the target voltage "Vtarget" is applied, is measured.

If "Ia" is larger than the target current "Itarget", "Vb = Va - ΔVr (offset value)" is applied, and, if it is smaller than "Itarget", "Vb = Va + ΔVr" is applied, and then the current "Ib" at that point is measured.

When connecting the two points between "Va" and "Ia", "Vb" and "Ib" with straight lines, a line-shape graph of the first-order approximation is obtained.

The voltage value "Vrough" which corresponds to "Itarget" is obtained based on this graph.



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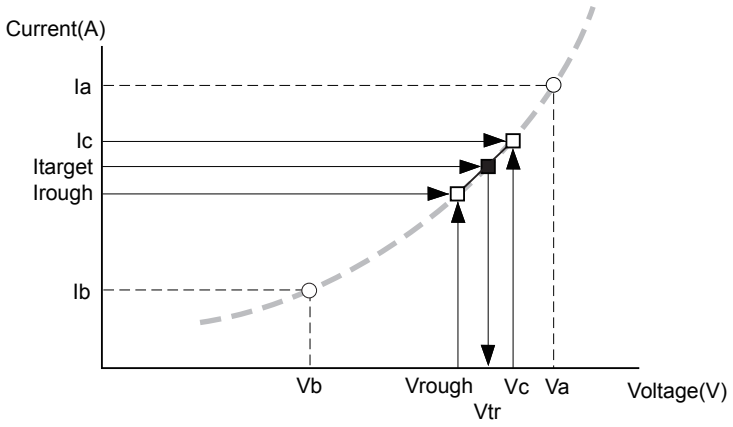
3. Obtaining the target voltage value

The current value, which is obtained when "Irough" when "Vrough" is applied, is measured.

If "Irough" is larger than "Itarget", "Vc = Vrough - ΔVe (offset value)" is applied, and if it is smaller than "Itarget", "Vc = Vrough + ΔVe" is applied, and then the current "Ic" at that point is measured.

When connecting the two points between "Vrough and Irough", "Vc and Ic" with straight lines, a line-shape graph of the first-order approximation is obtained.

The voltage value "Vtr" which corresponds to "Itarget" is obtained based on this graph.



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Please note that this control is only performed at 1/1 speed. At 1/2 speed and 1/3 speed, calculation is performed by multiplying the transfer voltage by the rate at the time of deceleration.

<Related Service Mode>

COPIER>DISPLAY>DPOT>1TR-DC-Y/M/C/K: display the primary transfer voltage

COPIER>FUNCTION>MISC-P>1ATVC-EX: execute the primary transfer ATVC control

Primary Transfer ATVC Control

<Timing of Execution>
In printing

<Details of the Control>
At the time of printing operation, sampling of a transfer current is performed between each image. When the transfer current obtained in sampling is displaced from the target transfer current, correction of the transfer current is performed.
Please note that this control is performed for each of the 1/1 speed, 1/2 speed, and 1/3 speed and that a transfer voltage suitable for the process speed is determined.

<Related Service Mode>
COPIER>DISPLAY>HV-STS>1ATVC-Y/M/C/K,1ATVC-K1: display the primary transfer paper interval current
COPIER>DISPLAY>DPOT>1TR-DC-Y/M/C/K: display the primary transfer voltage
COPIER>FUNCTION>MISC-P>1ATVC-EX: execute the primary transfer ATVC control

Secondary Transfer ATVC Control

This control is performed to determine an appropriate transfer bias to prevent a transfer failure caused by environmental changes and durability variation of the secondary transfer roller.
Please note that the primary transfer DC bias is determined based on the sum of the base voltage "Vb", which is determined by this control, and the paper shared voltage "Vp", which differs depending on the paper type.

Two types of secondary transfer ATVC are performed. One is the primary transfer full ATVC, which is performed at the time of last rotation and initial rotation, and the other is the primary transfer paper interval ATVC, which is performed at paper interval.

Secondary transfer FullATVC: to determine the secondary transfer bias to run the target current
Secondary transfer paper interval ATVC: transfer bias calculated by the secondary transfer FullATVC is corrected at paper interval to run the target secondary transfer current

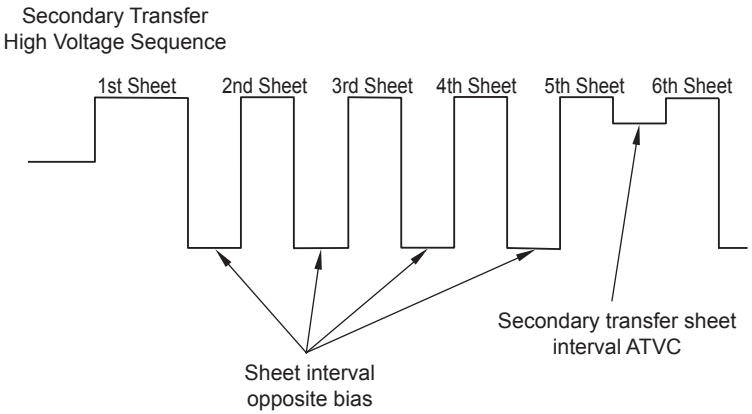
Secondary Transfer Full ATVC Control

<Timing of Execution>
At the time of initial rotation

<Details of the Control>
The same control as that for the primary transfer full ATVC is performed.
Please note that this control is performed for each of the 1/1 speed, 1/2 speed, and 1/3 speed and that a transfer voltage suitable for the process speed is determined.

Secondary Transfer Paper Interval ATVC

<Timing of Execution>
At paper interval
The base voltage "Vb" is applied for every 1 out of 5 printed sheets, and sampling of a transfer current is performed. When the transfer current obtained in sampling is displaced from the target transfer current, correction of the transfer current is performed.



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<Related Service Mode>
COPIER>DISPLAY>HV-STS>2ATVC-F1/2/3: display the secondary transfer ATVC target current (full color)
COPIER>DISPLAY>HV-STS>2ATVC-M1/2/3: display the secondary transfer ATVC target current (monochrome)
COPIER>DISPLAY>DPOT>2TR-PPR: display the secondary transfer ATVC paper shared voltage
COPIER>DISPLAY> DPOT > 2TR-BASE: display the secondary transfer ATVC base voltage

Patch Sensor Adjustment

Correction of the light intensity in the patch sensor and sampling of the ITB base are performed so that desired patch reading performance can be obtained.

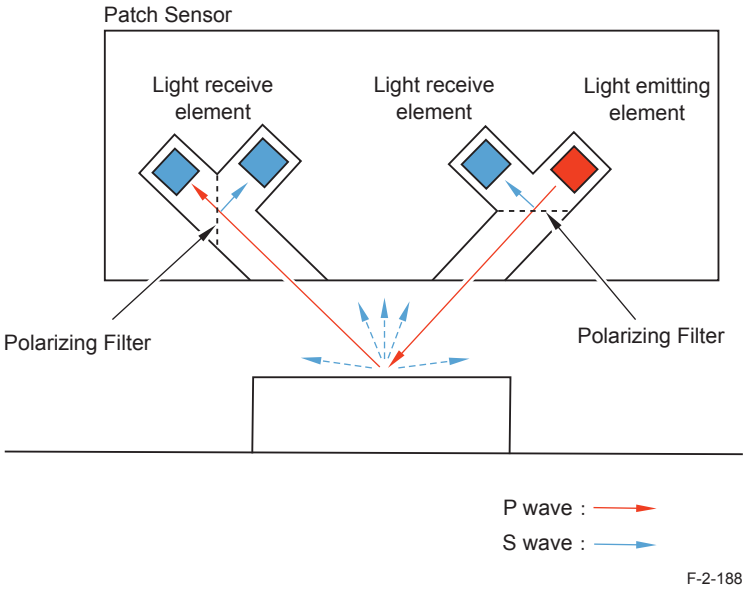
<Execution timing>

- At the time of multiple initial rotations (Fixing temperature is less than100 deg C)
- At the time of automatic adjustment of last rotation.

Configuration of the Patch Sensor

Light emitted from the LED is reflected in the patch image and detected by a light reception element.

The light is filtered into P-wave and S-wave by the polarizing filter so that light intensity is detected by the light-received elements.



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Adjustment of the light intensity

Light intensity is sequentially switched, using the ITBHP sensor (PS5) as a trigger, so that the P-wave output becomes 3.5V.

Sampling of the ITB Base

To prevent uneven reflection in the circumference of the ITB, sampling of the ITB base in one circumference is performed by the patch sensor in the condition where no patch is formed. When an image is read by the patch, correction is performed based on the result of sampling of the ITB base.

<Related Service Mode>

COPIER>FUNCTION>MISC-P>PT-LPADJ> execute patch light intensity correction and base correction

COPIER>DISPLAY>DENS>P-LED-DA: display patch sensor LED light intensity

COPIER>DISPLAY>DENS>P-SENS-P: display base light intensity (P-wave) at the time of ATR control

COPIER>DISPLAY>DENS>P-SENS-S: display base light intensity (S-wave) at the time of ATR control

Drum Idling

Drum idling is performed to remove discharge products generated on the drum surface.

<Timing of Execution>

At the time of multiple initial rotations (Fixing temperature is less than100 deg C/Total 2000-sheet from previous D-half control)

<Details of the Control>

The machine rotates the drum without applying high voltage to the drum. Discharge products on the drum are scraped by the drum cleaning blade.

<Related Service Mode>

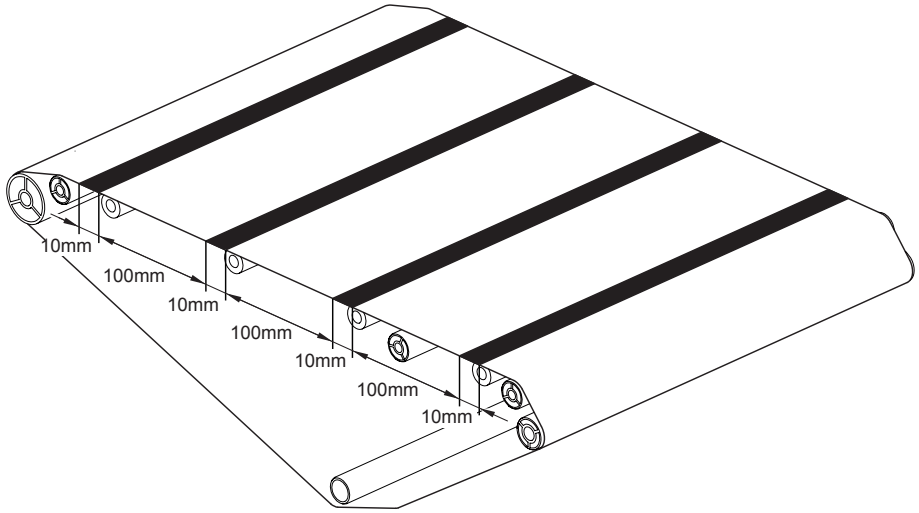
COPIER>FUNCTION>MISC-P>MAIN-DRV: user mode “Drum Cleaning”, adjusting the cleaning time

Black band sequence

When printing continuously under the condition which toner is not delivered to ITB Cleaning Blade, ITB Cleaning Blade might be flipped over, so the toner is transferred on the ITB (width = whole ITB width; length = 10mm solid black band; 2 ITB cycles with 100mm interval) and supplied to the ITB Cleaning Blade.

<Execution timing>

- At the time of automatic adjustment of paper interval (For every 200 images)
- At the time of automatic adjustment of last rotation (Fixing temperature is less than100 deg C/Total 2000-sheet from previous D-half control)



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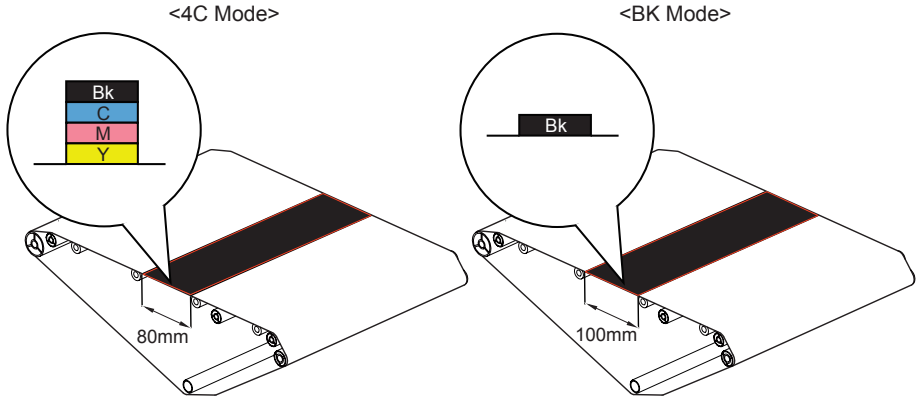
<Related Service Mode>
COPIER>FUNCTION>CLEANING>TBLT-CLN: ITB cleaning

OHP Black Band Sequence

When the surface acting agent applied to the OHP surface is attached to the ITB during OHP printing, the transfer efficiency in the attached area decreases. To prevent this problem, toner (Width: Entire ITB length, Length: 80mm in 4C mode, 120mm in Bk mode) is supplied to the ITB cleaning blade, and the acting agent and the toner are scraped by the ITB cleaning blade.

<Timing of Execution>

- Last rotation after more than 15 OHPs are printed on an accumulation basis
- Paper interval when 15 sheets are printed continuously after the previous execution



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<Related Service Mode>
COPIER>OPTION>FNC-SW> OHP-PTH> setting the threshold (the number of transparency (OHT) sheets) for ITB cleaning

Low Duty Discharge Sequence

This is performed to prevent a decrease of density caused by an increase in the toner potential volume when low duty images are continuously printed.

<Timing of Execution>

- At last rotation or paper interval after printing specified numbers* of jobs which average image Duty is lower than the specified value (default: 1%).
  (Counting of the number of prints starts at the point when the conditions are satisfied. When the number of prints reached the specified prints (20 prints), the job is discontinued and the discharge sequence is executed.): A
  * It differs depending on the average image duty.

  <Examples>
  When the average image Duty is 0.01%, execute toner ejection sequence at 100-sheet.
  When the average image Duty is 0.5%, execute toner ejection sequence at 200-sheet.
  When the average image Duty is 1.0% and higher, operation is not executed.

- If the condition to execute discharging of a color is almost satisfied when the discharge sequence is executed for another color, the sequence is executed for the two colors at the same time. : B

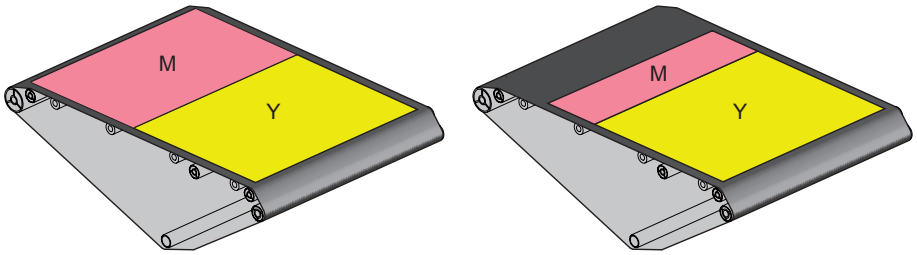
<Details of the Control>

When the above-mentioned conditions are satisfied, toner in a corresponding color is transferred to the ITB.

- In the case of A, an A4-size patch is transferred (With: 297mm, Length: 210mm).
- In the case of B, an A4 half-size patch is transferred (Width: 297mm, Length: 205mm).

<In case of A>
In case Y/M is A

<In case of B>
In case Y is A and M is B



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<Related Service Mode>

COPIER>OPTION>FNC-SW> DEVL-VTH: setting of threshold for toner discharge video count

COPIER>OPTION>FNC-SW>DEVL-PTH: setting of threshold (the number of sheets) for toner discharge

Servicing

Periodically Replaced Parts

Parts Name	Parts Number	Piece	Expected life	Parts Counter
Primary Charging Wire	FL2-8915	1	150,000 sheets	PRM-WIRE
Primary Charging Wire Cleaniner 1	FL2-7750	1	150,000 sheets	PRM-CLN
Primary Charging Wire Cleaniner 2	FL3-7560	1	150,000 sheets	PRM-CLN2
Pre-transfer Charging Wire	FL2-8807	1	150,000 sheets	PO-WIRE
Pre-transfer Charging Wire Cleaniner 1	FL2-7750	1	150,000 sheets	PO-CLN
Pre-transfer Charging Wire Cleaniner 2	FL3-7560	1	150,000 sheets	PO-CLN2
Grid Plate	FC8-2295	1	150,000 sheets	PRM-GRID
Grid cleaning pad	FL3-4090	1	150,000 sheets	GRID-PAD
Primary Charging Assembly	FM0-0892	1	1,400,000 sheets	PRM-UNIT
Pre-transfer Charging Assembly	FM0-0862	1	1,400,000 sheets	PO-UNIT

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Consumable Parts

Parts Name	Parts Number	Piece	Expected life		Parts Counter
Developing Assembly(Y)	FM0-2706	1	500,000 sheets		DV-UNT-Y
Developing Assembly(M)	FM0-2707	1	500,000 sheets		DV-UNT-M
Developing Assembly(C)	FM0-2708	1	500,000 sheets		DV-UNT-C
Developing Assembly(Bk)	FM2-2709	1	500,000 sheets		DV-UNT-B
Drum Cleaning Blade (Bk)	FC8-2281	1	A	530,000 sheets	CLN-BLD
			B	550,000 sheets	
			C	500,000 sheets	
Drum Cleaning Scoop-up Sheet (Bk)	FL2-8652	1	A	530,000 sheets	SU-SHT-K
			B	550,000 sheets	
			C	500,000 sheets	
Edge Scraper 1 (Bk)	FL2-8653	1	A	530,000 sheets	EDGE-F-K
			B	550,000 sheets	
			C	500,000 sheets	
Edge Scraper 2 (Bk)	FL2-8654	1	A	530,000 sheets	
			B	550,000 sheets	
			C	500,000 sheets	
ITB	FM4-6624	1	550,000 sheets		TR-BLT
ITB Cleaning Blade	FL3-4920	1	200,000 sheets		ITB-BLD1
Primary Transfer Roller	FC0-2331	4	550,000 sheets		1TR-RL-Y/M/C/K
Secondary Transfer Inner Roller	FC7-9325	1	550,000 sheets		2TR-INRL
ITB Internal Scraper Holder	FL3-9149	1	550,000 sheets		ITB-SCRP
Secondary Transfer Outer Roller	FL3-8693	1	550,000 sheets		2TR-ROLL
Secondary Transfer Static Eliminator	FM3-9841	1	550,000 sheets		TR-STC-H
Waste Toner Container	FM0-4545	1	50,000*1		WST-TNR

*1 Replace it when the waste toner full alarm is displayed.

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A : imaga RUNNER ADVANCE C9280 PRO/C7280i

B : imaga RUNNER ADVANCE C9270 PRO/C7270/C7270i

C : imaga RUNNER ADVANCE C7260 PRO/C7250i

Periodical Servicing List

CL: Cleaning, LU: Lubrication, AD: Adjustment, CH: Check

No.	Parts/Area Name	Piece	Operation Interval					Remarks
			Installation	150,000 sheets	500,000 sheets	As needed	Others	
1	Developing Assembly Cover (Color)	Each 1		CL				Clean it with lint-free paper.
2	Developing Assembly Cover (Bk)	1		CL				Clean it with lint-free paper.
3	Pre-fixing Feed Belt	1					CL	When Replacing the Secondary Transfer Outer Roller Clean it with alcohol and lint-free paper.
4	Post-secondary Transfer Sensor	1					CL	When Replacing the Secondary Transfer Outer Roller Clean it with blower brush.
5	Registration Sensor	1					CL	When Replacing the Secondary Transfer Outer Roller Clean it with blower brush.
6	Paper Width Detection Sensor	1					CL	When Replacing the Secondary Transfer Outer Roller Clean it with blower brush.
7	ITB Drive Roller	1					CL	When Replacing the ITB/Secondary Transfer Inner Roller Clean it with alcohol and lint-free paper.
8	ITB Steering Roller	1					CL	When Replacing the ITB/Secondary Transfer Inner Roller Clean it with alcohol and lint-free paper.
9	Post Upper Duct	1					CL	When Replacing the Pre-transfer Charging Wire Clean it with alcohol and lint-free paper.
10	Shield Plate (Primary Charging Assembly)	1					CL	When Replacing the Primary Charging Wire Clean it with alcohol and lint-free paper.
11	Shield Plate (Pre-transfer Charging Assembly)	1					CL	When Replacing the Pre-transfer Charging Wire Clean it with alcohol and lint-free paper.
12	Developing Assembly Under The Toner Rest Base	1					CL	When Replacing the Photosensitive Drum Unit (Bk) Clean it with alcohol and lint-free paper.
13	Catch Sheet	1					CL	When Replacing the Photosensitive Drum CRG (Color) Clean it with alcohol and lint-free paper.
14	Drum Heater Sliding Portion	1					CL	When Replacing the Photosensitive Drum Unit (Bk) Clean it with alcohol and lint-free paper.

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When Replacing Parts

No.	Parts Name	Processing at Parts Replacement
1	Primary Charging Wire	1) Execution of Charging Wire cleaning (COPIER>FUNCTION>CLEANING>WIRE-EX) 2) Execution of potential control (COPIER>FUNCTION>DPC>DPC) 3)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
2	Grid Plate	1) Execution of Charging Wire cleaning (COPIER>FUNCTION>CLEANING>WIRE-EX) 2) Execution of potential control (COPIER>FUNCTION>DPC>DPC) 3)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
3	Primary Charging Assembly	1) Test print for checking the grid height is output to check the density difference between front and back sides. 2) In case of uneven density: Adjust with Adjustment Screw. In case of even density: Go to Procedure 3). 3) Execution of Charging Wire cleaning (FUNCTION > CLEANING > WIRE-EX) 4) Execution of potential control (COPIER>FUNCTION>DPC>DPC) 5)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
4	Pre-transfer Charging Assembly	1) Execution of Charging Wire cleaning (COPIER>FUNCTION>CLEANING>WIRE-EX) 2)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
5	Pre-transfer Charging Wire	1) Execution of Charging Wire cleaning (COPIER>FUNCTION>CLEANING>WIRE-EX) 2)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
6	Drum Unit	1) Disable (OFF) the warm-up rotation. (COPIER>FUNCTION>INSTALL>AINR-OFF) 2) Turn OFF the main power switch. (Replace the Drum.) 3) Turn ON the main power switch. 4) Forcible execution of Drum replacement mode (COPIER>FUNCTION>DPC>DRMRSETY/M/C/K) 5) Enable (ON) the warm-up rotation. (COPIER>FUNCTION>INSTALL>AINR-OFF) 6)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
7	Developing Assembly	1) Disable (OFF) the warm-up rotation. (COPIER>FUNCTION>INSTALL>AINR-OFF) 2) Execution of initial installation mode for Developing Assembly (COPIER>FUNCTION>INSTALL>INISET-Y/M/C/K 3)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
8	When replacing the Potential Sensor and Potential Control PCB	1)Execution of Potential Sensor offset adjustment using the dedicated tool (COPIER > FUNCTION > DPC > OFST) 2)Creation of ITB edge profile (COPIER>FUNCTION>INSTALL>INIT-ITB)
9	ITB	1) Execution of ITB edge profile/Steering Roller neutral position measurement mode (COPIER>FUNCTION>INSTALL>INIT-ITB)
10	Primary Transfer Roller	Execute the primary transfer ATVC (COPIER>FUNCTION>MISC-P>1ATVC-EX)
11	Patch Sensor	1) Enter patch sensor alpha value.(COPIER>OPTION>IMG-MCON>P-ALPHA) 2) Adjustment of Patch Sensor light intensity (COPIER > FUNCTION >MISC-P > PT-LPADJ)
12	Waste Toner Container	1) Install a new Waste Toner Container.
13	Waste Toner Sensor	1) Install the Waste Toner Container.

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Major Adjustments

Nothing particularly

Fixing System

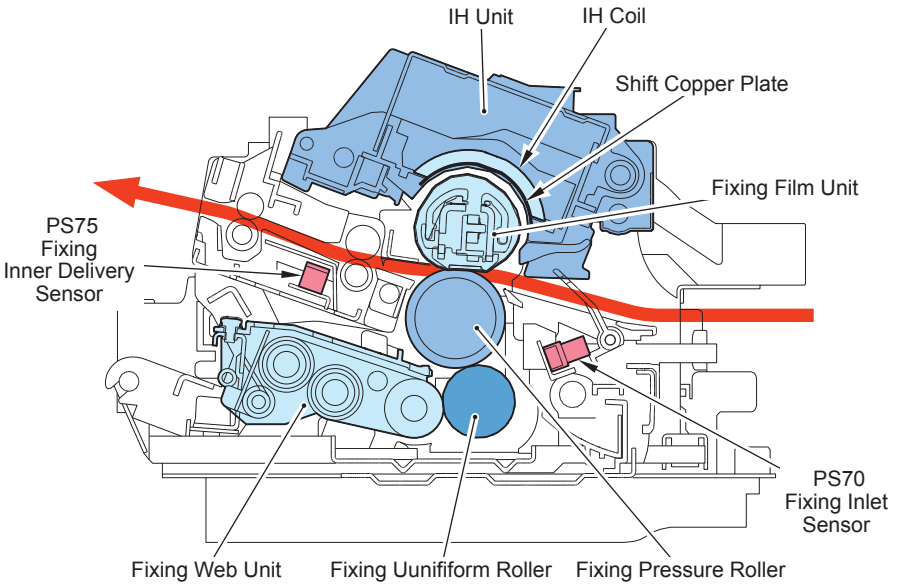
Overview

Overview

By employing the first-in-class IH-ODF (Induction Heating On Demand Fixing Unit), the fastest-in-class warm-up time and the top runner of TEC value been achieved.

IHODF

Heating the Fixing Film of low heat capacity with the IH (induction heating) method has enabled the machine to shorten the warm-up time and achieve the TEC value top runner.



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Specifications

Item		Function/method
Fixing method		IH-ODF fixing
Fixing speed		iR-ADV C9280 PRO / 7280i • 321 mm/sec (1/1 speed) • 160 mm/sec (1/2 speed) • 107 mm/sec (1/3 speed) • 93.3 mm/sec (1/3 slow speed)
		iR-ADV C7270 PRO / C7270 / C7270i / C7260 / C7260i • 280 mm/sec (1/1 speed) • 140 mm/sec (1/2 speed) • 93.3mm/sec (1/3 speed) • 32mm/sec (Standby)
Fixing heater	Fixing Film	IH Heater
Control temperature	Fixing Film	Fixing temperature (Plain paper 1, environment temperature at 23 deg C) - 174 deg C
Electrical power for heating	Fixing Film	1135W to 1500W (It differs according to the region. See the following for region.)
Thermistor	Fixing Film	Main Thermistor (contact)
		Sub Thermistor 1 (contact)
		Sub Thermistor 2 (contact)
		Edge Thermistor 1 (contact)
		Edge Thermistor 2 (contact)
Thermoswitch	Pressure Roller	1 pc (non-contact)
Separation mechanism	Fixing Film	Separation plate (non-contact)
Disengage mechanism		Yes
Cleaning mechanism		Yes
Paper Wrapping Prevention Control		Yes
Fixing/pressure roller displacement control		Yes
Edge heat rising prevention control		Yes
Down sequence control		Yes
Fixing loop control		Yes
Protective Function		Yes(Detection by the Thermistor and the Thermo Switch)

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Electric power for heating during printing differs according to the model.

Time	Model	Country
1365 W (100 V machine)	imageRUNNER ADVANCE C9280 PRO	JP
1500 W (200 V machine)	imageRUNNER ADVANCE C9280 PRO	US, CA, LTN, EU, AU, SG, CIPL, HK, CN, TW, KR
	imageRUNNER ADVANCE C7280i	EU
	imageRUNNER ADVANCE C9270 PRO	US, CA, LTN, AU, SG, CIPL, HK, CN, TW,
	imageRUNNER ADVANCE C7270	US, CA, LTN, EU, AU, SG, CIPL, HK,
	imageRUNNER ADVANCE C7270i	EU
1135 W (100 V machine)	imageRUNNER ADVANCE C9270 PRO	JP
	imageRUNNER ADVANCE C7270	JP
	imageRUNNER ADVANCE C7260	JP
1248 W (120 V machine)	imageRUNNER ADVANCE C7270	US, CA, LTN, EU, AU, SG, CIPL, HK,
	imageRUNNER ADVANCE C7260	US, CA, LTN, AU, SG, CIPL, HK, KR
1336 W (200 V machine)	imageRUNNER ADVANCE C7260	US, CA, LTN, AU, SG, CIPL, HK, KR
	imageRUNNER ADVANCE C7260i	EU

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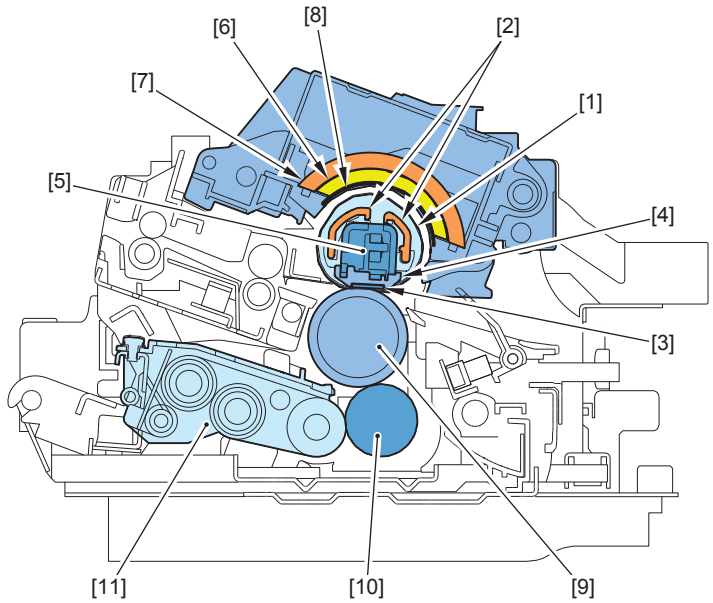
Parts Configuration

Cross View



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Parts name		Function/method
Fixing Film Unit		
1	Fixing Film	30 mm dia. (Ni + silicon rubber + PFA tube)
2	Inner Core	To increase the heating efficiency of the Fixing Film
3	Nip Pad	To form nip surface
4	Nip Pad Holder	To form nip surface
5	T Stay	To form nip surface
IH Unit		
6	IH Coil	To heat the Fixing Film
7	Outer Core	To increase the heating efficiency of the Fixing Film
8	Shift Copper Plate	To reduce temperature rise at non paper-feed area
IH Unit		
9	Pressure Roller	dia. 30 mm (countercrown level: 200 micro meter)
10	Heat Soaking Roller	dia. 22 mm (AL + PFA coated) To reduce temperature rise at non paper-feed area
11	Web Unit	Cleaning the Heat Soaking Roller

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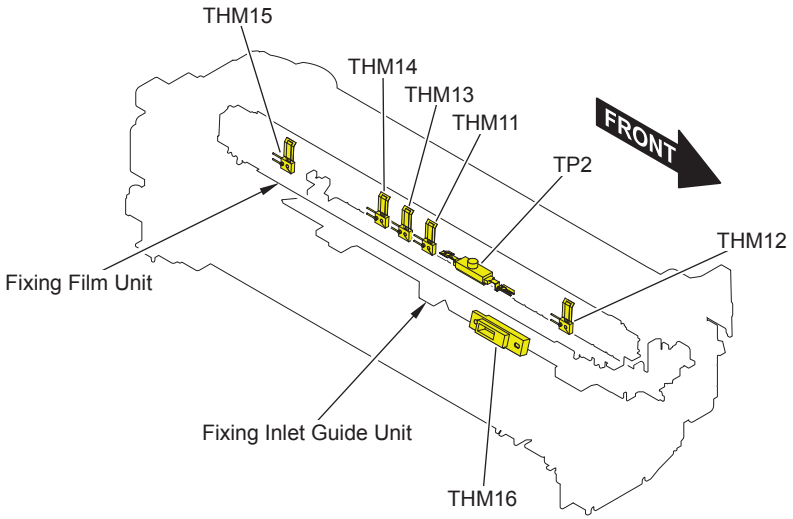
● Thermistor, Thermoswitch



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Symbol	Parts name	Function/method
Fixing Film Unit		
THM11	Fixing Main Thermistor	Contact type (temperature control, overheating detection)
THM12	Fixing Edge Front Thermistor	Contact type (overheating detection)
THM13	Fixing Sub Thermistor 1	Contact type (overheating detection)
THM14	Fixing Sub Thermistor 2	Contact type (overheating detection)
THM15	Fixing Edge Rear Thermistor	Contact type (overheating detection)
TP2	Fixing Thermoswitch	Non-contact type (253 deg C)
Pressure Roller		
THM16	Pressure Roller Thermistor	Non-contact type (temperature control)

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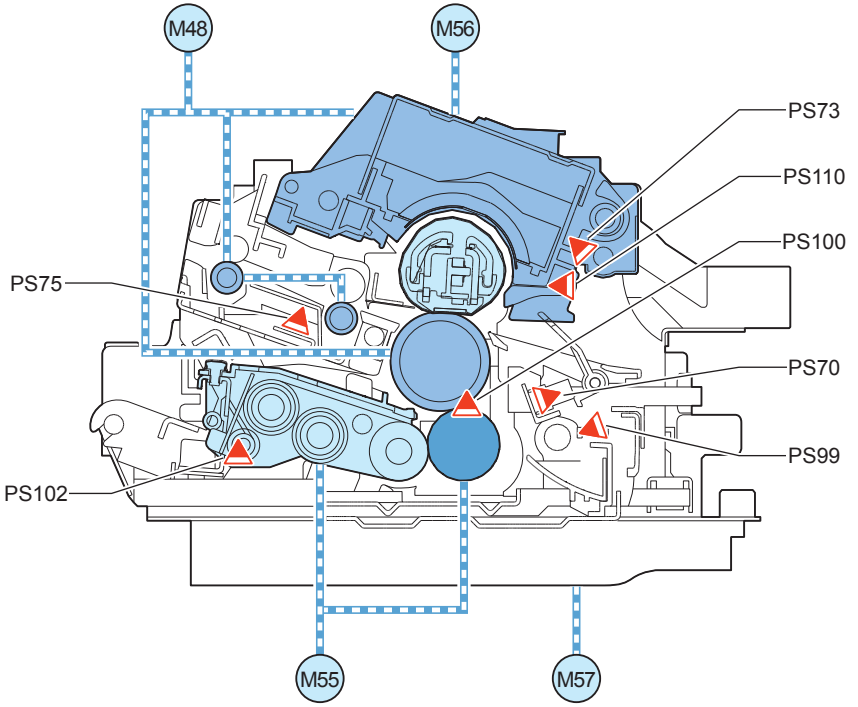
■ Drive Configuration



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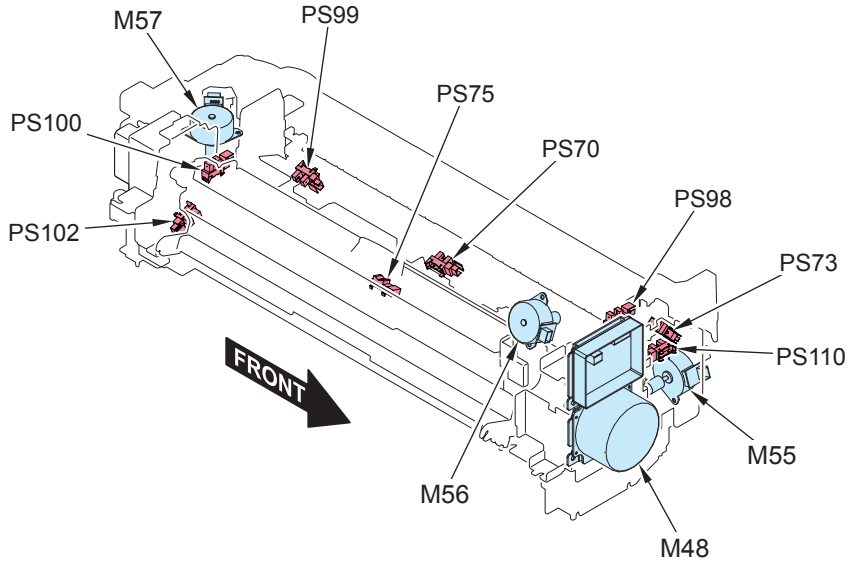

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Symbol	Parts name	Function/method
M48	Fixing Motor	To control the drive of Fixing/Pressure Roller
M55	Heat Soaking Roller disengagement or engagement / Web Motor	To control the drive of Heat Soaking Roller/Web
M56	Outer Core Shift/Shift Copper Plate Motor	To control the drive of Outer Core Shift/Shift Copper Plate
M57	Reciprocation Motor	To control the drive of Fixing Recipro.
PS70	Fixing Inlet Sensor	To detect fixing inlet jam
PS73	Fixing Pressure Engagement/ Disengagement Sensor	To detect Engagement/Disengagement position of Fixing Film
PS75	Fixing Inner Delivery Sensor	To detect fixing outlet jam
PS98	Outer Core Shift HP Sensor	To detect Outer Core position
PS99	Heat Soaking Roller HP Sensor	To detect Heat Soaking Roller Engagement/ Disengagement position
PS100	Reciprocation HP Sensor	To detect Fixing Unit Reciprocation position
PS102	Web leve sensor	To detect Web leve
PS110	Semi-pressure Sensor	To detect Fixing Film semi-engaged.position

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Controls

Overview

No.	Controls/Function	Overview
1	Heat control	IH (Induction Heating) method is used.
2	Temperature Control	Temperature is controlled on the basis of a target temperature calculation for each environment temperature according to the target control temperature table as a standard.
3	Temperature control flying start	This control starts initial rotation of the image formation system when temperature reaches the flying-start temperature (which is slightly lower than the target temperature). This is to minimize FPOT in consideration of the time that the paper reaches the Fixing Unit after the initial rotation of the image formation system starts.
4	Paper interval control	In case a paper interval is longer than the specified time, the paper interval temperature control and the paper interval stop control are executed according to the paper interval time.
5	Fixing Film engagement/ disengagement control	To improve jam removability and prevent deformation of the Pressure Roller, the Fixing Film is put in a disengaged state, or in a semi-engaged state in the case of envelops with 110 mm or smaller width.
6	Outer Core and Copper Plate shift control	To prevent overheating at non paper-feed area, the position of Copper Plate and the number of Outer Cores to be raised are controlled at job start-up and during paper feeding according to the paper width and the converted number of sheets.
7	Heat Soaking Roller engagement/ disengagement and web feeding control	To prevent overheating at non paper-feed area, the Heat Soaking Roller is engaged with the Pressure Roller during paper feeding at continuous jobs with a specific number of prints or more.
8	Reciprocation control	As a countermeasure against scratches on the edge of Fixing Film, the whole Fixing Unit is reciprocated during paper feeding.
9	Extra-large paper productivity up sequence	When feeding extra large size plain paper and recycled paper with certain models, the productivity is increased in stages according to the elapsed time since starting paper-feeding.
10	Fixing cleaning control	As a countermeasure against scratches on the edge of the Fixing Film, cleaning is performed by feeding the web with the Heat Soaking Roller engaged when a certain number of sheets were fed while the Heat Soaking Roller was disengaged.
11	Paper dust removal control	When continuously feeding paper while the Heat Soaking Roller is engaged, it causes paper dust accumulated at the front side of the Heat Soaking Roller and the web. Therefore, this control feeds the web longer to remove paper dust.
12	Mixed media/width control	The control for mixed media or media with different paper widths
13	Down sequence	There are the overheating down sequence, the down sequence to prevent temperature rise of the Core Shift Motor, and the low temperature down sequence.
14	Fixing Internal Fan control	It executes ON/OFF control of the Center Fan and the Edge Fan depending on the condition.
15	Fixing control when feeding envelope	Although envelops are normally fed at the same control temperature and feeding speed as those of heavy paper 1 and 2, envelops with 110 mm or smaller width are fed at the same feeding speed as that of plain paper 1 and 2 under lowered pressure.
16	Paper Wrapping Prevention Control	This control prevents failure of the Fixing Assembly caused by paper wrapping around the Fixing Film and the Pressure Roller.
17	Heat Film Unit engagement/semi-engagement/ disengagement control	To increase jam removability and improve feeding performance of envelopes, the Heat Film and the Pressure Roller are engaged/ semi-engaged/disengaged as needed
18	Protection function	Function to prevent damages to the machine

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Heat Control

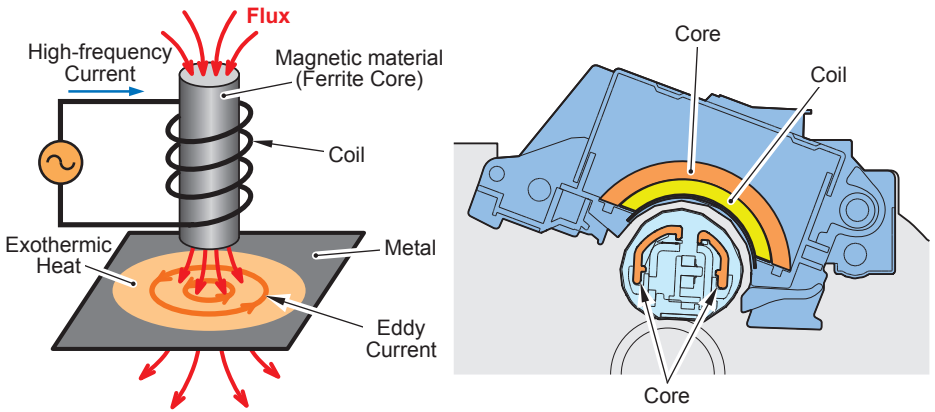
Overview

This machine uses the following heating method to enable high-speed full color print despite the size of an office machine.

- Fixing Film: IH (Induction Heating) method

IH (Induction Heating) method

This is a method to self-heat the metal by electromagnetic induction.
Applying high-frequency AC power to the coil generates magnetic flux around it. Eddy current flows in the metal as the magnetic flux passes through the metal, and the current flow in the metal generates heat (Joule heat) in the metal part. This is called induction heating.
The Fixing Film of this machine has its metal part coated with silicone rubber so that the Fixing Film is self-heated using this induction heating.



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Temperature Control

Overview

Temperature is controlled on the basis of a target temperature calculation for each environment temperature according to the target control temperature table as a standard

- Temperature control level
- Environment temperature
- Process speed
- Region

Control description

	Standby temperature	Level 0 temperature control	Level 1 temperature control	Level 2 temperature control	Level 3 temperature control	Paper Weight (g)
	Fixing Film temperature	Fixing Film temperature	Fixing Film temperature	Fixing Film temperature	Fixing Film temperature	
Thin paper	179	169	184	177	177	52 to 63
Plain paper 1		170	194	187	187	64 to 81.9
Plain paper 2		185	199	192	192	82 to 105
Recycled paper 1		174	189	182	182	64 to 81.9
Recycled paper 2		180	194	187	187	82 to 105
Heavy paper 1		175	185	185	185	106 to 150
Heavy paper 2		175	185	185	185	151 to 220
Heavy paper 3		170	180	180	180	221 to 256
Heavy paper 4		170	180	180	180	257 to 300
Coated paper 1A		166	186	186	186	126 to 128
Coated paper 1B		166	186	186	186	129 to 150
Coated paper 1C		166	186	186	186	151 to 180
Coated paper 2		166	186	186	186	181 to 220
Coated paper 3		166	186	186	186	221 to 256
Coated paper 4		166	186	186	186	257 to 300
Coated paper 5A		166	186	186	186	105 to 128

	Standby temperature	Level 0 temperature control	Level 1 temperature control	Level 2 temperature control	Level 3 temperature control	Paper Weight (g)
	Fixing Film temperature	Fixing Film temperature	Fixing Film temperature	Fixing Film temperature	Fixing Film temperature	
Coated paper 5B	179	166	186	186	186	129 to 150
Coated paper 5C		166	186	186	186	151 to 180
Transparency		176	186	186	186	-

Reference target temperature table (15 deg C environment, PS280, JPN)

Control description

This control changes control temperature according to the paper position and the converted number of sheets to keep a constant amount of heat applied to the paper.

	Temperature control level
From the start of temperature control to the paper type determination	Standby temperature Control
From the paper type determination to one second before the top paper reaches the fixing nip	Level 0 control temperature
From one second before the top paper reaches the fixing nip until the converted number of sheets is 999	Level 1 control temperature
Converted number of sheets: From 1000 to 1499	Level 2 control temperature
Converted number of sheets: 1500 or more	Level 3 control temperature

T-2-70

Environment temperature

The reference temperature (temperature control table of 15 deg C environment, PS280, JPN) is offset according to the environment temperature.

Other than plain paper 1

- When the environment temperature is lower than 7.5 deg C
  The control temperature in the 7.5 deg C environment is used.
- When the environment temperature is 7.5 deg C or higher and 30.0 deg C or lower
  The target temperature is calculated by the formula below.

  [The control temperature for environment temperature x] =
  [Reference temperature] - ([Environment temperature x] - 15) x [Temperature coefficient by paper type] ... (Formula (1))

Temperature coefficient by paper type

Thin, Plain, Recycled	Heavy, Coated, Transparency
1.00	1.33

T-2-71

- When the environment temperature exceeds 30.0 deg C
  The control temperature in the 30.0 deg C environment is used.

Level 0 and 1 temperature controls for plain paper 1

- When the environment temperature is lower than 7.5 deg C
  The control temperature in the 7.5 deg C environment is used.
- When the environment temperature is 7.5 deg C or higher and lower than 17.5 deg C
  The control temperature with linear interpolation performed between the control temperature in the 7.5 deg C environment in Formula (1) and the control temperature in the 17.5 deg C environment in Formula (2) (which is described later) is used.
- When the environment temperature is 7.5 deg C or higher and 24.0 deg C or lower The target temperature is calculated by the formula below.

  [The control temperature for environment temperature x] =
  [Reference temperature] - ([Environment temperature x] - 15) x [Temperature coefficient by paper type] ... (Formula (2))

Low temperature offset

The A4 width or smaller	Larger than the A4 width
16	8

- When the environment temperature exceeds 24.0 deg C
  The control temperature in the 24.0 deg C environment is used.

*For Level 0 temperature control with the A4 width or smaller only, 5 deg C is added to the target temperature calculated above.

* In any environment, the target temperature calculated in Formula (1) is used when the target temperature calculated in Formula (1) is lower.

Process speed (PS)

For the PS321mm/s model (image RUNNER ADVANCE C9280 PRO/C7280i), the target temperature is set 4 deg C higher than that of the PS280mm/s model (iR-ADV C7270 PRO/C7270/C7270i/C7260/C7260i).

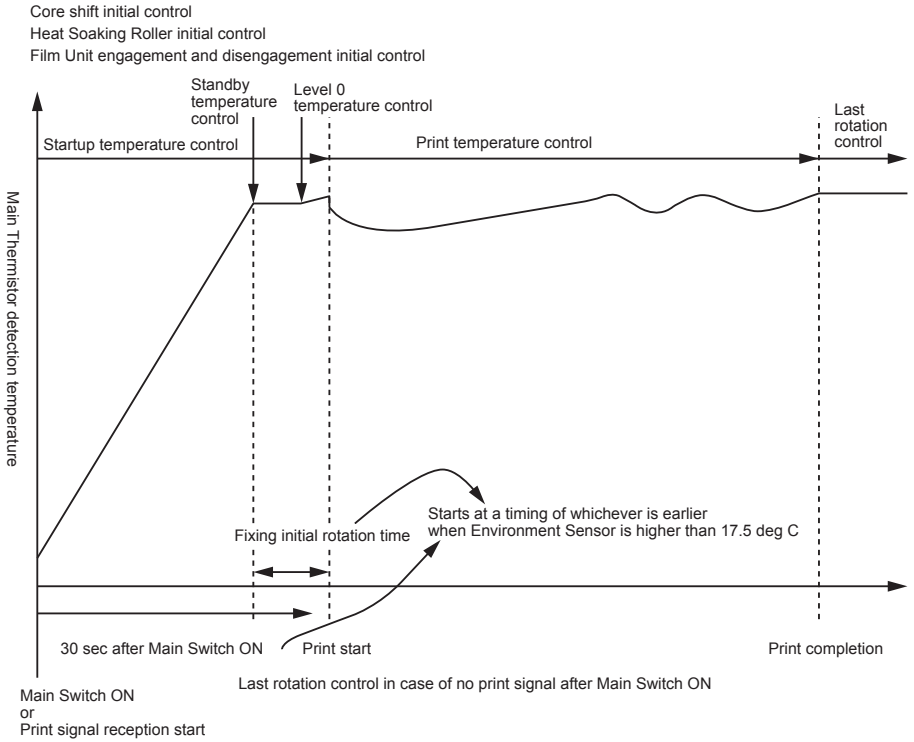
Note that the control temperature of coated paper 1 to 4 (93.3 mm/s) with the same PS uses the same control temperature of the PS280mm/s model.

Region

To support paper with poor fixing performance used outside Japan, the target temperature of plain paper 2 for the USA and EUR is set 8 deg C higher.

Temperature control sequence startup operation

The following shows the temperature control sequence at startup.



F-2-198

Temperature control flying start

This control starts initial rotation of the image formation system when temperature reaches the flying-start temperature (which is slightly lower than the target temperature). This is to minimize FPOT in consideration of the time that the paper reaches the Fixing Unit after the initial rotation of the image formation system starts.
The flying-start temperature is calculated as follows according to the environment temperature.

- When the environment temperature is lower than 7.5 deg C
  The flying-start temperature in the 7.5 deg C environment is used.
- When the environment temperature is 7.5 deg C or higher and 30.0 deg C or lower
  The flying-start temperature is calculated by the formula below.

  [Flying-start temperature] =
  [Flying-start temperature in the 15 deg C environment] - ([Environment temperature] - 15) x [Environment temperature coefficient]

The flying-start temperature in the 15 deg C environment

iR-ADV C9280 PRO/C7280i	iR-ADV C7270 PRO/C7270/ C7270i/C7260/C7260i
164 deg C	167 deg C

T-2-72

Environment temperature coefficient

iR-ADV C9280 PRO/C7280i	iR-ADV C7270 PRO/C7270/ C7270i/C7260/C7260i
1.29	1.20

- When the environment temperature exceeds 30.0 deg C T-2-73
  The flying-start temperature in the 30.0 deg C environment is used.

Paper interval control

In case a paper interval is longer than the specified time, the paper interval temperature control and the paper interval stop control are executed according to the paper-interval time.

Paper interval time	Paper interval control
0 sec or more to less than 2 sec	None
2 sec or more to less than 10 sec	Control temperature is reduced.
10 sec or more to less than 16 sec	Temperature control is stopped for 1.9 sec.
16 sec or more to less than 22 sec	Temperature control is stopped for 5.7 sec.
22 sec or more to less than 32 sec	Temperature control is stopped for 9.8 sec.
32 sec or more to less than 46 sec	Temperature control is stopped for 17.3 sec.
46 sec or more to less than 60 sec	Temperature control is stopped for 28.9 sec.
60 sec or more	Temperature control is stopped for 41.2 sec.

T-2-74

Paper interval temperature control

When paper interval time is 2 sec or more and less than 10 sec, the target control temperature is reduced at paper interval.
To be specific, when the preceding sheet passes through the Fixing Unit, the target

temperature is changed to the Level 0 control temperature, which is specified based on the paper type. The temperature is recovered to the normal target temperature 1 second before the succeeding sheet comes into the fixing nip.

Paper interval stop control

When paper interval time is 10 sec or more, the temperature control according to the paper interval time.
according to the paper interval time. When the temperature control is stopped, the machine is at standby state while the Fixing Motor is stopped and the Film is engaged. The target temperature is specified according to the succeeding sheet upon passage of time during which temperature control is stopped, and then temperature control is resumed.

Fixing Film engagement/disengagement control

To improve jam removability and prevent deformation of the Pressure Roller, the Fixing Film is put in a disengaged state, or in a semi-engaged state in the case of envelops with 110 mm or smaller width.

Timing to shift to the engaged state

- At Power-on
- At recovery from sleep state
- At recovery from an error or jam

Timing to shift to the disengaged state

- When an error or jam occurs
- When shifting to sleep state
- At power-off
- At front Cover open

Outer Core and Copper Plate shift control

To prevent overheating at non paper-feed area, the position of Copper Plate and the number of Outer Cores to be raised are controlled at job start-up and during paper feeding according to the paper width and the converted number of sheets.
The position of Copper Plate is determined according to the following table on the basis of the power voltage, paper type, paper width and the converted number of sheets.
* It is configured such that moving the Copper Plate raises an appropriate number of Outer Cores according to the position of the Copper Plate

200V

Plain paper 2

Distance from paper edge to Copper Plate b(mm)		Paper width (mm)				
		330 to	320 to	265 to	210 to	155 to 100
The converted number of sheets	0 to	15	15	15	15	15
	10 to	15	12	12	12	12
	50 to	12	9	9	9	9
	150 to	12	6	5	5	5
	500 to	12	3	5	3	3

T-2-75

Level 1 low temperature mode

Distance from paper edge to Copper Plate b(mm)		Paper width (mm)				
		330 to	320 to	265 to	210 to	155 to 100
The converted number of sheets	0 to	15	15	15	15	15
	10 to	15	14	14	14	14
	50 to	12	11	11	11	11
	150 to	12	9	9	9	9
	500 to	12	9	9	9	6
	1000 to	12	3	7	5	5

T-2-76

Other paper types

Distance from paper edge to Copper Plate b(mm)		Paper width (mm)				
		330 to	320 to	265 to	210 to	155 to 100
The converted number of sheets	0 to	15	15	15	15	15
	10 to	15	14	14	14	14
	50 to	12	11	11	11	11
	150 to	12	3	7	7	7
	500 to	12	3	7	5	5

T-2-77

● 100V

Plain paper 2

Distance from paper edge to Copper Plate b(mm)		Paper width (mm)				
		330 to	320 to	265 to	210 to	155 to 100
The converted number of sheets	0 to	15	15	15	15	15
	10 to	15	12	14	14	14
	50 to	12	11	11	11	11
	150 to	12	9	7	7	7
	500 to	12	6	7	5	5

T-2-78

Level 1 low temperature mode

Distance from paper edge to Copper Plate b(mm)		Paper width (mm)				
		330 to	320 to	265 to	210 to	155 to 100
The converted number of sheets	0 to	15	15	15	15	15
	10 to	15	15	15	15	15
	50 to	12	13	13	13	13
	150 to	12	9	9	9	9
	500 to	12	9	9	9	9
	1000 to	12	3	7	5	5

T-2-79

Other paper types

Distance from paper edge to Copper Plate b(mm)		Paper width (mm)				
		330 to	320 to	265 to	210 to	155 to 100
The converted number of sheets	0 to	15	15	15	15	15
	10 to	15	15	15	15	15
	50 to	12	13	13	13	13
	150 to	12	3	9	9	9
	500 to	12	3	9	7	7

T-2-80

* The control temperature in low temperature mode becomes the control temperature in high temperature mode from the level 2 temperature control or later; therefore the Cu shift table becomes uniformly the same as that of the high temperature mode.

■ Heat Soaking Roller engagement/disengagement and web feed controls

To prevent overheating at non paper-feed area, the Heat Soaking Roller is engaged with the Pressure Roller during paper feeding at continuous jobs with a specific number of prints or more.

In addition, when the Heat Soaking Roller is engaged, the web feed control is executed to clean the Heat Soaking Roller.

● Heat Soaking Roller engagement timing

The Heat Soaking Roller is engaged at the point when the converted number of sheets exceeds the specified value.

The converted number of sheets to make the Heat Soaking Roller engaged is determined according to the following table.

	Heat Soaking Roller engagement timing (the converted number of sheets)	Paper Weight (g)
Thin paper	27	52 to 63
Plain paper 1	27	64 to 90
Plain paper 2	27	91 to 105
Recycled paper 1	27	64 to 90
Recycled paper 2	27	91 to 105
Heavy paper 1	27	106 to 150
Heavy paper 2	27	151 to 220
Heavy paper 3	Not engaged	221 to 256
Heavy paper 4	Not engaged	257 to 300
Coated paper 1A	Not engaged	106 to 128
Coated paper 1B	Not engaged	129 to 150
Coated paper 1C	Not engaged	151 to 180
Coated paper 2	Not engaged	181 to 220
Coated paper 3	Not engaged	221 to 256
Coated paper 4	Not engaged	257 to 300

	Heat Soaking Roller engagement timing (the converted number of sheets)	Paper Weight (g)
Coated paper 5A	27	106 to 128
Coated paper 5B	27	129 to 150
Coated paper 5C	27	151 to 180
Transparency	27	-

T-2-81

To prevent overheating, when the temperature of any of the thermistors exceeds 220 deg C for 0.5 sec or more, the Heat Soaking Roller is made to be engaged regardless of the converted number of sheets.

Heat Soaking Roller disengagement timing

When the Heat Soaking Roller is engaged, the engaged state remains until the job is completed. After the job completion, the roller shifts to be disengaged at the timing when the converted number of sheets becomes 0.

Web feed control

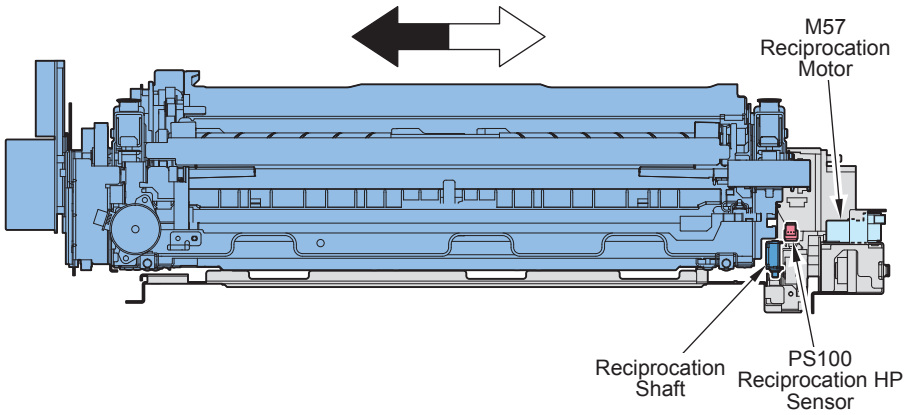
To clean the Heat Soaking Roller, this control counts the number of sheets fed while the Heat Soaking Roller is engaged, and feeds the web every time the counter is advanced by 2. The web length to be fed is 0.008 mm when feeding paper at normal speed while 0.016 mm when feeding paper at at 1/2 speed. The web is not fed when feeding paper at 1/3 speed because the Heat Soaking Roller is not engaged. Note that the count of sheets is executed based on the table below.

Length in vertical scanning direction	Number of sheets
215.9 mm (LTR) or shorter	1
Longer than 215.9 mm (LTR)	2

T-2-82

Reciprocation control

As a countermeasure against scratches on the edge of Fixing Film, the whole Fixing Unit is reciprocated during paper feeding.
To be specific, reciprocation is executed by 0.15 mm whenever the paper's trailing edge passes through the Secondary Transfer Outer Roller.
When feeding 13-inch paper, however, the Fixing Unit is returned to the HP position and there will be no reciprocation.



F-2-199

Extra-large paper productivity up sequence

Limited to plain paper and recycled paper of image RUNNER ADVANCE C9270 PRO/C7270 (100V machine) and image RUNNER ADVANCE C7260 PRO/C7260i and when feeding extra-large paper (12 inch, SRA3, 13 inch), the productivity is increased in stages according to the elapsed time since starting paper-feeding.

- Target models: image RUNNER ADVANCE C9270 PRO/C7270 (100V machine), image RUNNER ADVANCE C7260 PRO/C7260i
- Target paper types: Plain paper 1, Plain paper 2, Recycled paper 1, Recycled paper 2

Color productivity: image RUNNER ADVANCE C9270 PRO/C7270 (100V machine)

	0 sec (paper feeding starts)	120 sec	300 sec
12inch 304.8×457.2	19.4	22.9	28.3
SRA3 320×450	18.2	22.1	28.8
13inch 330.2×482.6	16.4	20.0	26.8

T-2-83

Black & White productivity: image RUNNER ADVANCE C9270 PRO/C7270 (100V machine)

	0 sec (paper feeding starts)	120 sec	300 sec
12inch 304.8×457.2	21.1	24.9	33.1
SRA3 320×450	19.9	24.1	33.6
13inch 330.2×482.6	17.9	21.8	31.3

T-2-84

Color productivity: image RUNNER ADVANCE C7260 PRO/C7260i

	0 sec (paper feeding starts)	120 sec	300 sec
12inch 304.8×457.2	21.1	24.9	33.1
SRA3 320×450	19.9	24.1	33.6
13inch 330.2×482.6	17.9	21.8	31.3

T-2-85

Black & White productivity: image RUNNER ADVANCE C7260 PRO/C7260i

	0 sec (paper feeding starts)	120 sec	300 sec
12inch 304.8×457.2	21.1	24.9	33.1
SRA3 320×450	19.9	24.1	33.6
13inch 330.2×482.6	17.9	21.8	31.3

T-2-86

Fixing cleaning control

As a countermeasure against scratches on the edge of the Fixing Film, cleaning is performed by feeding the web with the Heat Soaking Roller engaged when a certain number of sheets were fed while the Heat Soaking Roller was disengaged..

Condition to start cleaning

Cleaning is executed when the counter shows 100 or more by counting the number of sheets fed while the Heat Soaking Roller is disengaged. The count of sheets is executed based on the table below. When the paper is fed while the Heat Soaking Roller is engaged, the counter value is reduced based on the table below.

Length in vertical scanning direction	Number of sheets
215.9 mm (LTR) or shorter	1
Longer than 215.9 mm (LTR)	2

T-2-87

Cleaning operation

When feeding paper at normal speed and at 1/2 speed

Cleaning operation is executed when the last rotation is started with the counter value exceeding 100.

The web is fed after the Fixing Motor is driven at normal speed and the Heat Soaking Roller is engaged. The web is fed for 0.016 mm at intervals of 1.5 sec repeatedly for 5 times. The counter value is reduced by 100 when the web feeding is completed.

When a job is introduced during cleaning operation, the cleaning is stopped to immediately start the job. The machine memorizes how many times the web-feeding was executed at that time, and then executes the remaining web-feeding operation at the next last rotation.

When feeding paper at 1/3 speed

When the counter value exceeds 100, the Heat Soaking Roller shifts to be engaged while paper is fed, and then the web-feeding is executed. The web is fed at the point when paper passes through the fixing nip, with the web length to be fed being 0.032 mm, and the number of web-feeding being 5 times.

When the job is completed during cleaning, the remaining web-feeding operation is executed at the last rotation. The operation at that time is the same as that when feeding paper at normal speed and at 1/2 speed.

Paper dust removal control

When continuously feeding paper while the Heat Soaking Roller is engaged, it can cause paper dust accumulated at the front side of the Heat Soaking Roller and the web. Therefore, this control feeds the web longer to remove paper dust.

To be specific, the number of sheets continuously fed while the Heat Soaking Roller is engaged is counted, and the web is fed for the length equivalent to 800 sheets of LTR (approx. 3.2 mm) when the number of sheets fed reaches 2,000. The counting method for the number of sheets fed is the same as that of the normal web feed control. Note that there is no normal web feed control during web-feeding operations by the paper dust removal control.

Mixed media/width control

Mixed media

In the case of a job with mixed media (e.g.: Thin paper => Plain paper 1) fed at normal speed, the following control is executed when the media is switched according to the difference in the media's control temperature.

When the control temperature is higher after media is switched

The control temperature is switched t sec before the paper, which is used after media switching, reaches the fixing nip. The timing to switch control temperature is determined based on the following table.

Difference in control temperature	t (sec)
+25 to	6
+15 to +19	4
+10 to +14	3
+5 to +9	2
0 to +4	0

T-2-88

When the control temperature is lower after media switching

By increasing paper intervals, it controls to make the paper, which is used after media switching, reach the fixing nip t sec after the paper, which was used before media switching, passes through the fixing nip. The control temperature is switched at the point when the paper before media switching passes through the fixing nip. Paper interval time is determined based on the following table.

Difference in control temperature	t (sec)
0 to -4	0
-5 to -9	0
-10 to -14	0
-15 to -19	2
-20 to	2

T-2-89

Width of large size > ymm
↓ Large size

Paper Type	y productivity
Thin paper	100
Recycled paper 1	215.9
Recycled paper 2	215.9
Plain paper 1	215.9
Plain paper 2	215.9
Heavy paper 1	215.9
Heavy paper 2	215.9
Heavy paper 3	215.9
Heavy paper 4	215.9
Coated paper 1	215.9
Coated paper 2	215.9
Coated paper 3	215.9
Coated paper 4	215.9

Width of large size - Width of small size >/= zmm
↓ Large size

Paper Type	z productivity
Thin paper	45
Recycled paper 1	50
Recycled paper 2	50
Plain paper 1	50
Plain paper 2	50
Heavy paper 1	50
Heavy paper 2	50
Heavy paper 3	50
Heavy paper 4	50
Coated paper 1	50
Coated paper 2	50
Coated paper 3	50
Coated paper 4	50

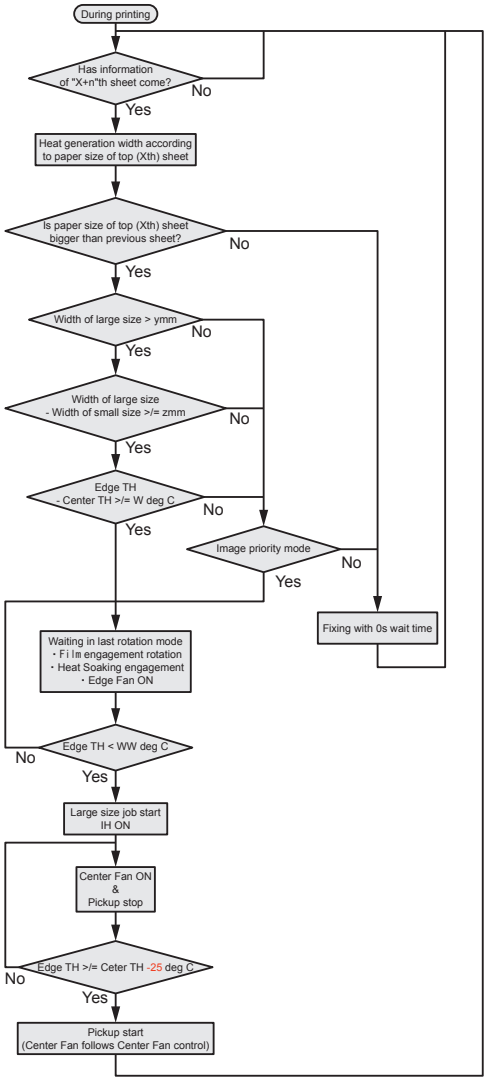
Edge Thermistor - Center Thermistor >/= W deg C
↓ Small size

Paper Type	z productivity
Thin paper	-20
Recycled paper 1	-5
Recycled paper 2	15
Plain paper 1	10
Plain paper 2	15
Heavy paper 1	20
Heavy paper 2	30
Heavy paper 3	30
Heavy paper 4	30
Coated paper 1	30
Coated paper 2	30
Coated paper 3	30
Coated paper 4	30

Edge Thermistor >/= WW deg C
Last rotation mode

Paper Type	WW productivity	
Thin paper	155	
Recycled paper 1	175	
Recycled paper 2	210	
Plain paper 1	195	
Plain paper 2	210	
Heavy paper 1	200	in NN
Heavy paper 2	200	in NN
Heavy paper 3	200	in NN
Heavy paper 4	200	in NN
Coated paper 1	190	in NN
Coated paper 2	200	in NN
Coated paper 3	200	in NN
Coated paper 4	200	in NN

Paper Type	WW High-resolution	
Thin paper	130	
Recycled paper 1	150	
Recycled paper 2	190	
Plain paper 1	160	
Plain paper 2	200	
Heavy paper 1	170	in NN
Heavy paper 2	190	in NN
Heavy paper 3	190	in NN
Heavy paper 4	190	in NN
Coated paper 1	150	in NN
Coated paper 2	190	in NN
Coated paper 3	190	in NN
Coated paper 4	190	in NN



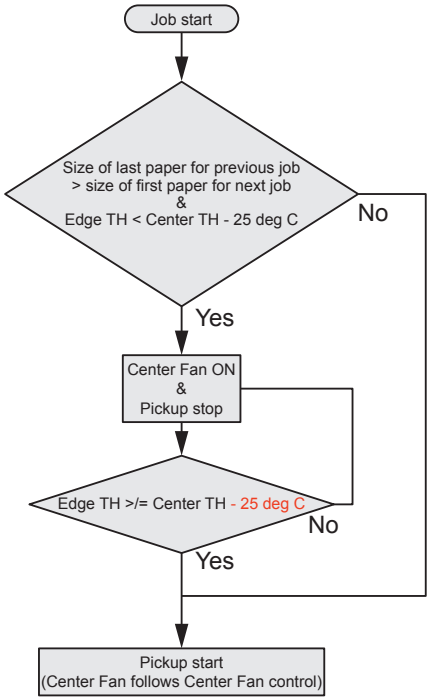
F-2-200

Media with different paper widths

Whenever paper passes through the fixing nip, the Outer Cores and Copper Plate are moved according to the paper with maximum paper width among the 4 sheets of succeeding paper. When the paper data of succeeding 4 sheets has not been notified, the paper interval is controlled to make the succeeding sheet reach the fixing nip 6 seconds after the preceding one by moving the Outer Cores and Copper Plate according to the paper with the maximum paper width among the sheets whose data has been notified.
When the paper width is switched from small to large, pickup is stopped until the temperature at the edge of the Fixing Film reaches below the specified temperature based on the flow chart below.

Large size job after a small size job

In the case of executing a job with large-width paper after executing a job with small-width paper, pickup operation is kept waiting until the temperature at the edge of the Film reaches above the specified temperature according to the flow chart below.



F-2-201

Down sequence

Down sequence to avoid overheating

It controls to prevent the Fixing Unit from being overheated to an overheating error temperature even in the case of a wrong size/weight setting or double feeding.

IH Heater OFF control

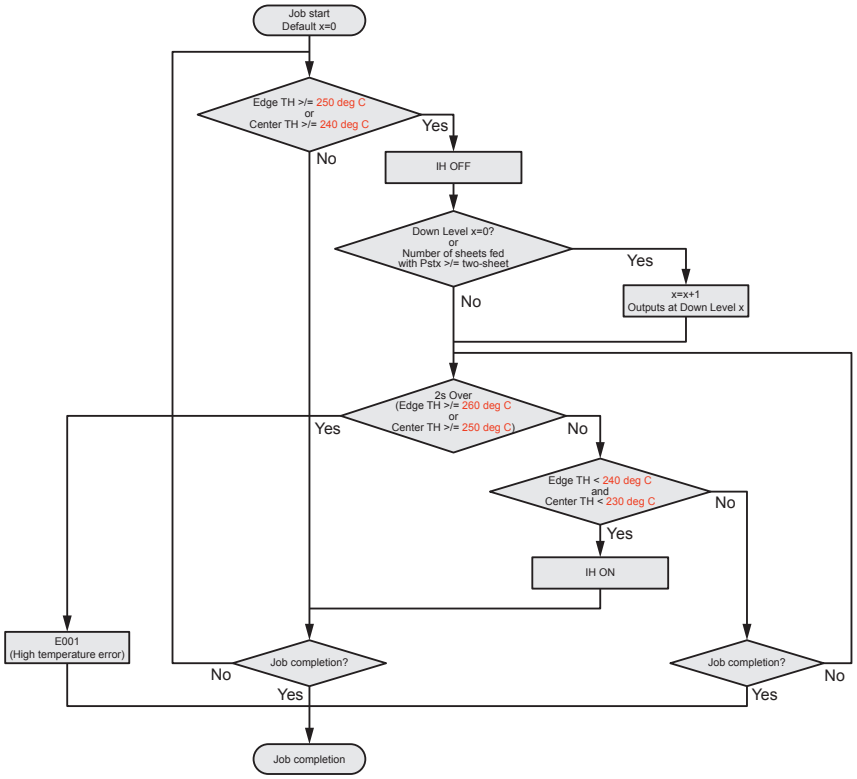
When the Main Thermistor detects 240 deg C or higher or when the Edge Thermistor detects 250 deg C or higher, the IH Heater is turned OFF to continue paper feeding. Then, the IH Heater is turned ON again when the Main Thermistor detects lower than 230 deg C while the Edge Thermistor detects lower than 240 deg C.

Productivity down control

When the Main Thermistor detects 240 deg C or higher or when the Edge Thermistor detects 250 deg C or higher, the machine reduces its productivity as Down Level 1. At that moment, the temperature should be reduced because the IH Heater OFF control is executed simultaneously; however, when the Main Thermistor detects 240 deg C or higher, or the Edge Thermistor detects 250 deg C or higher after the heater is turned ON again, the Down Level is increased by 1 to further reduce productivity The step above is repeated until it reaches Down Level 4. When Down Level is increased, it will not shift to the next Down Level unless 2 or more sheets of paper are fed in the existing state. Productivity is back to the normal state when the job is completed.

Down Level	Productivity
Level 1	23.53 %
Level 2	17.64 %
Level 3	11.76 %
Level 4	7.84 %

T-2-90



F-2-202

Down sequence to avoid temperature rising of Core Shift Motor

In the case of handling media with different paper width, the Outer Cores and the Copper Plate are frequently moved, which can cause temperature rising of the Core Shift Motor. Therefore, the machine reduces its productivity when the average current value of the Core Shift Motor in the past 40 sec was 0.12A or more. Productivity is calculated by the formula below.

[Productivity] = [Current productivity (ppm)] x 0.12/[Average current value in the past 40 sec]

Productivity is updated every 40 sec. Productivity is back to the normal state when the job is completed.

Low temperature down sequence

Depending on the conditions of output restriction at low pressure, low temperature environment, large paper weight, etc., this machine has the down sequence to prevent fixing failure caused by reduced temperature due to power shortage

(The first 5 sheets are ignored)

Low temperature down sequence		The converted number of sheets					
		0 sheets to	6 sheets to	30 sheets to	100sheets to	300 sheets to	1,000 sheets to
Environment temperature is 7.5 deg C or higher	Low temperature down sequence 1	-	20 deg C	20 deg C	20 deg C	20 deg C	13 deg C
Environment temperature is less then 7.5 deg C	Low temperature down sequence 2	-	12 deg C	12 deg C	12 deg C	12 deg C	12 deg C

T-2-91

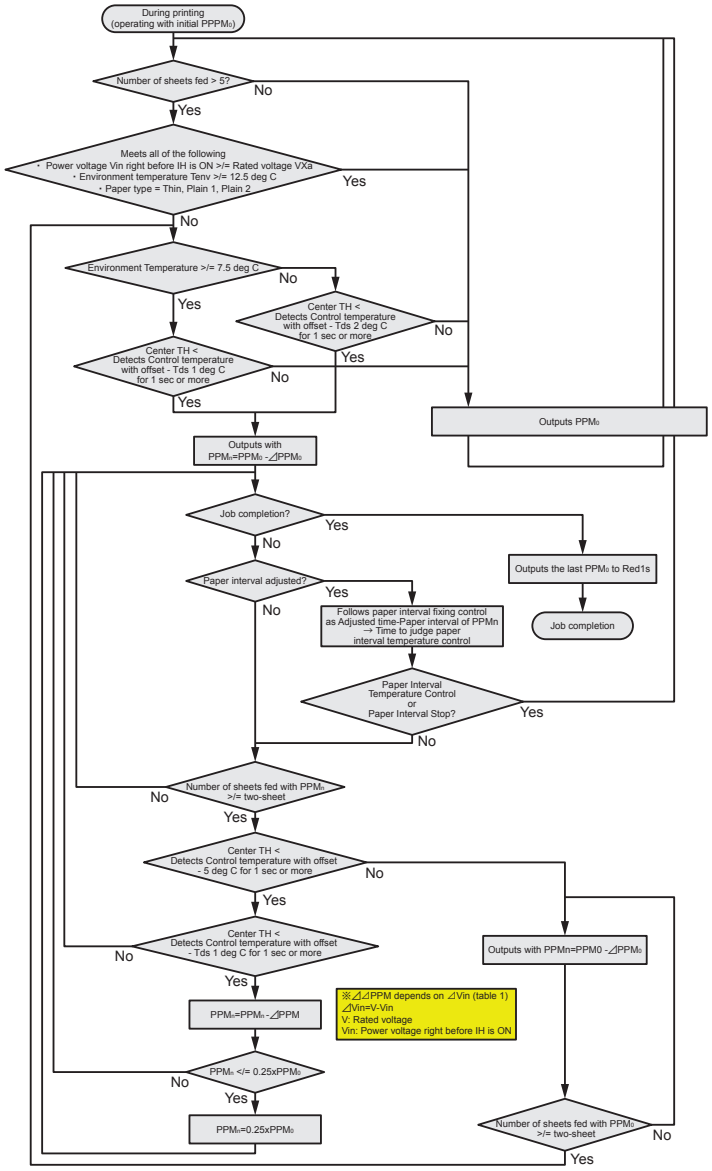
ppm is lowered when the temperature of the Fixing Unit is below the above value as against the target temperature of the Fixing Unit (refer to the following table).

The following values are deducted.

		Paper length feed direction (mm)			
		to 216	216.1 to 431.8	431.9 to 630	630.1 to
Delta PPM		Initial ppm×0.25	Initial ppm×0.25	Initial ppm×0.25	Initial ppm×0.25

The lower limit of PPMn is the initial ppm x 0.25.

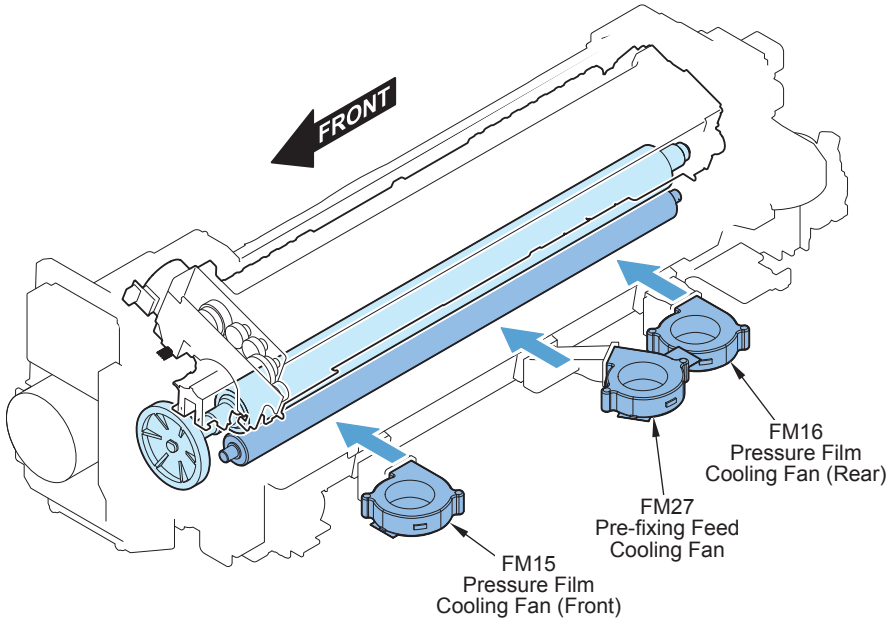
T-2-92



F-2-203

■ Fixing Internal Fan control

● Center Fan control



F-2-204

The ON/OFF control is executed based on the table and flow chart below.

	Paper width (mm)	Paper length (mm)	Thin paper		Recycled paper	
			The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.	The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.
Postcard	100	148	Stopped	-	Stopped	-
STMTR	139.7	215.9	1,000	0	1,000	25
A5R	148	210	1,000	0	1,000	25
B5R	182	257	1,000	0	1,000	25
A5	210	148	1,000	0	1,000	25
A4R	210	297	1,000	0	1,000	25
LTRR	215.9	279	1,000	0	1,000	25
LGL	215.9	356	1,000	0	1,000	25

	Paper width (mm)	Paper length (mm)	Thin paper		Recycled paper	
			The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.	The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.
B5	257	182	1,000	0	1,000	25
B4	257	364	1,000	0	1,000	25
EXEC	267	184	1,000	0	1,000	25
16K	270	390	1,000	0	1,000	25
8K	270	195	1,000	0	1,000	25
LTR	279.4	216	500	-2	1,000	25
LDR	279.4	432	500	-2	1,000	25
A4	297	210	500	-2	1,000	25
A3	297	420	500	-2	1,000	25
12×18	304.8	457.2	500	-5	1,000	25
12×19.2	304.8	487.7	500	-5	1,000	25
SRA3	320	450	Stopped	-	Stopped	-
13×19	330.2	482.6	Stopped	-	Stopped	-

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	Paper width (mm)	Paper length (mm)	Plain paper 1		Transparency	
			The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.	The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.
EXEC	267	184	Stopped	-	5	5
16K	270	390	Stopped	-	5	5
8K	270	195	Stopped	-	5	5
LTR	279.4	216	Stopped	-	2	0
LDR	279.4	432	Stopped	-	2	0
A4	297	210	Stopped	-	2	0
A3	297	420	Stopped	-	2	0
12×18	304.8	457.2	Stopped	-	Stopped	-
12×19.2	304.8	487.7	Stopped	-	Stopped	-
SRA3	320	450	Stopped	-	Stopped	-
13×19	330.2	482.6	Stopped	-	Stopped	-

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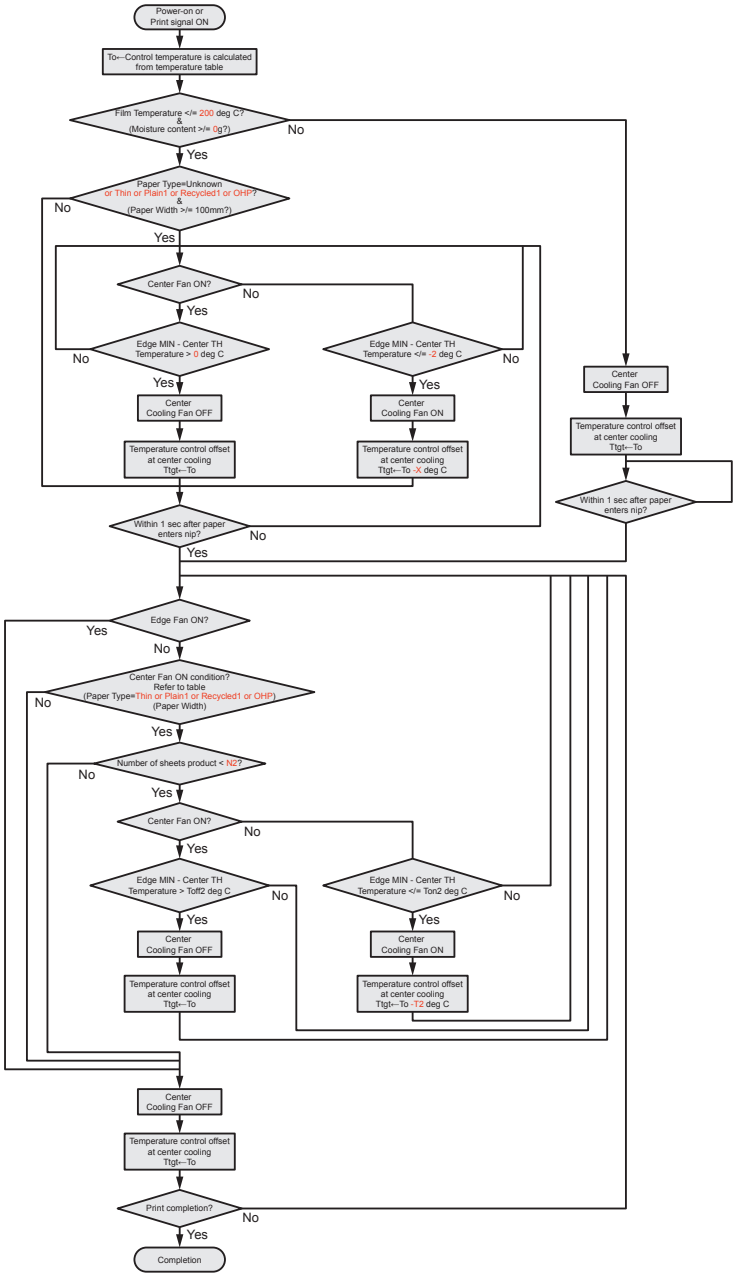
	Paper width (mm)	Paper length (mm)	Plain paper 1		Transparency	
			The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.	The number of sheets to stop the Center Fan during paper feeding	To stop when temperature difference between the edge and the center reaches X deg C.
Postcard	100	148	Stopped	-	Stopped	-
STMTR	139.7	215.9	1,000	0	5	5
A5R	148	210	1,000	0	5	5
B5R	182	257	1,000	0	5	5
A5	210	148	1,000	0	5	5
A4R	210	297	1,000	0	5	5
LTRR	215.9	279	1,000	0	5	5
LGL	215.9	356	1,000	0	5	5
B5	257	182	Stopped	-	5	5
B4	257	364	Stopped	-	5	5



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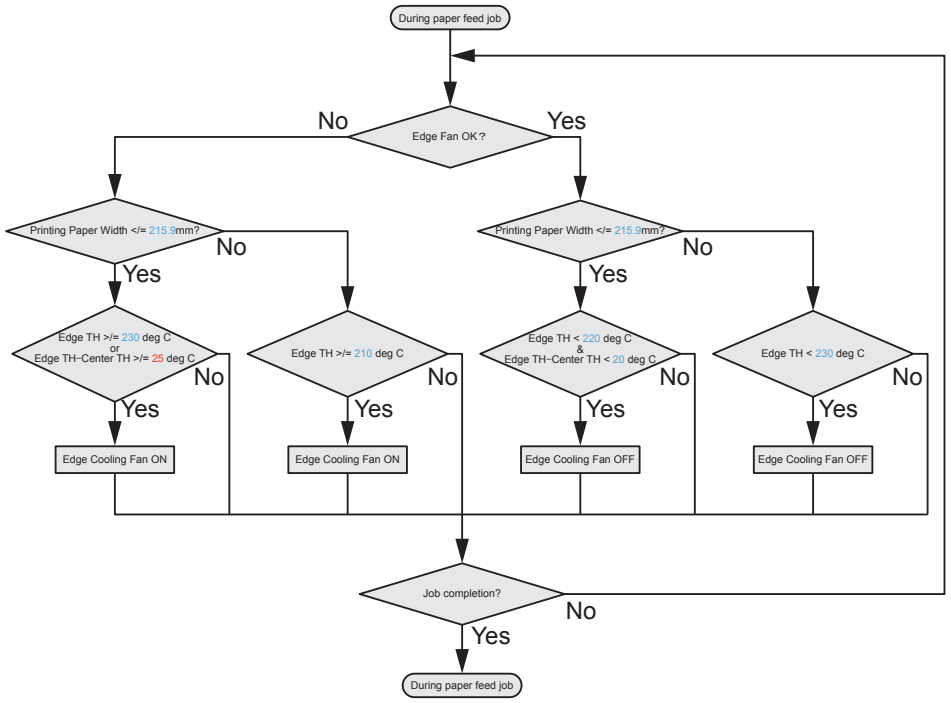
Edge Fan control

The ON/OFF control is executed based on the flow chart below.



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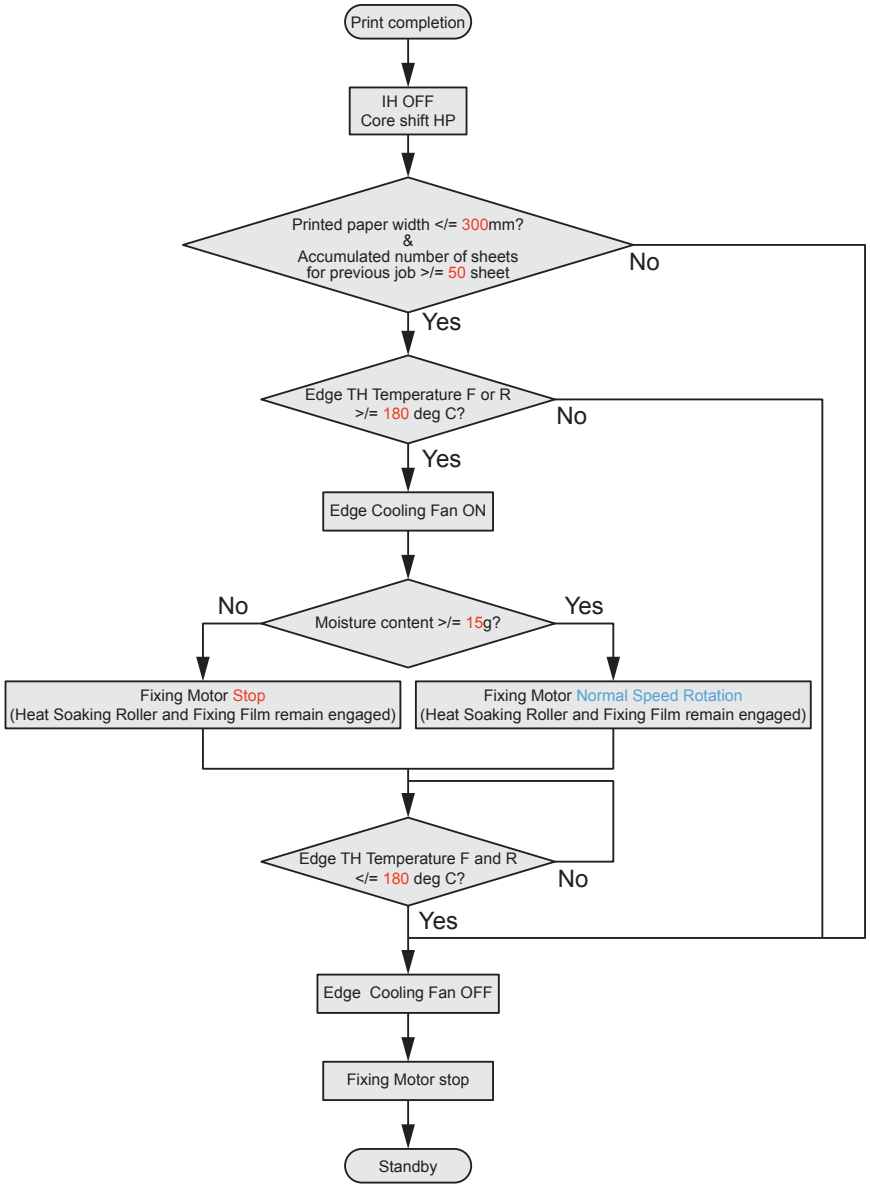
Edge Cooling Fan control after job

To prevent image failure when feeding large-width paper after continuous feeding of small-width paper, the machine reduces temperature at non paper-feed area by blowing air with the Edge Fan after completion of the job with small-size paper. When the following job is introduced while this control is executed, the machine immediately stops the cooling operation to start the job.

The control description is described in the flow chart below.



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Fixing control when feeding envelope

Although envelops are normally fed at the same control temperature and feeding speed as those of heavy paper 1 and 2, envelops with 110 mm or smaller width are fed at the same feeding speed as that of plain paper 1 and 2 under lowered pressure.

- Paper is fed while the Fixing Film is semi-engaged.
- Paper is fed at normal speed (note that the productivity is the same as when feeding paper at 1/2 speed)
- The control temperature is the same as that of plain paper 2.

Related error code

- Insufficient temperature increase at power-on
  E000-0001/0101
- Abnormal temperature rising
  E001-0001/0002/0003/0011/0012/0013/0014/0015/0102/0103/0111/0112/0113
- Insufficient temperature increase
  E002-0002/0003/0004/0005/0006/0102
- Abnormal low temperature
  E003-0001/0002/0003/0004

Related service mode

- Output temperature of Fixing Thermistor
  COPIER>DISPLAY>ANALOG>FIX-UC/UE/LC/UC2/UC3/UE2
- Fixing control temperature change
  COPIER>OPTION>IMG-FIX>TMP-XXX
  XXX-1:Immediately before printing
  XXX-2:During printing
  =P1-1/P1-2(plain paper 1 print fixing film temperature control))
  =P2-1/P2-2(plain paper 2 print fixing film temperature control)
  =R1-1/R1-2(Recycled paper 1 print fixing film temperature control)
  =R2-1/R2-2(Recycled paper 2 print fixing film temperature control)
  =H1-1/H1-2(Heavy paper 1 print fixing film temperature control)
  =H2-1/H2-2(Heavy paper 2 print fixing film temperature control)
  =H3-1/H3-2(Heavy paper 3 print fixing film temperature control)
  =H4-1/H4-2(Heavy paper 4 print fixing film temperature control)
  =C1A-1/C1A-2/C1B-1/C1B-2/C1C-1/C1C-2/C2-1/C2-2/C3-1/C3-2/C4-1/C4-2/C5A-1/C5A-2/C5B-1/C5B-2/C5C-1/C5C-2(Coated paper print fixing film temperature control)
  =THIN1/THIN2(Thin paper print fixing film temperature control)
  =OHT-1/OHT2(Transparency print fixing film temperature control)

Paper Wrapping Prevention Control

Overview

This control prevents failure of the Fixing Assembly caused by paper wrapping around the Fixing Film and the Pressure Roller.

Control description

This machine uses a sensor to detect paper wrapping around the Heat Film or Pressure Roller to assume a paper wrapping state

Sensor name	Condition	Detection condition
Fixing Inner Delivery Sensor (PS75)	The paper's leading edge wraps around the Heat Film or the Pressure Roller.	Delay in paper feeding -> Detection by PS75

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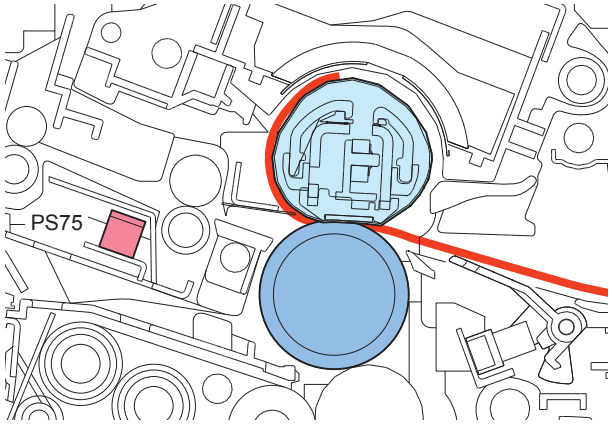
The DC Controller performs the following remedies once a paper wrapping is detected.

1. The brake is applied to the Fixing Motor to immediately stop operation of the Fixing Motor. (to minimize the paper wrapping level).
2. The Heat Film Unit is Pressure Release from the Pressure Roller.
3. A jam is displayed. (Jam code: PS75 = 0110)



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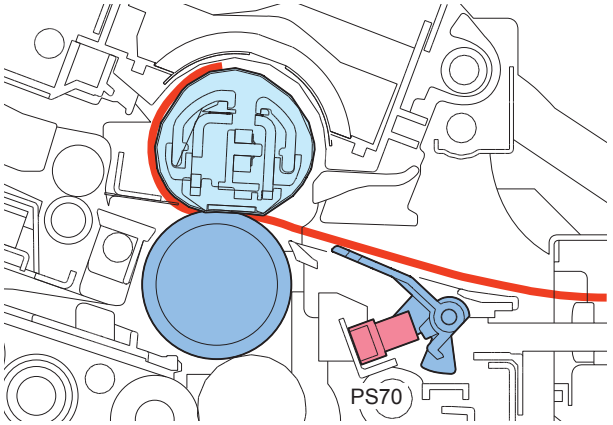
Detection of remaining paper

The Fixing Inlet Sensor (PS70) executes detection of remaining paper to prevent wrapped paper from being forgotten to be removed at recovery from fixing paper wrapping jam.



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Heat Film Unit pressure/semi-pressure/disengagement control

Overview

To increase jam removability and improve feeding performance of envelopes, the Heat Film applies pressure/semi-pressure to and disengages from the Pressure Roller as needed.

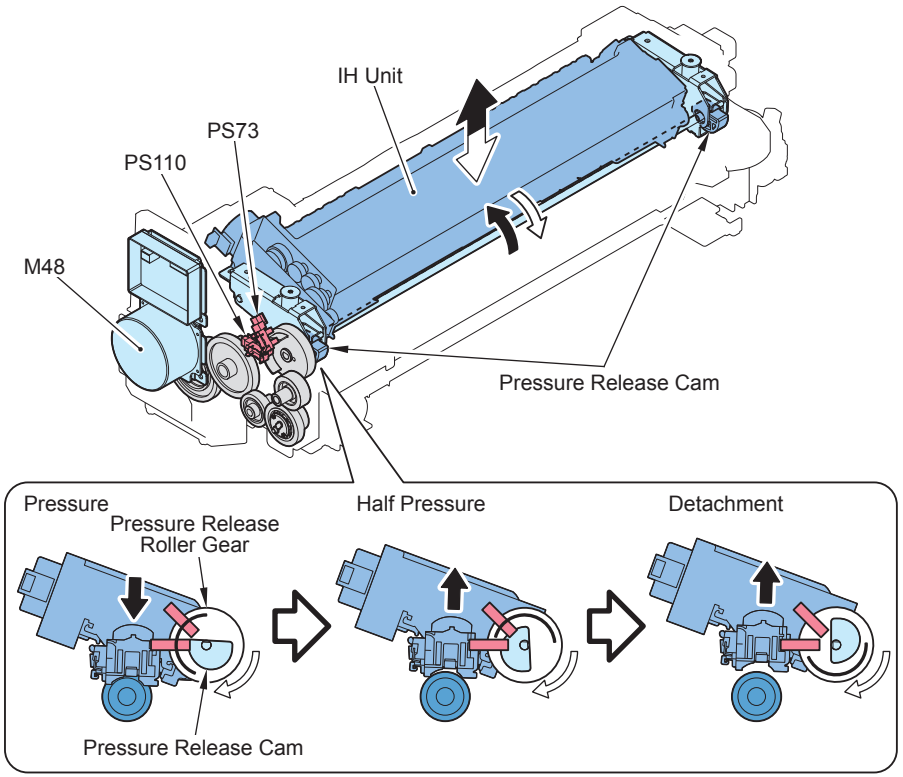
Execution timing

- Applying pressure: Printing
- Applying semi-pressure: Envelopes
- Releasing pressure: At paper jam, at sleep state or at power-off

Control description

The Pressure Film is pressured/released by the drive of the Fixing Pressure Release Motor (M47).

1) When the Fixing Pressure Release Motor (M47) rotates clockwise, the drive of the Motor rotates the Pressure Cam.
2) Rotation of the Pressure Cam lifts the Pressure Film Unit.
3) Lifting of the Film Unit releases the nip pressure with the Pressure Roller.



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Pressure/disengagement detection

Whether the Film Unit releases/applies pressure is detected by the Fixing Pressure Release Sensor (PS73) and the Semi-pressure Sensor (PS110).

Related Error Code

Pressure Unit pressure release error

E009-0500/0501/0502

*The Fixing Pressure Release Sensor (PS73) failed to detect engagement/disengagement of the Pressure Film.

- 0500: Pressure Unit pressure release HP search error

Related service mode

- Displaying the total number of sheets fed through the Fixing Unit
  COPIER > COUNTER > DRBL-1 > FX-BLT-U

* The accumulated number of sheet fed (converted into small-size sheet) is displayed.

- Displaying the rotation time equivalent to the time when the Fixing Film Unit is at standby
  COPIER>DISPLAY>FIXING>BLT-TM to 8/BLT2-TM 1 to 8
  * To be displayed based on the process speed (321, 280, 160, 140, 107, 93, 32 mm/sec)
- Displaying the accumulated number of sheets fed through the Fixing Unit
  COPIER>COUNTER>FIXING>FX-CNT
  * The accumulated number of sheet fed (converted into small-size sheet) is displayed.

Protection function

Overview

The protection function of this machine prevents damages to the machine from the following 2 elements.

- Abnormal temperature rising of Fixing Film
- Fixing Film displacement

Abnormal temperature rising		
1	Power shutdown by CPU	• Relay drive OFF => DC12V power shutdown • IH drive I/F OFF => IH drive circuit OFF
2	Shutdown by hardware circuit	• Relay drive OFF => +12V shutdown • IH drive I/F OFF => IH drive circuit OFF
3	Power shutdown by the Thermoswitch operation	• Thermoswitch OFF (253 deg C) => DC12V power shutdown
Fixing Film displacement		
4	Detection by Thermistor	• Detection by temperature difference between the Edge Sub Thermistors (front and rear)

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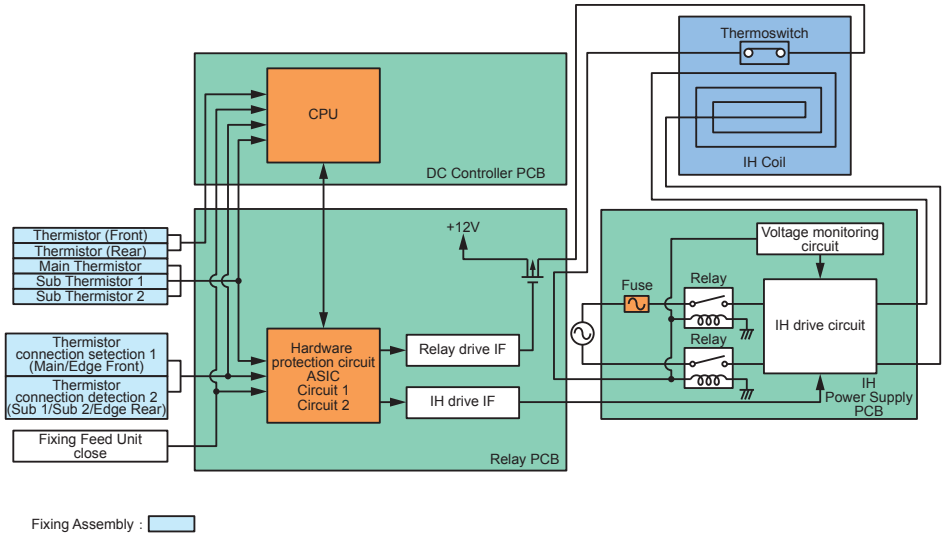

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Related Error Code

Error codes		Description
E000	-0001	The temperature of Fixing Film Main Thermistor does not reach 120 deg C within 20 sec after the Fixing Film temperature control was started.
E001	-0001	The Fixing Film Main Thermistor exceeds 225 deg C (hardware detection)
	-0002	The Fixing Film Sub 1 Thermistor exceeds 225 deg C (hardware detection)
	-0003	The Fixing Film Sub 2 Thermistor exceeds 225 deg C (hardware detection)
	-0011	The Fixing Film Main Thermistor exceeds 250 deg C consecutively for 2 sec (software detection)
	-0012	The Fixing Film Sub 1 Thermistor detects beyond 250 deg C consecutively for 2 sec. (Software Detection)
	-0013	The Fixing Film Sub 2 Thermistor exceeds 250 deg C consecutively for 2 sec (software detection)
	-0014	The Fixing Film Edge Rear Thermistor exceeds 260 deg C consecutively for 2 sec (software detection)
	-0015	The Fixing Film Edge Front Thermistor exceeds 260 deg C consecutively for 2 sec (software detection)
E003	-0001	The detected temperature of the Fixing Main Thermistor is 120 deg C or less consecutively for 1 sec during paper feeding
E004	-0201	Temperature difference between Sub 1 and Sub 2
	-0202	Temperature difference between the Main and Sub 2
	-0203	Temperature difference between the Main and Sub 1
	-0214	Temperature difference between the Edge Front and the Edge Rear is 50 deg C or more (Software Detection)
	-0215	Temperature difference between the edges is changed by 20 deg C or more during the sequence to check the Fixing Film
	-0301	IH power supply error
	-0401	12V error
	-0501	Thermistor 1 connection error (Main/Edge Front)
	-0502	Thermistor 1 connection error (Sub 1/Sub 2/Edge Rear)
	-0702	IH power supply relay error (50V or more at power-off)
E005	-0000	Absence of WEB (60,000 sheets after the Web Level Sensor is ON for 10 consecutive sheets)
E008	-0002	Fixing Film Unit rotation time error 5,206 hours
	-0003	Error in the number of sheets fed through the Fixing Film Unit 360,000 sheets
E009	-0500	Fixing Film Unit engagement/disengagement HP search error The HP Sensor cannot be detected within 5 seconds after starting HP detection.
E840	-0001	1) When moving the Fixing Core/Shield Plate for initializing the Fixing Unit, HP cannot be detected even if 200 seconds have passed since the moving started. * The Fixing Unit is initialized at power-on, at recovery from sleep state, and at recovery from jam. 2) When moving the Fixing Core/Shield Plate except for initializing the Fixing Unit, HP cannot be detected even if 8 seconds have passed since the moving started.
	-0215	When the Fixing Film initial position checking sequence is executed, the HP Sensor cannot be detected within 5 seconds after starting HP detection.
E841	-0001	Reciprocation HP search error. The HP Sensor cannot be detected within 5 seconds after starting HP detection.
E842	-0001	Heat Soaking Roller engagement/disengagement HP search error. The HP Sensor cannot be detected within 10 seconds after starting HP detection.

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Servicing

Periodically Replaced Parts

None

Consumable Parts

No.	Parts name	Parts Number	Piece	Expected life	Remarks
1	Fixing Film Unit	FM0-0413	1	300,000 sheets	DRBL-1 > FX-BLT-U
2	Pressure Roller Unit	FM0-0387	1	300,000 sheets	DRBL-1 > FX-L
3	Web Unit	FC0-8030	1	300,000 sheets	DRBL-1 > FX-WEB
4	Heat Soaking Roller	FC0-7967	1	300,000 sheets	DRBL-1 > FX-UH-RL
5	Heat Soaking Roller Bearring	XG9-0810	2	300,000 sheets	-

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Periodical Servicing List

None

When Replacing Parts

When the foregoing counter clear is executed, the following item is cleared.

Major Adjustments

Checking of nip width

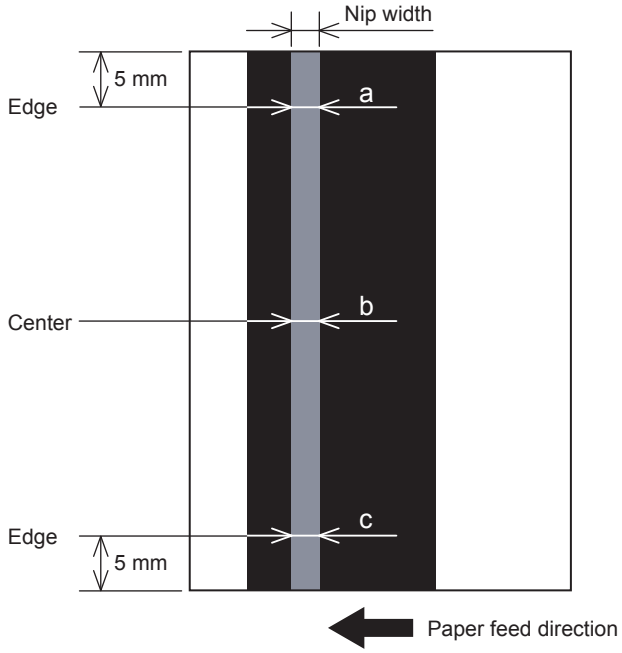
If the paper wrinkle or fixing failure occurs, check whether the fixing nip width is within the reference range.
However, fixing nip width of this machine cannot be checked in the field.

1) Set the paper to the Multi-purpose Tray. (plain paper, A4 or letter size)
2) Specify the paper size and the paper type.
3) Execute the fixing nip paper output in service mode.
4) Measure the nip width of output paper and check whether it is within the reference range.

< Reference value >

- Center: 9.2 +/- 1.0 mm
- Edge: 8.3 +/- 1.0 mm (at 5 mm from the edge)

If the nip width is not within the range, replace the Fixing Assembly.



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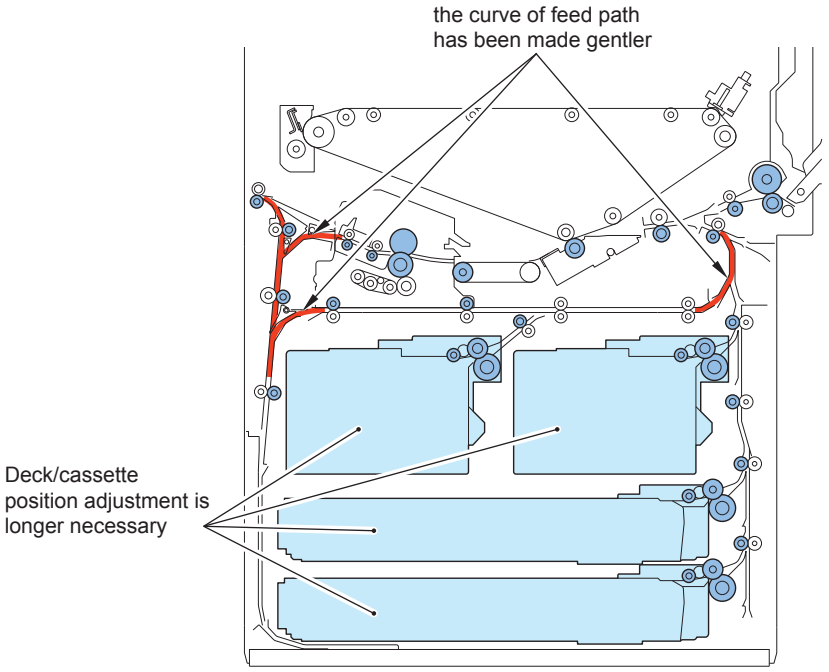
Service Note

None

Pickup / Feed System

Overview

- B&W 80 ppm, and color 70 ppm (for imageRUNNER ADVANCE C9280 PRO)
- Adjustment of deck/cassette position is required. Image position can be adjusted in service mode on a paper source basis.
- With gentle curve of the feeding path, face-down delivery and duplex print can be done with the following paper types.
  - facedown delivery: 256 g/m^2 or less
  - 2-sided printing: 220 g/m^2 or less



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Specifications

The following shows main specification for pickup feed system:

Item	Function/Method		Remarks
Paper Storage Method	Front Loading Method		-
Pickup Method	Separation Retard Method		-
Paper Feed Standard	Center		-
Paper Loading Capacity	Left/Right Deck	1100 sheets (normal paper: 80 g/m^2, height: 115.5 mm)	-
	Cassette 3/4	550 sheets (normal paper: 80 g/m^2, height: 60.5 mm)	-
	Multi-purpose Tray	100 sheets (normal paper: 80 g/m^2, height: 11.0 mm)	-
Paper Size	Left/Right Deck	A4, B5, LTR	-
	Cassette 3/4	A3, A4, A4R, B4, B5, B5R, A5R, 11" x 17", LDR, LGL, LTR, LTRR, STMTR, EXE, K8, K16,K16-R 304.8 x 457.2 mm (12" x 18") 320 x 450 mm (SRA3) 330.2 x 482.6 mm (13" x 19") Irregular size (139.7 x 182.0 mm to 330.2 x 487.7 mm)	-
	Multi-purpose Tray	Size that can be loaded to cassette, Postcard, Reply Postcard, 4 On 1 Postcard, Envelope, Irregular size (100 x 148 mm to 330.2 x 487.7 mm)	Pickup until 630mm paper is possible by service mode (*1) switch
Paper Type	Left/Right Deck	Normal Paper, Color Paper, Transparency, Heavy Paper, Bond Paper, Recycle Paper	-
	Cassette 3/4	Normal Paper, Color Paper, Transparency, Heavy Paper, Bond Paper, Recycle Paper, Index Paper	-
	Multi-purpose Tray	Normal Paper, Color Paper, Transparency, Heavy Paper, Bond Paper, Recycle Paper, Texture Paper, Envelope, Labels, Postcard, Coated Paper, Tracing Paper	-
Paper Grammage	Left/Right Deck	52 g/m^2 to 220 g/m^2	-
	Cassette 3/4	52 g/m^2 to 220 g/m^2	-
	Multi-purpose Tray	52 g/m^2 to 300 g/m^2 (Coated paper: 106 to 300 g/m^2)	Facedown Delivery: 256 g/m^2 or less
	Duplex	52 g/m^2 to 220 g/m^2 (Coated paper: 106 to 220 g/m^2)	-
Paper Size Switching	Left/Right Deck	Service Switching	-
	Cassette 3/4	Auto size detection	B5/EXEC, A5R/STMTR can be switched in Settings/Registration or service mode (*2).
	Multi-purpose Tray	Depends on user	-
Duplex printing method	Through path		-
Transparency detection	Available		-

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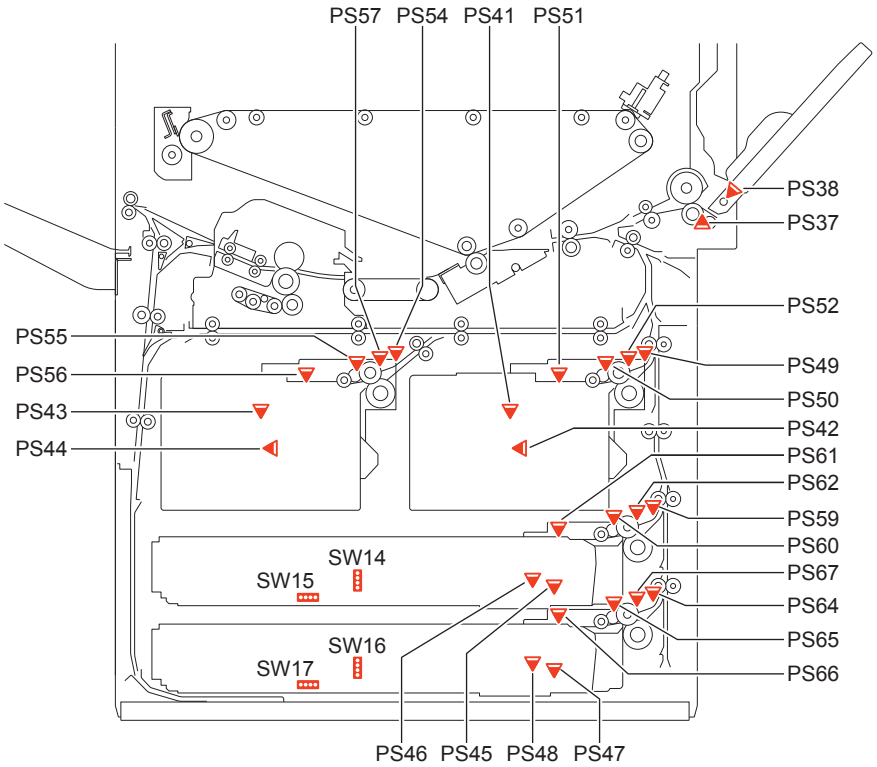
*1: (Lv.2) COPIER > OPTION > USER > MF-LG-ST (Display/hide of extra long document button)

Setting value 0: hide, 1: display

*2: Refer to Paper Size Detection (p. 2-174)

Parts configuration

Switch/Sensor 1



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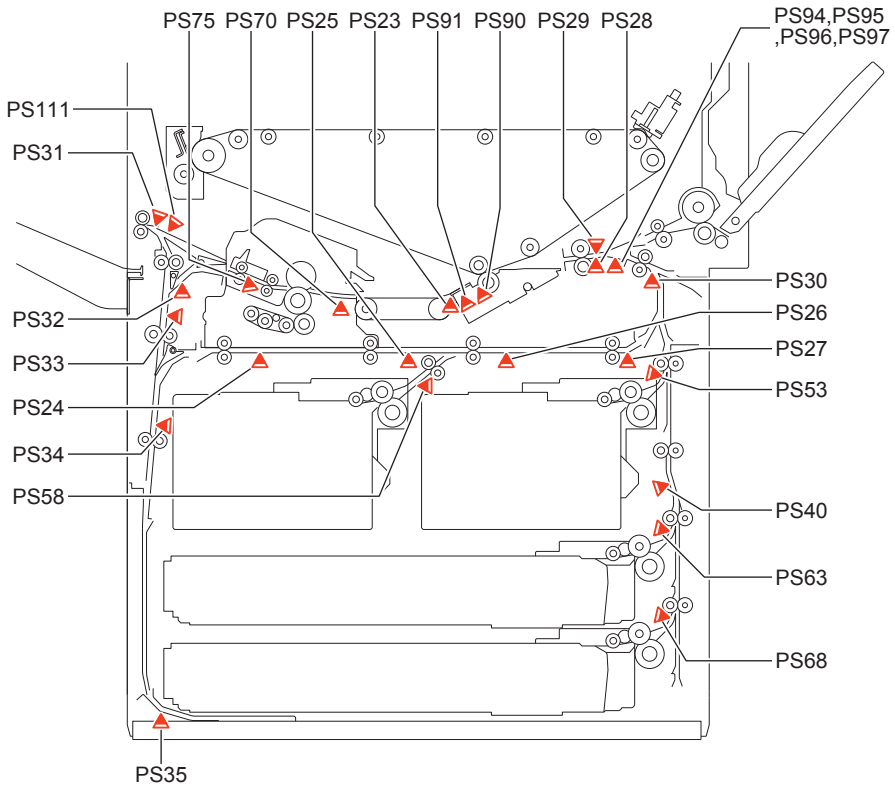
PS37 Multi-purpose Tray Paper Sensor
PS38 Multi-purpose Tray Last Paper Sensor
PS41 Right Deck Paper Level Sensor 1
PS42 Right Deck Paper Level Sensor 2
PS43 Left Deck Paper Level Sensor 1
PS44 Left Deck Paper Level Sensor 2
PS45 Cassette 3 Paper Level Sensor 1
PS46 Cassette 3 Paper Level Sensor 2
PS47 Cassette 4 Paper Level Sensor 1
PS48 Cassette 4 Paper Level Sensor 2
PS49 Right Deck Pickup Sensor
PS50 Right Deck Upper Limit Sensor
PS51 Right Deck Paper Sensor
PS52 Right Deck Paper Height Sensor
PS54 Left Deck Pickup Sensor
PS55 Left Deck Upper Limit Sensor
PS56 Left Deck Paper Sensor
PS57 Left Deck Paper Height Sensor
PS59 Cassette 3 Pickup Sensor
PS60 Cassette 3 Upper Limit Sensor
PS61 Cassette 3 Paper Sensor
PS62 Cassette 3 Paper Height Sensor
PS64 Cassette 4 Pickup Sensor
PS65 Cassette 4 Upper Limit Sensor
PS66 Cassette 4 Paper Sensor
PS67 Cassette 4 Paper Height Sensor
SW14 Cassette 3 Size Detection Switch 1
SW15 Cassette 3 Size Detection Switch 2
SW16 Cassette 4 Size Detection Switch 1
SW17 Cassette 4 Size Detection Switch 2

Sensor 2



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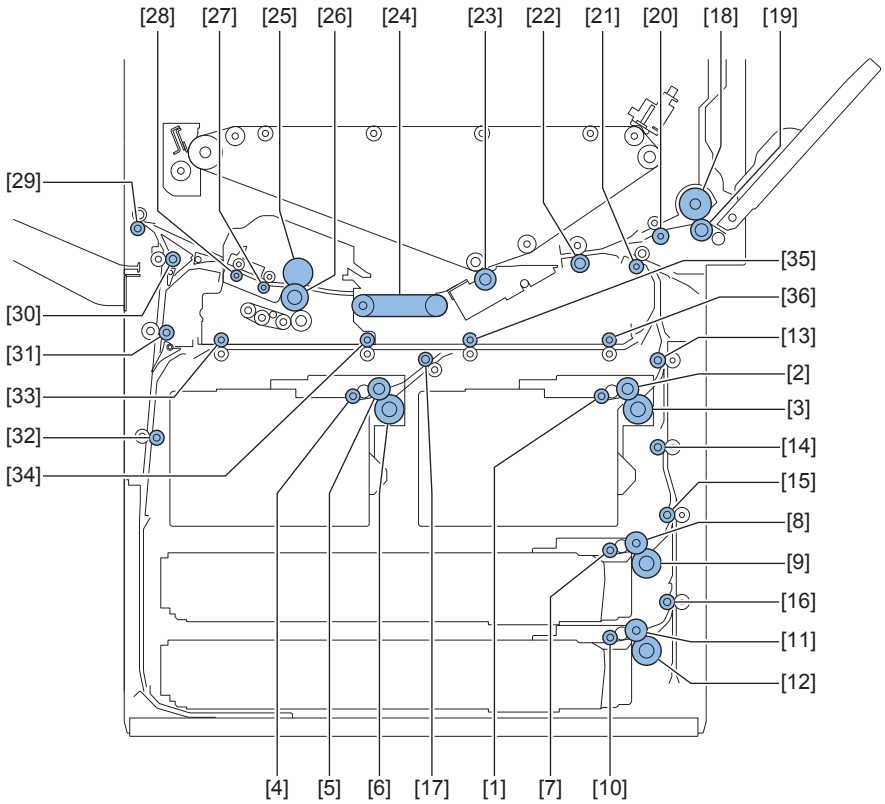
PS23 Post-secondary Transfer Sensor
PS24 Duplex Sensor 1
PS25 Duplex Sensor 2
PS26 Duplex Sensor 3
PS27 Duplex Sensor 4
PS28 Registration Sensor
PS29 Transparency Sensor
PS30 Vertical Path Merging Sensor
PS31 Outer Delivery Sensor
PS32 Reverse Sensor
PS33 Reverse Vertical Path Sensor 1
PS34 Reverse Vertical Path Sensor 2
PS35 Reverse Vertical Path Sensor 3
PS40 Vertical Path Sensor 2
PS53 Vertical Path Sensor 1
PS58 Left Deck Pullout Sensor
PS63 Vertical Path Sensor 3
PS68 Vertical Path Sensor 4
PS70 Fixing Inlet Sensor
PS75 Fixing Inner Delivery Sensor
PS90 Loop Sensor 1
PS91 Loop Sensor 2
PS94 Original Size Sensor 1
PS95 Original Size Sensor 2
PS96 Original Size Sensor 3
PS97 Original Size Sensor 4
PS111 Outer Delivery Transparency Sensor

Roller



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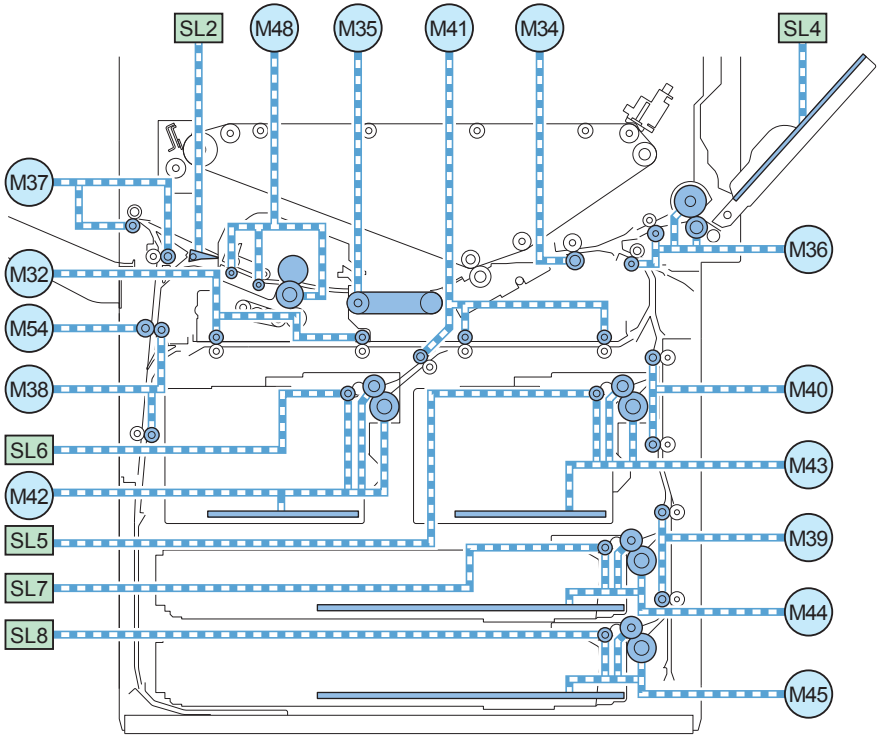
[1] Right Deck Pickup Roller
[2] Right Deck Feed Roller
[3] Right Deck Separation Roller
[4] Left Deck Pickup Roller
[5] Left Deck Feed Roller
[6] Left Deck Separation Roller
[7] Cassette 3 Pickup Roller
[8] Cassette 3 Feed Roller
[9] Cassette 3 Separation Roller
[10] Cassette 4 Pickup Roller
[11] Cassette 4 Feed Roller
[12] Cassette 4 Separation Roller
[13] Vertical Path Roller 1
[14] Vertical Path Roller 2
[15] Vertical Path Roller 3
[16] Vertical Path Roller 4
[17] Left Deck Pull Out Roller
[18] Multi-purpose Tray Feed Roller
[19] Multi-purpose Tray Separation Roller
[20] Multi-purpose Pull-out Roller
[21] Registration Front Roller
[22] Registration Roller
[23] Secondary Transfer Roller
[24] Pre-fixing Feed Belt
[25] Fixing Film Unit
[26] Pressure Roller
[27] Inner Delivery Roller 1
[28] Inner Delivery Roller 2
[29] Outer Delivery Roller
[30] Outer Delivery Front Roller
[31] Reverse Upper Roller
[32] Reverse Lower Roller
[33] Duplex Roller 1
[34] Duplex Roller 2
[35] Duplex Roller 3
[36] Duplex Roller 4

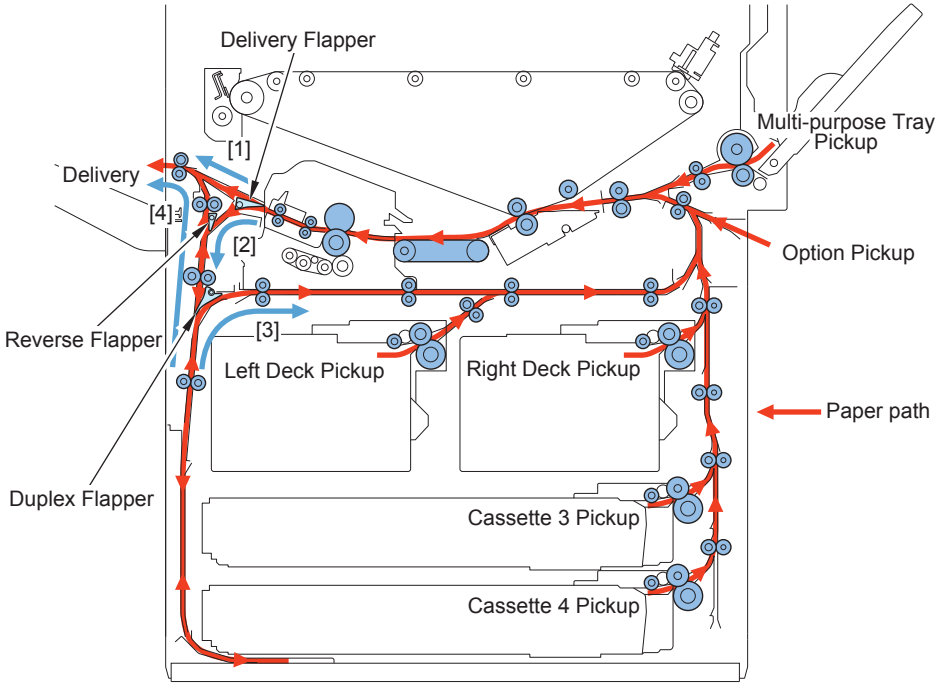
Drive Configuration



F-2-217

M32 Duplex Left Motor
M34 Registration Motor
M35 Pre-fixing Feed Motor
M36 Pre-registration Multi-purpose Tray Drive Motor
M37 Delivery Motor
M38 Reverse Motor
M39 Cassette Vertical Path Motor
M40 Right Deck Vertical Path Motor
M41 Left Deck Vertical Path Motor
M42 Left Deck Pickup Motor
M43 Right Deck Pickup Motor
M44 Cassette 3 Pickup Motor
M45 Cassette 4 Pickup Motor
M48 Fixing Motor
M54 Reverse Detachment Motor
SL2 Delivery Flapper Solenoid
SL4 Multi-purpose Tray Pickup Solenoid
SL5 Right Deck Pickup Solenoid
SL6 Left Deck Pickup Solenoid
SL7 Cassette 3 Pickup Solenoid
SL8 Cassette 4 Pickup Solenoid

Paper path



F-2-218

[1] 1-side face-up delivery, duplex face-down delivery

[2] 1-side face-down delivery, duplex printing

[3] Duplex printing

[4] 1-side face-down delivery

Interval speed

Pickup to Registration Roller

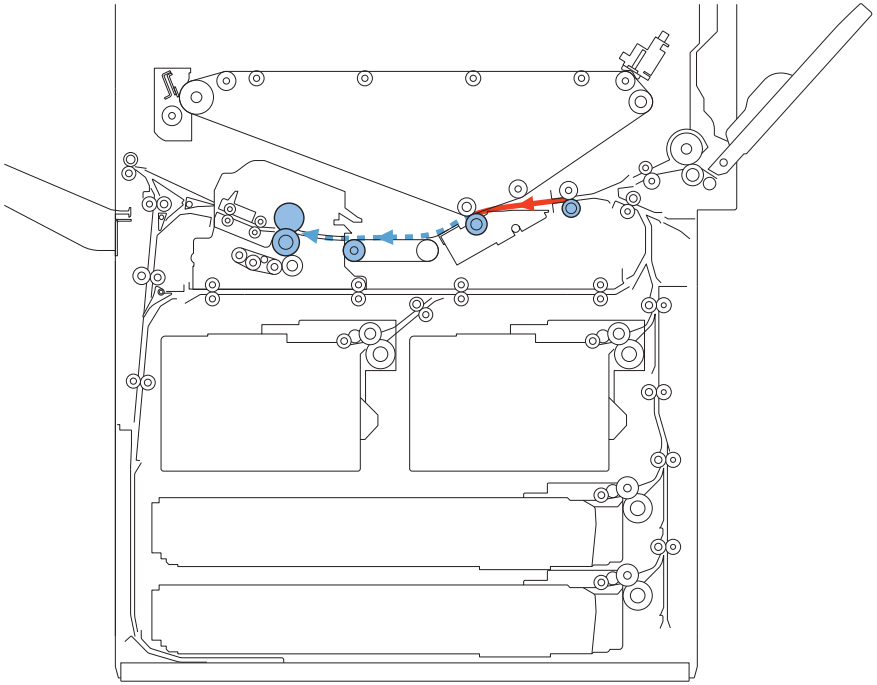
F-2-219

(Unit: mm/s)

Interval		iR-ADV C9200 Series				iR-ADV C7200 Series			Re-marks
		1/1 Speed	1/2 Speed	1/3 Speed	1/3 Speed Slow	1/1 Speed	1/2 Speed	1/3 Speed	
Pickup - Pullout (Vertical Path) Roller	Except Multi-purpose Tray	500	500	500	500	500	500	500	-
	Multi-purpose Tray	323.6	161.8	107.9	94.1	282.2	141.1	94.1	-
Pullout (Vertical Path) Roller - Registration Roller	Left Deck and Cassettes 3/4	642	642	642	642	642	642	642	-
	Right Deck	280 to 642							-
	Paper Deck and POD Deck Lite	280 to 750							-
	Multiple Decks	750	750	750	750	750	750	750	-
	Duplex	642	642	642	642	642	642	642	-
	Multi-purpose Tray	323.6	161.8	107.9	94.1	282.2	141.1	94.1	-

T-2-100

Registration Control to Fixing Film



F-2-220

(Unit: mm/s)

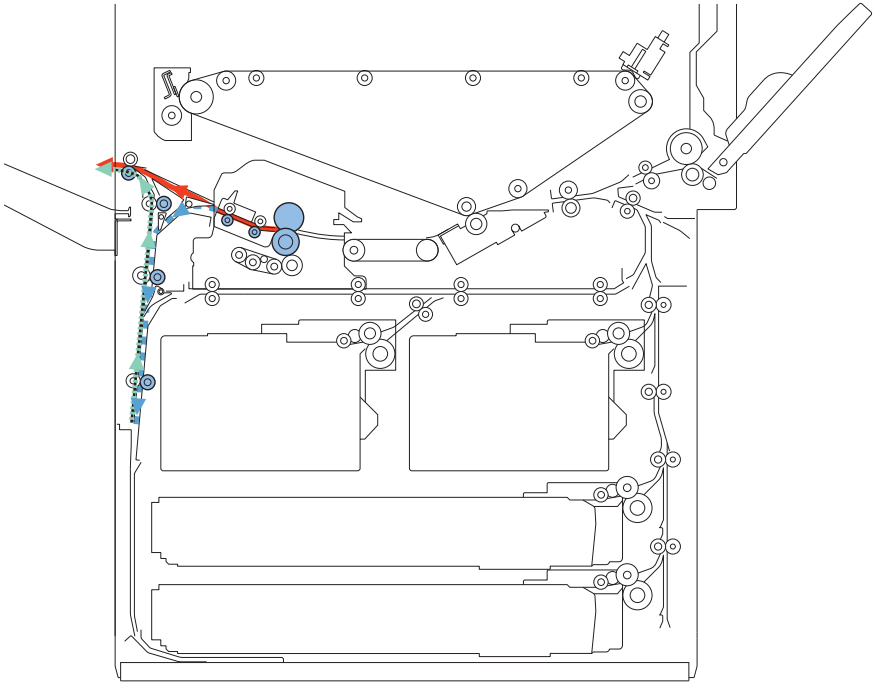
Interval	iR-ADV C9200 Series				iR-ADV C7200 Series			Re-marks
	1/1 Speed	1/2 Speed	1/3 Speed	1/3 Speed Slow	1/1 Speed	1/2 Speed	1/3 Speed	
Registration Roller – Before advancing to Secondary Transfer Roller	600 *1 750 *2	280	280	280	600 *1 750 *2	280	280	When pickup from Multi-purpose Tray, speed does not change.
Before advancing to Secondary Transfer Roller – when passing through the Secondary Transfer Roller	323.6	161.8	107.9	94.1	282.2	141.1	94.1	
When passing through Secondary Transfer Roller	321	160.5	107.0	93.3	280	140	93.3	-
After coming out from Secondary Transfer Roller - Before advancing to Fixing Roller	321	160.5	107.0	93.3	280	140	93.3	-
When passing through Fixing Roller	321	160.5	107.0	93.3	280	140	93.3	-

T-2-101

*1: In the case of paper which length is longer than that of A4R, the feeding speed is 600 mm/sec.

*2: In the case of B&W printing with A4R or smaller size paper, the feeding speed is 750 mm/sec.

Fixing Film to Delivery



F-2-221

(Unit: mm/s)

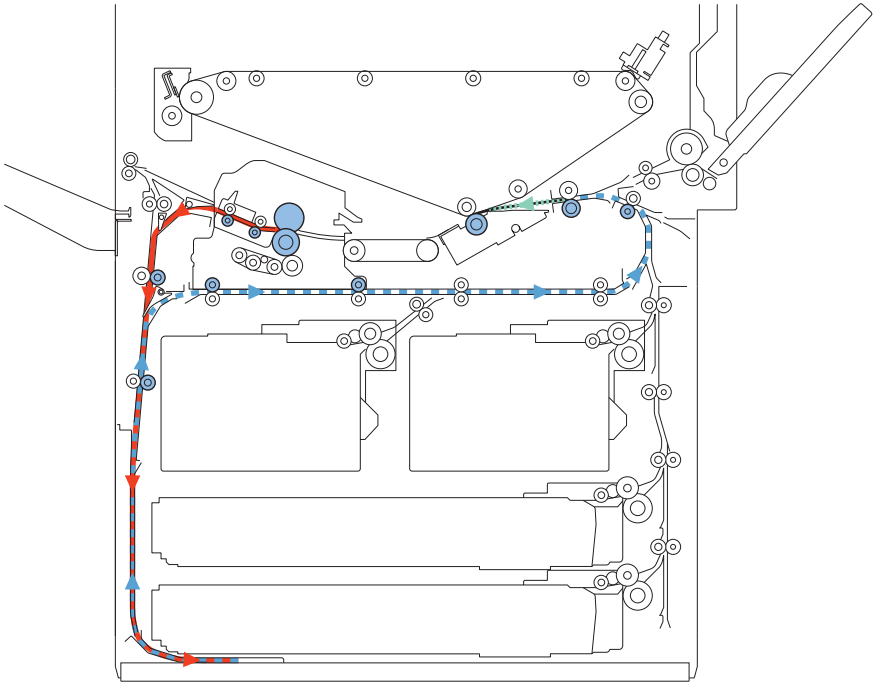
Interval		iR-ADV C9200 Series				iR-ADV C7200 Series			Re-marks
		1/1 Speed	1/2 Speed	1/3 Speed	1/3 Speed Slow	1/1 Speed	1/2 Speed	1/3 Speed	
After coming out from Fixing Film - Until coming out from Outer Delivery Roller	FU Delivery: Buffer Path Unit not equipped	642	164.8	109.8	95.8	642	143.8	95.8	-
	FU Delivery: Buffer Path Unit equipped	329.5	164.8	109.8	95.8	287.5	143.8	95.8	-
	FD Delivery (Before reversing)	642 *1	321	321	93.3	642 *2	321	321	-
	FD Delivery (After reversing)	642	642	642	642	642	642	642	-
Before coming out the trailing edge from Outer Delivery Roller - After coming out the trailing edge from Outer Delivery Roller	FU Delivery	321	160.5	107	93.3	321	140	93.3	When Buffer Path Unit is installed, speed does not change.
	FD Delivery	334	334	334	334	334	334	334	

T-2-102

*1: In some cases, the feeding speed is 451 mm/sec.

*2: In some cases, the feeding speed is 410 mm/sec.

Fixing Film to Secondary Transfer Roller



F-2-222

(Unit: mm/s)

Interval	iR-ADV C9200 Series				iR-ADV C7200 Series			Re-marks
	1/1 Speed	1/2 Speed	1/3 Speed	1/3 Speed Slow	1/1 Speed	1/2 Speed	1/3 Speed	
After coming out from Fixing Film - Before reversing for duplex	642 *1	321	321	93.3	642 *2	321	321	-
After reversing for duplex - Registration Roller	642	642	642	642	642	642	642	-
Registration Roller - Before advancing to Secondary Transfer Roller	600 *3	280	280	280	600	280	280	-
When passing through Secondary Transfer Roller	321	160.5	107.0	93.3	280	140	93.3	-

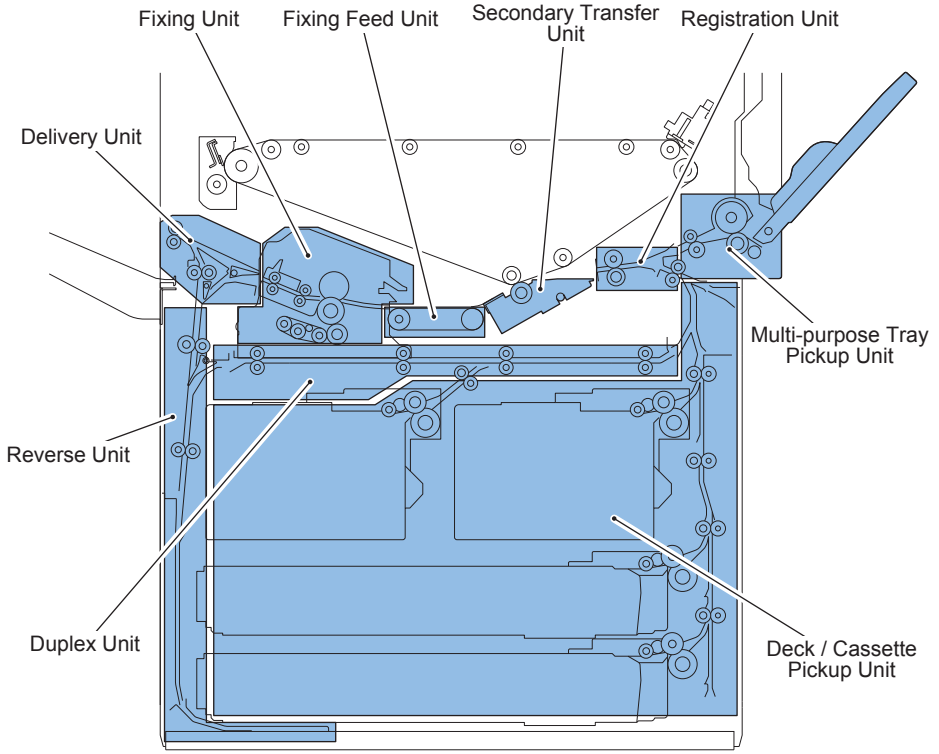
T-2-103

*1: In some cases, the feeding speed is 451 mm/sec.

*2: In some cases, the feeding speed is 410 mm/sec.

*3: In the case of B&W printing with A4R or smaller size paper, the feeding speed is 750 mm/sec. In the case of paper which length is longer than that of A4R, the feeding speed is 600 mm/sec.

Various types of control



F-2-223

Deck / Cassette Pickup Unit	Basic Movement
	Pickup Preceding Control (Left Deck, Cassette 3/4, Multi-drawer Paper Deck)
	Speed Variable Control (Right Deck, Paper Deck, POD Deck Lite)
	Deck/Cassette detection
	Paper Size Detection
	Paper Level Detection
	Paper Detection
	Lifter Control
	Pickup Retry Control
Multi-purpose Tray Pickup Unit	Basic Movement
	Paper Size Detection
	Paper Detection
	Last Paper Detection
Registration Unit	Registration Control
	Registration Noise Reduction Control
	Transparency detection
	Paper Size Sensor
Secondary Transfer Unit	-
Fixing Feed Unit	-
Fixing Unit	-
Delivery Unit	Basic Movement
	Delivery Speed Reduction Control
Reverse Unit	Basic Movement
	Reverse Flapper Movement
	Reverse Detachment Control
Duplex Unit	Basic Movement
	Duplex Flapper Movement
	Circulation quantity and limit
	Duplex Reverse Control
Jam detection	Jam Code List
	Forced Paper Feed Control

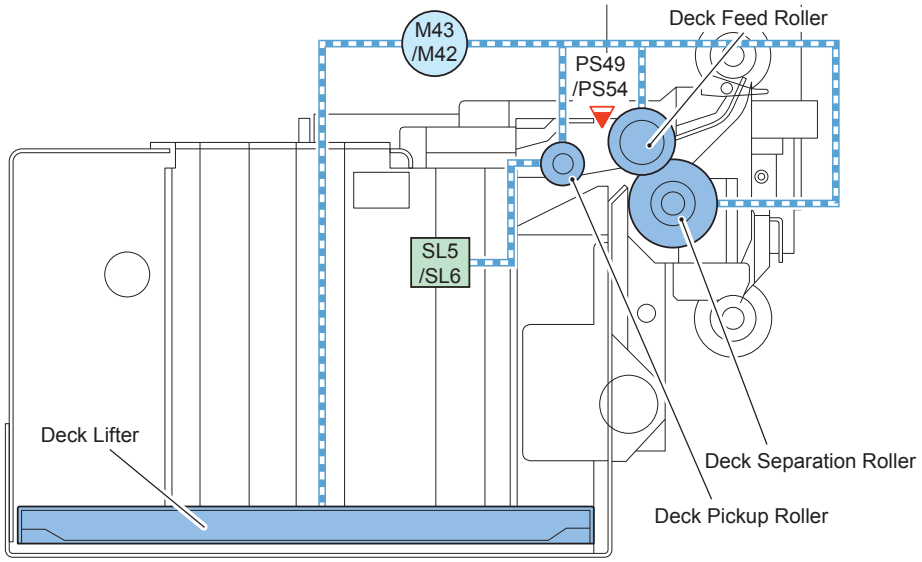
T-2-104

Deck/Cassette Pickup Unit

Basic Movement

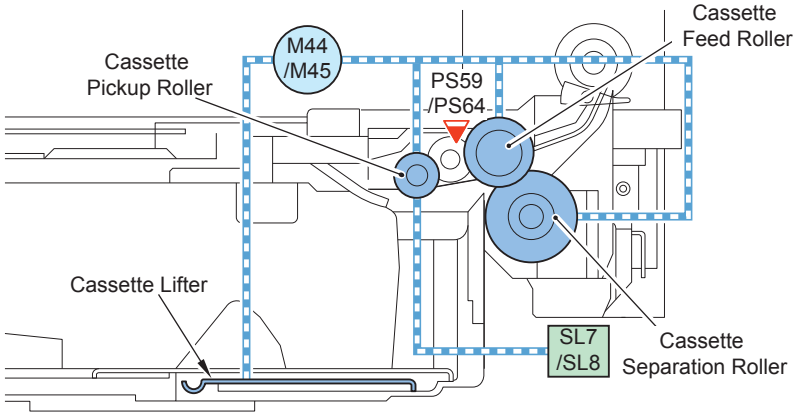
When Deck/Cassette is installed, Motor drives to maintain the height which paper surface attaches to Pickup Roller (This is the height of Pickup Roller when Pickup Solenoid is OFF).
If the Pickup Motor (M43/M42/M44/M45) is turned ON, the Pickup Roller will rotate and the paper will be fed.
When the Pickup Sensor (PS49/PS54/PS59/PS64) detects paper, the Pickup Solenoid (SL5/SL6/SL7/SL8) will turn ON, and Pickup Roller will draw away from paper surface.
Only 1 sheet of paper is sent to feed path by the Feed Roller and the Separation Roller, and fed to Vertical Path Roller.

Deck



F-2-224

Cassette

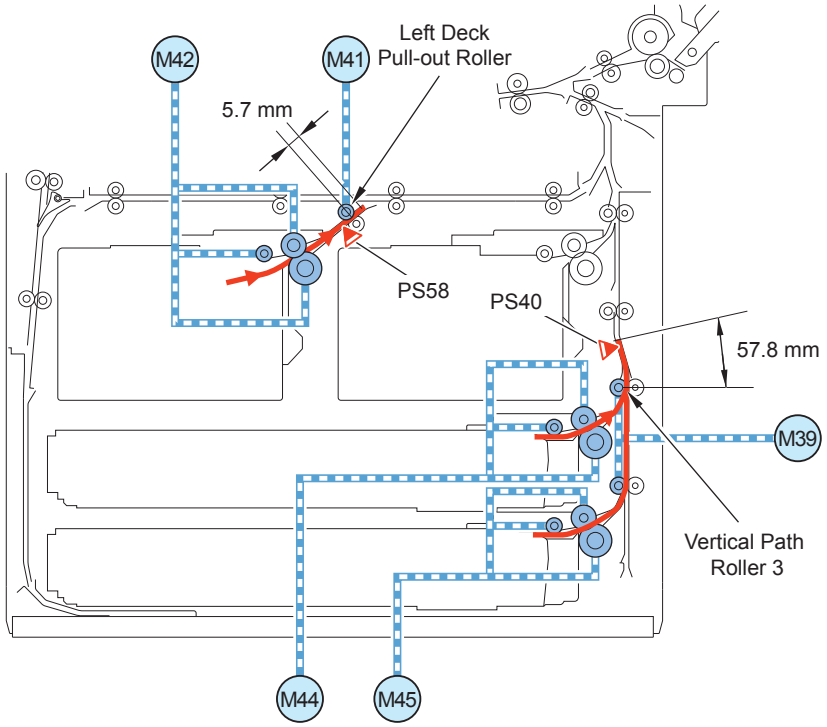


F-2-225

NOTE: Related Service Mode
(Lv.1) COPIER > OPTION > FEED-SW>
DK1-TURN (ON/OFF of Pickup Roller Post-Rotation on Right Deck)
DK2-TURN (ON/OFF of Pickup Roller Post-Rotation on Left Deck)
DK3-TURN (ON/OFF of Pickup Roller Post-Rotation on Cassette3)
DK4-TURN (ON/OFF of Pickup Roller Post-Rotation on Cassette4)
Setting Value 0: OFF (Default), 1: ON

Pickup Preceding Control (Left Deck, Cassette 3/4, Multi-drawer Paper Deck)

In order for the subsequent paper not to interfere the preceding paper at the registration control, the difference of pickup operation speed due to paper type, size and environment is corrected.
After the sensor that detects each pickup position detects the paper leading edge, the corresponding motor will stop temporarily in preceding pickup stop position.
This control is performed on the second paper feeding and after.



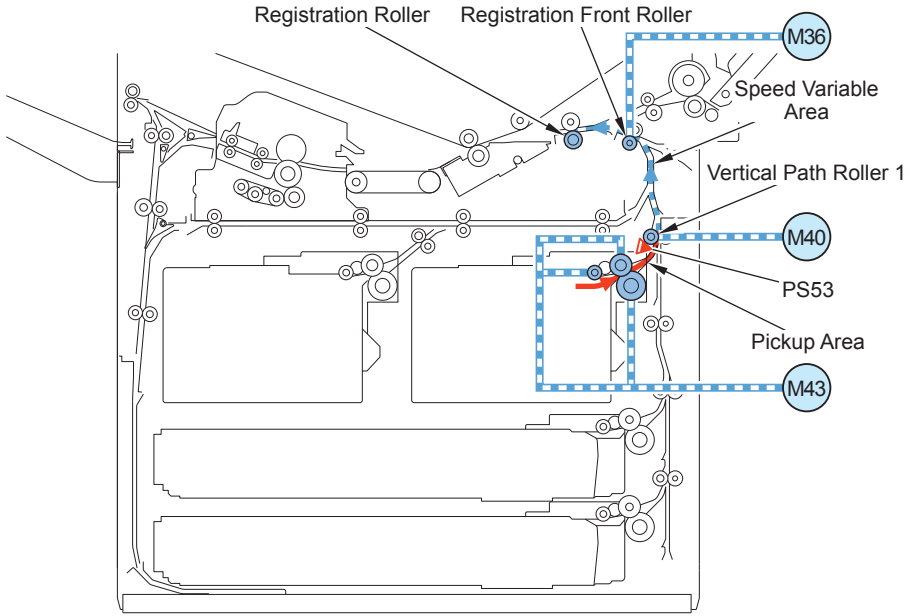
F-2-226

Pickup position	Sensor	Stop motor	Stop position
Left deck	Left Deck Pull Out Sensor (PS58)	Left Deck Pickup Motor (M42) Left Deck Vertical Path Motor (M41)	5.7 mm downstream from the Left Deck Pull-out Roller
Cassette 3	Vertical Path Sensor 2 (PS40)	Cassette 3 Pickup Motor (M44) Cassette Vertical Path Motor (M39)	57.8 mm downstream from the Vertical Path Roller 3
Cassette 4	Vertical Path Sensor 2 (PS40)	Cassette 4 Pickup Motor (M45) Cassette Vertical Path Motor(M39)	57.8 mm downstream from the Vertical Path Roller 3
Multi-drawer Paper Deck	Pullout Sensor (Each Deck)	Pickup Motor (Each Deck) Pull-out Motor (Each Deck)	Pull-out Roller (Each Deck)

T-2-105

Speed Variable Control (Right Deck, Paper Deck, POD Deck Lite)

If pickup delays or too fast, feed speed will accelerate or decelerate.
When the difference of pickup operation speed is corrected, in case of paper pickup from Right Deck, the distance from pickup to registration is short, so the pickup preceding control cannot be implemented. For this reason, this control is executed.



F-2-227

Pickup position	Detection sensor	Pickup speed	The speed after passing Vertical Path Roller 1
Right Deck	Vertical Path Sensor 1 (PS53)	Slower than 500 mm/s	500 to 642 mm/s
		Faster than 500 mm/s	280 to 500 mm/s
Paper Deck	Deck Pull-out Sensor (Paper Deck)	Slower than 500 mm/s	500 to 750 mm/s
		Faster than 500 mm/s	280 to 500 mm/s
POD Deck Lite	Deck Pull-out Sensor (POD Deck Lite)	Slower than 500 mm/s	500 to 750 mm/s
		Faster than 500mm/s	280 to 500 mm/s

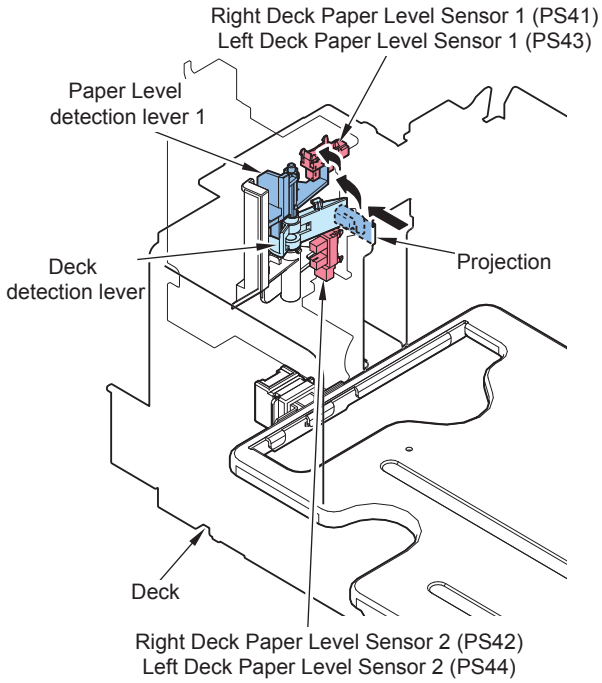
T-2-106

■ Deck/Cassette detection

Whether Deck/Cassette is installed is detected.

● Deck

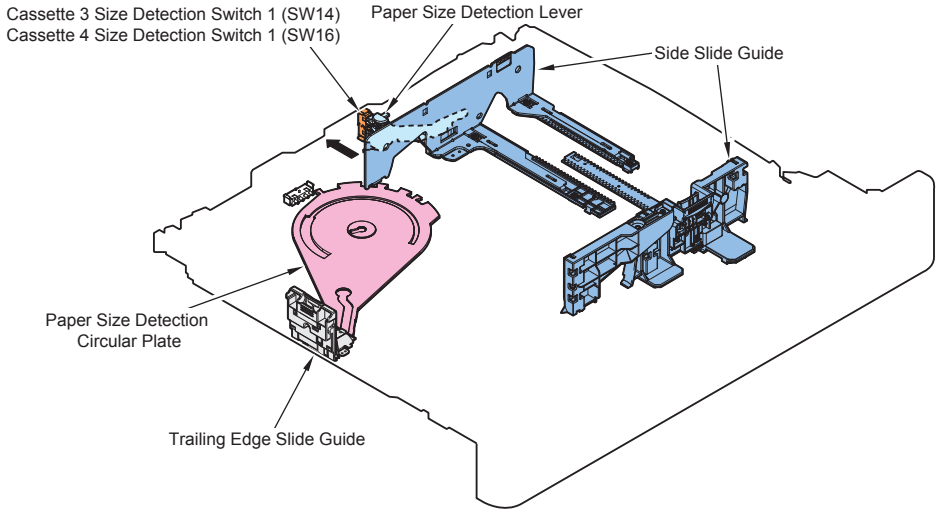
Deck is detected by Paper Level Sensor. When light from 2 Paper Level Sensors is not blocked, it is detected as no deck installed.



F-2-228

● Cassette

Cassette is detected by Paper Size Detection Switch. When all actuators of the Paper Size Detection Switch (SW14/SW16) are not pressed, it is detected as no cassette installed.



F-2-229

Paper Size Detection

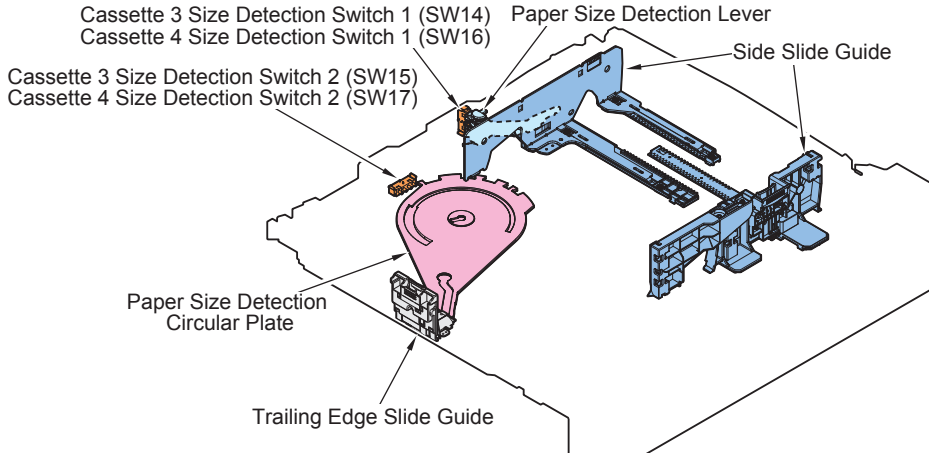
Deck

Set in Service Mode.

NOTE:Related Service Mode
(Lv.1) COPIER > OPTION > CST > P-SZ-C1 (Right Deck Paper setting)
(Lv.1) COPIER > OPTION > CST > P-SZ-C2 (Left Deck Paper setting)
Setting Value
0: A4 (default), 1: B5, 2: LTR

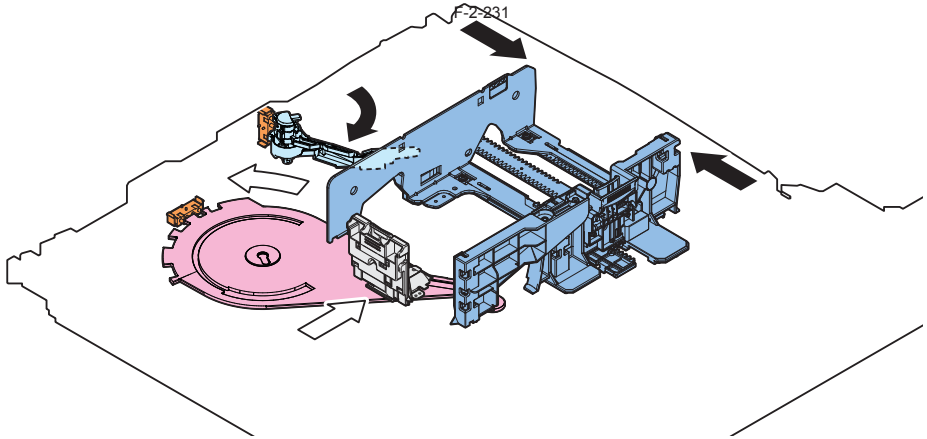
Cassette

Paper size in cassette 3/4 is each detected by 2 paper size detection switches. ON/OFF of 4-actuator in the Host Machine changes according to the Paper Size Detection Circular Plate/Lever Position linked to Trailing Edge/Side Slide Guide. Paper size is detected by two 4-actuator ON/OFF combinations. And, if all 4-actuator are OFF is detected, it means no-cassette.



F-2-230

F-2-231

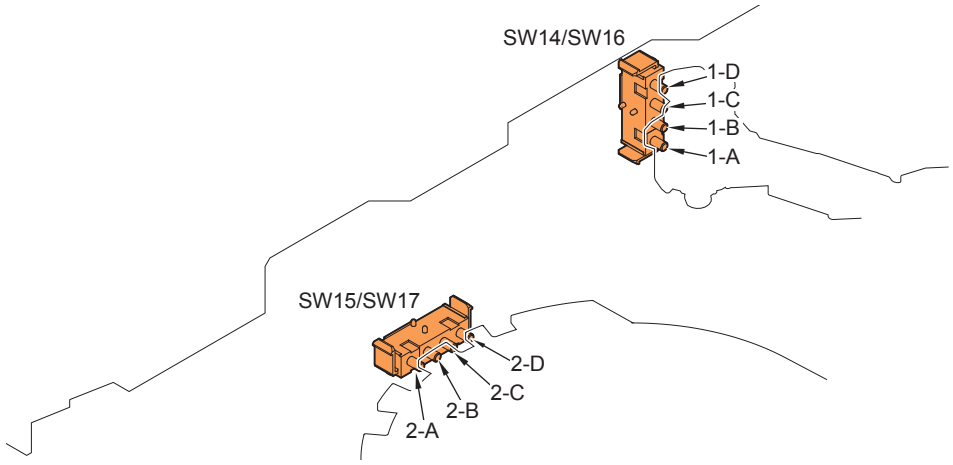


F-2-232

List of size detection switches combination

Paper Size	Width (mm)	Length (mm)	Width (SW14/SW16)				Length (SW15/SW17)			
			1-A	1-B	1-C	1-D	2-A	2-B	2-C	2-D
B5	257.0	182.0	ON	-	-	ON	ON	ON	ON	ON
EXEC	267.0	184.0	ON	-	-	ON	ON	ON	ON	ON
16K	270.0	195.0	ON	-	-	ON	-	ON	ON	ON
A5-R	148.5	210.0	-	ON	-	ON	ON	-	ON	ON
A4	297.0	210.0	ON	-	ON	ON	ON	-	ON	ON
STMT-R	139.7	215.9	-	ON	-	ON	ON	-	ON	ON
LTR	279.4	215.9	ON	-	-	ON	ON	-	ON	ON
B5-R	182.0	257.0	-	ON	-	ON	ON	-	ON	-
16K-R	195.0	270.0	ON	ON	-	ON	ON	ON	-	ON
			-	ON	-	ON	ON	ON	-	ON
LTR-R	215.9	279.4	ON	ON	-	ON	-	ON	ON	ON
			ON	ON	-	ON	-	ON	ON	-
A4-R	210.0	297.0	ON	ON	-	ON	-	-	ON	ON
LGL	215.9	355.6	ON	ON	-	ON	ON	ON	-	-
B4	257.0	364.0	ON	-	-	ON	ON	ON	ON	-
8K	270.0	390.0	ON	-	-	ON	-	-	ON	ON
A3	297.0	420.0	ON	-	ON	ON	-	ON	-	-
LDR	279.4	431.8	ON	-	-	ON	-	-	ON	-
SRA3	320.0	450.0	ON	-	ON	-	-	-	-	ON
12 x 18	304.8	457.2	ON	-	ON	ON	-	-	-	ON
13 x 19	330.2	483.0	ON	-	ON	-	-	-	-	-
K_LGL	268.0	190.0	ON	-	-	ON	ON	ON	ON	ON
K_LGL-R	190.0	268.0	-	ON	-	ON	ON	ON	-	ON
G_LTR	267.0	203.0	ON	-	-	ON	-	ON	ON	ON
G_LTR-R	203.0	267.0	ON	ON	-	ON	ON	ON	-	ON
G_LGL	203.2	330.2	ON	ON	-	ON	-	ON	ON	-
OFI	216.0	317.0	ON	ON	-	ON	ON	ON	-	-
E_OFI	220.0	320.0	ON	ON	-	ON	ON	ON	-	-
M_OFI	216.0	341.0	ON	ON	-	ON	ON	-	ON	ON
B_OFI	216.0	355.0	ON	ON	-	ON	ON	ON	-	-
A_OFI	220.0	340.0	ON	ON	-	ON	-	-	ON	ON
FOLIO	216.0	330.0	ON	ON	-	ON	-	ON	ON	-
FLSP	216.0	330.0	ON	ON	-	ON	-	ON	ON	-
A_FLSP	206.0	337.0	ON	ON	-	ON	-	-	ON	ON
A_LTR	280.0	220.0	ON	-	-	ON	ON	-	ON	ON
A_LTR-R	220.0	280.0	ON	ON	-	ON	-	ON	ON	-
A_LGL	220.0	340.0	ON	ON	-	ON	-	-	ON	ON
FA4	216.0	343.0	ON	ON	-	ON	ON	-	-	ON
FB4	216.0	330.0	ON	ON	-	ON	-	ON	ON	-

T-2-107



F-2-233

NOTE:

- Related Settings/registration
  Settings/registration (Top) > Preferences > Paper Settings > A5R/STMTR Original Selection
  Setting value Cassette3: A5R, STMTR, Cassette4: A5R, STMTR

  Settings/registration (Top) > Preferences > Paper Settings > B5/EXEC Original Selection
  Setting value Cassette3: B5, EXEC, Cassette4: B5, EXEC

  Settings/registration (Top) > Preferences > Paper Settings > Register Custom Size
  Setting value X: 182.0 to 487.7 mm, Y: 139.7 to 330.2 mm (Maximum 5 pieces)

- Related Service Mode
  (Lv.1) COPIER > OPTION > CST
  > CST3-P1 (Cassette3 paper size setting (A5R/STMTR))
  , CST4-P1 (Cassette4 paper size setting (A5R/STMTR))
  Setting value 0: A5R, 1: STMTR

  , CST3-P2 (Cassette3 paper size setting (B5/EXEC))
  , CST4-P2 (Cassette4 paper size setting (B5/EXEC))
  Setting value 0: B5, 1: EXEC

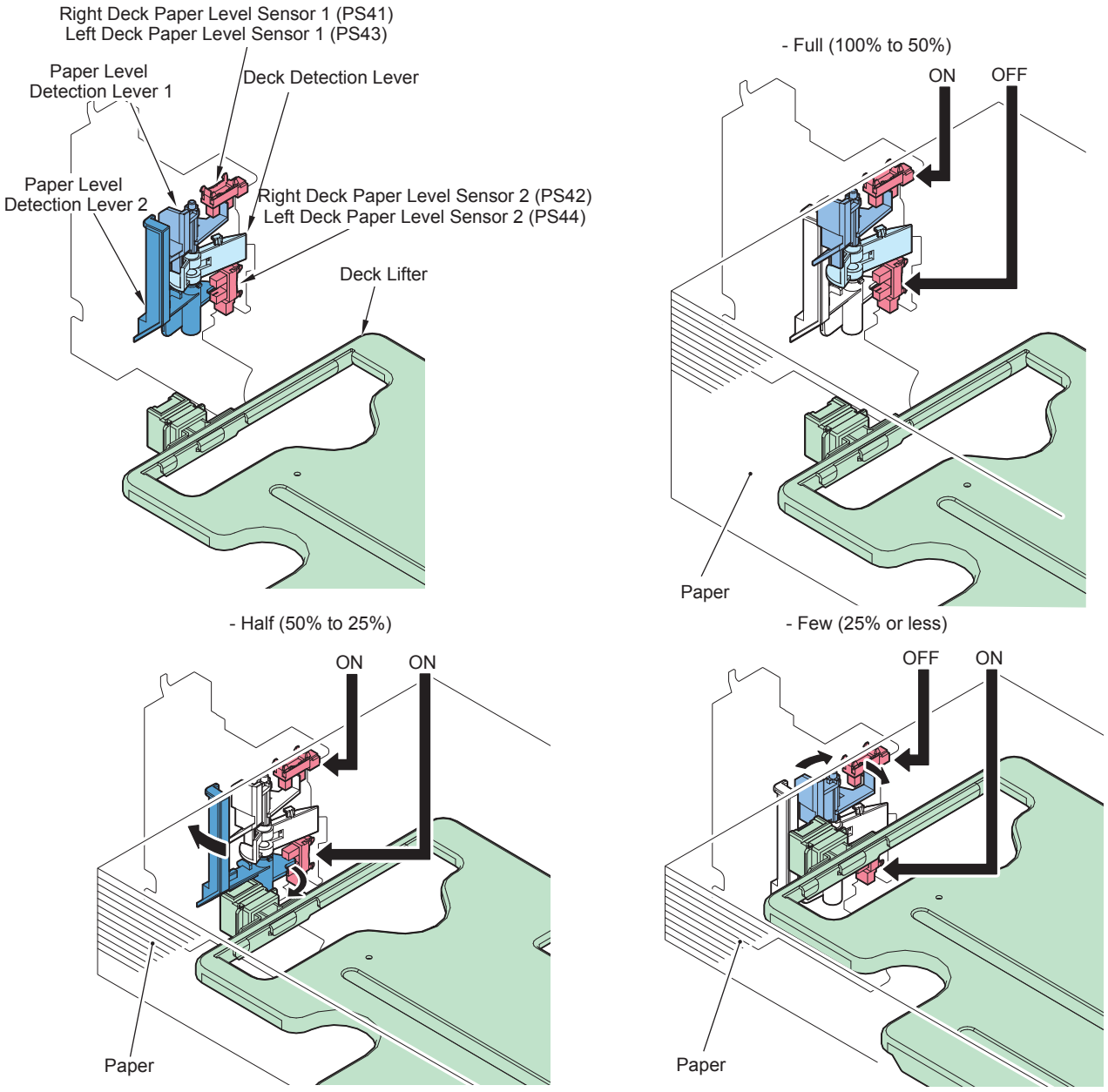
Paper Level Detection

Paper level is detected by two Paper Level sensors in each cassette.

Deck

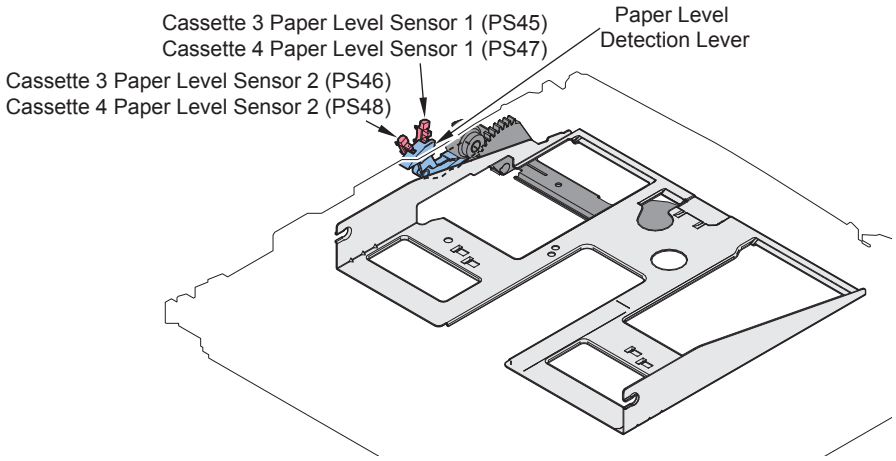
	Right Deck Paper Level Sensor 1 (PS41) Left Deck Paper Level Sensor 1 (PS43)	Right Deck Paper Level Sensor 2 (PS42) Left Deck Paper Level Sensor 2 (PS44)	Control Panel Screen Display
Full (100% to 50%)	ON	OFF	
Half (50% to 25%)	ON	ON	
Few (25% or less)	OFF	ON	

T-2-108



F-2-234

Cassette

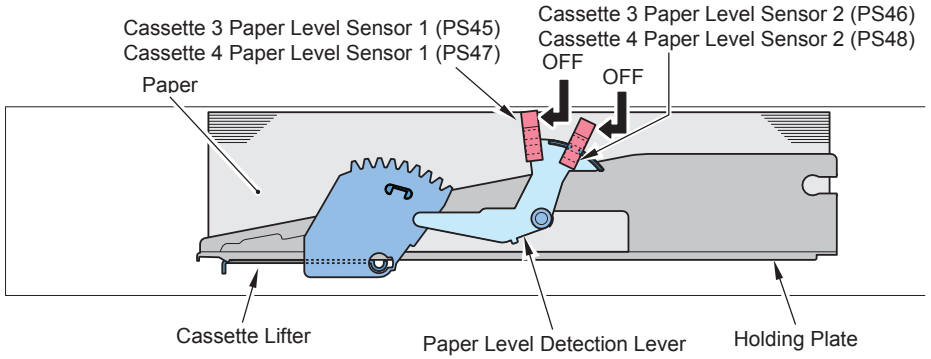


F-2-235

	Cassette 3 Paper Level Sensor 1 (PS45) Cassette 4 Paper Level Sensor 1 (PS47)	Cassette 3 Paper Level Sensor 2 (PS46) Cassette 4 Paper Level Sensor 2 (PS48)	Control Panel Screen Display
Full (100% to 50%)	OFF	OFF	
Half (50% to 25%)	OFF	ON	
Few (25% or less)	ON	ON	

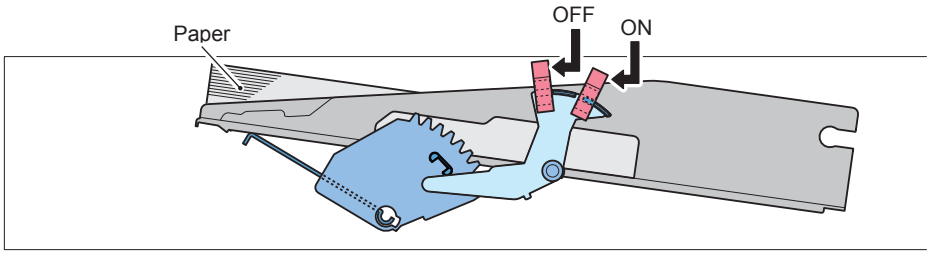
T-2-109

- Full (100% to 50%)



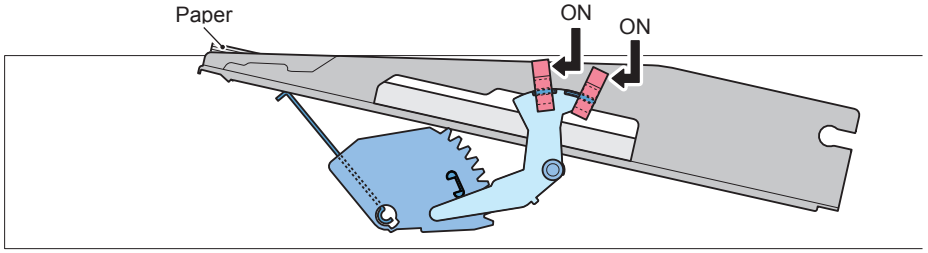
F-2-236

- Half (50% to 25%)



F-2-237

- Few (25% or less)



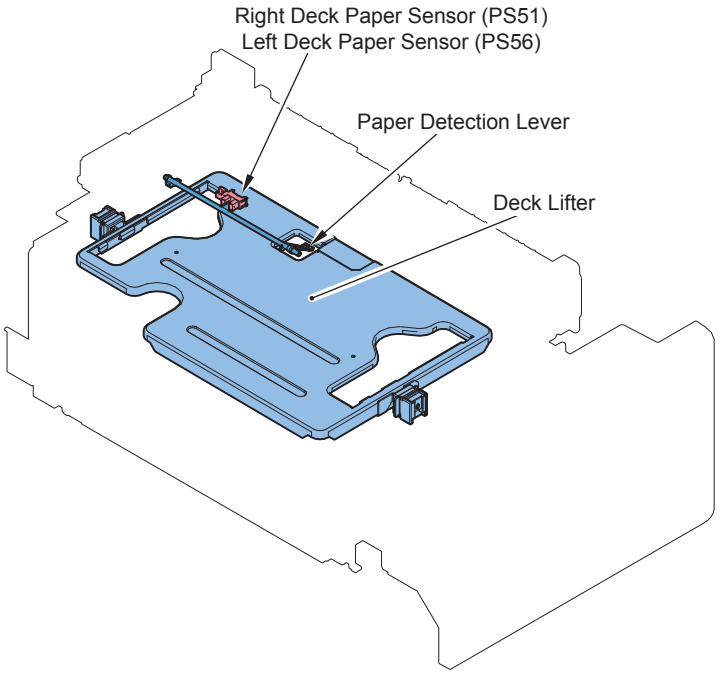
F-2-238

Paper Detection

If paper is present, the Detection Lever is pushed upward when lifter ascends, and Paper Sensor is turned OFF.

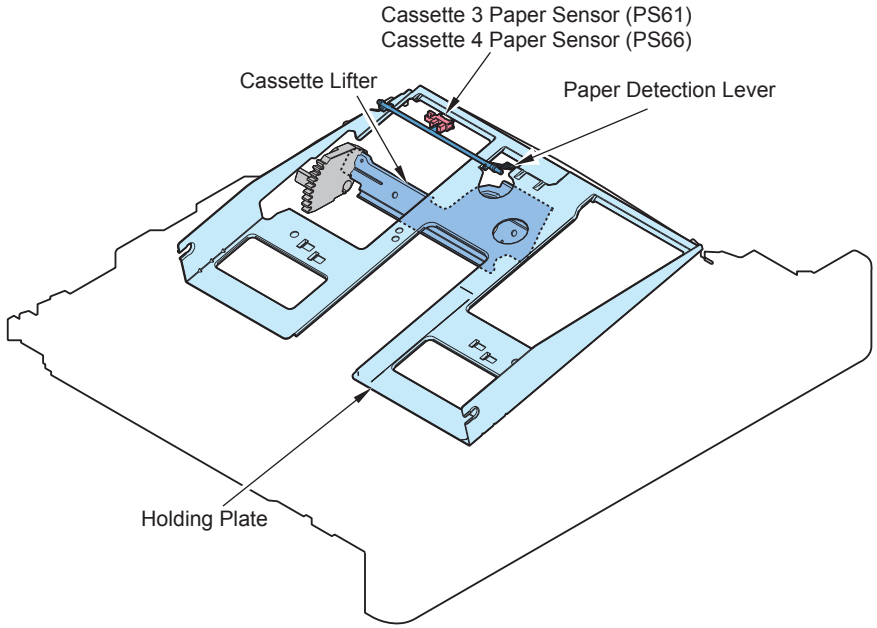
If paper finishes, the Detection Lever enters lifter hole, and Paper Sensor is turned ON.

Deck



F-2-239

Cassette



F-2-240

Lifter Control

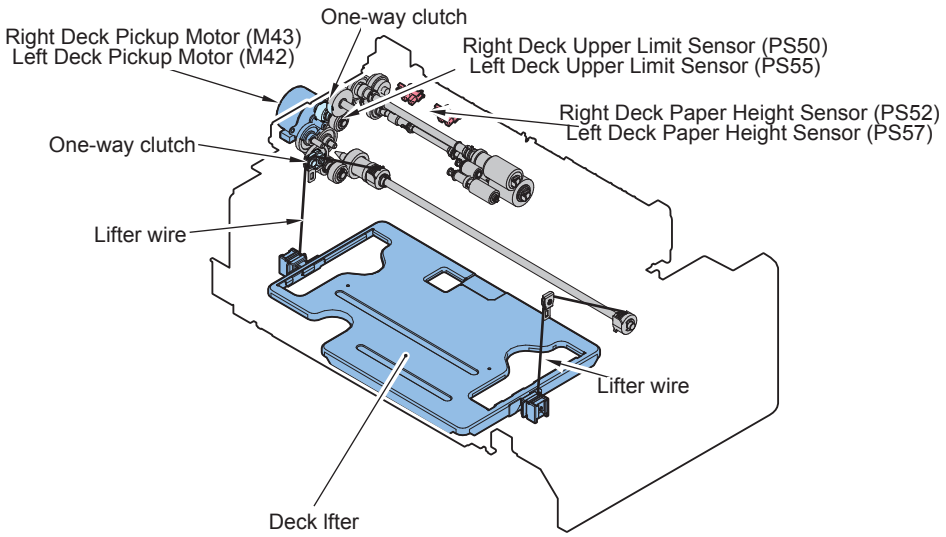
Lifter will raise paper to pickup position.

If deck/cassette is set, the Pickup Motor will be driven in reverse direction from pickup movement, and lifter will be ascended until the paper surface arrives at the height of pickup position.

One-way Clutch is equipped to the shaft of both Lifter drive and Pickup Roller drive sides. Therefore, the Pickup Roller does not operate when the Lifter is operated, and vice versa.

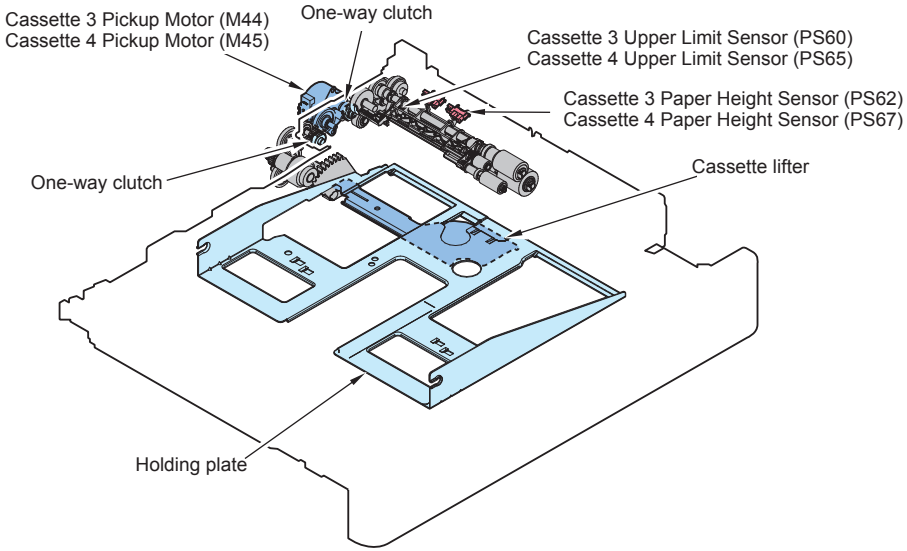
One-way clutch is attached in the Host Machine shaft, hence when deck/cassette is pulled out, lifter will descend.

Deck



F-2-241

Cassette



F-2-242

Lifter Error Detection

In case due to some reason the lifter keep ascending even the Paper Surface Height Sensor is turned ON, the Upper Limit Sensor is provided to prevent damage in this equipment due to the error in ascending.

And, if the lifter starts ascending, but not detected by the Paper Surface Sensor and the Upper Limit Sensor within 3 minutes, the alarm corresponds to the concerned Pickup Cassette will be triggered. The alarm will release if the corresponding deck/cassette is open or closed, or the power is turned OFF/ON.

Pickup Retry Control

If paper leading edge is not detected by Pickup sensor within the specified time after pickup movement starts, it is not immediately determined as jam, and re-pickup movement will be executed.
During pickup retry, the Pickup Motor will be repeatedly turned ON/OFF with the Pickup Roller is in descended condition.

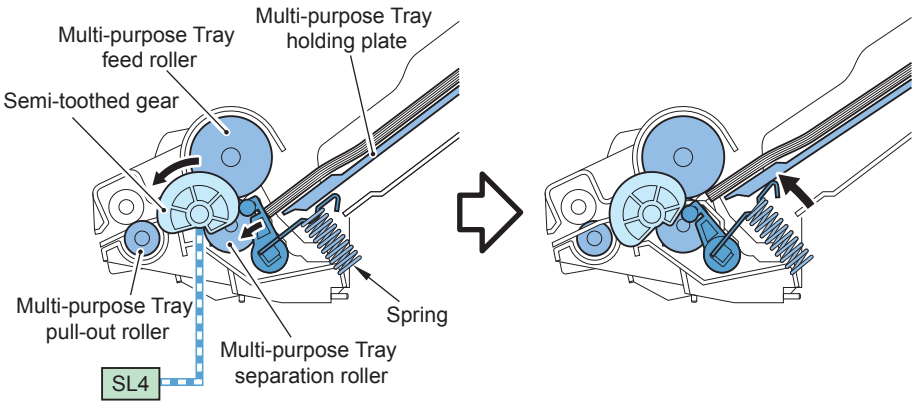
Feed Speed	Paper length (mm)	Retry numbers	Typical Paper Type
1/1 Speed	215.9 or less	0	B5/A4/LTR
	297 or less		B5-R/A4-R/LTR-R
	419 or less		LGL/B4/8K
	431.8 or less	1	A3/LDR
	431.9 or more		SRA3/12x18/13x19
1/2 Speed	215.9 or less	2	B5/A4/LTR
	297 or less		B5-R/A4-R/LTR-R
	419 or less		LGL/B4/8K
	431.8 or less		A3/LDR
	431.9 or more		SRA3/12x18/13x19
1/3 Speed	215.9 or less	2	B5/A4/LTR
	297 or less		B5-R/A4-R/LTR-R
	419 or less		LGL/B4/8K
	431.8 or less		A3/LDR
	431.9 or more		SRA3/12x18/13x19

T-2-110

Multi-purpose Tray Pickup Unit

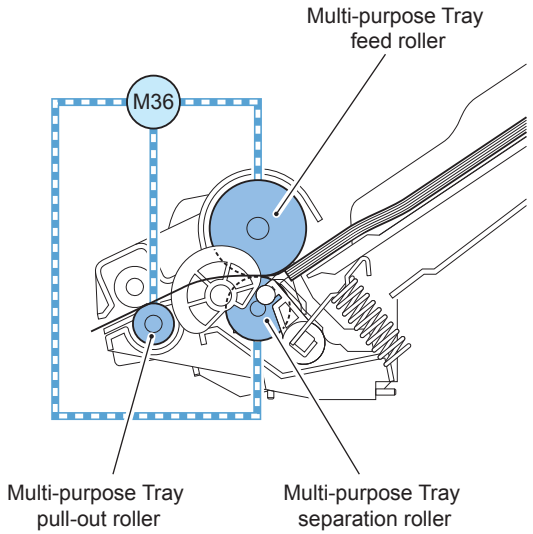
Basic Movement

1) If the Multi-purpose Pickup Solenoid (SL4) is turned ON, the semi-toothed gear will rotate.
2) The holding plate Fixing Members will be released and the holding plate will ascend.



F-2-243

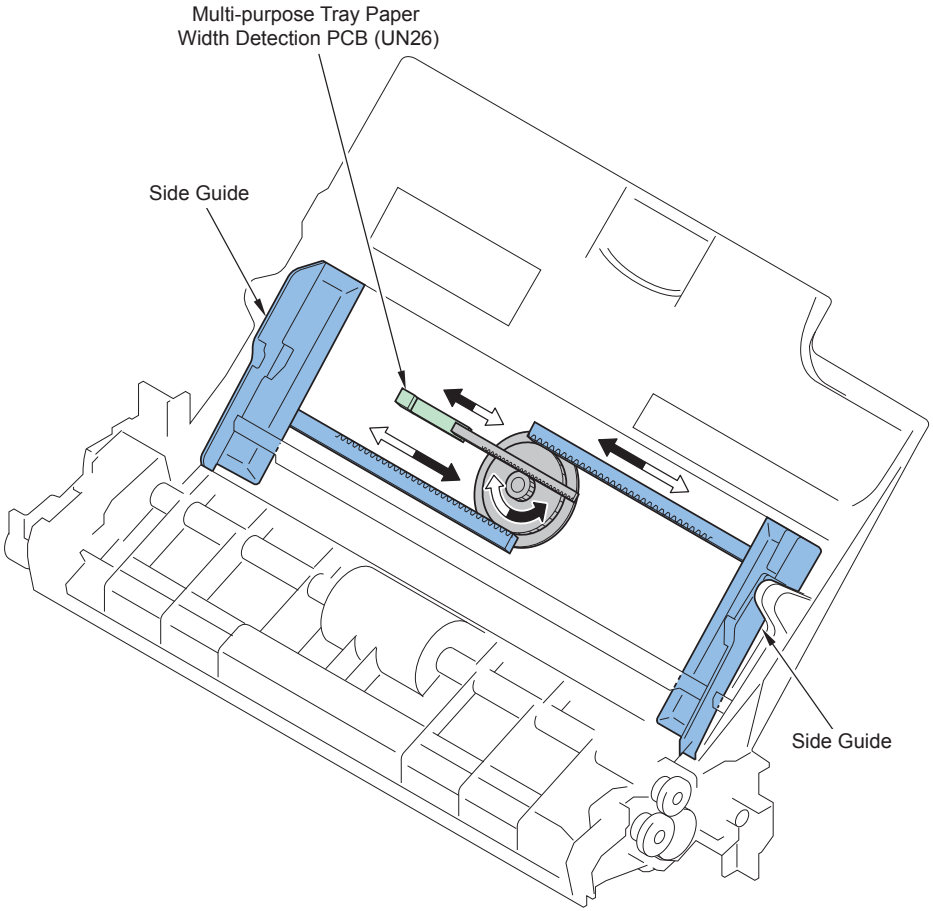
3) When the Pre-registration Multi-purpose Tray Drive Motor drives, the Multi-purpose Pull Out Roller and the Multi-purpose Feed Roller/Multi-purpose Separation Roller will rotate, and only 1 sheet of paper will be picked up/fed.



F-2-244

Paper Size Detection

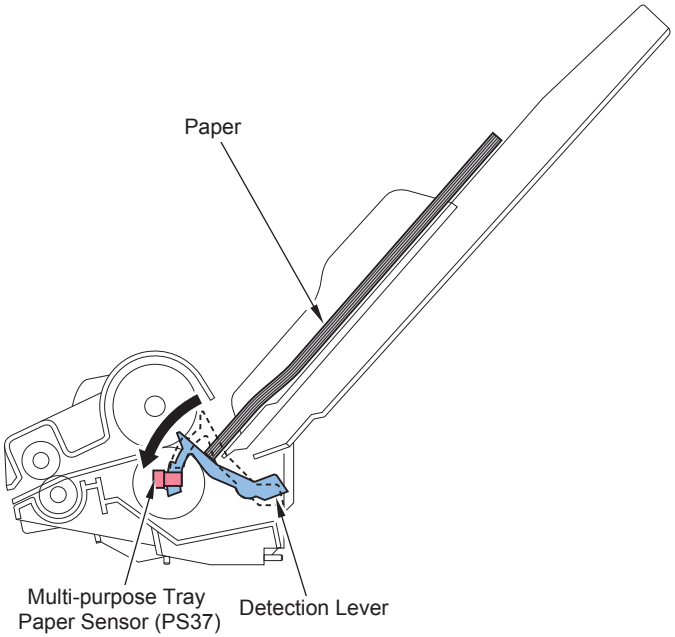
The setting is performed the Side Guide Plate and size code setting (or irregular size setting assignment) by and the Control Panel Unit.
Paper width is detected by the outputted value from the Variable Resistor Assembly (Multi-purpose Tray Paper Width Detection PCB (UN26)) which is linked to movement of the Side Guide Plate.
Setting of the Side Guide Plate on the Multi-purpose Pickup Tray is executed by users after paper is set.



F-2-245

Paper Detection

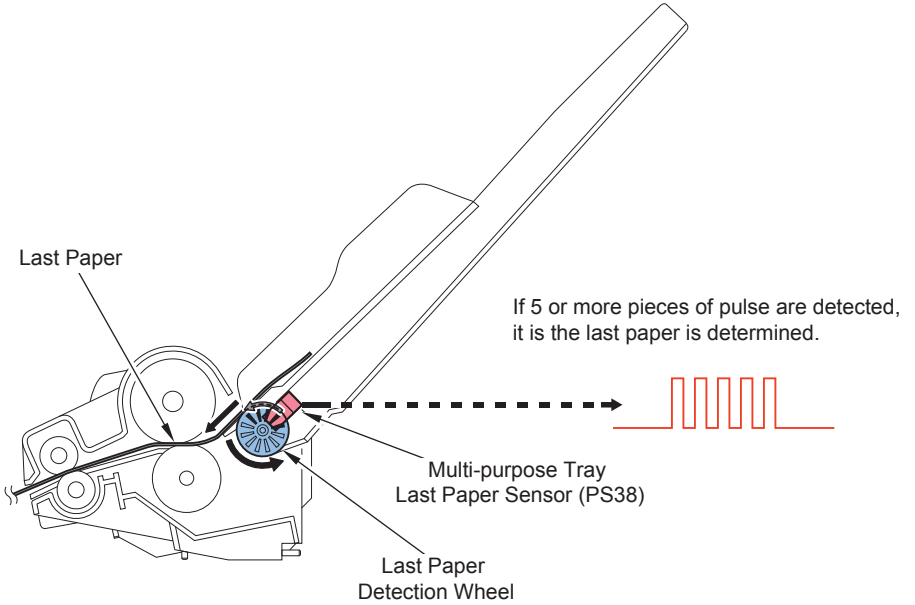
When paper is set, Paper Presence Detection Lever will be pushed, and the Multi-purpose Tray Paper Sensor (PS37) will turn ON.



F-2-246

Last Paper Detection

After the Last Paper Detection Wheel rotates, the Multi-purpose Last Paper Sensor (PS38) will detect whether it is last paper or not.
Last Paper Detection Wheel only rotates when the last paper is picked up.
Since there is slit in the Last Paper Detection Wheel, the output of the Multi-purpose Last Paper Sensor (PS38) is pulse shape. If 5 or more pieces of pulse are detected, it is the last paper is determined.

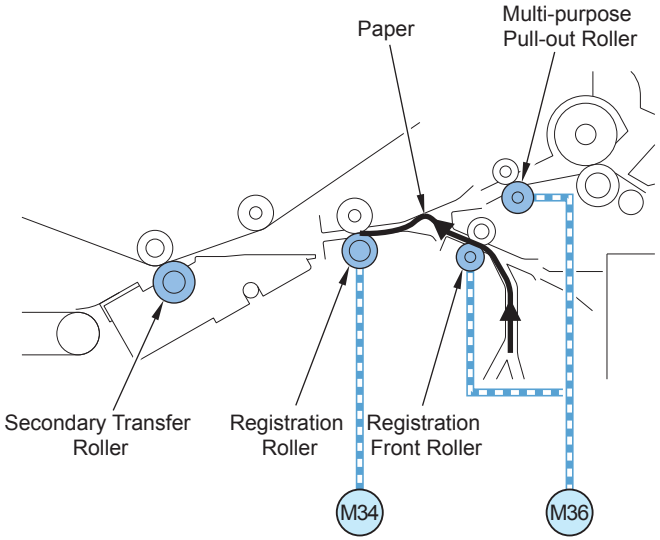


F-2-247

Registration Unit

Registration Control

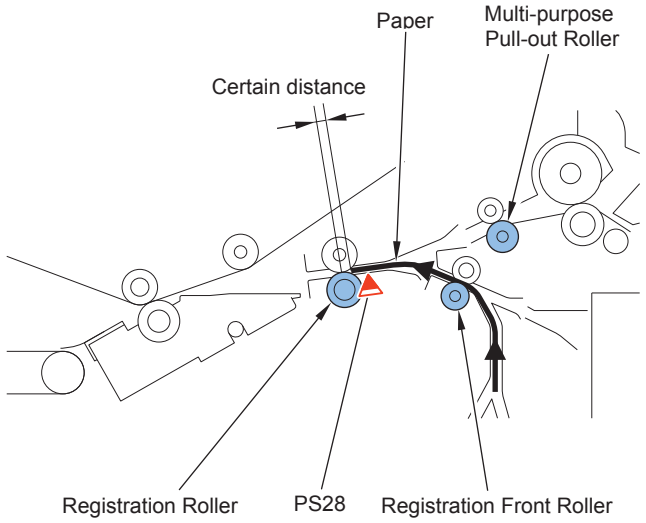
Registration Roller is driven by the Registration Motor (M34).
It controls so that the paper and the image on ITB is conformed in the specified place.



F-2-248

Registration Noise Reduction Control

Each feed motor stops just before the paper leading edge is pushed-on the Registration Roller (in this moment, paper leading edge doesn't reach the Registration Roller). After specified time, motor drive restarts, and it forms registration arch. Noise reduction measurement is executed by pushing-on the paper leading edge to the Registration Roller in slow speed.



F-2-249

Feed condition	Stop motor	Remarks
Multi-purpose Tray Pickup	Pre-registration Multi-purpose Tray Drive Motor (M36)	-
Right Deck Pickup	Pre-registration Multi-purpose Tray Drive Motor (M36) Right Deck Vertical Path Motor (M40)	-
Left Deck Pickup	Pre-registration Multi-purpose Tray Drive Motor (M36) Left Deck Vertical Path Motor (M41)	-
Cassette 3/4 Pickup	Pre-registration Multi-purpose Tray Drive Motor (M36) Right Deck Vertical Path Motor (M40) Cassette Vertical Path Motor (M39)	Cassette Vertical Path Motor (M39) stops only when B4, A3, LDR, and 13” x 19” size are fed.
Option Pickup	Pre-registration Multi-purpose Tray Drive Motor (M36)	-
Duplex printing	Pre-registration Multi-purpose Tray Drive Motor (M36) Left Deck Vertical Path Motor(M41) Duplex Left Motor (M32)	Duplex Left Motor (M32) stops only when 13” x 19” size is fed.

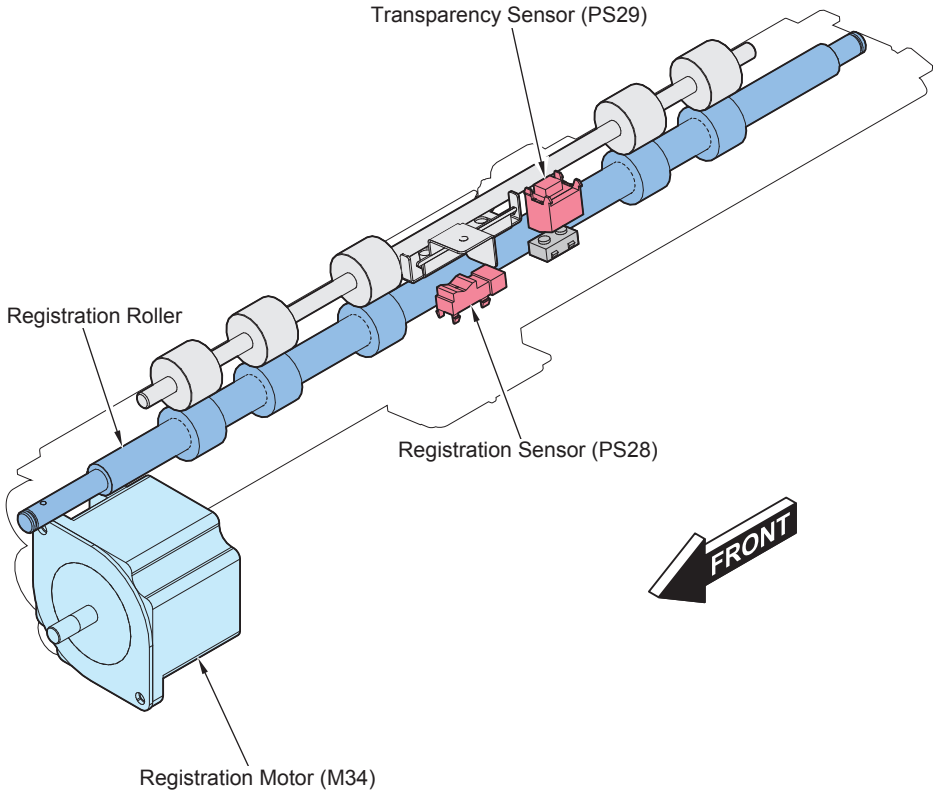
T-2-111

■ Transparency detection

Whether the fed paper is transparency or not is detected. The detection is performed in the Transparency Sensor (PS29).

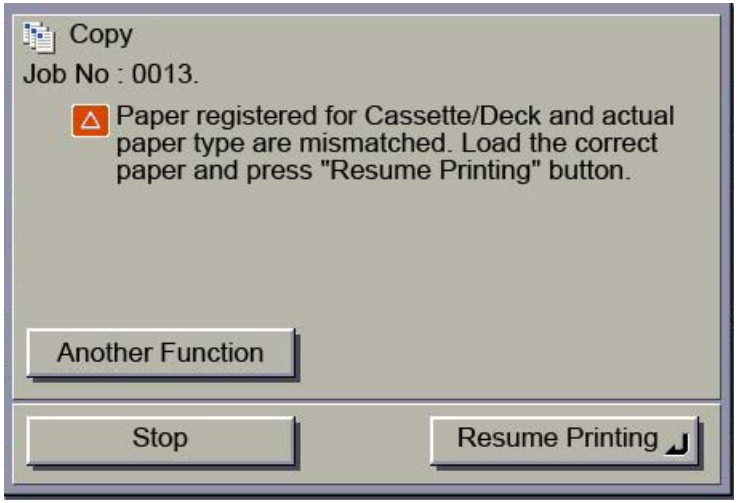
The following condition is jam announcement for paper mistake.

- If it is determined that non-transparency paper placed in transparency setting
- If it is determined that transparency paper placed in non-transparency setting



F-2-250

● Touch Panel display at detection (Tentative message)



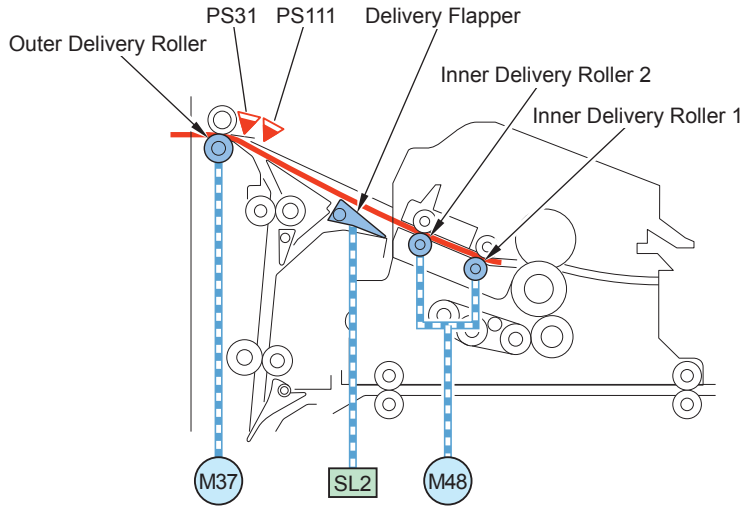
F-2-251

Delivery Unit

Basic movement

Face-up delivery

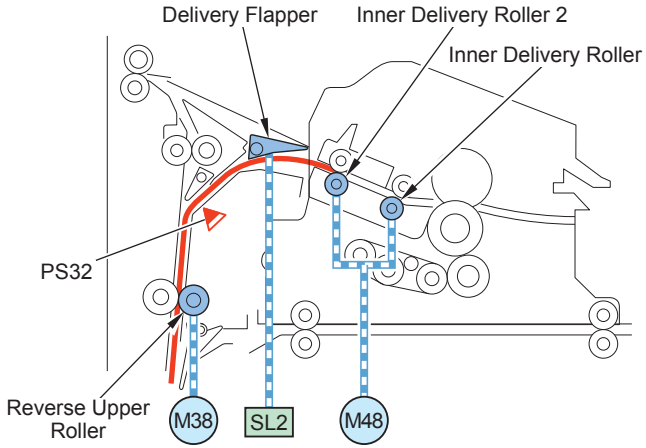
Delivery Flapper Solenoid (SL2) is turned ON, and paper is fed to Delivery Inlet.



F-2-252

Face-down delivery

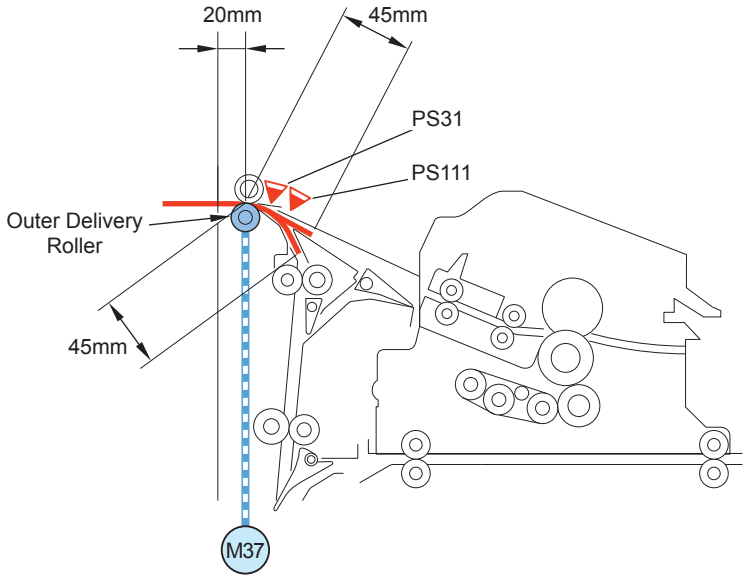
Delivery Flapper Solenoid (SL2) is turned OFF, and paper is fed to the Reverse Unit.



F-2-253

Delivery Speed Reduction Control

If the Copy Tray is attached, speed reduction is executed to improve paper loading (to prevent the paper from dashing out).



F-2-254

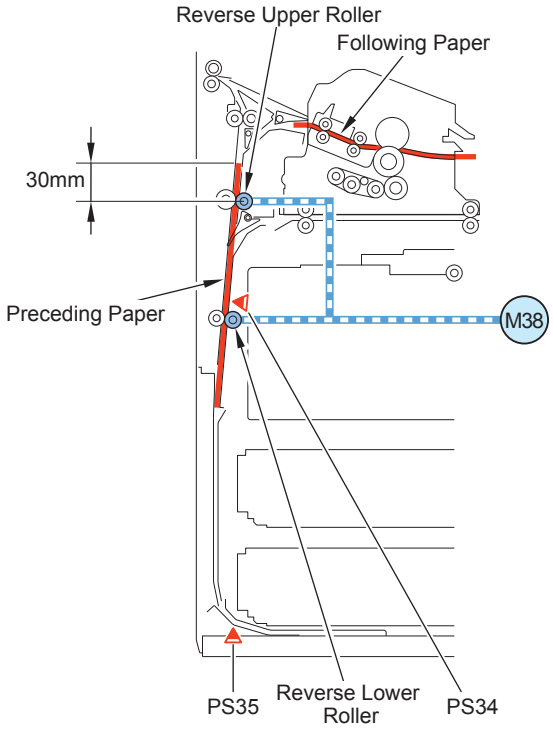
Control Description	Position Where Speed Change
Speed Reduction Start	Paper trailing edge is 45 mm upstream from the Delivery Roller.
Speed Reduction Finish	Paper trailing edge is 20 mm downstream from the Delivery Roller.

T-2-112

Reverse Unit

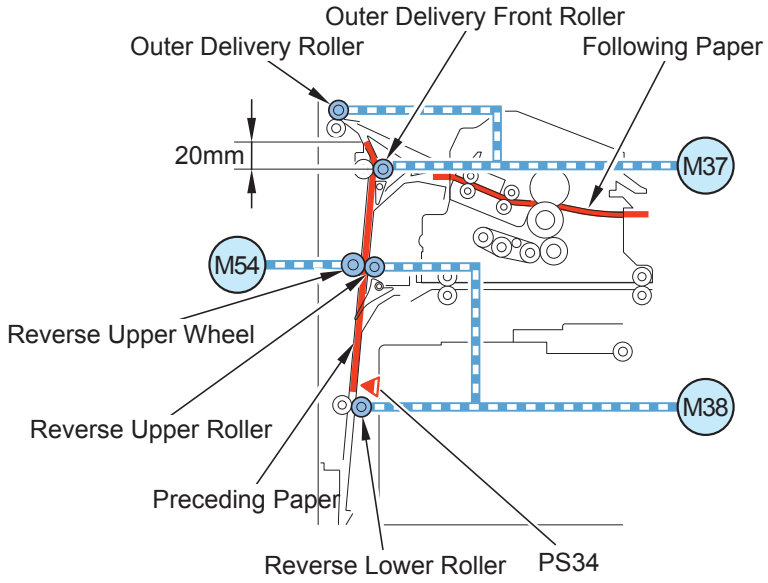
Basic Movement

1) The Reverse Motor (M38) will stop/reverse-rotate when paper trailing edge arrives at the reverse stop position (30.0 mm upstream from the Reverse Upper Roller) in the specified time after the Reverse Vertical Path Sensor 2 (PS34) (Paper length: less than 480 mm) is turned ON.
If the paper length is 480 mm or more, reverse operation is performed based on the Reverse Vertical Path Sensor 3 (PS35).



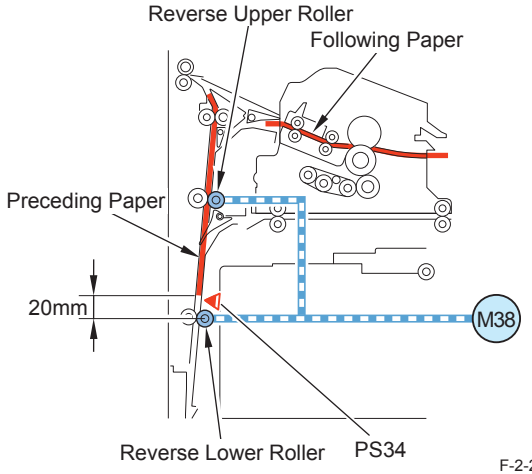
F-2-255

2) In the point when the leading edge of preceding paper exceeds the position 20 mm lowstream from the Outer Delivery Front Roller, in order to prepare for the following paper advancement, the Reverse Upper Wheel Detachment Motor (M54) is turned ON, and The Reverse Upper Wheel will detach.



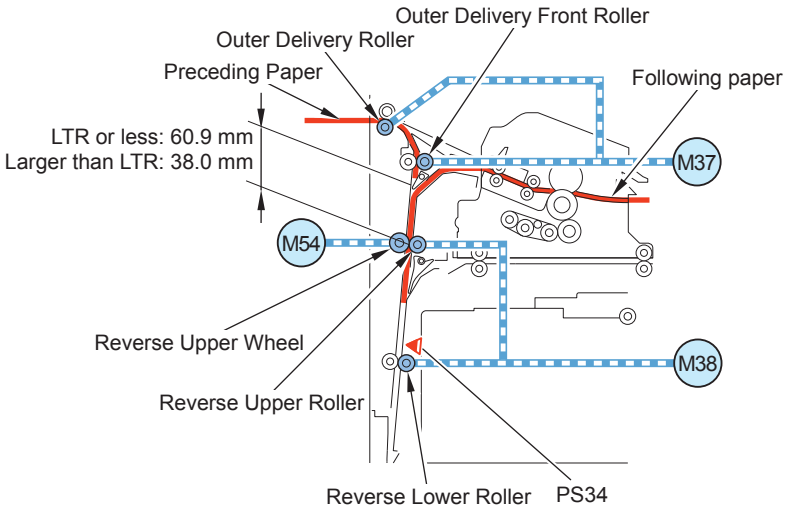
F-2-256

3) The following paper will be fed to the Reverse Unit direction. Reverse Motor (M38) will stop/normal-rotates.



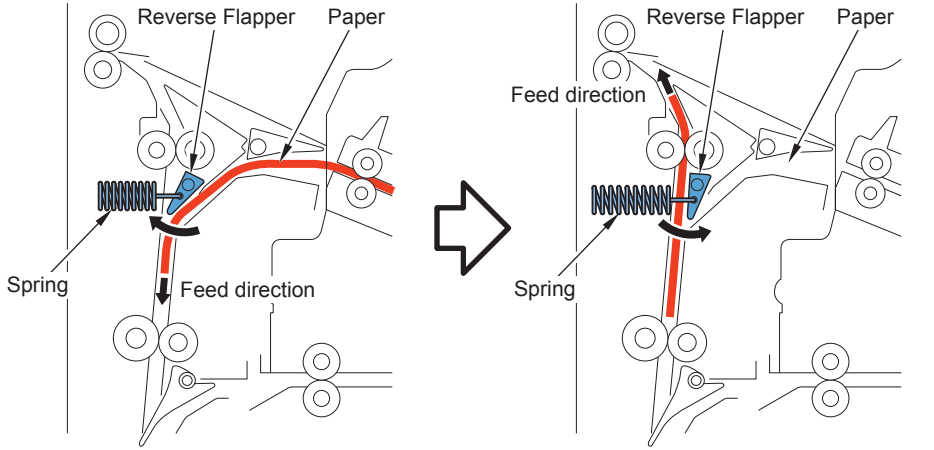
F-2-257

4) In the moment when the trailing edge of the preceding paper exceeds the position 10 mm upstream of the Outer Delivery Front Roller (for other than LTR paper), the Reverse Upper Wheel Detachment Motor (M54) is turned OFF and the Reverse Upper Wheel is attached.



F-2-258

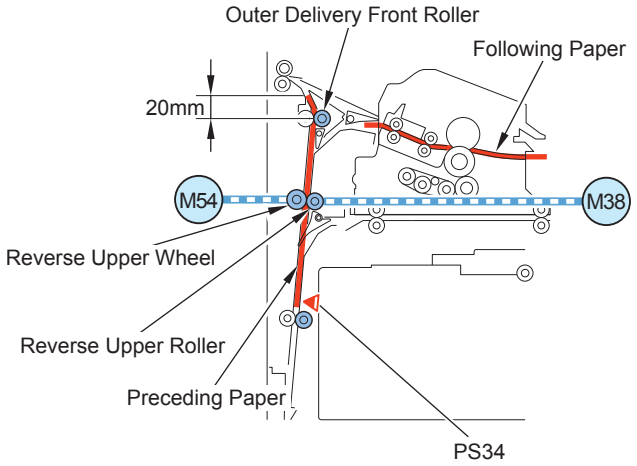
Reverse Flapper Movement



F-2-259

Reverse Detachment Control

The Reverse Upper Roller is detached, to make the preceding paper and the following paper cross on the Reverse Upper Wheel.

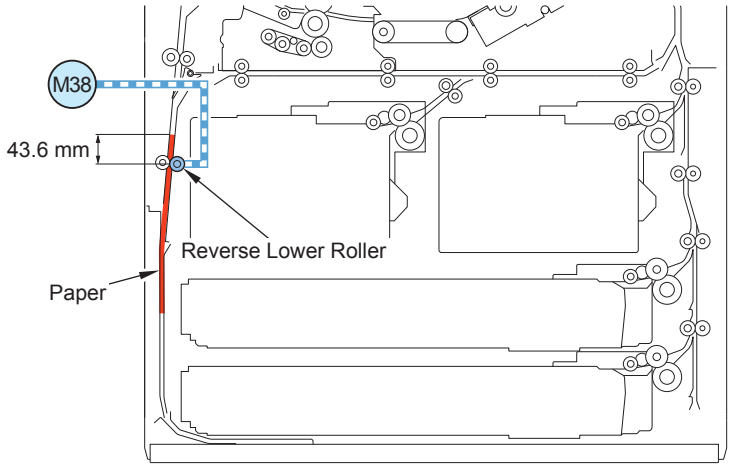


F-2-260

Duplex Unit

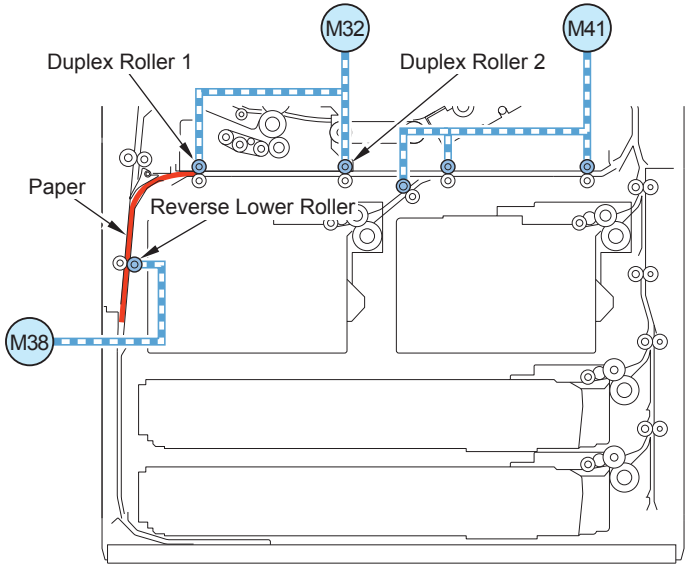
Basic Movement

1) When the paper trailing edge arrives at the duplex reverse position (43.6 mm upstream from the Reverse Lower Roller), the Reverse Motor (M38) stops/reverses and the paper will be fed to the Duplex Unit.



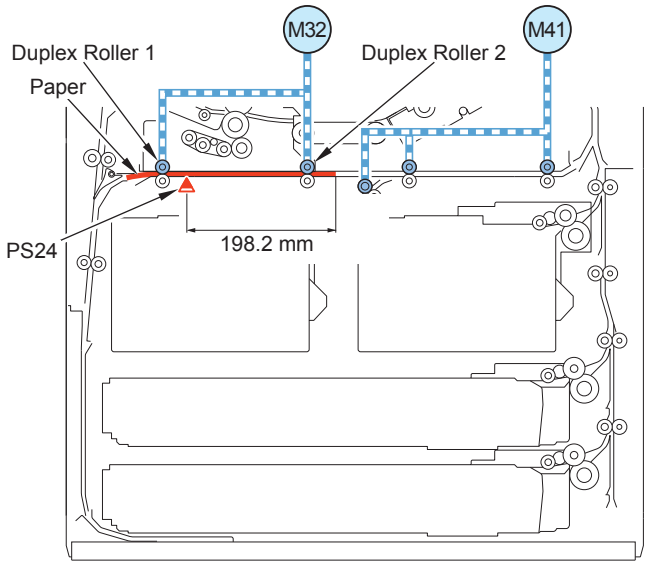
F-2-261

2) Drive the Duplex Left Motor (M32) and the Left Deck Vertical Path Motor (M41) to feed paper to the duplex re-pickup position.



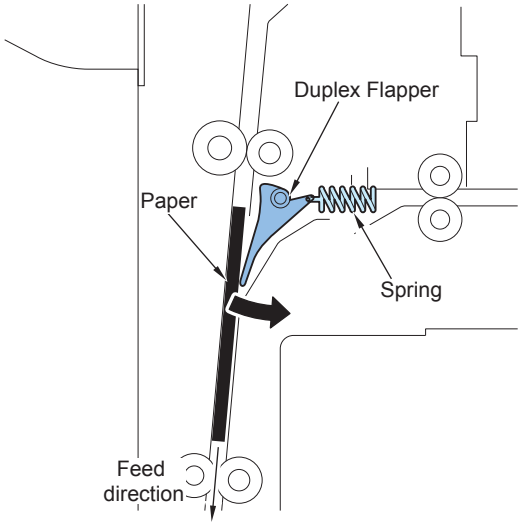
F-2-262

3) Paper stops in duplex re-pickup position (paper leading edge is 198.2 mm downstream of the Duplex Sensor 1), and after specified time, the Duplex Right Motor (M32) and the Left Deck Vertical Path Motor (M41)are driven and paper is fed to the Registration Unit.



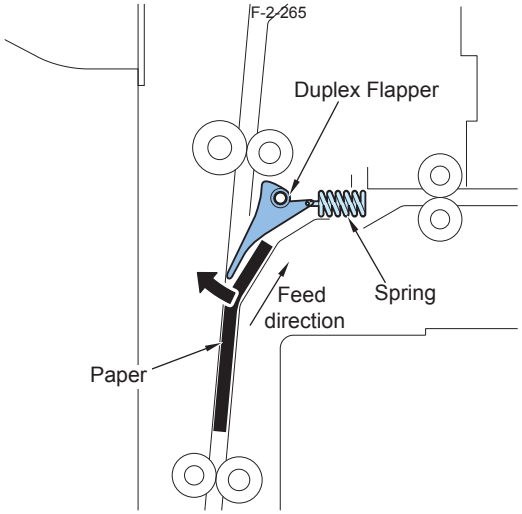
F-2-263

■ Duplex Flapper Movement



F-2-264

F-2-265



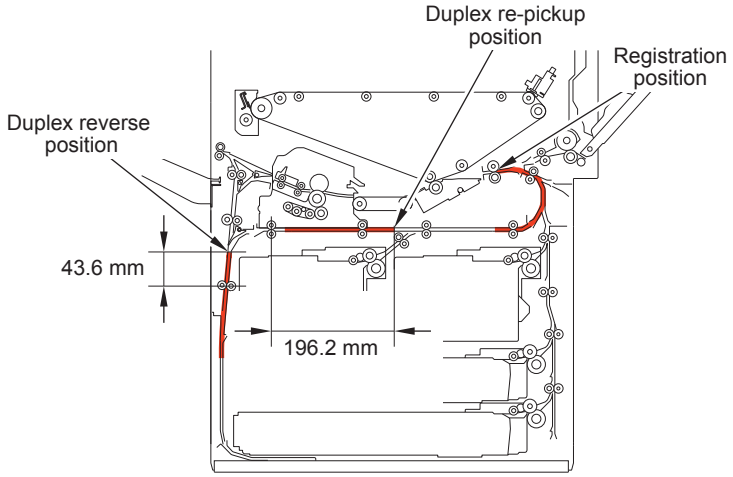
F-2-266

■ Duplex Reverse Control

The following is the timing when the paper is fed from duplex reverse position.
Paper whose size is 298 mm or more and 390 mm or less in size doesn't stop in duplex re-pickup position.

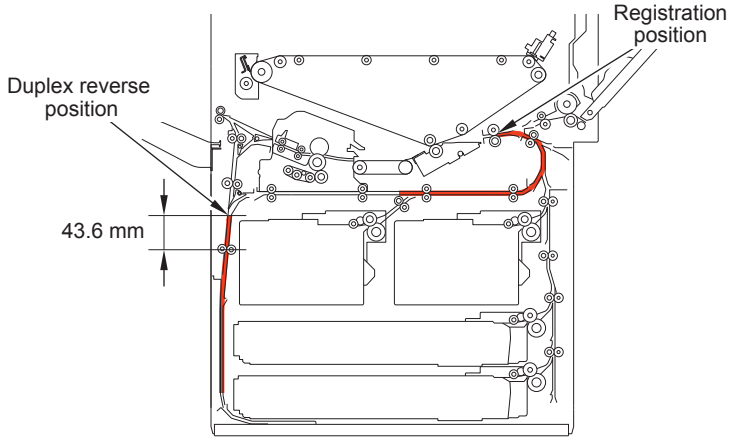
Paper length	If there is no paper in duplex re-pickup position	If there is paper in duplex re-pickup position	Paper stops/not in duplex re-pickup position
less than 298 mm (B5 to A4R)	Feed will certainly start	Feed will start after the preceding paper duplex re-pickup is started	Stop
298 mm or more 390 mm or less (B4, LGL, 8K)	Feed will start in the specified time after the leading edge of preceding paper passes the Registration Roller	In the specified time after the leading edge of preceding paper passes the Registration Roller.	-
exceeds 390 mm (A3 to 19.2 inch)	Feed will certainly start	Feed will start after the trailing edge of the preceding paper passes the duplex re-pickup position.	Stop

● Less than 298 mm in size/5 sheets in circulation (B5 to A4)



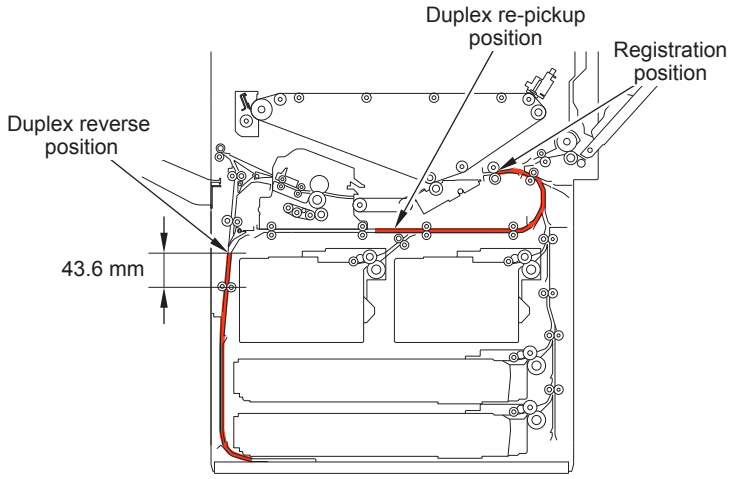
F-2-267

● 298 mm or more and 390 mm or less in size, 3 sheets in circulation (reverse position and re-pickup position is the same) (B4, LGL, 8K)



F-2-268

● Exceeds 390 mm in size/3 sheets in circulation (A3 to 19.2 inch)

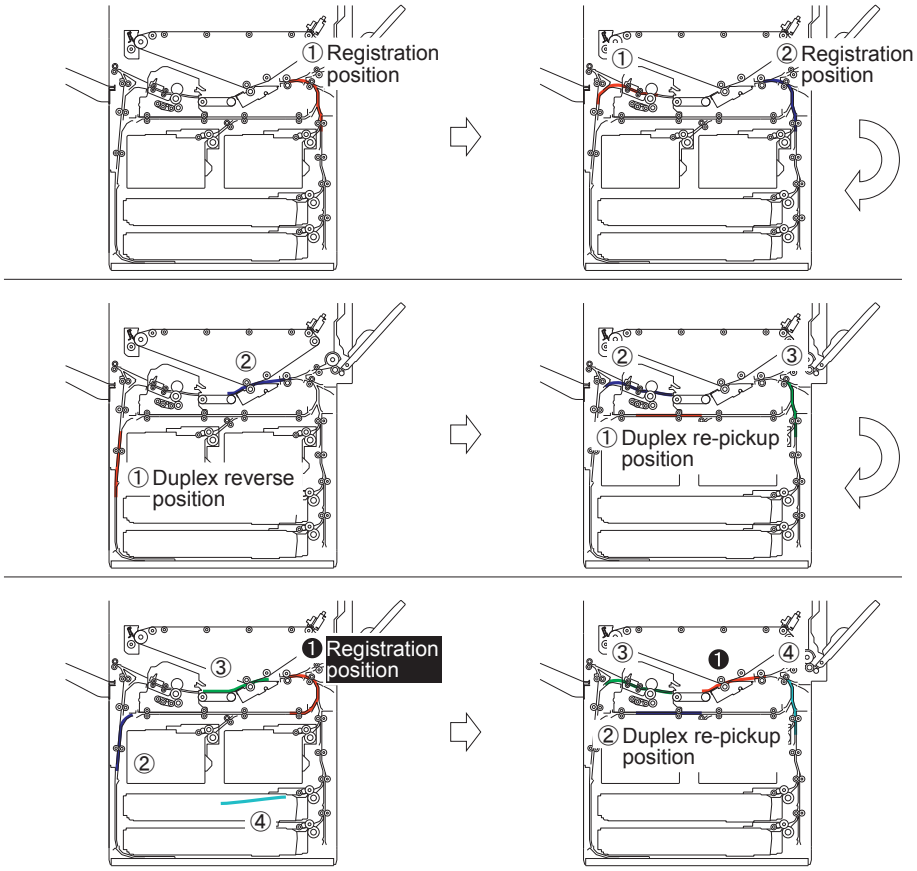


F-2-269

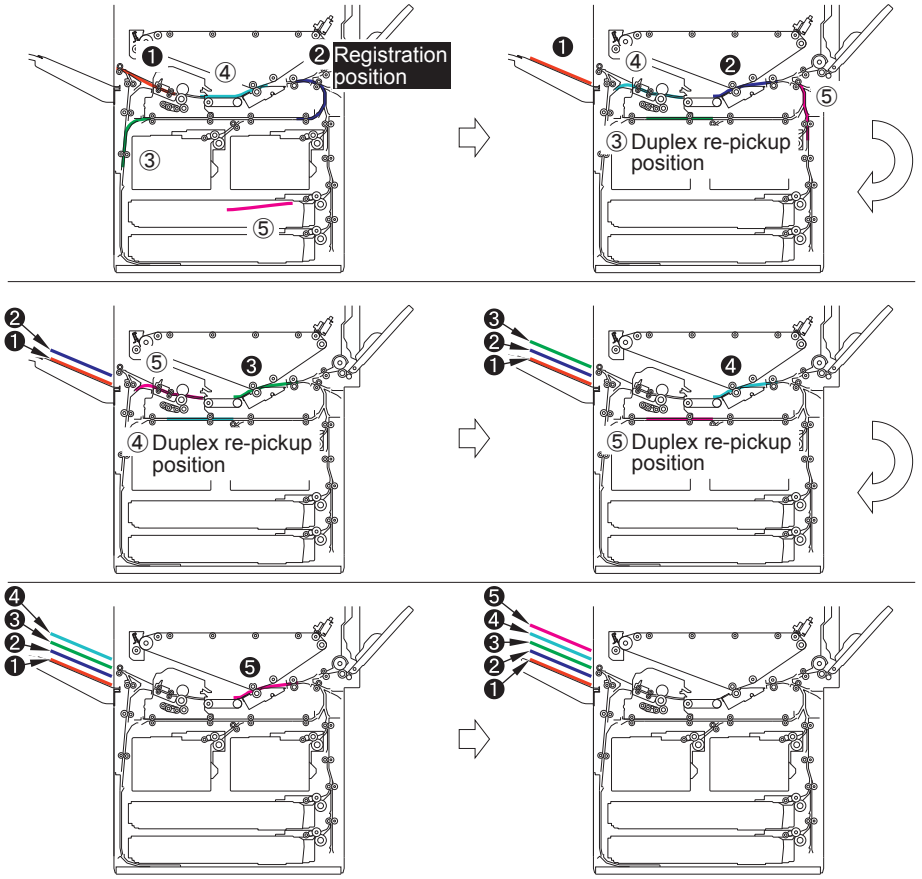
Circulation quantity and limit

The numbers in white background and the numbers in black background show each the first page and second page.

Less than 298 mm in size/5 sheets in circulation (B5 to A4)

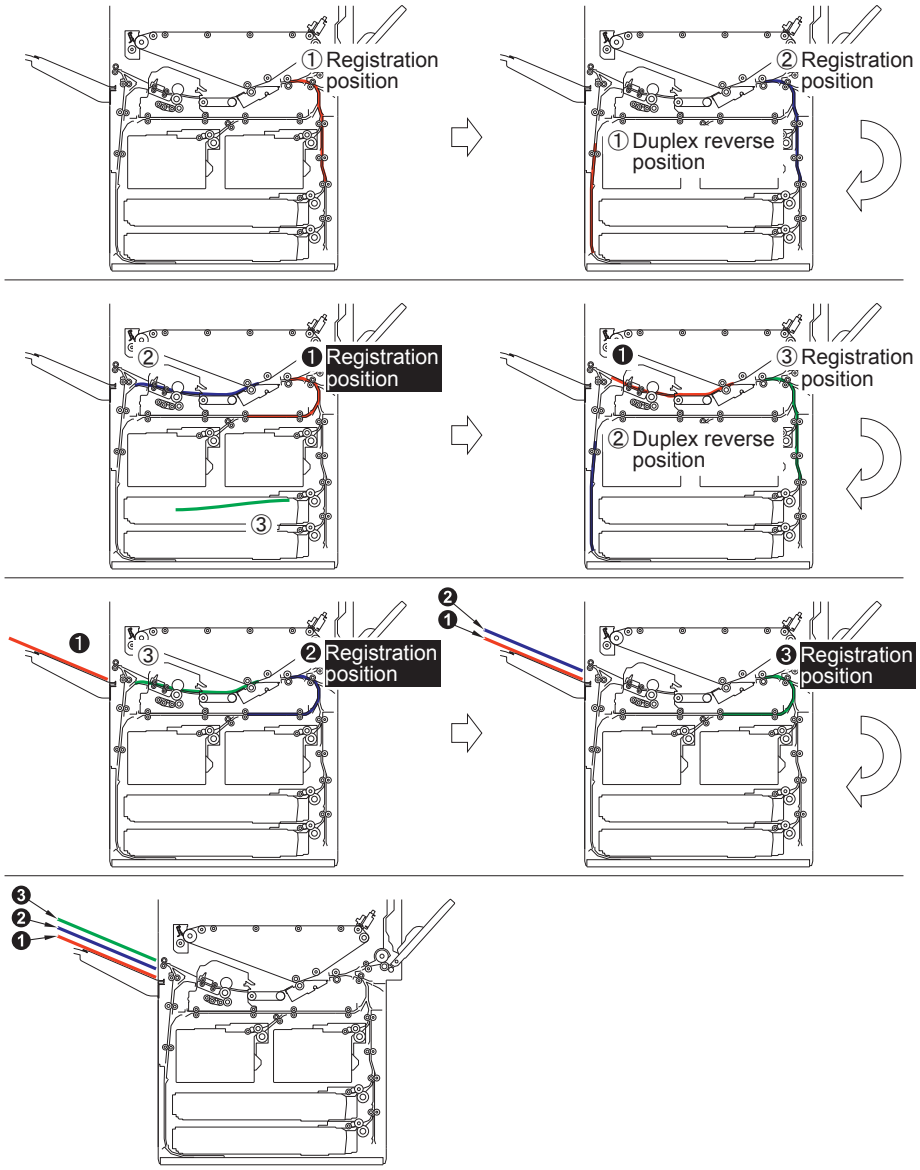


F-2-270



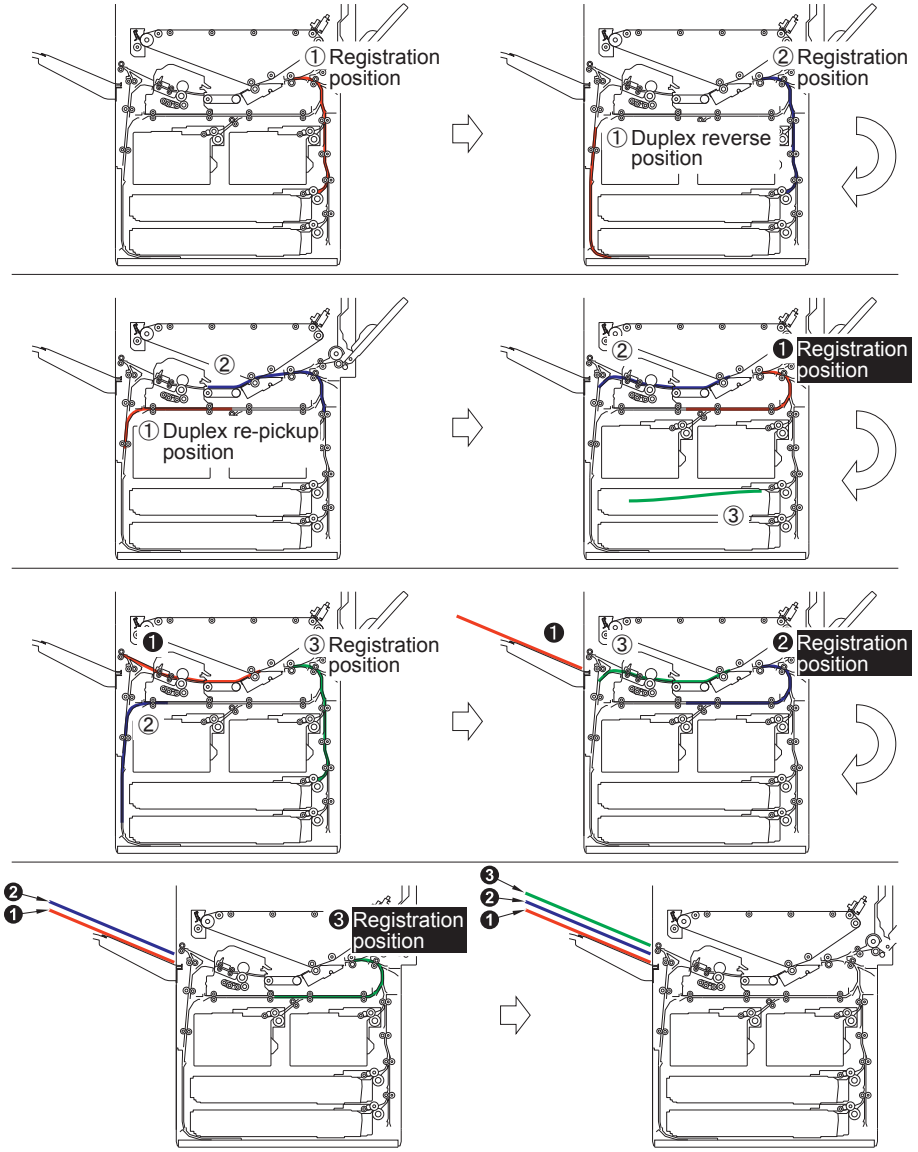
F-2-271

● 298 mm or more and 390 mm or less in size, 3 sheets in circulation (reverse position and re-pickup position is the same) (B4, LGL, 8K)



F-2-272

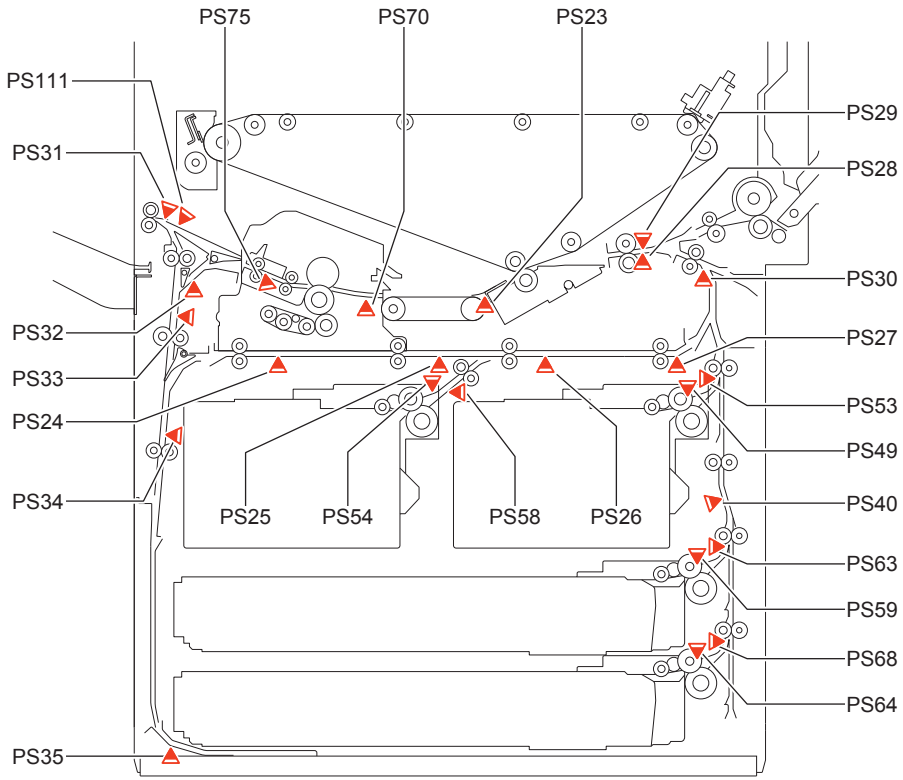
● Exceeds 390 mm in size/3 sheets in circulation (A3 to 19.2 inch)



F-2-273

Jam Detection

Jam Code List



F-2-274

Jam in Feed System

xx = 01: Delay, 02: Stationary, 0A: Residue
Yes: Detects, -: Does not detect

Code No.	Sensor name			Jam type		
				Delay	Sta-tionary	Residue
xx01	PS49	Right Deck Pickup Sensor		Yes	-	-
xx02	PS54	Left Deck Pickup Sensor		Yes	-	-
xx03	PS59	Cassette 3 Pickup Sensor		Yes	-	-
xx04	PS64	Cassette 4 Pickup Sensor		Yes	-	-
xx05	PS53	Vertical Path Sensor 1		Yes	Yes	Yes
xx06	PS58	Left Deck Pullout Sensor		Yes	Yes	Yes
xx07	PS40	Vertical Path Sensor 2		Yes	Yes	Yes
xx08	PS63	Vertical Path Sensor 3		Yes	Yes	Yes
xx09	PS68	Vertical Path Sensor 4		Yes	Yes	Yes
xx0A	PS30	Vertical Path Merging Sensor		Yes	Yes	Yes
xx0C	PS28	Registration Sensor		Yes	Yes	Yes
xx0D	PS23	Post-secondary Transfer Sensor		Yes	Yes	Yes
xx0E	PS70	Fixing Inlet Sensor		-	-	Yes
xx0F	PS74	Fixing Wrap Sensor		-	Yes	Yes
xx10	PS75	Fixing Inner Delivery Sensor		Yes	Yes	Yes
xx11	PS31	Outer Delivery Sensor		Yes	Yes	Yes
xx12	PS32	Reverse Sensor		Yes	Yes	Yes
xx13	PS33	Reverse Vertical Path Sensor 1		Yes	Yes	Yes
xx14	PS34	Reverse Vertical Path Sensor 2		Yes	Yes	Yes
xx15	PS35	Reverse Vertical Path Sensor 3		Yes	Yes	Yes
xx16	PS24	Duplex Sensor 1		Yes	Yes	Yes
xx17	PS25	Duplex Sensor 2		-	-	Yes
xx18	PS26	Duplex Sensor 3		Yes	Yes	Yes
xx19	PS27	Duplex Sensor 4		Yes	Yes	Yes
xx1A	(PS1)	Deck Pickup Sensor	Paper Deck Unit/ POD Deck Lite	Yes		
xx1B	(PS6)	Deck Pull-out Sensor		Yes	Yes	Yes
xx1C	PS85	Buffer Sensor 1	Buffer Pass Unit	Yes	Yes	Yes
xx1D	PS86	Buffer Sensor 2		Yes	Yes	Yes
xx1E	S101	Upper Deck Pickup Sensor	Multi-drawer Paper Deck	Yes		
xx1F	S102	Upper Deck Pull-out Sensor		Yes	Yes	Yes
xx20	S201	Middle Deck Pickup Sensor		Yes		
xx21	S202	Middle Deck Pull-out Sensor		Yes	Yes	Yes
xx22	S301	Lower Deck Pickup Sensor		Yes		
xx23	S302	Lower Deck Pull-out Sensor		Yes	Yes	Yes
xx24	S004	Lower Deck Feed Sensor		Yes	Yes	Yes
xx25	S001	Vertical Path Upper Sensor		Yes	Yes	Yes
xx26	S002	Vertical Path Middle Sensor		Yes	Yes	Yes
xx27	S003	Vertical Path Lower Sensor		Yes	Yes	Yes
xx28	S009/ S010	Double Feed Sensor (Reception/Option)		Yes	Yes	Yes
xx29	S005	Delivery Sensor		Yes	Yes	Yes

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Other Jams

Code No.	Sensor name		Jam Type
0B01	PS80	Front Cover Sensor	Door Open Jam
0B02	PS79	Multi-purpose Tray Cover Sensor	
0B03	PS39	Lower Right Cover Sensor	
0B04	PS36	Lower Left Cover Sensor	
0B05	PS87	Buffer Front Cover Sensor	
0B06	S006	Deck Left Front Cover Sensor	
0C00	-	-	Jam, others
0CA0	-	-	Logical jam
0CA2	-	-	REFEED command is not received. (Former: E240-0001)
0CA3	-	-	IMAGET_SET command is not received. (Former: E240-0002)
0CA4	-	-	PAGE_COMPLETE is not returned. (Former: E240-0004)
0CA5	-	-	PVREQ-K is not received. (Former: E240-0005)
0CA6	-	-	REGON interruption is not received. (Former: E240-0006)
0CA7	-	-	READY is not received from IP. (Former: E240-0007)
0CA8	-	-	IMG2 DMA setting is not finished. (Former: E240-0008)
0CA9	-	-	Initial rotation and last rotation are not finished. (Former: E996-0*00)
0CF1	-	-	Error retry occurs.
0D91	-	-	Misprint (Paper is too short.)
0D92	PS29	Transparency Sensor	Misprint (Non-transparency paper in transparency setting)
0D93	PS29	Transparency Sensor	Misprint (Transparency paper in non-transparency setting)
1001	S101	Inlet Sensor	Finisher delay
1002	S102	Feed Path Sensor	
1101	S101	Inlet Sensor	Finisher stationary
1102	S102	Feed Path Sensor	
1300	S101	Inlet Sensor	Finisher power-on
	S102	Feed Path Sensor	
1400	S129	Front Door Sensor	Finisher Cover open
1500	S131	Staple HP Sensor	Finisher staple jam
1e00	-	-	Finisher sequence error jam
1fxx	-	-	Finisher, others
28xx	S009/ S010	Double Feed Sensor (Reception/Option)	Double feed at Multi-drawer Paper Deck
0191	-	-	Jam due to mismatch of paper feed timing and image formation timing at Right Deck pickup (Check the feed path from the Right Deck Pickup Assembly to the Registration Assembly.)
0192	-	-	Jam due to mismatch of paper feed timing and image formation timing at Left Deck pickup (Check the feed path from the Left Deck Pickup Assembly to the Registration Assembly.)
0193	-	-	Jam due to mismatch of paper feed timing and image formation timing at Cassette 3 pickup (Check the feed path from the Cassette 3 Pickup Assembly to the Registration Assembly.)
0194	-	-	Jam due to mismatch of paper feed timing and image formation timing at Cassette 4 pickup (Check the feed path from the Cassette 4 Pickup Assembly to the Registration Assembly.)
0195	-	-	Jam due to mismatch of paper feed timing and image formation timing at Option Deck pickup (Check the feed path from the Option Deck Pickup Assembly to the Registration Assembly of the host machine.)
0196	-	-	Jam due to mismatch of paper feed timing and image formation timing at Multi-purpose Tray pickup (Check the feed path from the Multi-purpose Tray Pickup Assembly to the Registration Assembly.)
0197	-	-	Jam due to mismatch of paper feed timing and image formation timing at Multi Deck Upper Deck pickup (Check the feed path from the Upper Deck Pickup Assembly of the Multi Deck to the Registration Assembly of the host machine.)
0198	-	-	Jam due to mismatch of paper feed timing and image formation timing at Multi Deck Middle Deck pickup (Check the feed path from the Middle Deck Pickup Assembly of the Multi Deck to the Registration Assembly of the host machine.)
0199	-	-	Jam due to mismatch of paper feed timing and image formation timing at Multi Deck Lower Deck pickup (Check the feed path from the Lower Deck Pickup Assembly of the Multi Deck to the Registration Assembly of the host machine.)
019A	-	-	Jam due to mismatch of paper feed timing and image formation timing at 2-sided printing (Check the feed path around the Registration Assembly of the host machine.)

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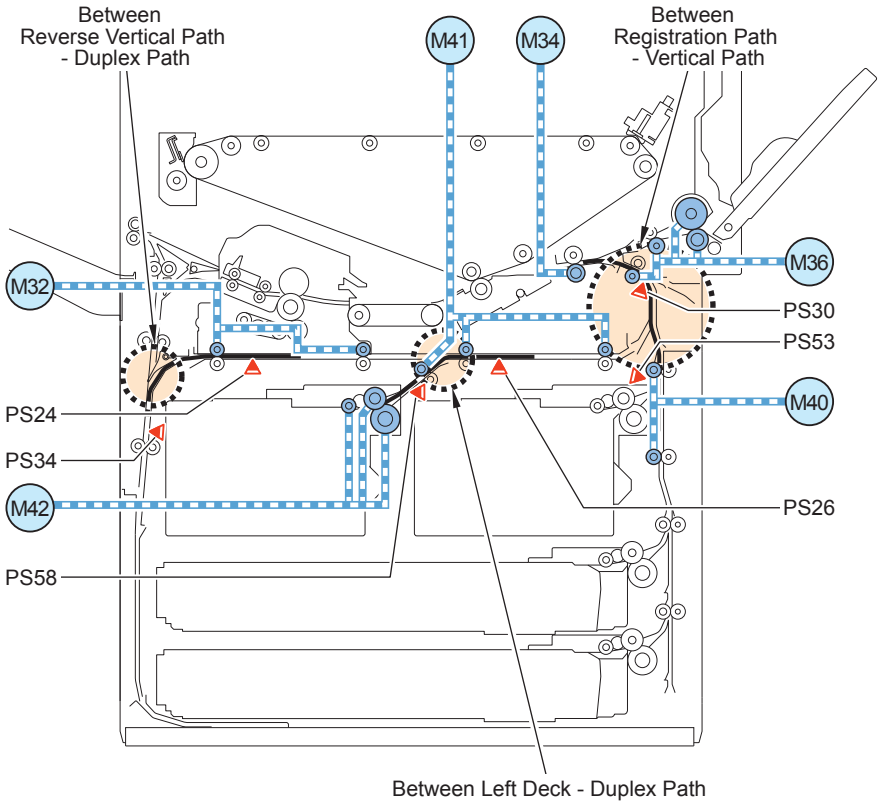
Forced Paper Feed Control

If there is paper in the following place after jam is detected, the paper will be forcedly fed to downstream direction.

This control suppresses paper damage during jam handling.



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Condition		Drive Motor	Remarks
If there is paper between Left Deck Pickup Path and Duplex Path	Left Deck Pullout Sensor (PS58) is ON	Left Deck Vertical Path Motor (M41) Duplex Right Motor (M33) Left Deck Pickup Motor (M42)	If delay jam of Vertical Path Marge Sensor (PS60) occurs on precedent paper, feeding is not executed.
	Duplex Sensor 3 (PS26) is ON	Left Deck Vertical Path Motor (M41) Duplex Right Motor (M33)	-
If paper trailing edge is between Vertical Path and Registration Path	- In case of pickup from Right Deck/Cassette 3/ Cassette 4 - Vertical Path Marge Sensor (PS30) is ON and also, Vertical Path Sensor 1 (PS53) is OFF.	Right Deck Vertical Path Motor (M40) Pre-Registration Multi-Purpose Drive Motor (M36) Registration Motor (M34)	-
If paper trailing edge is between Reverse Path and Duplex Path	Reverse Vertical Path Sensor 2 (PS34) is OFF and also, Duplex Sensor 1 (PS24) is ON.	Duplex Left Motor (M32) Left Deck Vertical Path Motor (M41)	- If 258 mm to 297 mm (A4R) size paper stops in the duplex re-pickup position, the machine feeds the paper that stops in the duplex re-pickup position regardless of ON/OFF of the sensor. - Left Deck Vertical Path Motor (M41) is driven only when the paper is lager than 297mm (A4R).
If there is paper that is being picked up from Multi-Purpose Pickup Tray	-	Pre-Registration Multi-Purpose Drive Motor (M36)	- Feeding is not executed in case of Registration Sensor delay jam at pickup. - Feeding is executed not to prevent the paper damage but to return the drive parts to the normal position.
If paper trailing edge is in Option Pickup Path	In case of pickup from Multi Deck (Distance is measured from the Deck Delivery Sensor.)	Pre-Registration Multi-Purpose Drive Motor (M36) Registration Motor (M34)	In case of paper with 431.9 mm or more in length (12” x 18”, 12” x 19.2”, SRA3, 13” x 19”), the motor rotates inversely to return the paper (in order not to reach the Fixing Roller).
	In case of pickup from POD Deck Lite (Distance is measured from the Deck Pullout Sensor.)		
	In case of pickup from Paper Deck (Distance is measured from the Deck Pullout Sensor.)		-

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Service Work

Measurement during Parts Replacement

Perform adjustment and clear counters for the below parts replacement.

Parts name	Measure	Reference
Right Deck Pickup Roller Left Deck Pickup Roller Right Deck Feed Roller Left Deck Feed Roller Right Deck Separation Roller Left Deck Separation Roller Cassette 3 Pickup Roller Cassette 4 Pickup Roller Cassette 3 Feed Roller Cassette 4 Feed Roller Cassette 3 Separation Roller Cassette 4 Separation Roller Multi-purpose Tray Feed Roller Multi-purpose Tray Separation Roller	Clear the corresponding counter.	-

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Periodic Service

When it gets close to its duration period, be sure to clean or replace the concerned parts.

Item	Parts name	Interval	Measure	Reference
Periodically replacement parts	-	-	-	-
Consumables	Right Deck Pickup Roller	500K sheets	Replace	p. 4-4
	Left Deck Pickup Roller			p. 4-7
	Right Deck Feed Roller			p. 4-4
	Left Deck Feed Roller			p. 4-7
	Right Deck Separation Roller			p. 4-4
	Left Deck Separation Roller			p. 4-7
	Cassette 3 Pickup Roller			p. 4-9
	Cassette 4 Pickup Roller			p. 4-12
	Cassette 3 Feed Roller			p. 4-9
	Cassette 4 Feed Roller			p. 4-12
	Cassette 3 Separation Roller			p. 4-9
	Cassette 4 Separation Roller			p. 4-12
	Multi-purpose Tray Feed Roller	120K sheets		p. 4-1
	Multi-purpose Tray Separation Roller			p. 4-2
Periodic service	Transparency Sensor	Timely	Cleaning	p. 3-3
	Pre-fixing Feed Film	Timely or per 500K sheet		p. 3-3
	Post-secondary Transfer Sensor			p. 3-2
	Secondary Transfer Static Eliminator Unit	Timely		p. 3-2
	Lower side of Secondary Transfer Outer Roller			p. 3-2

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External and Controls

Counter Control

Overview

The machine is equipped with counters that indicate the counts of output according to types of job. These counters are indicated in response to a press on the Counter Check key on the control panel.

Target	Display code of each counter (in service mode)/Item								Country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7	Counter 8	
JP model type1 (Conventional method)	Total 1	Total (Black 1)	Copy (Full Color + Single Color1)	Total A (Full Color + Single Color 1)	*1	*1	*1	*1	JP
	101	108	232	149	0	0	0	0	
JP model type2 (New method)	Total 2	Copy (Full Color + Single Color 2)	Total A (Full Color + Single Color 2)	Copy (Black 2)	Total A (Black 2)	*1	*1	*1	JP
	102	231	148	222	133	0	0	0	
JP model type3 (New method)	Total 1	Total (Black 1)	Copy (Full Color + Single Color 1)	Total A (Full Color + Single Color 1)	Total (Single Color 1)	*1	*1	*1	JP
	101	108	232	149	118	0	0	0	
JP model type4 (New method)	Total 1	Total (Full Color + Single Color/ Small)	Total (Full Color + Single Color/ Large)	Total (Black/Small)	Total (Black/Large)	Scan (Total 1)	*1	*1	JP
	101	123	122	113	112	501	0	0	
JP model type5 (New method)	Total 1	Total (Full Color + Single Color/ Small)	Total (Full Color + Single Color/ Large)	Total (Black/Small)	Total (Black/Large)	Total (Single Color/ Small)	Total (Single Color/ Large)	Scan (Total 1)	JP
	101	123	122	113	112	111	110	501	
Taiwan model	Total 1	Total (Black 1)	Copy + Print (Full Color/Large)	Copy + Print (Full Color/Small)	Total (Single Color 1)	*1	*1	*1	TW
	101	108	401	402	118	0	0	0	
UL model type1 (Conventional method)	Total 1	Total (Black 1)	Copy (Full Color + Single Color/ Large)	Copy (Full Color + Single Color/ Small)	Print (Full Color + Single Color/ Large)	Print (Full Color + Single Color/ Small)	*1	*1	US
	101	108	229	230	321	322	0	0	

Target	Display code of each counter (in service mode)/Item								Country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7	Counter 8	
UL model type1 (Conventional method)	Total 2	Total (Black 2)	Copy (Full Color + Single Color/ Large)	Copy (Full Color + Single Color/ Small)	Print (Full Color + Single Color/ Large)	Print (Full Color + Single Color/ Small)	*1	*1	US
	102	109	229	230	321	322	0	0	
General model	Total 1	Total (Black 1)	Copy + Print (Full Color/Large)	Copy + Print (Full Color/Small)	Total (Single Color 1)	Total1 (2-Sided)	*1	*1	SG/KO/CN
	101	108	401	402	118	114	0	0	
UK model type1 (Conventional method)	Total (Black/Large)	Total (Black/Small)	Total (Full Color + Single Color/ Large)	Total (Full Color + Single Color/ Small)	Scan (Total 1)	Print (Total 1)	*1	*1	GB
	112	113	122	123	501	301	0	0	
240V UK model type2 (New method)	Total 1	*1	*1	*1	*1	*1	*1	*1	GB
	101	0	0	0	0	0	0	0	
CA model	TTotal 1	Total (Black 1)	Copy (Full Color + Single Color/ Large)	Copy (Full Color + Single Color/ Small)	Print (Full Color + Single Color/ Large)	Print (Full Color + Single Color/ Small)	*1	*1	AU
	101	108	229	230	321	322	0	0	
FRN mode type1 (Conventional method)	Total (Black/Large)	Total (Black/Small)	Total (Full Color + Single Color/ Large)	Total (Full Color + Single Color/ Small)	Scan (Total 1)	Print (Total 1)	*1	*1	FR
	112	113	122	123	501	301	0	0	
FRN model type2 (New method)	Total 1	*1	*1	*1	*1	*1	*1	*1	FR
	101	0	0	0	0	0	0	0	
GER model type1 (Conventional method)	Total (Black/Large)	Total (Black/Small)	Total (Full Color + Single Color/ Large)	Total (Full Color + Single Color/ Small)	Scan (Total 1)	Print (Total 1)	*1	*1	DE
	112	113	122	123	501	301	0	0	

Target	Display code of each counter (in service mode)/Item								Country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7	Counter 8	
GER model type2 (New method)	Total 1	*1	*1	*1	*1	*1	*1	*1	DE
	101	0	0	0	0	0	0	0	
AMS model type1 (Conventional method)	Total (Black/Large)	Total (Black/Small)	Total (Full Color + Single Color/ Large)	Total (Full Color + Single Color/ Small)	Scan (Total 1)	Print (Total 1)	*1	*1	ES/SE/PT/NO/ DK/FI/PL/HU/CZ/ SI/GR/EE/RU/NL/ SK/RO/HR/BG/ TR
	112	113	122	123	501	301	0	0	
AMS model type2 (New method)	Total 1	*1	*1	*1	*1	*1	*1	*1	ES/SE/PT/NO/ DK/FI/PL/HU/CZ/ SI/GR/EE/RU/NL/ SK/RO/HR/BG/ TR
	101	0	0	0	0	0	0	0	
ITA model type1 (Conventional method)	Total (Black/Large)	Total (Black/Small)	Total (Full Color + Single Color/ Large)	Total (Full Color + Single Color/ Small)	Scan (Total 1)	Print (Total 1)	*1	*1	IT
	112	113	122	123	501	301	0	0	
ITA model Total type2 (New method)	Total 1	*1	*1	*1	*1	*1	*1	*1	IT
	101	0	0	0	0	0	0	0	

<Code description>

Large : Large size paper (if the width in paper feed direction is over 364mm/count up x1)
Small : Small size paper (if the width in paper feed direction is 364mm or less)
Total : All (C + P), count up x 1
Duplex : At auto duplexing copy, count up x 1

- 3-digit code in counter column is the setting value of the following service mode items.
  COPIER > OPTION > USER > COUNTER1 to 6
- Counter2 to 6 can be changed in service mode: COPIER > OPTION > USER.

*1: by default, not indicated; may be changed in service mode.
*2: if '0' is set for the following: COPIER>OPTION>USER>CNT-SW.
*3: if '1' is set for the following: COPIER>OPTION>USER>CNT-SW.

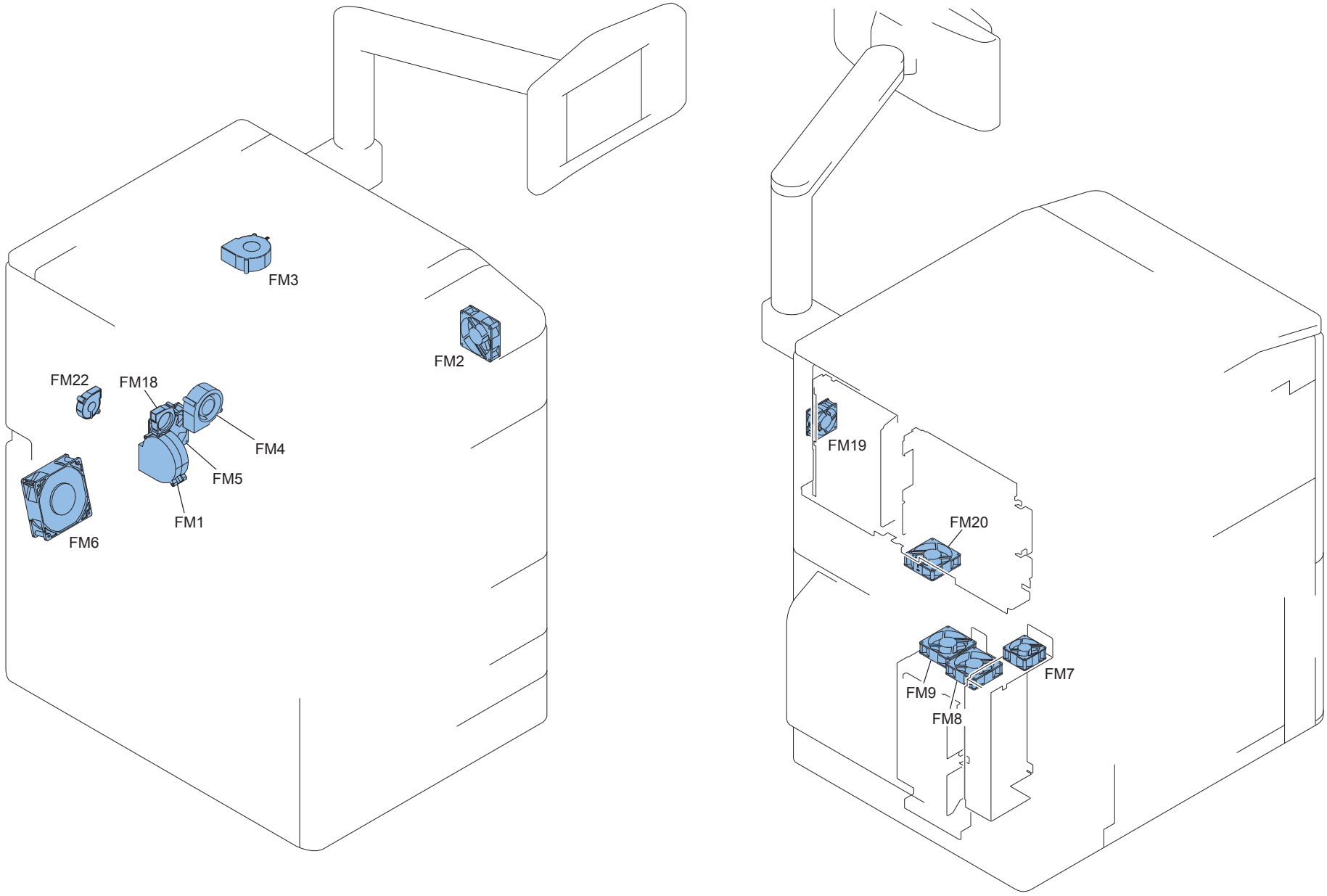
Count-up Timing

Count-up timing (timing to advance the counter) di_ers according to the following condition:
Print mode (1-sided, 2nd side of the 2-sided print, 1st side of the 2-sided print)
Delivery location (finisher)

Delivery location			Print mode	
			1-sided/ 2nd side of 2-sided print	1st side of 2-sided print
			Count-up timing	
1	In the case of host machine only		Reference sensor: Outer Delivery Sensor (PS31)	Reference sensor: duplex feed sensor 1(PS24)
2	Finisher Saddle finisher	Tray A (upper tray)	Reference sensor: upper delivery sensor	
		Tray B (lower tray)	Reference sensor: lower delivery sensor	
		Saddle assembly	Reference sensor: saddle inlet sensor	

Fan

1) Fan Control



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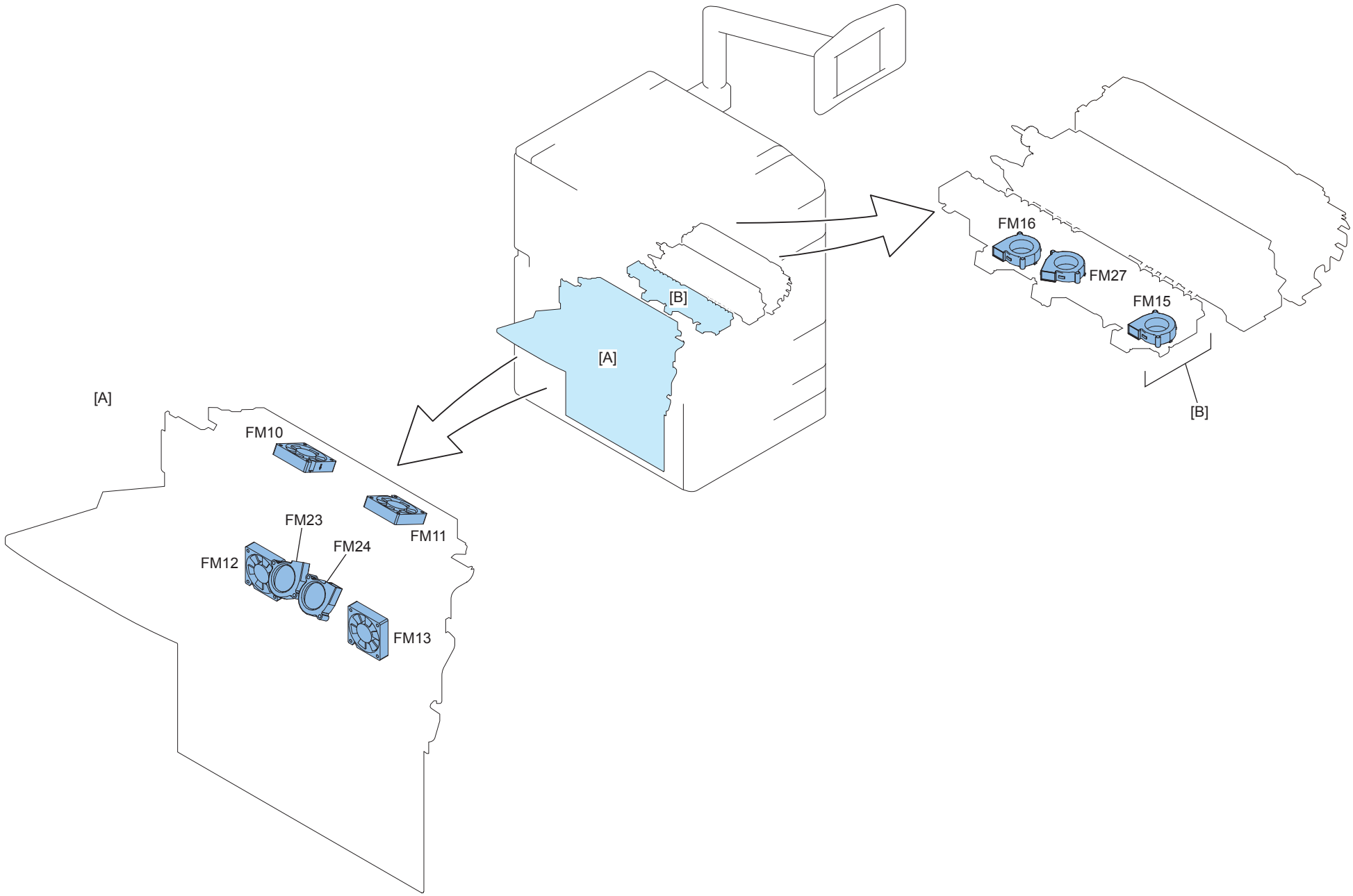

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No.	Name	Role/function	Ecodes
FM1	Pre-fixing Feed Suction Fan		E804-0001
FM2	Primary Charging Suction Fan	To suction air around the primary charging assembly	E804-0002
FM3	Primary Charging Exhaust Fan	To exhaust air around the primary charging assembly	E804-0003
FM4	Developing and Pre-transfer Charging Fan	To cool around the eveloping and Pre-transfer area	E804-0004
FM5	Color Cleaning Fan		E804-0005
FM6	Fixing Heat Fan	To exhaust air around the ÿxing assembly	E804-0006
FM7	IH Power Supply Fan	To cool the IH power supply assembly	E804-0007
FM8	Power Supply Fan 1	To cool the power supply assembly	E804-0000
FM9	Power Supply Fan 2	To cool the power supply assembly	E804-0000
FM10	Delivery Heat Fan 1	To exhaust air around the delivery area	E804-0010
FM11	Delivery Heat Fan 2	To exhaust air around the delivery area	E804-0011
FM12	Delivery Heat Fan 3	To exhaust air around the delivery area	E804-0012
FM13	Delivery Heat Fan 4	To exhaust air around the delivery area	E804-0013
FM15	Pressure Roller Cooling Fan (Front)	To cool the Pressure Roller.	E804-0015
FM16	Pressure Roller Cooling Fan (Rear)	To cool the Pressure Roller	E804-0016
FM17	Front Cooling Fan		E804-0017
FM18	Hopper Cooling Fan	To suction air around the hopper assembly	E804-0018
FM19	Controller Cooling Fan 1	To cool the main controller PCB1	E804-0019
FM20	Controller Cooling Fan 2	To cool the main controller PCB2	E804-0020
FM22	Hopper Cooling Suction Fan	To suction air around the hopper area	E804-0022
FM23	Anti-adhesion Fan 1	To cool paper that passes through the delivery assembly	E804-0023
FM24	Anti-adhesion Fan 2	To cool paper that passes through the delivery assembly	E804-0024
FM27	Pre-fixing Feed Cooling Fan		E804-0017

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2)Fan Sequence

Symbol	Name	Pre Rotetion	Standby	Print			Post Rotetion	JAM /ERR	Sleep1	Deep Sleep
				Normal Speed	1/2 Speed	1/3 Speed				
FM1	Pre-fixing Feed Attraction Fan				※1	※1				
FM2	Primary Charging Suction Fan									
FM3	Primary Charging Exhaust Fan									
FM4	Developing and Pre-transfer Charging Fan									
FM5	Color Cleaning Fan									
FM6	Fixing Heat Fan									
FM7	IH Power Supply Fan									
FM8	Power Supply Fan 1									
FM9	Power Supply Fan 2									
FM10	Delivery Heat Fan 1									
FM11	Delivery Heat Fan 2									
FM12	Delivery Heat Fan 3									
FM13	Delivery Heat Fan 4									
FM15	Heat Soaking Roller Cooling Fan (Front)									
FM16	Heat Soaking Roller Cooling Fan (Rear)									
FM18	Hopper Cooling Fan									
FM19	Controller Cooling Fan 1									
FM20	Controller Cooling Fan 2									
FM22	Hopper Cooling Suction Fan									
FM23	Anti-adhesion Fan 1									
FM24	Anti-adhesion Fan 2									
FM27	Pre-fixing Feed Cooling Fan									
FM30	Decurler Suction Fan									
FM31	Decurler Side Exhaust Fan									
FM32	Decurler Lower Exhaust Fan									

:Full Speed

:Harf Speed

:Full speed or half speed depending on the mechanical and process conditions

※1:Full speed only in the cases of postcard, reply postcard, 4 on 1postcard, and Catalog Globe No. 8 (envelop)
(Postcard or envelop, 200 mm or less in length in feed direction, and 1/2 speed or 1/3 speed (paper of 105 g or more))

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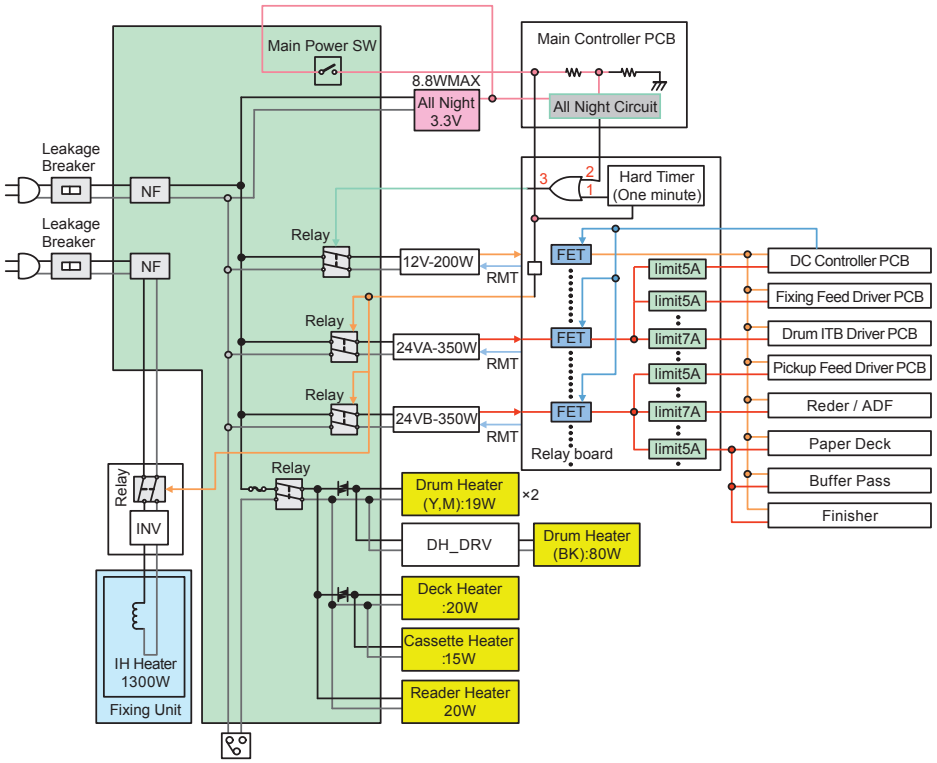
Power Control Function

Power supply inside the printer



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Effects of Spanning Tree-supported Hub

If you set the network as a loop, data keeps staying in this loop and efficiency of data transfer might be decreased. In order to prevent this symptom, some hubs have the function called “spanning tree”. If this function is enabled, the device newly connected to the hub can make data communication with network 10 to 50 seconds (time changes due to the conditions) after the connection. When the machine enters Deep sleep mode and restores from the sleep mode, the machine electrically disconnects with the network once. Therefore, if the machine connects with the spanning tree-installed hub, the machine cannot communicate with network for approximately 1 minute at a maximum after restoring from the Deep sleep mode.
For this reason, right after restoring from the Deep sleep mode, the following symptoms might occur: Device status cannot be collected, printing cannot be made, and login using a login application cannot be made. If such symptoms become any problems, perform the following operations.

- Using user mode, set not to enter the Deep sleep mode.
  Preferences > Timer/Energy Settings > Sleep Mode Energy Use > High
- Disable the spanning tree function of hub.
- Request users to use the hub which supports Rapid Spanning-Tree
- Protocol (RSTP) that resolved such problems.

Protective Function

DC power PCB of the host machine and the power PCB of options have the overcurrent protective function and the abnormal high voltage protective function to prevent the power circuit brokerage by stopping the output voltage automatically when overcurrent or abnormal high voltage occur due to the problems such as short circuit etc on each load.
When an error occurs on 3VB (all-night power), all the power will be stopped.
An error occurs on the power other than above, all the power will be stopped except for 3VB (all-night power).
When an error occurs on 3VB (all-night power), turn OFF the main power switch on the printer unit and remove the part where the protective circuit has been activated, and then replace the all-night power PCB (because the fuse of all-night power PCB is burnt.).
In other cases than above, turn OFF the main power switch of the printer unit and remove the part where the protective circuit is activated. Wait for 3 min or more and turn ON the power to reset the protective circuit.

Service Works (External Auxiliary System)

Periodically replaced parts

	Parts name	Parts number	Qty.	Estimated life	Remarks
1	Toner Filter	FL2-0554	2	500K Sheets	
2	Primary Charging Ozone Filter	FC5-2486	1	500K Sheets	
3	Fixing Ozone Filter	FC6-2035	1	500K Sheets	

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Durable parts

No durable parts are assigned

Periodical services

There are no parts to execute periodical service

When replacing parts

[When replacing the DC controller PCB]

COPIER > FUNCTION > SYSTEM > DSRAMBUP (LEVEL2)

[Restoration of DC Controller PCB SRAM]

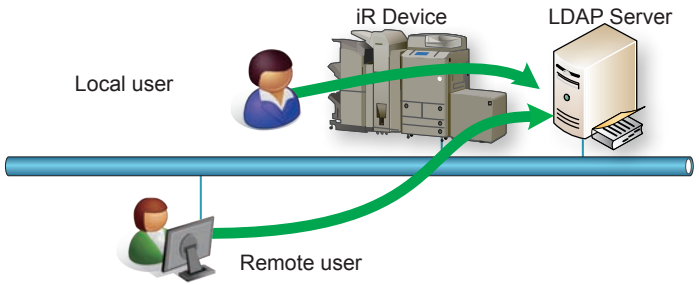
COPIER > FUNCTION > SYSTEM > DSRAMRES (LEVEL2)

MEAP

Changes

LDAP Authentication (SSO-H Server Authentication)

LDAP authentication has been added to the server authentication method using Single Sign-On H (hereinafter referred to as SSO-H).
LDAP authentication is a user authentication performed by using an LDAP server on the network linked with the device.



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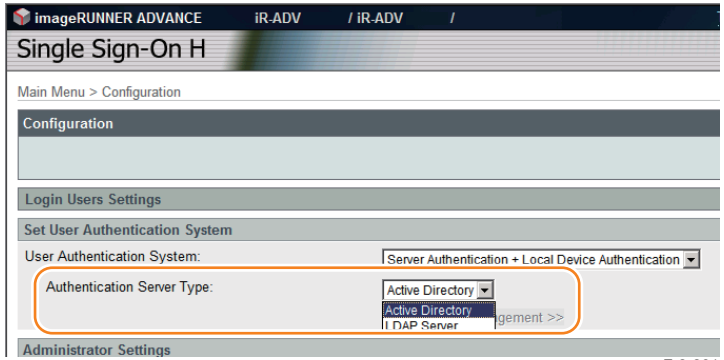
Accordingly, the following item and setting screens have been added to the SSO-H management screen of the remote UI.

- Drop-down list for selecting the LDAP server as the authentication server
- The LDAP server management screen (when [LDAP Server] is selected from the foregoing drop-down list)
- The screen for adding an LDAP server

An example of the screen showing the drop-down list for selecting LDAP Server



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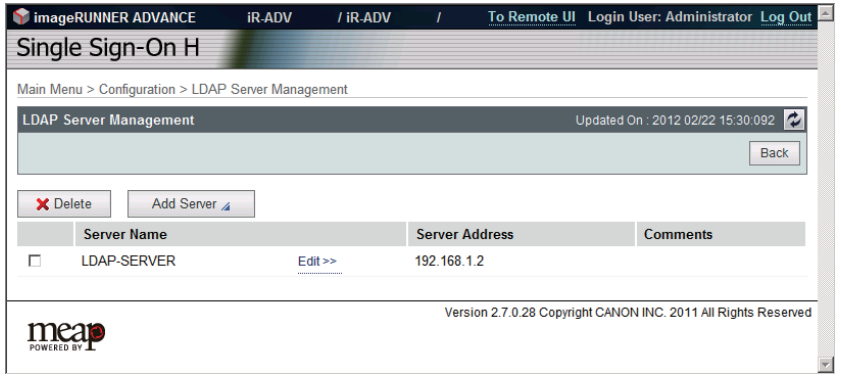
An example of the LDAP server management screen



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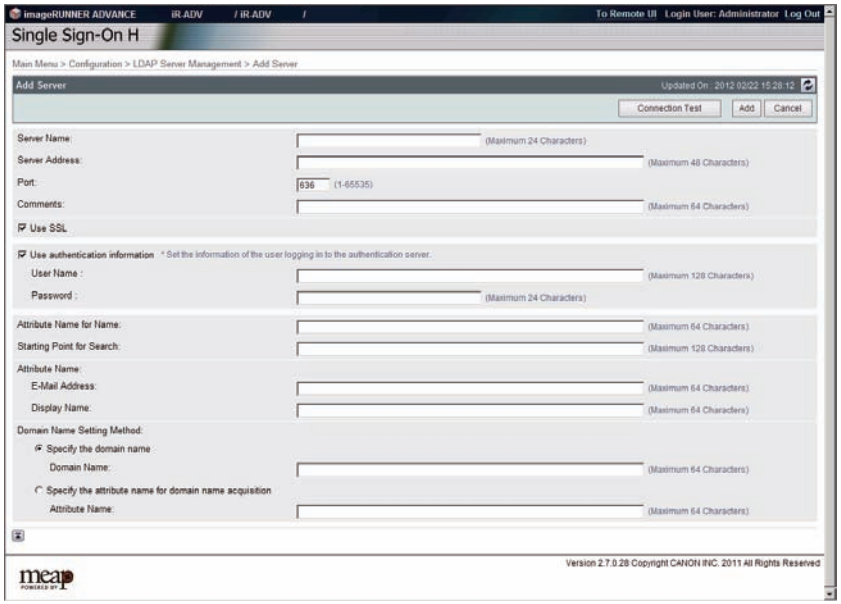
An example of the screen for adding an LDAP server



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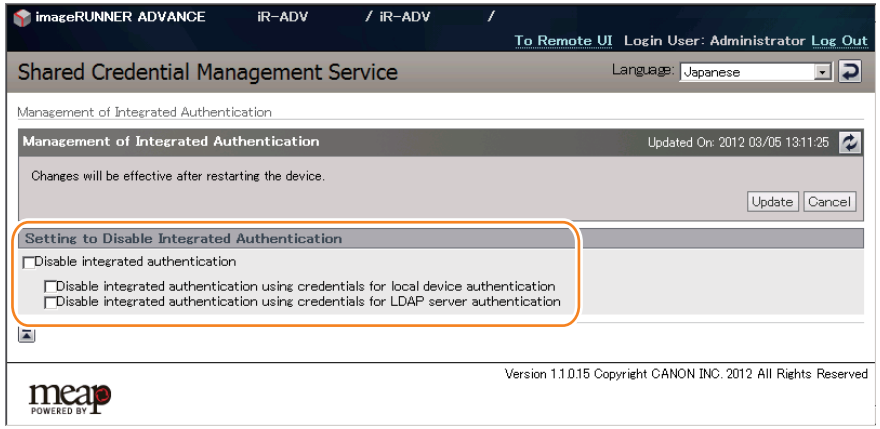
For details, refer to "Server authentication (Active Directory authentication)" in this chapter.

Integrated Authentication Disabling Setting Screen

A user setting screen has been added to the integrated authentication function which allows the authentication information used for logging into the machine to be shared between MEAP applications.

From a security standpoint, the setting screen for disabling the function to allow authentication information (Volatile Credential), whose registered information is discarded at the time of logout or shutdown of the device, to be used has conventionally been included in service mode.
In addition to this service mode, a screen that allows even users to make the setting has been added to the remote UI.
This screen can be also used to disable the integrated authentication function for each authentication protocol.
For details, refer to "Integrated Authentication Function" in this chapter.



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Preparation for Using SSO-H

Outline

When using Single Sign-On H (hereinafter referred to as SSO-H) for the login service, required system environments are different in server authentication or local device authentication.
See the following for system requirements in each of authentication methods:

Server authentication management

The system requirements necessary when using server authentication by SSO-H vary depending on the authentication server.
The system requirements for using each authentication server are shown below.

Active Directory authentication

In order to use Active Directory authentication in SSO-H, the following system environments are required.

1) Authentication server (Active Directory : Windows server)

- Active Directory and Domain Name System (DNS) should be installed.
- A group named "Canon Peripheral Admins" should be created on the Active Directory.
- The OS should be one of the followings.
  - Microsoft Windows Server 2003 SP2 *
  - Microsoft Windows Server 2003 R2 SP2 *
  - Microsoft Windows Server 2008 SP2 *
  - Microsoft Windows Server 2008 R2 SP1

  * 64-bit version is not supported.

2) Users accessing the authentication server (Active Directory: Windows Server)

- The user should belong to the "Canon Peripheral Admins" group on the Active Directory.
- The user name should contain only single-byte alphanumeric characters, - (hyphen), _ (low line), and % (percent).

Note:
The difference in time setting between the authentication server (Active Directory) and the machine (and the computer for login) should be within 5 minutes. (If the difference in time setting is 5 minutes or longer, an error will occur at the time of login for the server authentication.)

Note:
As for the user name for logging into the machine, use the name registered as "User logon name (pre-Windows 2000)" in the Active Directory.

An example of the user registration screen (Windows Server 2003)

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LDAP authentication

When using LDAP authentication by SSO-H, the following conditions need to be satisfied.

1) LDAP server
- Novell eDirectory V8.8 SP6 for Windows
- Lotus Domino V8.5 for Windows

2) OS where the LDAP server runs
- It should comply with the specifications of the LDAP server product.

Operation check has been conducted for the following OS.
- Microsoft Windows Server 2003 Enterprise SP2
- Microsoft Windows Server 2008 Enterprise

Note:
When an LDAP server other than the server shown above is used, SSO-H may not work properly.
Windows Active Directory works also as an LDAP server, but is not supported.

PC Environment of Administrator Users and General Users

The following environment is required to use this machine (managed by SSO-H) from a PC on the network.

OS of the PC and Other Environments

Classification	Operating System	Supported browser	Java Runtime Environment
Client OS	Windows XP Professional SP3	Internet Explorer 7 Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
	Windows Vista SP2	Internet Explorer 7 Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
		Internet Explorer 9	Java Runtime Environment 1.5 or later *2 *3
	Windows 7 SP1	Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
		Internet Explorer 9	Java Runtime Environment 1.5 or later *2 *3
Server OS	Windows Server 2003 SP2 Windows Server 2003 R2 SP2	Internet Explorer 7 Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
	Windows Server 2008 SP2	Internet Explorer 7 Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
		Internet Explorer 9	Java Runtime Environment 1.5 or later *2 *3
	Windows Server 2008 R2 SP1	Internet Explorer 8	Java Runtime Environment 1.5 or later *1 *3
		Internet Explorer 9	Java Runtime Environment 1.5 or later *2 *3
Mac OS	Mac OS X v10.5	Safari 4.0.5 Safari 5.0.5	Java 2 Standard Edition 5.0 *1 *3
	Mac OS X v10.6	Safari 4.0.5 Safari 5.0.5 Safari 5.1	
	Mac OS X v10.7	Safari 5.1	

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JRE : Java Runtime Environment
J2SE : Java 2 Platform Standard Edition

Note:
*1 Excluding JRE6 update4/5
*2 In order to use JRE1.6 with Internet Explorer 9, JRE1.6.0.24 or later is required.
*3 Refer to the website of JAVA (http://java.com/) for how to obtain the Java environment.

Note:
- The ActiveX plug-in should be enabled in Internet Explorer.
- In Internet Explorer, if [Run ActiveX controls and plug-ins] is disabled in [Internet Options] > [Security] > [Custom level...], a warning message that JRE has not yet been installed is displayed.
- JavaScript should be enabled in all the browsers.
- In the case of an IP v6 environment, JRE1.5 or later is required.
- When using Windows XP in an IP v6 environment, IP v6 may need to be installed manually in some cases.

Network ports used

	Port No.	Application
Connecting	53	Communication with DNS server (fixed)
	88	Kerberos authentication with KDC (Key Distribution Center)
	1-65535 (default:389)	Communication with directory service using LDAP (default is 389, may be changed to any port on LDAP service side)
Listening	10000 - 10100	

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Preparation for Using SMS

To use SMS, a PC and browser used to access SMS are required, and the network settings need to be set up on the device.

Preparation of PC for Accessing SMS

Checking of operation environment

In order to access SMS using password authentication, the PC and browser need to comply with the following system environment.

Combination of the Browser and the OS

Operating System	Supported browser
Windows XP Professional SP3	Microsoft Internet Explorer 7 Microsoft Internet Explorer 8
Windows Vista SP2	Microsoft Internet Explorer 7 Microsoft Internet Explorer 8 Microsoft Internet Explorer 9
Windows 7 SP1	Microsoft Internet Explorer 8 Microsoft Internet Explorer 9
Mac OS X v10.5	Safari 4.0.5 Safari 5.0.5
Mac OS X v10.6	Safari 4.0.5 Safari 5.0.5 Safari 5.1
Mac OS X Lion	Safari 5.1

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In order to access SMS using RLS authentication, the environment should comply with the environment for using SSO-H as the login service. (For details, refer to "PC Environment of Administrator Users and General Users".)

PC and Browser Settings

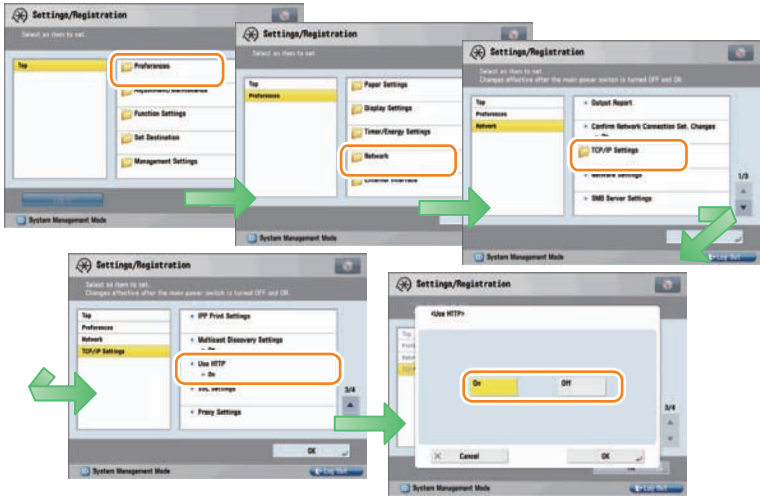
The PC and browser used to access SMS need to satisfy the following conditions.
- The supported browser language should be the same with the language of the OS.
- Java Script should be enabled.
- The supported screen size should be 800 x 600 or larger (recommended size: 1024 x 768).
- Session cookie should be enabled.
- Only alphanumeric characters and some of the symbols ("-" or ".") should be used as the machine domain name and host name. If an invalid character string such as a low line ("_") is included in the host name, cookies cannot be enabled.

Settings on the Device Side

Network configuration process

In order to provide support for the machine via network such as SMS, the network settings need to be made from the touch panel of the machine. (this setting is [ON] by default).

1) Press [Settings/Registration] button, select [Preferences] > [Network] > [TCP/IP Settings] > [Use HTTP] and press [On] button.



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Note:
In iR-ADV series, the System Manager ID and the System PIN are configured by default, so “Network” and the items that follow are grayed out and cannot be selected. Return to the top screen, press “Login” button at the lower left of the screen, login as the system manager, and configure the settings.
The default setting for the System Manager ID is “7654321”, and the password is” 7654321”.

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Note:
When using SSL, press [Settings/ Registration] button, select [Management Settings]>[License / Other] > [MEAP Settings] > [SSL Settings] and press [On] button. (This setting is applied to SSL setting on RUI. Vice versa, [On] set for SSL on RUI is also applied to the touch panel.)
When [Use SSL] is set to On, the message dialog, [The Default Key is not set. Check the Key and Certificate List settings in Certificate Setting.], is shown. Press [OK] button for this message.

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2) Press [OK] button to return to Main Menu screen.
3) Restart this device.

CAUTION:

- The setting [Use HTTP] is not actually enabled/disabled until you have restarted the device.
- You cannot make a connection through a proxy server. If a proxy server is in use, enter the IP address of the MEAP device in the Exceptions field for the browser. Open Internet Options dialog of Internet Explorer and select Connections tab, LAN Settings button, Use a proxy server option, and Advanced button of Proxy server group. Proxy Settings dialog will opens. The Exceptions field is in the dialog. As network settings vary among environments, consult the network administrator.
- If Cookie and JavaScript are not enabled in the Web browser, you will not be able to use SMS.
- To type text using the Web browser, use the characters compatible with the MEAP device’s touch panel display. The MEAP device may not properly recognize some characters.
- When [Use SSL] is made available, it is necessary to set the key and the certificate necessary for the SSL communication. Set the key and the certificate by SSL with [SSL Settings] that exists in [Preferences] > [Network] > [TCP/IP Settings] > [SSL Settings] on the iR device.

Key Pair and Server Certificate when Using Encrypted SSL Communication

To use SMS via SSL connection, it is required to specify a key pair and server certificate as the key to be used.

Since a key (default key) that can be used for encrypted SSL communication is installed as standard on the device, advance setting of the key pair and server certificate is not required.

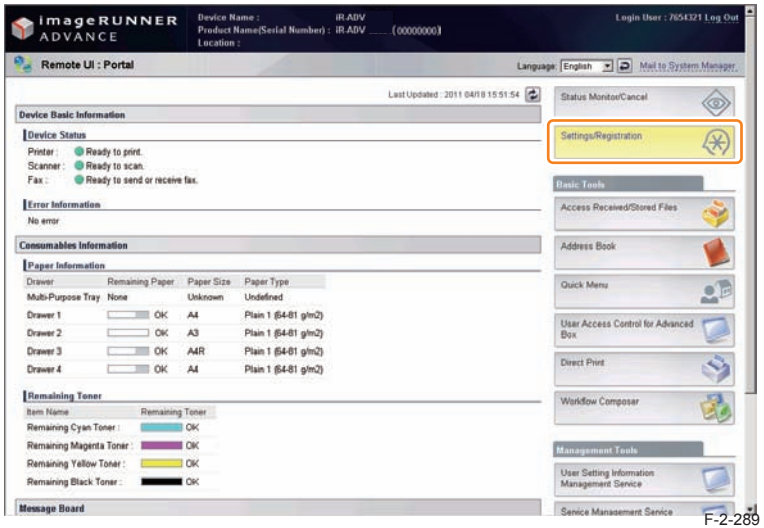
In order to use an encryption key other than the default key, follow the procedure "Generating a key pair" shown below to make settings for the key pair and server certificate necessary for encrypted SSL communication.

Note:
- MFP has a server certificate registered as standard.
- For detailed procedures of the Default Key setting, refer to [e-Manual > Security].
- As for SMS, by setting a Default Key, encrypted SSL communication is always executed regardless of the following setting: [Settings/Registration] > [Management Settings] (Settings/Registration) > [MEAP Settings] > [SSL Settings]: ON/OFF.

Generating a key pair

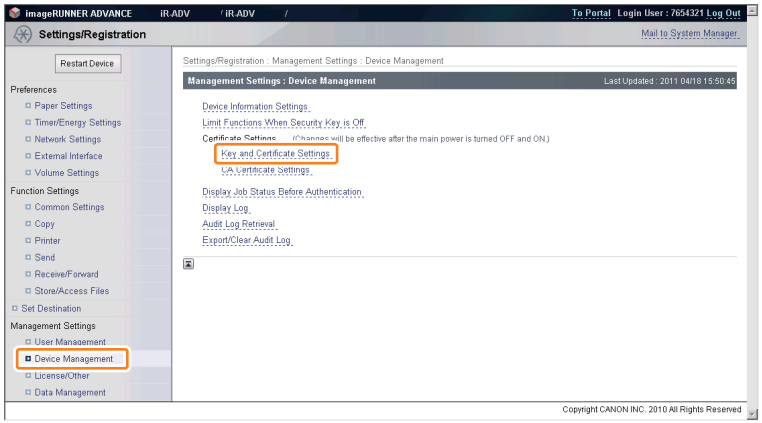
1) From a PC on the same network as the device, use a web browser to access the remote UI's portal page. Then, select [Settings/Registration] from the menu on the right side of the screen.

URL to access: http://<device's IP address>:8000/



F-2-289

2) Click [Management Settings] > [Device Management] > [Certificate Settings] > [Key and Certificate Settings].



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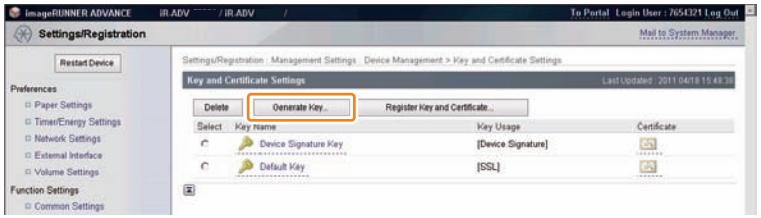
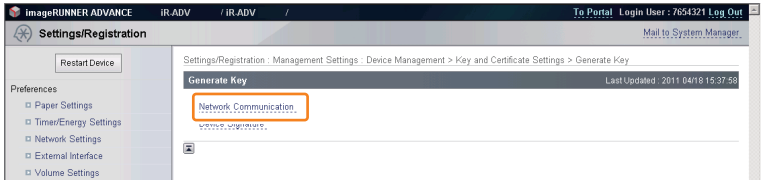
3) Click [Generate Key...] button.



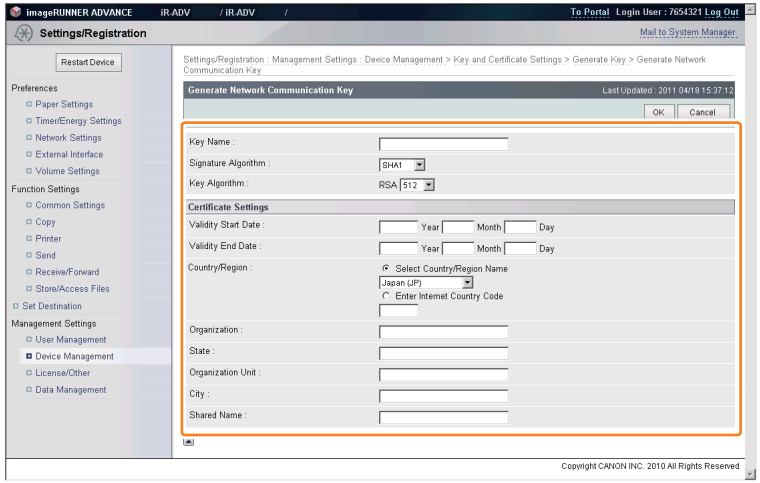
F-2-291

4) Click [Network Communication]



F-2-292

5) Enter the necessary information, and then click the [OK] button.



F-2-293

Input example

Item name	Type	Content	Entry
Key Settings			
Key Name	Compulsory	An arbitrary character string	Default Key
Signature Algorithm	Compulsory	Selected from:SHA1/SHA256/SHA384/SHA512	RSA
Key Algorithm	Compulsory	Selected from:512/1024/2048/4096	512
Certificate Settings			
Validity Start Date	Compulsory	Date	15/4/2012
Validity End Date	Compulsory	Date	15/4/2036
Country/Region	Compulsory	Country or region name	US
State	Arbitrary	State name	-
City	Arbitrary	City name	-
Organization	Arbitrary	Organization name	-
Organization Unit	Arbitrary	Organization unit	-
Common Name	Arbitrary	Common Name*	-

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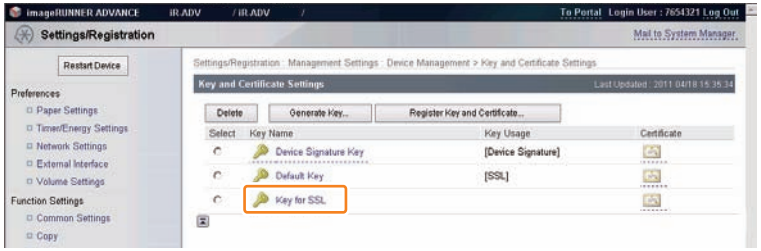
Note:
When the IP address of the device has been entered in the [Common Name] entry field, if you install a server certificate to the browser (see "Installing a server certificate (reference information)"), the message "Certificate Error" that usually appears when access is made from Internet Explorer 7 or later will not be displayed.

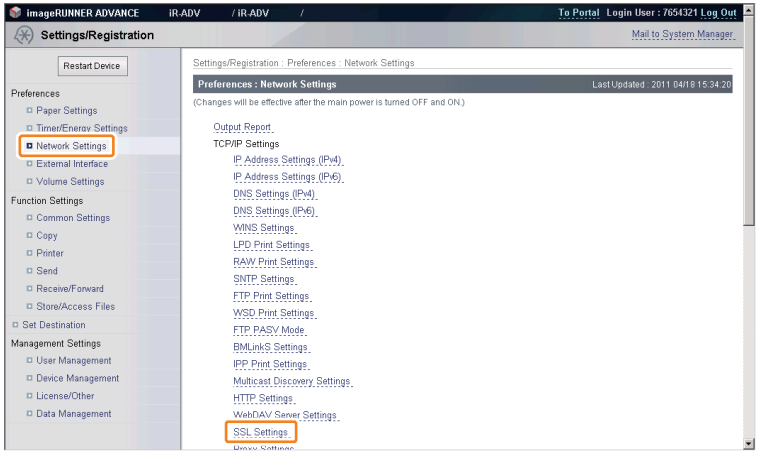
6) Check to see that the generated key appears in [Registered Key and Certificate].



F-2-294

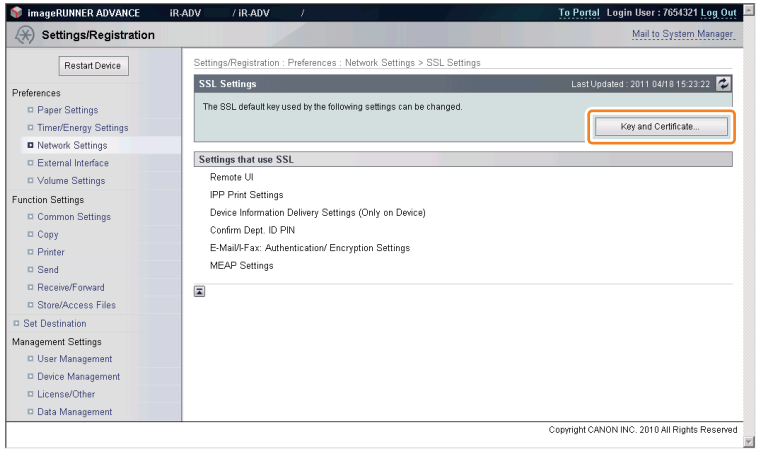
Default Key Settings

1) Click [Preferences] > [Network Settings] > [TCP/IP Settings] > [SSL Settings].



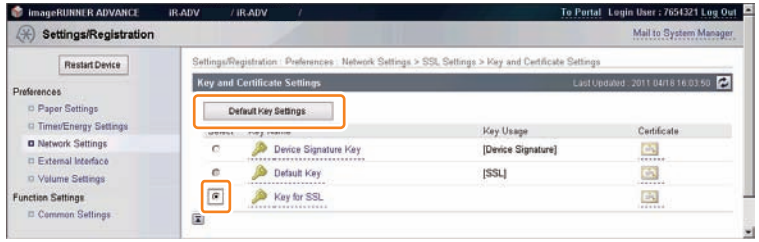
F-2-295

2) Click [Key and Certificate...] button.



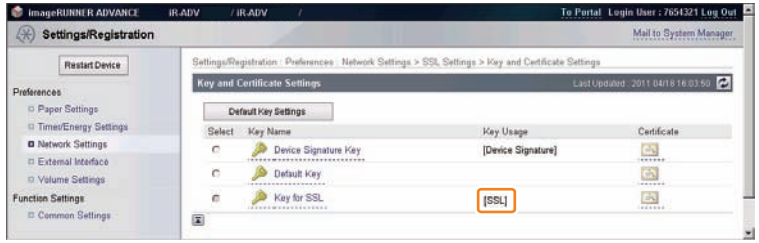
F-2-296

3) Select the generated key, and then click the [Default Key Settings] button.



F-2-297

4) Check that [SSL] is displayed in the [Key Usage] entry field.



F-2-298

5) Log out from the remote UI, and then restart the device.

Installing a server certificate (reference information)

When you access a device where the key installed as standard [default key] is set as the key for SSL, "Certificate Error" appears if the version of Internet Explorer (IE) is Version 7 or later.

Error display example

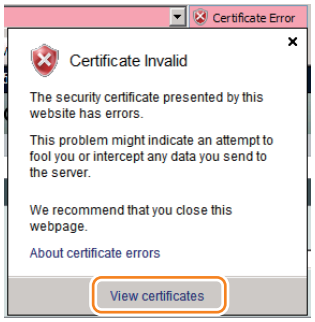
F-2-299

To disable display of "Certificate Error", use the following procedure (for IE8) to set the key generated in "Key Pair and Server Certificate when Using Encrypted SSL Communication" (i.e. the key with the IP address of the device specified as the shared name) as an SSL key.

1) Access SMS from the browser, and then click "Certificate Error" in the URL entry field.

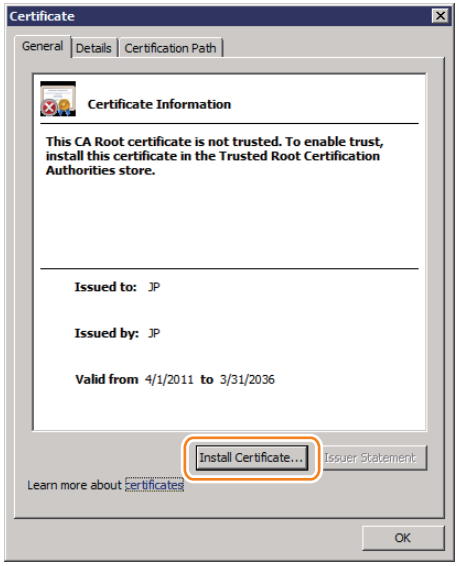
F-2-300

2) Click [View certificates].



F-2-301

3) Click the [Install Certificate...] button on the [General] tab.

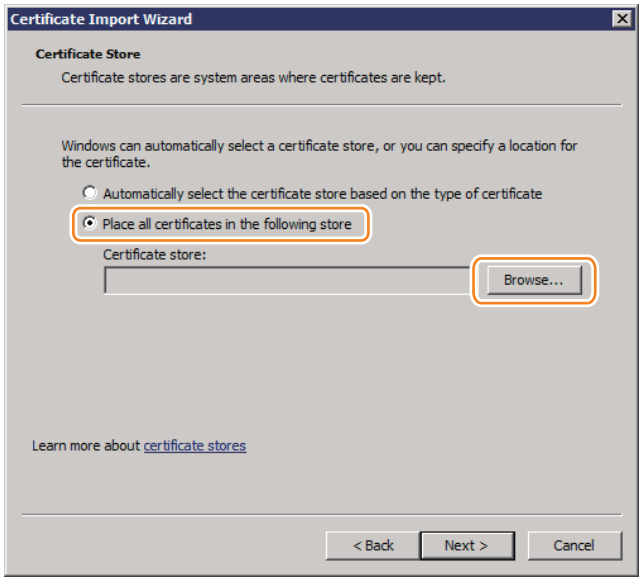


F-2-302

4) [Certificate Import Wizard] will appear. Click the [Next] button.

F-2-303

5) In [Certificate Store], select the [Place all certificates in the following store] option, and then click the [Browse] button.

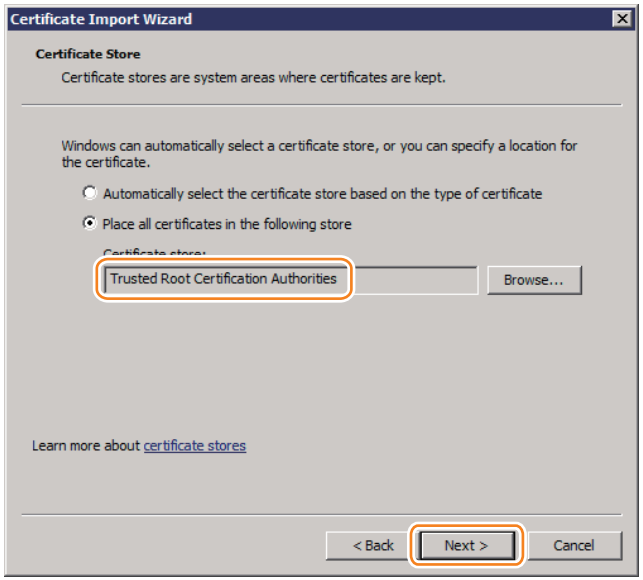


F-2-304

6) In [Select Certificate Store], select [Trusted Root Certification Authorities], and then click the [OK] button.

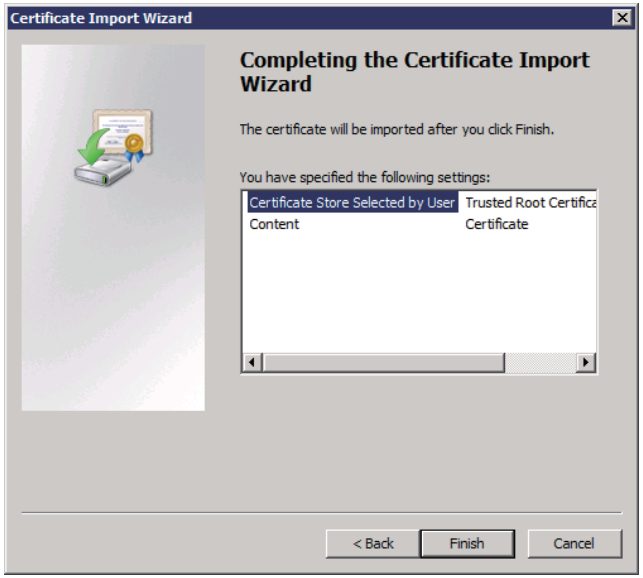
F-2-305

7) You will return to the [Certificate Store] dialog. Check that "Trusted Root Certification Authorities" appears in [Certificate], and then click the [Next] button.



F-2-306

8) [Completing the Certificate Import Wizard] will appear. Click the [Finish] button.

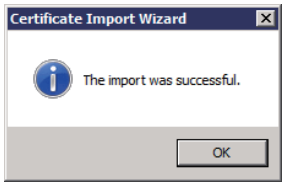


F-2-307

9) If the [Security Warning] appears, click the [Yes] button. (It does not appear when installing the same certificate again.)

F-2-308

10) A message will appear to indicate that import has been completed successfully. Click the [OK] button.

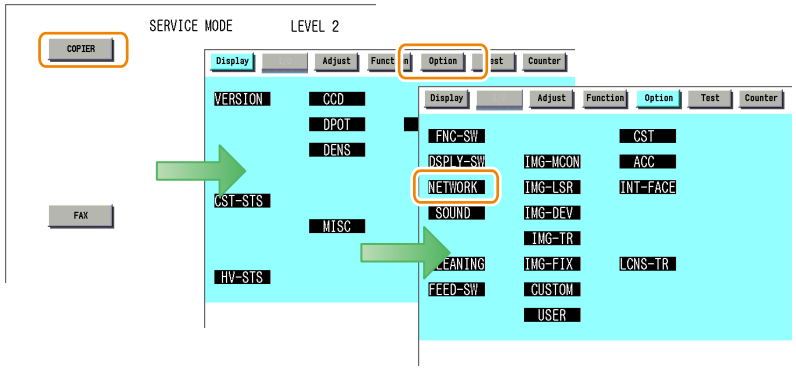


F-2-309

Network Port Settings

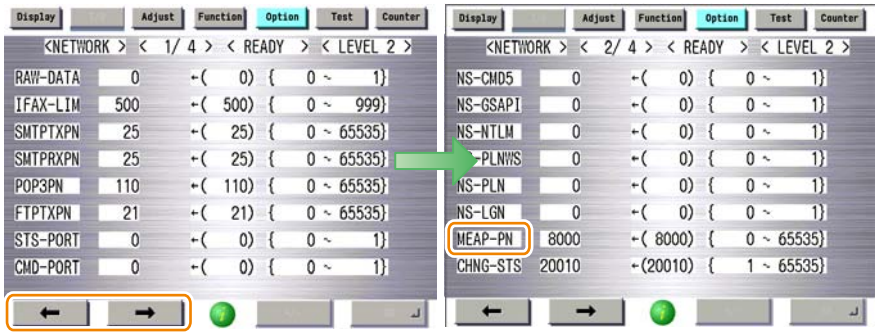
The default port of the HTTP server used for MEAP and MEAP applications to provide the servlet function is 8000, and the HTTPS server's default port is 8443. In the case that these ports have already used by the customer who is to introduce this application, the MEAP application cannot use the HTTP (or HTTPS) server(s).
By changing the following ports to use, however, the MEAP application can be used as well as the existing system.

1) Start [SERVICE MODE] in Level 2.
2) Press [COPIER] > [Option] > [NETWORK] buttons.



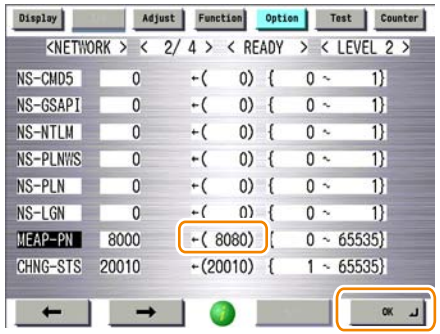
F-2-310

3) To set up the HTTP server port, select [MEAP-PN]. To set up the HTTPS server port, select [MEAP-SSL].



F-2-311

4) Press the port number to specify on the control panel (the numerical value input in the field is displayed), and press [OK] button.



F-2-312

Note:
A port number can be any integer from 0 to 65535. To avoid port numbers that are frequently used, do not use any integer from 0 to 1023.

Server	Setting value	Default value / Value after RAM clear
HTTP Server	1024 to 65535	8000
HTTPS Server	1024 to 65535	8443

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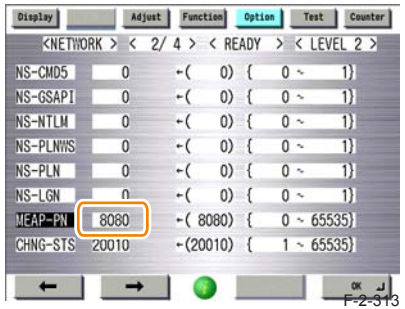
Note:
If PS Print Server Unit is connected, do not specify port 8080.
If port 8080 is specified, it is not possible to access the remote UI of the device where the MEAP authentication application is running. (Port 8080 is reserved to allow the PS Print Server Unit to redirect to the iR device.)

5) Restart the device if the port number is set.



F-2-313

How to Check the Serial Number

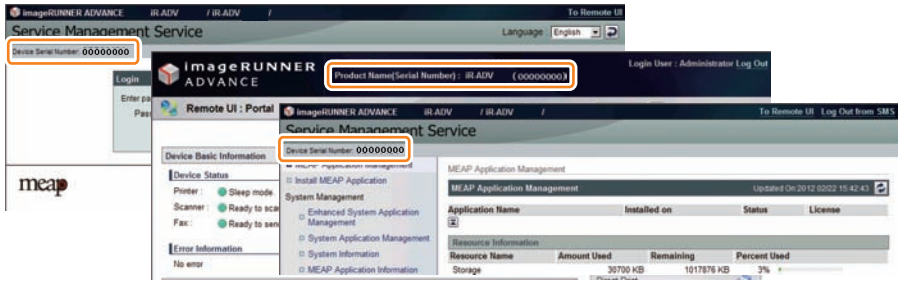
When performing MEAP device support, the serial number of the device is necessary in some cases.

Examples of where the serial number is necessary
- When initializing SMS login password (obtaining a switch license)
- When obtaining a MEAP application license from LMS
- When obtaining a transfer license of MEAP application
- When obtaining a special license for reinstalling MEAP application

If a problem occurs in the MEAP device and you want to contact the support department of the sales company, you need to provide the serial number. Perform the following procedure to get the serial number.

Checking from the PC browser

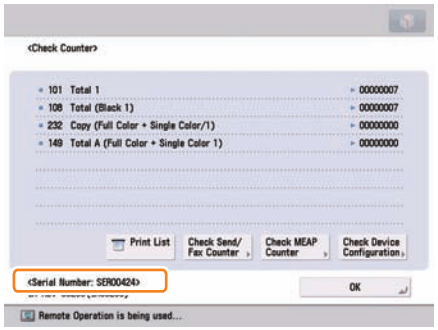
The serial number of the device is displayed on the SMS login screen, SMS screen, and remote UI portal screen.



F-2-314

Checking from the device's Touch Panel

You can see the number by pressing the counter key on the Control Panel of the machine.



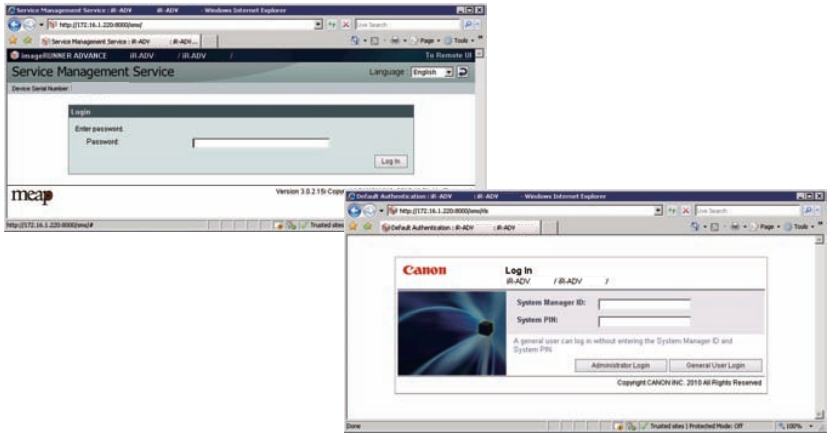
F-2-315

Login to SMS

Outline

SMS login may be done by entering a password for authentication, or by authentication via the Remote Login Service (RLS) login window (RLS authentication). Settings can be changed to allow either only one of these methods or both of them.

SMS login window (password auth) RLS login window (user name/ password auth)



F-2-316

Login method	Authentication method	Authentication service name	Users who may log in
Password authentication	Password authentication	SMS Installer Service (Password Authentication)	Users who know the SMS login password
RLS login	SSO-H	SMS Installer Service (Remote Login Service Authentication)	Users registered as administrators with SSO-H

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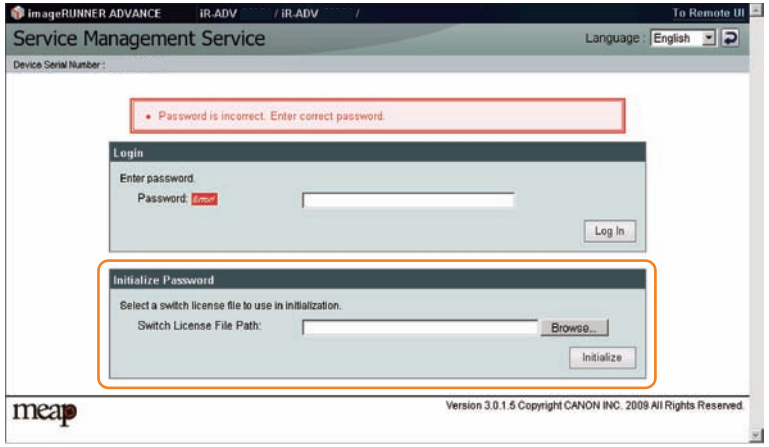
Note:
If Default Authentication is selected as the device authentication method, ‘RLS Authentication’ is not selectable as SMS Login method. Also, if ‘RLS Authentication’ is selected, the device authentication method (Default Authentication, SDL, SSO) cannot be changed.

When SMS Cannot Be Accessed

If you forgot the password (SMS login password initialization)

After changing the default SMS login password, if you forgot the new password and cannot log in to SMS, you can use a switch license for password initialization to change the password back to the default value "MeapSmsLogin".
Note that there is no special password for service.

1) Obtain a switch license file for password initialization.
   Contact the person in charge of support at the sales company, give the device's serial number, and have a switch license file for password initialization issued.
2) Load the switch license file.
   With nothing entered, click the [Log in] button to display the area for specifying a switch license file for password initialization.



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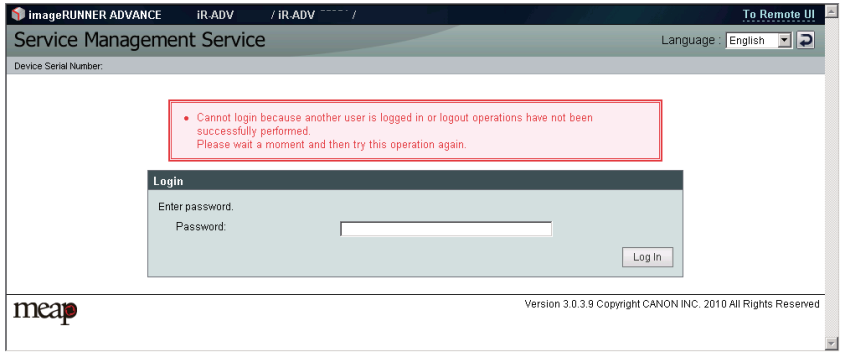
3) Specify the switch license file.
   Click the [Browse] button and specify the switch license file.
4) Initialize the login password.
   Click the [Initialize] button to display an initialization confirmation page, and click the [OK] button.

Note:
- The default password is “MeapSmsLogin.” (The password is case-sensitive.)
- If you click [Cancel] button, the Login page opens without initializing the password.

If login is not possible due to exclusive control

Since access to SMS is under exclusive control, you cannot log in if another user has already logged into the SMS of the same iR device.

An example of the exclusive control message



F-2-318

If you cannot log in due to exclusive control, you need to ask the other user to log out before you can try again.

Note:
If you close the browser without logging out, the session remains active. In that case, you cannot log in again.
If this problem occurs, you can wait for 5 minutes so that the session is disconnected.
Or, you can restart the device to force the session to disconnect.

If [Key and Certificate Settings] is not set

If [Key and Certificate Settings] is not set correctly, you cannot access the URL for SMS (https://<device's IP address>:8443/sms/). In that case, perform the following procedure.

1) Go to http://<device's IP address>:8000/sms/, and check to see that "HTTP 500 Internal Server Error" appears.
2) If it appears, perform the procedure "Key Pair and Server Certificate when Using Encrypted SSL Communication" in this chapter.

Note:
In the case of SMS, by setting the key to be used, encrypted SSL communication is always executed regardless of the following setting: [Settings/Registration] > [Management Settings] > [License/Other] > [MEAP Settings] > [Use SSL] > ON/OFF.

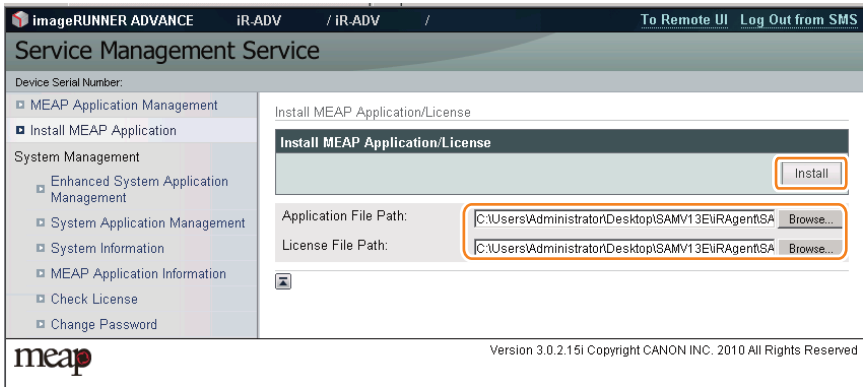
How to Deal with a Message "Certificate Error" That Appears at the Time of Access

When accessing from the browser to SMS, a message "Certificate Error" appears in some cases. In that case, perform the procedure "Installing a server certificate (reference information)" in this chapter.

Installing an MEAP Application

Outline

From the MEAP application installation screen, you can install the MEAP application as well as the license file.



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Before installing the MEAP application, be sure to check the following items.

Device compatibility with the MEAP application

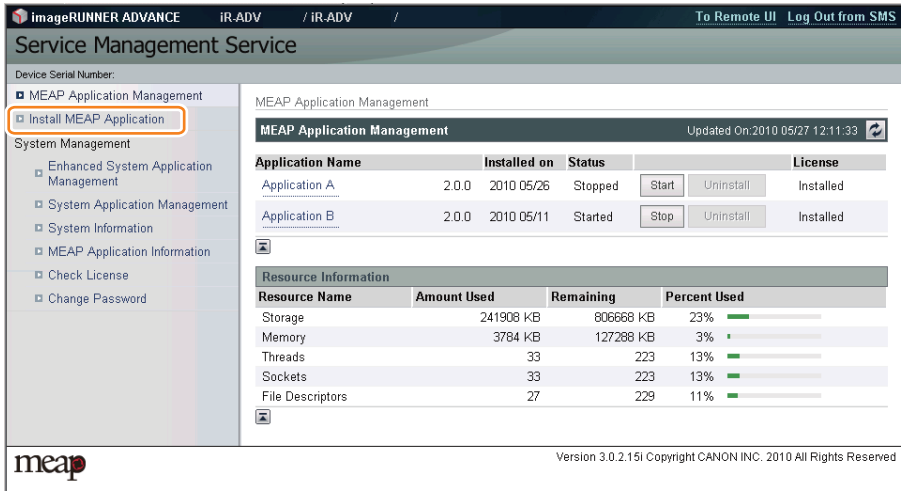
To find out whether the device is compatible with the MEAP application, check the devices supported by the MEAP application. Depending on the application, the device's firmware may require version upgrade.

Resources availability (remaining amount)

The necessary resources (free storage space and free memory available) must be secured for an MEAP application to run; otherwise, you cannot install the MEAP application.
To check the resource information, see "Device's resources" in this manual.

Procedure to install applications

1) Long on to SMS.
2) Click [Install MEAP Application] on the menu.



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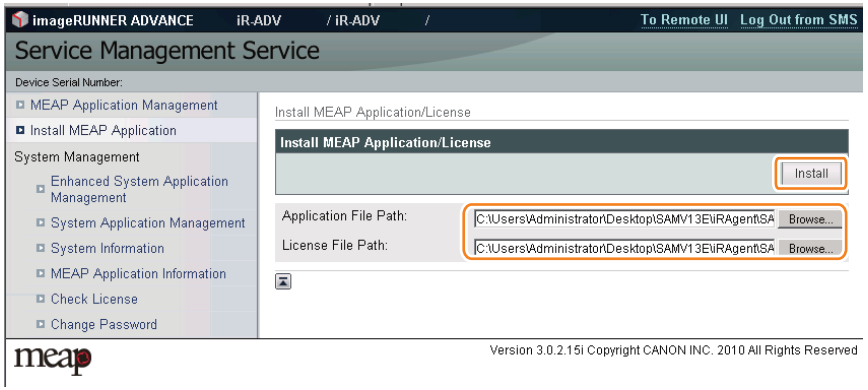
3) Check [Install MEAP Application/License]page appears.
4) Click [Browse..] button, and select the application file and the license file of the application; then, click [Install] button.

Note:
Application File: identified by the extension “jar”.
License File: identified by the extension “lic”.



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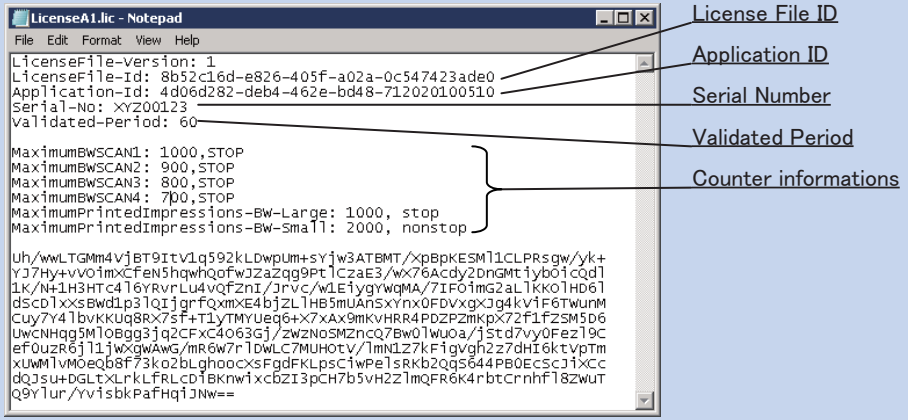
CAUTION:

- You cannot install only the license.
- You will not be able to install the application without using the appropriate license. Be sure to select its license file.
- If you are adding a license to an existing application, see "Procedure adding a license file".
- If you are updating an existing application, stop the application; then, install the new application or its license file. You will not be able to update an application while it is running.

Note:
The license file is provided in text file format, enabling to view in a text editor. The application ID and device serial number shown in the file allow users to confirm which device to install with the license file.
Note that any changes added to the license file may disable installation. Cares should be taken when confirming the contents of the license file.

Sample file



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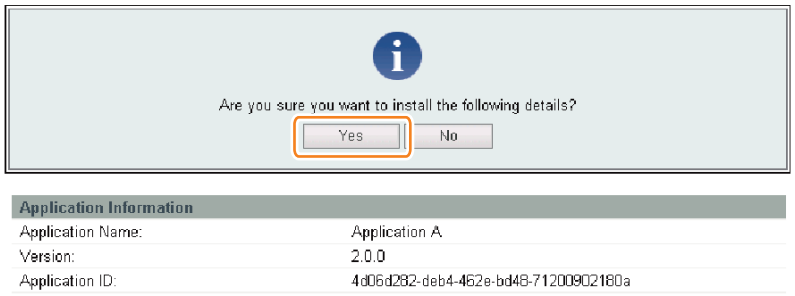
5) Check the contents of the Confirm page; then, click [OK] button.



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6) Some applications show a screen to indicate the terms of agreement. Read the terms, and click [OK].

7) Check the message "Installing...Please wait." appears, beginning the installation.

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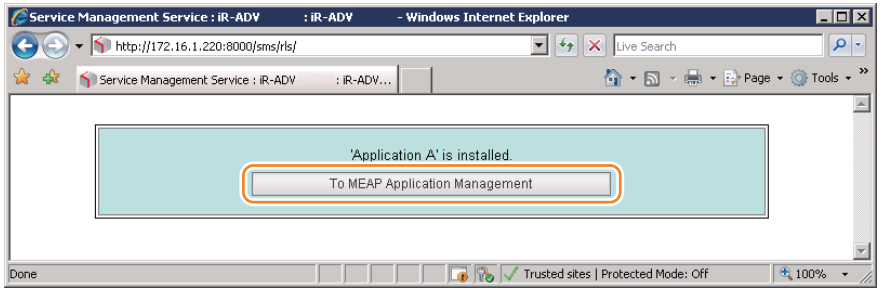
8) Upon installation completed, click [To MEAP Application Management] button shown on the screen to view MEAP Application Management page.



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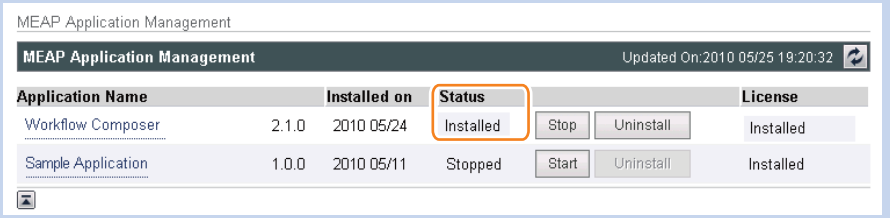
Note:
As for an application that has just been installed, the status is "Installed". In order to use the application, it is necessary to click the [Start] button to change the status to [Started].



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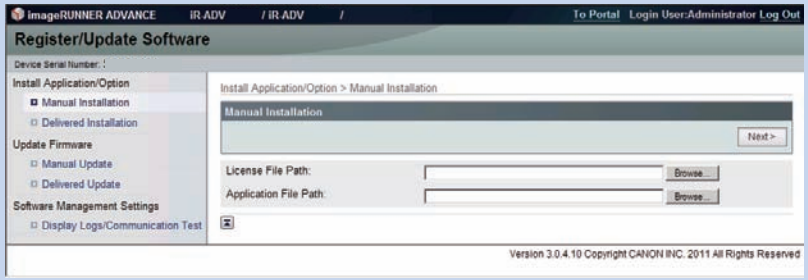
Note:
There are two ways to install an MEAP application. You can install using SMS, or install using the [Register/Update Software] screen of the remote UI.
Screen example



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[Register/Update Software] provides two types of installations. One is [Manual Installation] where you specify a jar file and a license file and then install. The other is [Delivered Installation] where you enter a license access number.
For details of the procedures, please refer to the e-Manual.

Resource Information

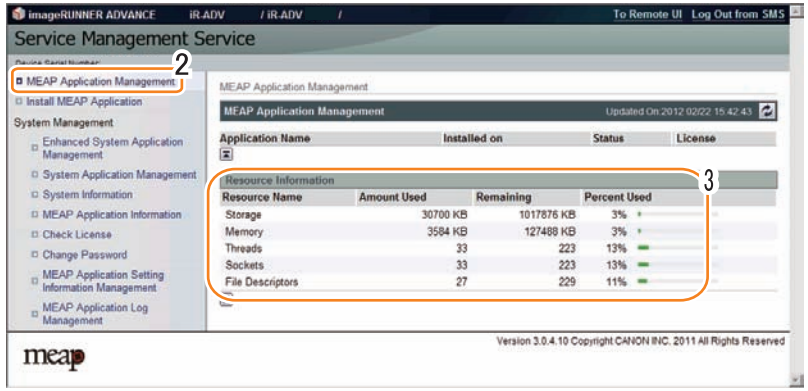
Outline

Application Management page shows [resource information] for information of the whole device resources including Amount Used, Remaining, and Percent Used.
This function enables users to judge the remaining resources before installing the additional application. Such resource information is shown based on the manifest header stated at the top of each application, which declares the resources required in the application. Therefore, the information does not necessarily show the resources actually in use.
The following resource information is shown:

- Storage
- Memory
- Thread
- Socket
- File Descriptor

If the hard disk does not have enough free space for the application, the application cannot be installed.
Moreover, if the free space of any of the resources (Memory, Thread, Socket, and File Descriptor) is insufficient, the application cannot be started.
The following procedure shows how to check the resource information.

1) Log in to SMS.
2) Click [MEAP Application Management].
3) Check [Resource Information] for information of the whole device resources.



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Device's resources

When 1 MEAP application operates, the resource volume allocated to each device is as follows (loaded resource list). Since the following value is an estimate, when installing the MEAP applications, it needs to check the available resource of SMS.
Since the indication of SMS resource volume fluctuates by the login service (authentication function) and configuration (future model), which the user selected, it may show a bigger value than the following values.

List of Available Resources

Product Name		Storage	Memory	Thread	Socket	File Description
iR-ADV C5051 series		1024MB	128MB	256	256	256
iR-ADV C9075 PRO series		1024MB	128MB	256	256	256
iR-ADV 6075 series		1024MB	128MB	256	256	256
iR-ADV 8105 PRO series		1024MB	128MB	256	256	256
iR-ADV C2030/C2020 series	Flash model	220MB	32MB	162	128	128
	HDD model	1024MB	128MB	256	256	256
iR-ADV 4045 series		1024MB	128MB	256	256	256
iR-ADV C5255 series		1024MB	128MB	256	256	256
iR-ADV C9280 PRO series		1024MB	128MB	256	256	256

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Note:
- Among the resources, the free space of Storage is checked when installing an application. For other resources, the free space is checked when the application is started.
- Some applications call for a specific set of conditions for installation. For details, see the User's Guide that comes with the individual applications.
- Maximum installable application is up to 20 even if the remaining resource is adequate. (However, the Send function consumes 1, it must be 19 in practice.) Authentication application is not included in this number.
- The MEAP application, which can be started simultaneously, is up to 19. (Authentication application is not included in this number.)

CAUTION:

To install an application, the user needs to use the following URL when accessing the license control system to obtain a license file. In doing so, he/she needs to register the license access number of the application and the serial number of the device.

http://www.canon.com/lms/license/

MEAP Specifications

What is MEAP Specifications (MEAP Spec Version)?

MEAP Specifications is one of the information required to judge whether MEAP applications can be operated or not. With MEAP Specifications, you can prevent an application that uses a specific function of device from being installed onto the device that does not have the function.

About Name

The displayed name for Meap Specifications differs depending on the screen or the location where the name is displayed.
In this document, it is referred to as "Meap Specifications".

The location where the name is displayed/shown	Displayed name
Platform Information : SMS > [System Management] > [System Information] > [Platform Information]	MEAP Specifications
System Information Print : Local UI [Settings/Registration] > [Management Settings] > [License/Other] > [MEAP Settings] > [System Information Print]	
Manifest file of the MEAP application	MeapSpecVersion
SDK documents	

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Mechanism

MEAP platform judges whether MEAP applications can be operated on it using on the 2 information below:

- Device Specification ID
- MEAP Specifications

Device Specification ID shows information such as the original functions of MFP (including print, scan, and copy), and one that differs by model such as maximum copy number, thus each model has a different ID. (It is easy to determine the IDs for this reason.) MEAP application declares 1 or more Device Specification ID required for its execution. Declaration of multiple Device Specification IDs means that the application is operable in all the models declared. Upon installation of MEAP application in (using) SMS or MEAP Enterprise Service Manager, matching of Device Specification ID is executed on the side of MEAP platform machine. The machine which doesn't support the ID declared by the application rejects installation of such an application.
Meanwhile, MEAP Specifications shows other information than defined by Device Specification ID above, including network and security. Thus each model does not always have the same version.
MEAP application declares 1 or more MEAP Specifications required for its execution.

Declaration of multiple Device Specification IDs means that the application is operable in all the environments declared. Upon installation of MEAP application in SMS or MEAP Enterprise Service Manager, matching of MEAP Specifications is executed on the side of MEAP platform machine. The machine which doesn't support the version declared by the application rejects installation of such an application.

MEAP Specifications for each model

Product Name	Initial MEAP SpecVer	Remarks
iR-ADV C5051 iR-ADV C5045 iR-ADV C5035 iR-ADV C5030	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45	Ver.37.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46 Ver.38.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 49 Ver.50.xx or later 5,6,7,9,10,11,13,14,15,17,18,19,25,26,27,29,30,31,32,33,34,35,36,37,38,39,40,41,42,44,45,46,47,49,50,51,52,53,54,55,56,57,58,59
iR-ADV C9075 PRO iR-ADV C9070 PRO iR-ADV C9065 PRO iR-ADV C9060 PRO iR-ADV C7065 iR-ADV C7055	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45	Ver.37.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46 Ver.38.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 49 Ver.50.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59
iR-ADV 6075 iR-ADV 6065 iR-ADV 6055	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49	Ver.20.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59
iR-ADV 8105 PRO iR-ADV 8095 PRO iR-ADV 8085 PRO	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 49	Ver.20.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 1, 32, 33, 34, 35, 36, 37, 38, 39, 40 , 41, 44, 45, 46, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

Product Name	Initial MEAP SpecVer	Remarks
iR-ADV C2030 iR-ADV C2025 iR-ADV C2020	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49	Ver.10.xx or later 5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19,25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 53
iR-ADV 4045 iR-ADV 4035 iR-ADV 4025	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59	-
iR-ADV C5255 iR-ADV C5250 iR-ADV C5240 iR-ADV C5235	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 68, 69, 70, 71, 72, 74, 78, 80	-
iR-ADV C9280 PRO iR-ADV C9270 PRO iR-ADV C7280 iR-ADV C7270 iR-ADV C7260	5, 6, 7, 9, 10, 11, 13, 14, 15, 17, 18, 19, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45,46,47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 68, 69, 70, 71, 72 ,74 ,78 ,80 ,82	-

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MEAP Specifications List

Ver	Description
1	MEAP basic function
2	MEAP Spec Version 1 function and SSL/TSL + Proxy
5	MEAP Spec Version 1 function and CPCA V2 + ERS (Error Recovery Service) + New SSL/TSL
6	Reserved
7	MEAP Spec Version 5 function and Compact PDF + OCR PDF (Text Searchable) + USB Host (Buffering of Interrupt Transfer)
9	Reserved
10	MEAP Spec Version 5 function and USB-Host (Exception + Clear Feature + Set Feature+ Hot Plug) + WINS address acquisition using MIB Agent + Timer Service + SSL client authentication
11	MEAP Spec Version 5 function and AMS
13	MEAP Spec Version 5 function and J2ME1.1 Support + Encrypted PDF + Trace and smooth PDF + CTK2.0
14	Device signature PDF
15	IMI + ERS (API addition for IMI) , IPv6, Extended encryption function (AES/RC4)
17	Acquiring images of JBIG format
18	Parsing XML documents (XML parser)
19	Enhancement of IMI function (IMI Version1.2 series)
21	Reserved
25	API to access the HID/Mass Storage class devices.
26	MEAP driver preference function
27	Symbols that can be used with MibAgent added. (symbols for IPv6 address acquisition)
29	IMI API added (IMI version 1.2.1 enabled)
30	Extended address book function. (e-mail/group/i-FAX/file)
31	Integrated ERS function
32	Extended Imaging function (function to generate PDF/OOXML (PowerPoint) with visible signature)
33	Extended function for imageRUNNER / iR ADVANCE series (API for address book/ CTK/ TopMenu)
34	Extended IMI Box function (v1.3.0)
35	Extended SIS function (function to check the network cable status, function to check PS print server unit status)
36	Reserved
37	CLS (Contextual Login Service) Supporting API Added
38	imageRUNNER / iR ADVANCE Series administrative privileges supported
39	MEAP Specifications added according to Jcrypto API Specification Change
40	ImagingAPI (Creation API of Visible Signature PDF) added
41	Reserved
42	Reserved
44	imageRUNNER / iR ADVANCE Series Remote Address Book Supported, RemoteFAX Supported
45	Addition of API that allows acquisition of the HID installation status
46	Multilingualization of the USB keyboard of the System Driver
47	Addition of API which executes a print order from the MEAP application of the IMI encryption PDF document
48	ID expressing the scan function for iR-ADV C2030/C2025/C2020 series
49	Reserved
50	SecurityOptionalPackage
51	IMI function expansion of iR-ADV C5051 series (Ver.50.xx or later) or later
52	(iR-ADV C5051 series (Ver.50.xx or later)) Addition of registered API to enable SSL communication setting (On/Off) for each URL
53	Disclosure of registration/deletion function to/from Quick Menu
54	Function to notify an event to the application at recovery from the sleep mode.
55	System account release function
56	MEAP User Preference Service
57	MEAP Application Configuration Service
58	MEAP Application Log Service
59	Reserved
59	Integrated authentication service
60	SFP basic functions
61	AVS (Lightweight Applet Viewer Service) for LBP
62	SIS (Lightweight System Interface Service) for LBP
63	LDT
64	IMI customization
65	Extension of MEAP User Preference Service (Ver56) (preference shared among applications)

Ver	Description
66	Reserved
68	Addition of Office Open XML's Word creation API
69	Extension of the encryption PDF function (AES 128-bit/256-bit)
70	Addition of 3 formats (uncompressed searchable PDF, XPS, and linearized searchable PDF)
71	Reserved
72	Reserved
73	IMI: API that supports A4 scanners and allows for specifying of the direction of the original image
74	SSL: Support for addition of the CN validation function
75	Reserved
76	Addition of the SFP ExtendedTextInputView class
77	Reserved
78	Reserved
80	Reserved
82	API to recover from Sleep 1

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MEAP Application Management

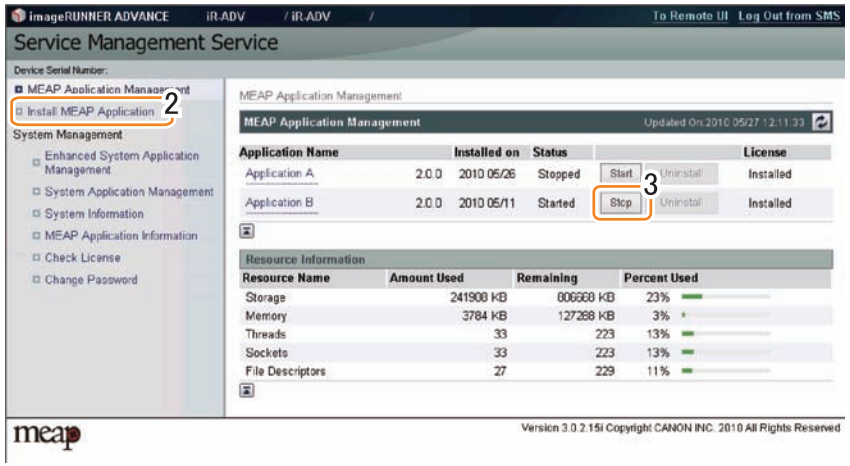
Outline

You can use the MEAP application management screen to perform basic management tasks of the MEAP application (start, stop, uninstall), or check the device's resource information.

Starting, Stopping, or Uninstalling the MEAP Application

Procedure to start and stop a MEAP application

1) Log in to the SMS. (Refer to "Login to SMS" in this manual.)
2) Click [Application List]. (If the Application List is already being displayed, this operation is not necessary.)
3) Click [Start] or [Stop] button shown for the MEAP application to be started or stopped.



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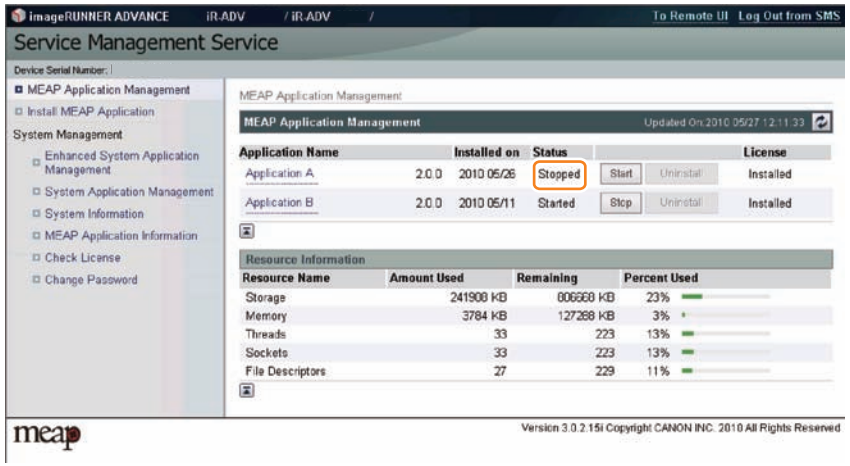
4) Check to see that the status of the MEAP application in question is either [Started] or [Stopped].



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If the MEAP application cannot be started

If the conditions to start the MEAP application are not satisfied, the MEAP application cannot be started.

If the MEAP application cannot be started, check the following items.

Is a valid license installed?

If the license has expired, you cannot start the application. If the license has already expired, obtain a new license and then update the license. (See "Managing the License File" in this manual.)

Are the necessary resources available?

If the resources such as memory capacity or number of threads are not sufficient, the application also cannot be started.

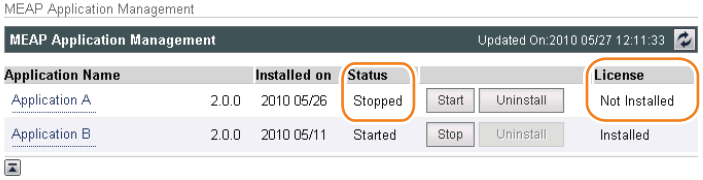
Delete any unnecessary data to secure sufficient resources.

If the application still cannot be started after checking the foregoing conditions, contact the support department of the sales company.

5) Procedure to uninstall the MEAP application

Before uninstalling the MEAP application, check that the following conditions are met.

- The MEAP application has stopped.
- The license has been disabled or deleted. (The status is "Not Installed".)



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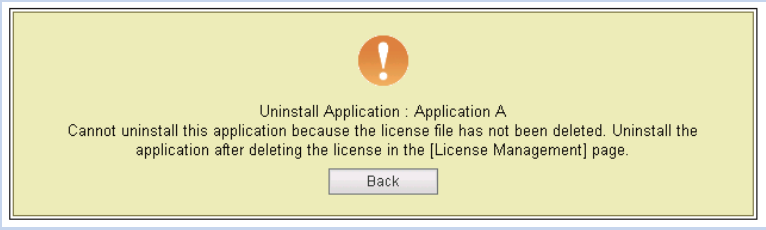
For information on the procedure to stop the MEAP application, see the previous section "Procedure to start and stop a MEAP application".

For information on the procedure to delete the license file, see the following section "Managing the License File".

Note:
When a user tries to uninstall an application before deleting the license, the following message is shown.



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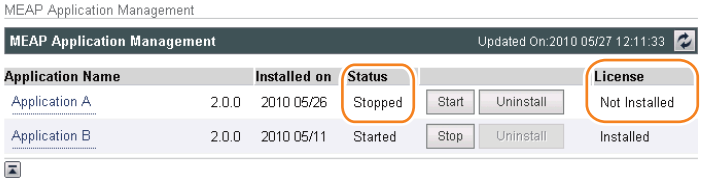
If the license file of the selected application cannot be deleted, the [Uninstall] button is grayed out and therefore the application cannot be uninstalled.

CAUTION:

If the application you are uninstalling is associated with another application, a message will appear to indicate that the package exported by the application will no loner be available. Uninstalling such an application may also disable its associated applications.

1) Log in to SMS to click [MEAP Application Management] on the menu.
2) Check that the status of the application you want to uninstall is [Stop] and the license has been disabled. (The status is "Not Installed".)



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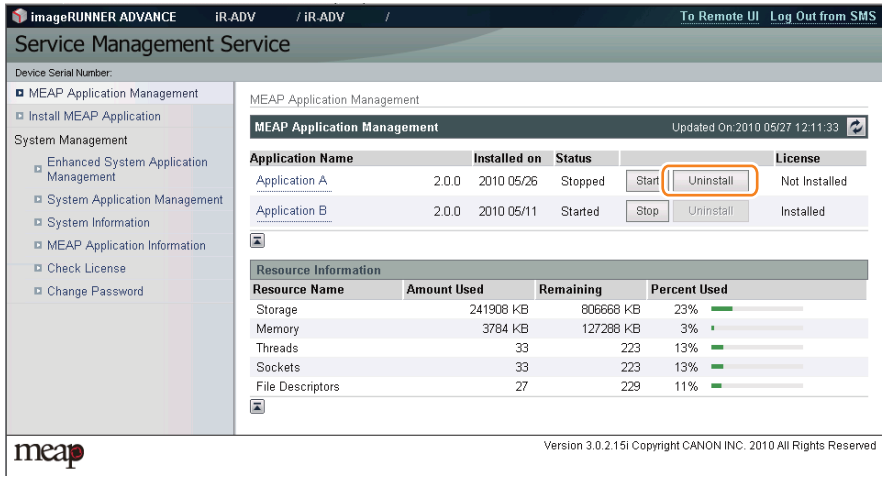
3) Click [Uninstall] button for the application to be uninstalled.



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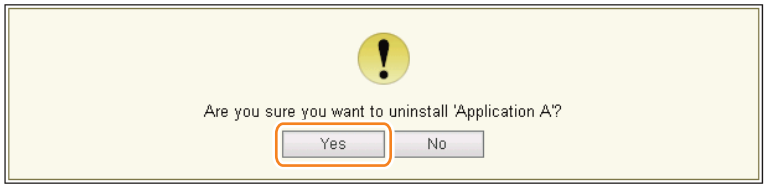
4) Check the application name to be uninstalled shown on the screen to click [Yes] button. Upon [Yes] button clicked, uninstallation process is started.



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■ Managing the License File

● Outline

The license file management functions allow you to perform the following operations related to the license file necessary for the MEAP application to run.

- Update the license which has already expired.
- Disable or delete the license file in order to uninstall the MEAP application.

These license management functions can be performed from the [MEAP Application Management] screen.
The main license management functions are as follows:

Adding a license

When the license has expired, you can add a license file.

Disabling a License File

Before uninstalling the MEAP application, the license needs to be deleted. In that case, you must first disable the license file because a license file which has not been disabled cannot be downloaded or deleted.

Downloading / Removing an Invalidated License File

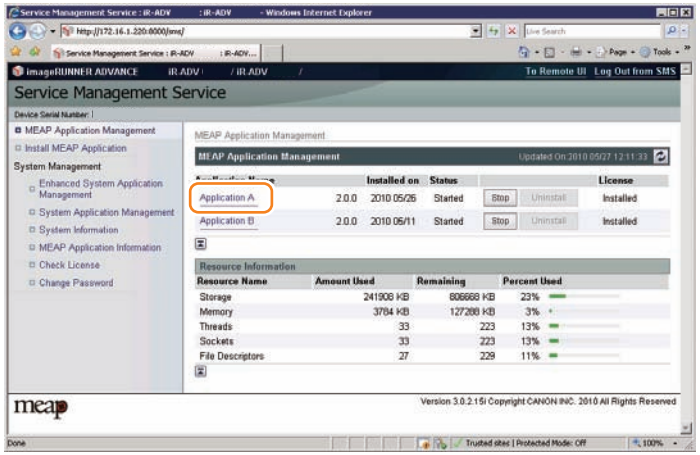
Before uninstalling the MEAP application, you need to delete its license file which has already been disabled.
By downloading the license file to your PC before it is deleted, you can use it when installing the application again to the same device.

WARNING:
After deleting the license file which has been disabled, you can no longer download the license file.

Procedure adding a license file

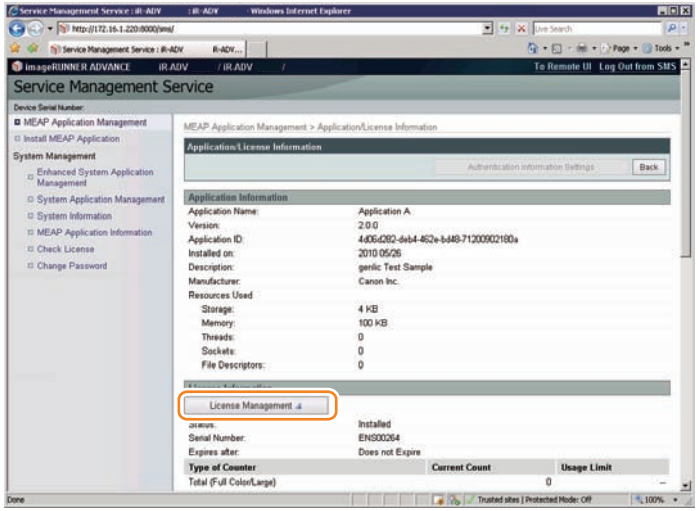
1) Log on to SMS.

2) On MEAP Application Management, click the name of the application to which you want to add a license file.



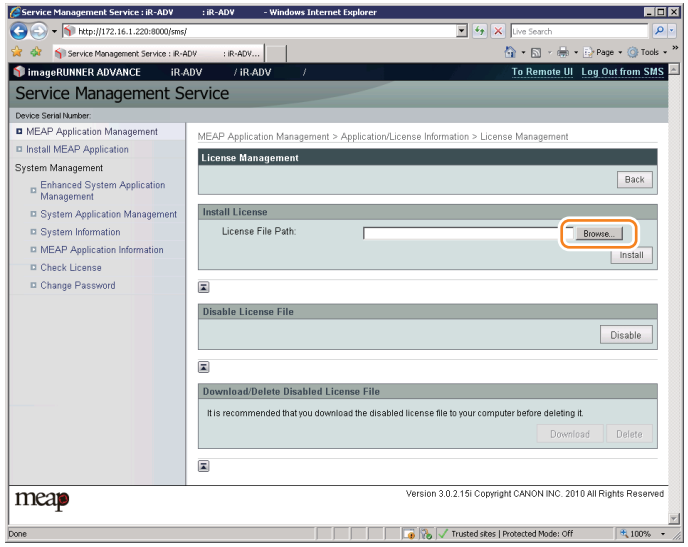
F-2-336

3) In [Application / License Information] page shown on the screen, click [License Management] button.



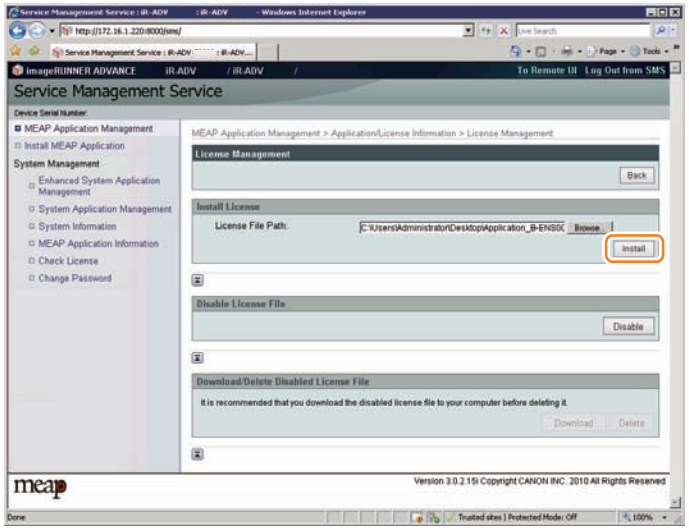
F-2-337

4) Click [Browse] button, and select the license file you want to install.



F-2-338

5) Click [Install] button.



F-2-339

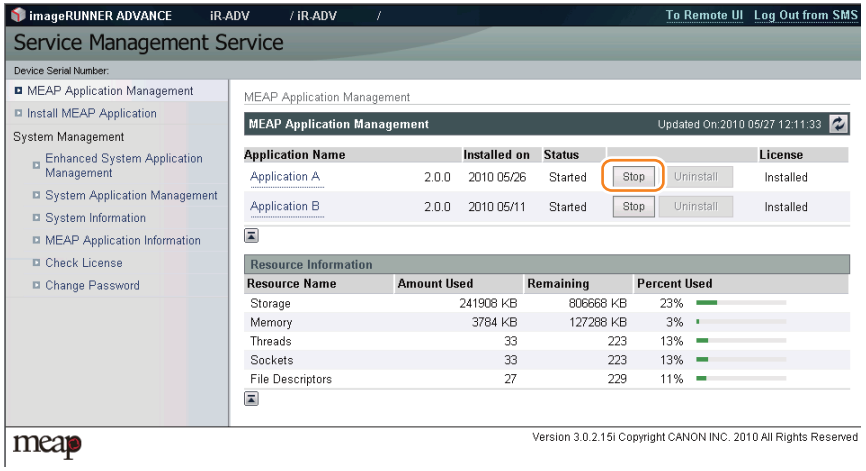
6) Check the content of the confirmation page, and click [OK] button.

Procedure disabling a license file (suspending a license)

CAUTION:

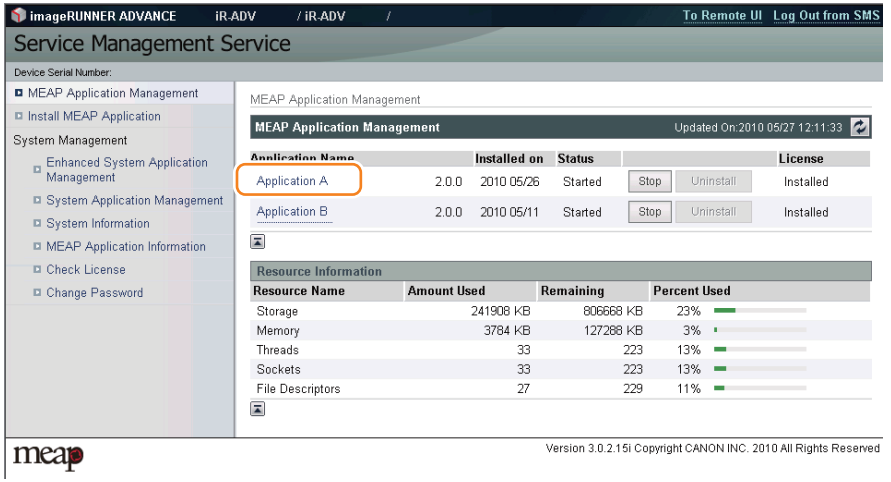
- Since the license file cannot be disabled when the application is still running, the application needs to be stopped before disabling the license file.
- Once suspended, the status of the license will be 'Not Installed', and its application will no longer be available for use.
- You can later restore a suspended license file as long as you are doing so on the same iR, the device with the same device serial number.
- If the machine needs to be replaced due to a device failure, use the transfer license during the replacement. (See "License for forwarding")

1) Stop the application you want to uninstall on MEAP Application Management page.



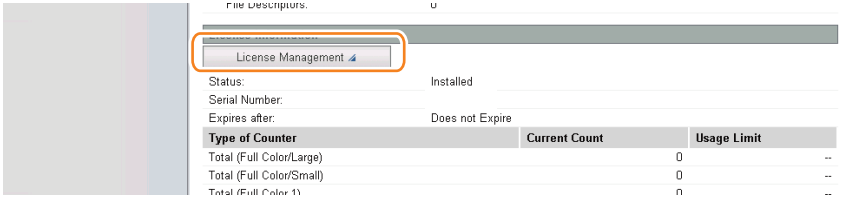
F-2-340

2) Click the name of the application that you want to disable.



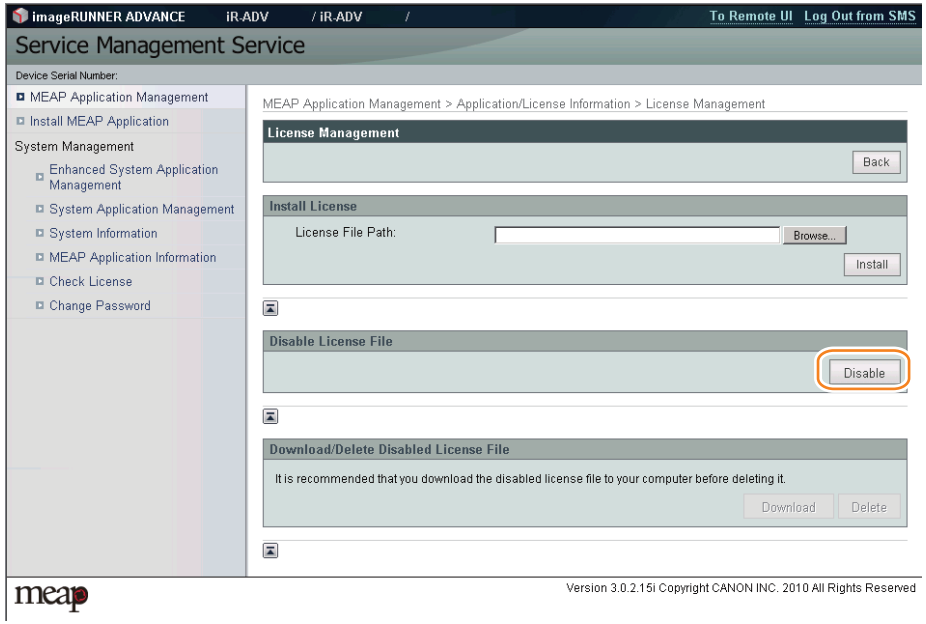
F-2-341

3) On Application/ License Information page, click [License Management] button.



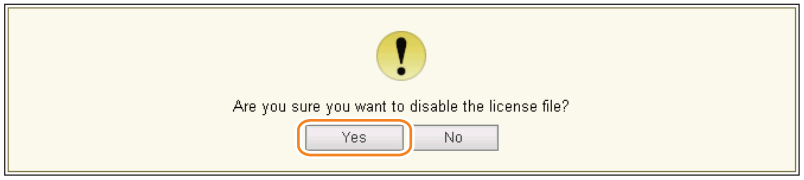
F-2-342

4) License Management page appears. Click [Disable] button.



F-2-343

5) Click [Yes].



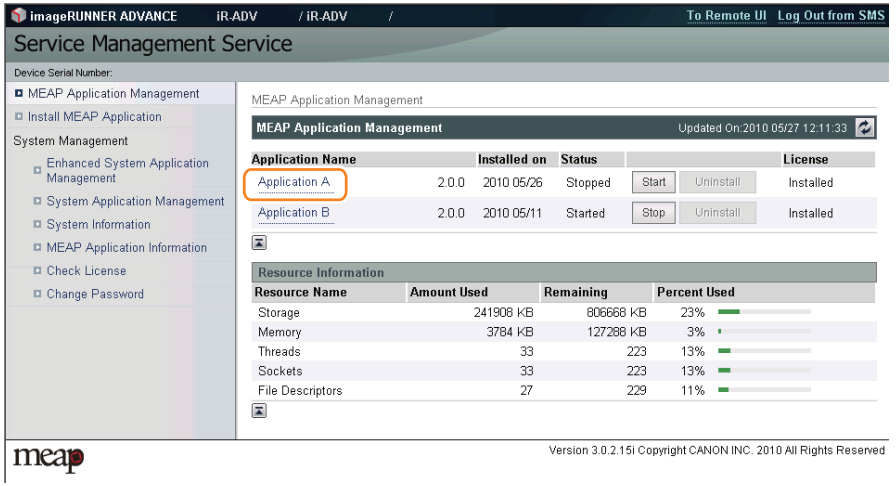
F-2-344

Procedure downloading / removing an invalidated license file

Note:
The downloaded license file can be used for reinstallation only in the same iR device (with the same device serial number).

1) Login to SMS.

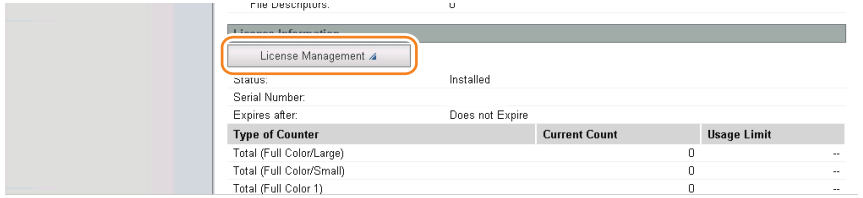
2) Application List page appears. On MEAP Application Management page , click the name of the application you want.



F-2-345

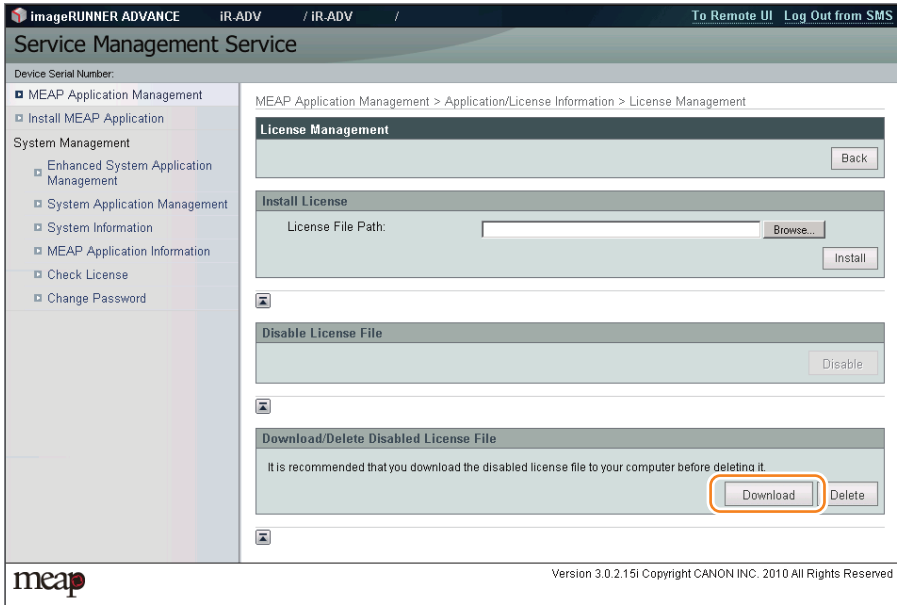
3) Check Application/ License Information page appears.

4) On Application / License Information page, click [License Management] button.



F-2-346

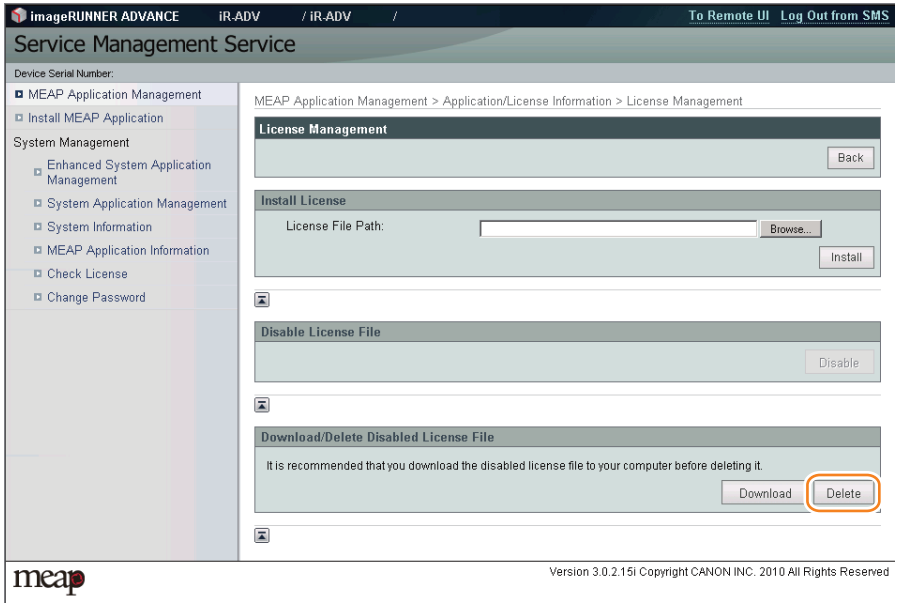
5) License Management page appears. To download, click [Download] button.



F-2-347

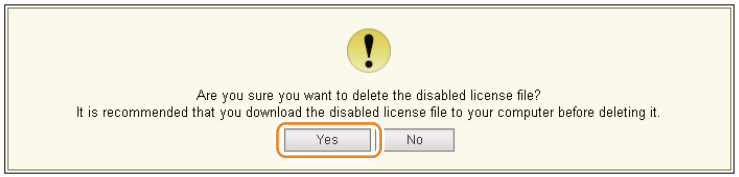
6) When you have selected [Download] button, specify where you want to store the file by following the instructions on the screen.

7) To delete, click [Delete] button.



F-2-348

8) When the dialog to confirm deletion is shown, click [Yes] button.



F-2-349

WARNING:

Without the license file, an application cannot be reinstalled even to the MEAP de-vice that the application had been installed last time. Download and save the license file before deleting the application.

Other License File Management Functions

Reusable license

When reinstalling, Disable License file should be downloaded (see Chapter 0, “Disabling a License File .” and see Chapter 0, “Downloading / Removing an Invalidated License File.” in this manual) or a license for reinstallation should be obtained from LMS, before reinstallation. This specification aims to prevent misuse of applications.

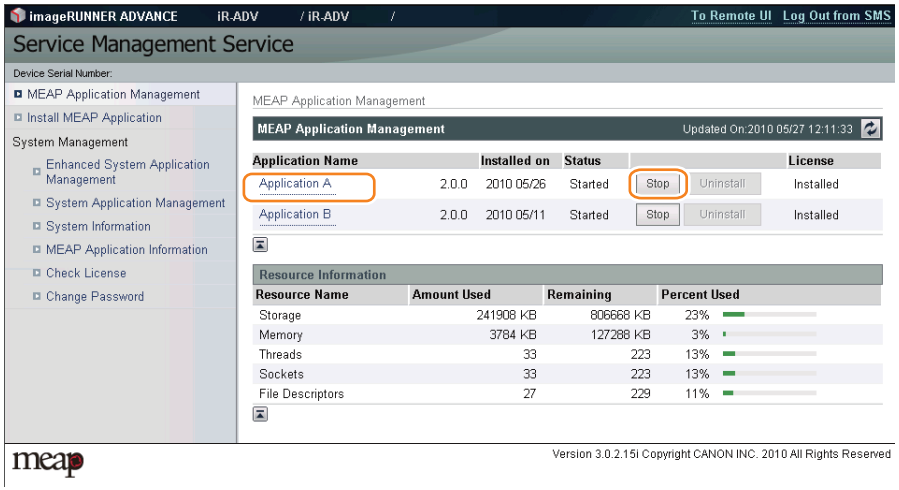
To increase convenience of users, only application with unlimited validity date and application counter (e.g. Portal Service, SDL, SSO) has been made to be able to install as many times as needed by the same license file. This kind of license is called 'Reusable license'.

License for forwarding

If the machine needs to be replaced due to a device failure, you can transfer the license information used in the MEAP application to the new machine and continue its usage. Service engineers are responsible for license transfer as this task requires the SMS hidden page (not open to users).

The procedure is shown below.

1) Log in to SMS, stop the application to be forwarded (see Chapter 0, “Starting and Stopping a MEAP Application.” in this manual).

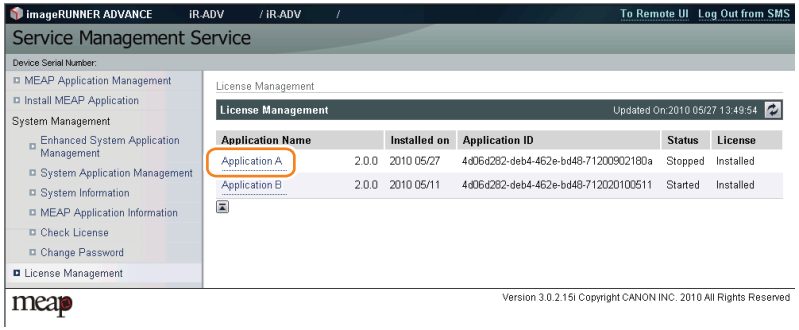


F-2-350

2) Move to the download page of license forwarded for the device as sender (https:// IP address of device: 8443/sms/ForwardLicense).

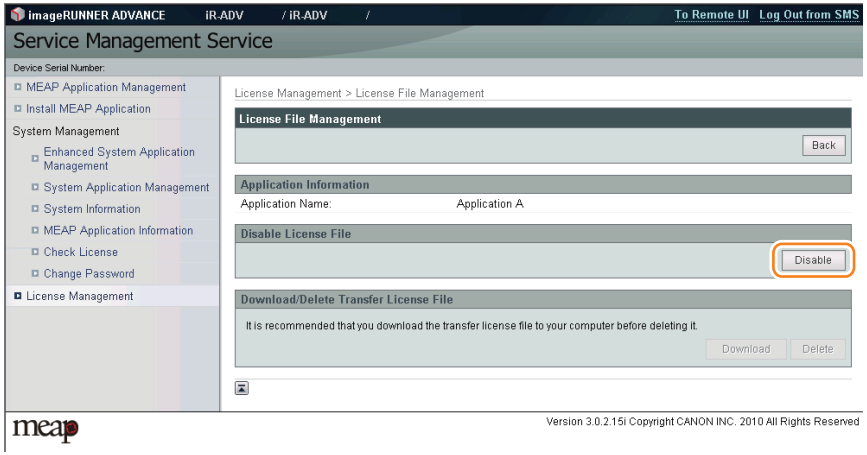
F-2-351

3) Specify the application to be forwarded.



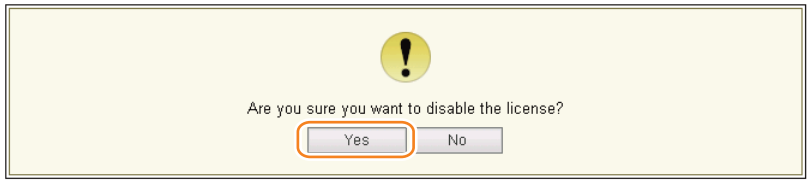
F-2-352

4) Click [Disable] button on the [Disable License File].



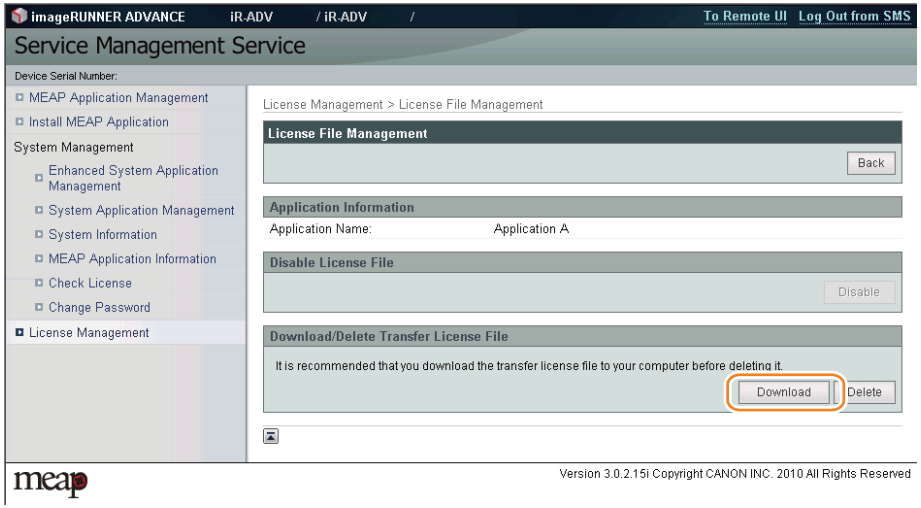
F-2-353

5) The window to confirm whether to create a transfer licence will be displayed. Click [Yes].



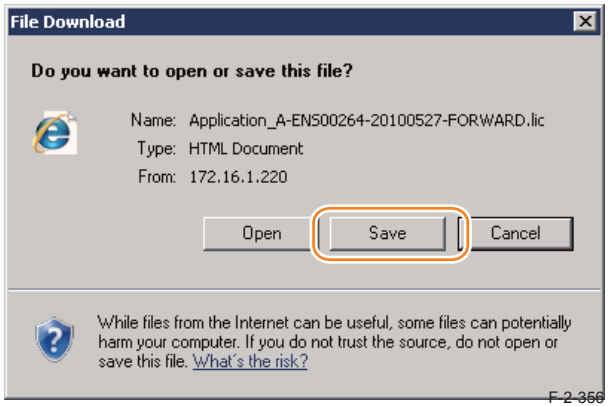
F-2-354

6) When [Download] button on the [Download / Delete Transfer License File] becomes effective, click [Download] button.



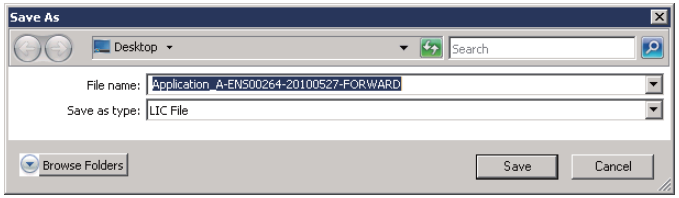
F-2-355

7) The dialogue [File Download] is displayed. Click [Save].



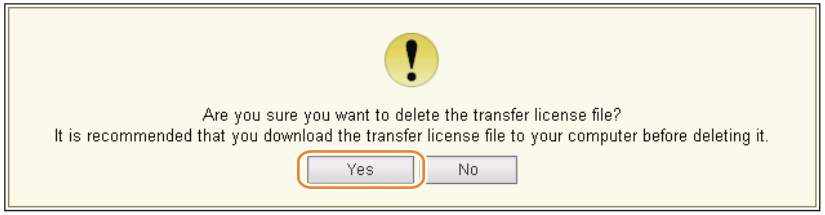
F-2-356

8) Specify the download destination, click [Save].



F-2-357

9) After downloading the license file for forwarding, click [Delete] to display the confirmation screen and click [Yes] to delete the file (in consideration of breakage of license for forwarding, deleting disabled license can be executed after all steps have been completed).



F-2-358

10) Log out of SMS.

11) Since this downloaded transfer license is the file only to prove the license invalidation, it cannot be used for installation to the other device as it is. Send the transfer license to the service support contact of your nearest sales company to request issuance of the new license for installation in the new device.

Note:
When requesting issuance of license for forwarding, inform the sales company of the name of product name and serial No. of the device as sender, and of the name of product name and serial No. of the forwarding destination.

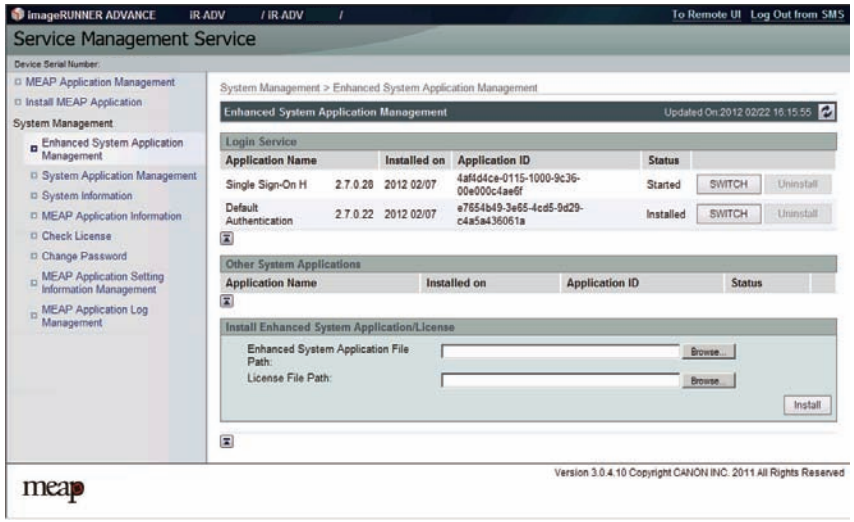
12) Install application using the license for forwarding issued by the sales company.

Enhanced System Application Management

Outline

[Enhanced System Application Management] mainly manages the login services for logging in to devices.

- Installing and uninstalling Enhanced System Application Management (login services, etc.)
- Switching login services (switching the method to log in to devices)
- Checking installation status of other System Applications



F-2-359

About Login Service

The login service is started up to authenticate the user when MEAP-enabled iR device is booted up. Login service changes and install/ uninstall are carried out from the [System Management] page.
The preinstalled login applications are Default Authentication and Single Sign On-H, and Default Authentication is enabled by default.

CAUTION:

- This device does not support SDL, conventional SSO and Security Agent.

Default Authentication overview

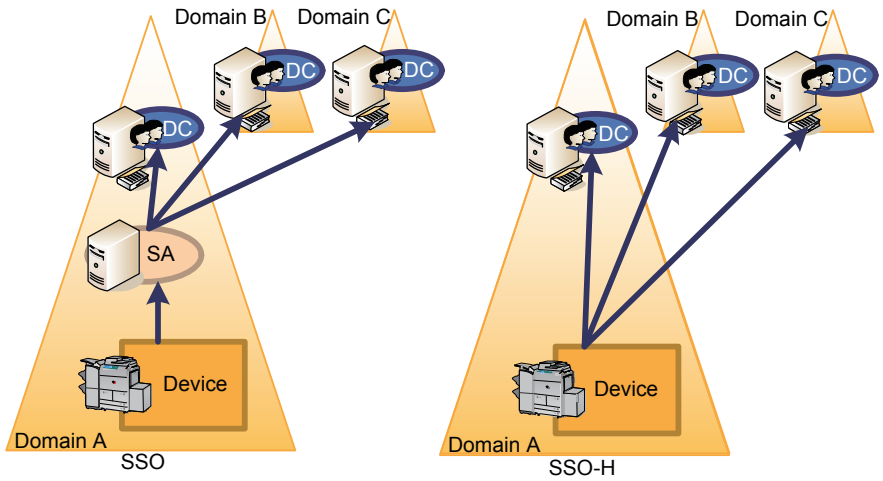
This login service is selected when the department ID management is enabled or no authentication function is set. Set the department ID management to [ON] on Setting / Registration (Additional Functions mode) of this device and register 7-digit ID and PIN by department. This setting restricts the use of this device only to users keying the registered ID and PIN. Department IDs/ and PINs can be registered on the touch panel of this device or Remote UI.

SSO-H (Single Sign-On-H) overview

This is a merger of the existing SDL and SSO login services and has the following features.

- The following three authentication methods may be selected from.
  - Server authentication
  - Server authentication and local authentication
  - Local device authentication
- Active Directory or LDAP can be used as the server for server authentication.
- It is not necessary to prepare a server for Security Agent (SA). (In the case of SSO, SA is necessary.)

Differences from conventional SSO



F-2-360

CAUTION:

- When the setting is SSO-H, the card reader for the option controller card cannot be used.
- When the setting is SSO-H, start up takes a little longer when compared to Default Authentication (because of the time required for object initialization).
- To use the SEND function when the setting is for SSO-H, when sending email, mail addresses need to be programmed against each user. If they are not, email cannot be sent. Note, however, that when sending i-Fax, the mail addresses set in the device are used.
- The system configuration is different from previous SSO, so individual management is required.
- Data porting of user information that was being used with the earlier SSO local device authentication and SDL can be done by exporting/ importing. However, application settings information cannot be ported.

Environment confirmation

Refer to the section of "Preparation for Using SSO-H" of this manual for system requirements needed in each login service.

Specification of SSO-H

Item		Specification
No. of local device users		Up to 5000
Maximum number of domains		Active Directory : 200 domains (“this device” not included)
IPv6		Authentication provided in IPv6 supports AD/KDC/DNS of Windows Server 2008 only)
Resource used		Memory : 3584KB Storage : 25000KB File Description : 27 Thread : 33 Socket : 33
Network ports used	Connecting	88 : KDC 53 : DNS 1 - 65535 (Default : 389) : LDAP
	Listening	10000 - 10100
Supported authentication server		Active Directory : Windows 2000 Server SP4/ Windows Server 2003 SP1 * / Windows Server 2003 R2 * / Windows 2008 Server * *64-bit OS is not supported. LDAP : Novell eDirectory V8.8 SP6 for Windows Lotus Domino V8.5 for Window
Supported Active Directory		Windows 2000 Server SP4/ Windows Server 2003 SP1/Windows Server 2003 R2/ Windows 2008 Server(64BitOS not supported)
Availability of Department Management Linkage		Available only in local authentication

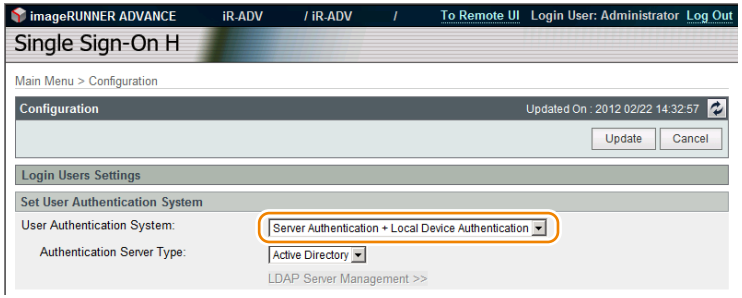
T-2-130

SSO/SDL handling

This model does not support older versions of SSO or SDL released in the past.

Setting the Authentication Method

In the case of SSO-H, it is possible to use a combination of multiple authentication methods. The combination can be changed from the SSO-H setting screen. (For details, refer to e-Manual > MEAP > Menu for Administrators > Setting the SSO-H > "Setting the User Authentication System".)



F-2-361

Note:
The default settings are shown below.
- User authentication method : "Server Authentication + Local Device Authentication"
- Type of authentication : "Active Directory"

CAUTION:
- To ensure the security, it is recommended to change the password and the user name of the Local Device Authentication administrator from those at the time of shipment immediately after you have started using SSO-H.
- Since department ID and password are not assigned to domain users, distributing setting information where the department ID is enabled to a device where the server authentication is enabled may make the device unable to be logged in. If the device has become unable to be logged in, follow "Remedy to Be Performed When the Device Has Become Unable to Be Logged in" in this manual.

Using an Accounting Product When SSO-H Is Used

SSO-H has collaborative linkage with NetSpot Accountant, imageWARE / iW Accounting Manager, imageWARE Enterprise Management Console / iW Management Console Access Management Plug-in, imageWARE Enterprise Management Console / iW Management Console Accounting Management Plug-in.
For details on the combination, refer to the User's Manual or Service Manual of the product.

Conducting Department ID Management When SSO-H Is Used

Department ID Management can be conducted also when SSO-H is used for login service.

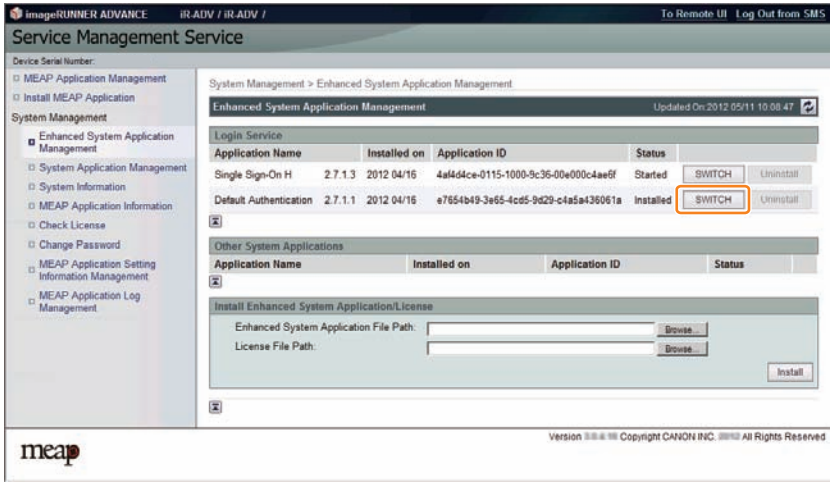
Usage Conditions

In order to allow coexistence of SSO-H and Department ID management, the following conditions need to be satisfied.
- Only "Local Device Authentication" can be used as the user authentication method.
- The department ID and password have been already set for the SSO-H login user before enabling department ID management.
- The information (the department ID and password) set for the login user coincides with the information registered in Department ID Management.

Setting Procedure

In order to allow coexistence of SSO-H and Department ID management, the following procedure needs to be performed to enable the setting.

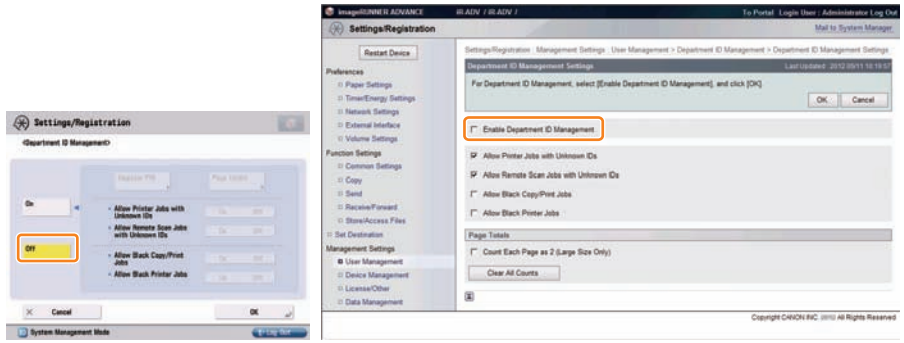
1) Change the authentication method to DA (Default Authentication).
Access SMS, and select [Default Authentication] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)



F-2-362

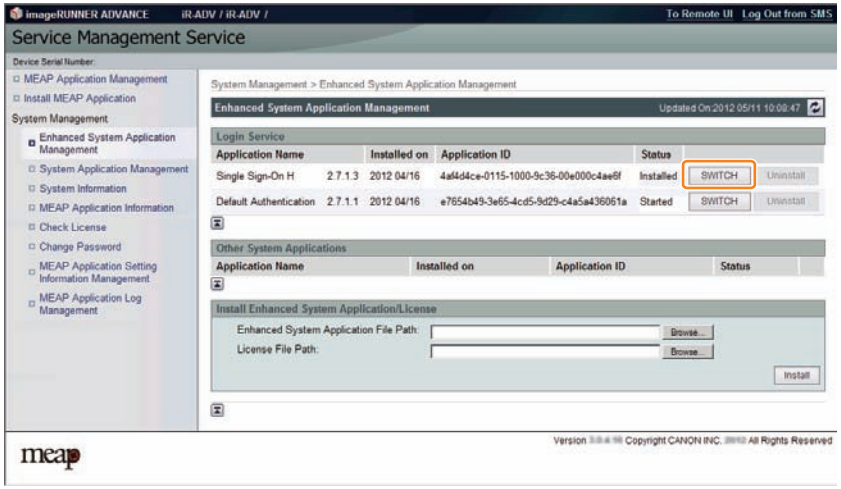
2) Restart the device.
Restart the device in order to reflect the changes in login service.

3) Disable Depart ID Management.
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [OFF]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and deselect [Enable Department ID Management].



F-2-363

4) Change the authentication method back to SSO-H authentication.
Access SMS, and select [Single Sign-On H] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)

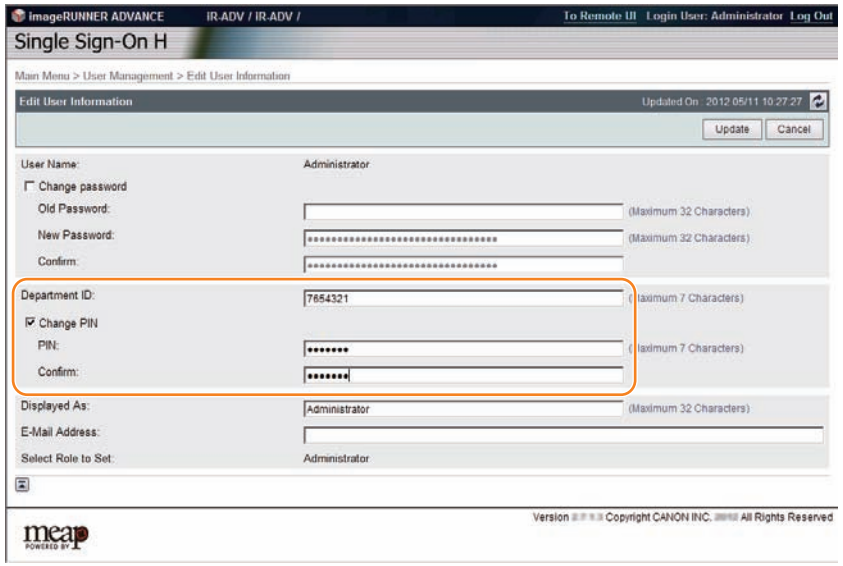


F-2-364

5) Restart the device.
Restart the device in order to reflect the changes in login service.

6) Change the user registration information of SSO-H.
Access the URL shown below, and change the content to the information registered in Department ID Management.
Or, import the setting file whose content you want to use.

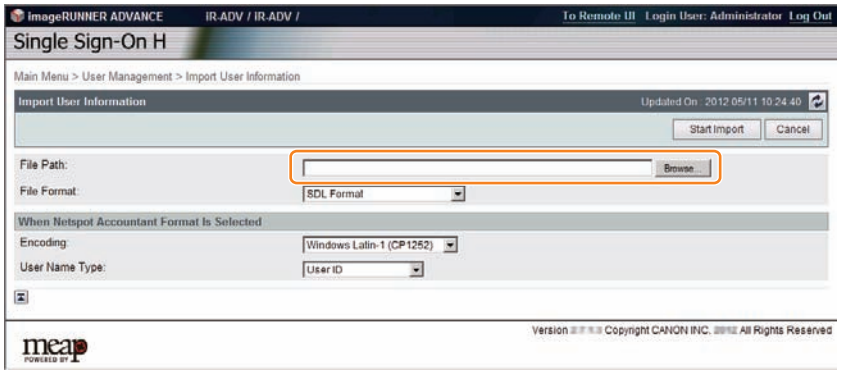
SSO-H user registration information edition screen
(SSO management screen [Main Menu] > [User Management] > [Edit User Information] or https://<IP address>:8443/sso/Edit).



F-2-365

SSO-H user registration information import screen

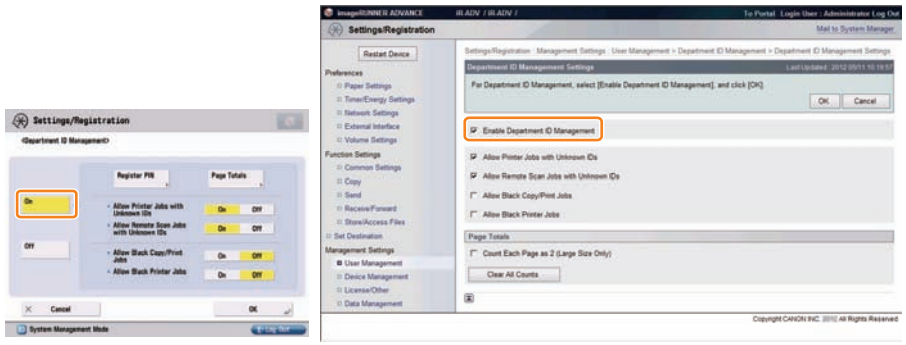
(SSO management screen [Main Menu] > [User Management] > [Import User Information] or (https://<IP address>:8443/sso/Import).



F-2-366

7) Enable Depart ID Management.

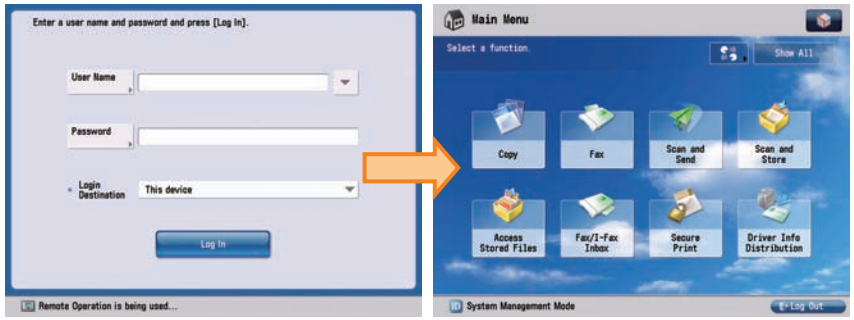
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [ON]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and select [Enable Department ID Management].



F-2-367

8) Check that the device can be logged in.

Log off and then log on to check that the device can be logged in with an environment where Local Device Authentication and Department ID Management are enabled.



F-2-368

Note:
In the case of conventional SSO, department management can be conducted also when server authentication is used provided that iWAM/iW EMC account management is used, which is not supported by SSO-H.

Setting the Administrator for Server Authentication

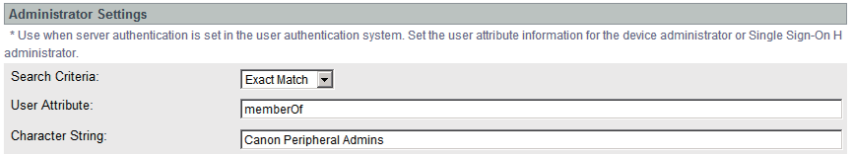
When using Server Authentication, the user who satisfies the specified conditions (user attribute and its match criteria) becomes the administrator (the device administrator and the SSO-H administrator).

The default user attribute and whether the setting value can be changed or not are shown below.

Item	Default value	Active Directory	LDAP
Search Criteria:	Exact Match	Not Available	Available
User Attribute:	memberOf	Not Available	Available
Character String:	Canon Peripheral Admins	Available	Available

T-2-134

The settings of the administrator can be changed on the following screen: remote UI > Single Sign-On H > Configuration (http://device's IP address:8000/sso/ActionSet)



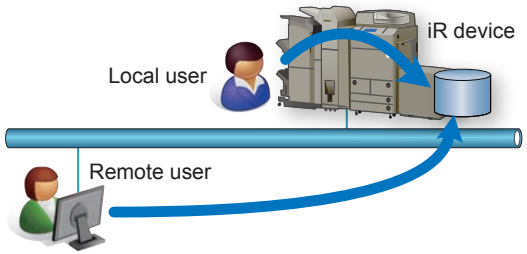
F-2-369

System Manager Linkage (automatic ID allocation to SystemManagers)

SSO provided the automated function conventionally on Security Agent (hereinafter “SA”) to authenticate System Manager by allocating IDs set on SA to domain authentication managers (users belonging to Canon Peripheral Admins group). However, SSO-H does not support this function.

Local device authentication

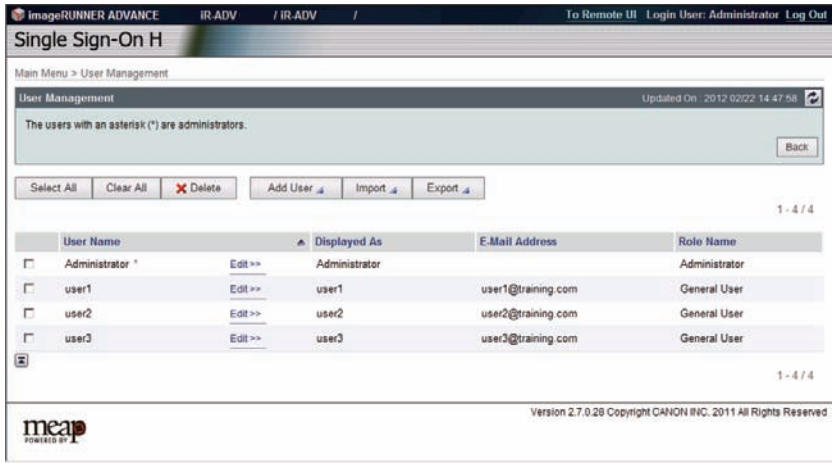
It is one of the user authentication methods using SSO-H, and is used for an iR device on a stand-alone basis.



F-2-370

Register the user to be authenticated on the database in the device.
User management can be performed from the User Management screen (http://device's IP address:8000/sso/) or imageWARE Enterprise Management Console. The login destination is [This device].

User Management screen

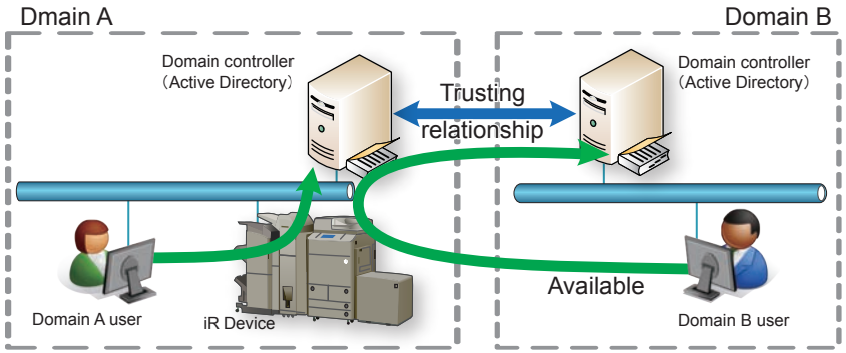


F-2-371

Server authentication (Active Directory authentication)

Outline

It is one of the user authentication methods using SSO-H. User authentication is performed with the device linked with a domain controller on the network in an Active Directory environment. It is a user authentication where the user is authenticated by the domain on the network when the user logs into the device. In addition to users belonging to the domain that includes the iR device, users belonging to domains that have a reliable relationship with the domain (multi-domain) can also be authenticated. The domain name of the login destination can be selected by the users themselves upon login.
Using one of the options (Net Spot Accountant, imageWARE Accounting Manager, or imageWARE EMC Accounting Management Plug-in) makes it possible to analyze/manage the iR device usage.



F-2-372

The protocol used is as follows.

- Kerberos:LLS/RLS/ILS
- NTLMV2:WLS(Web Service Login Service)

User information acquisition is done by LDAP, so the Active Directory LDAP port needs to be made accessible. If LDAP connection fails, the authentication will end in error.
No. of supported domains: 200 (unchanged from SSO) Site access supported.

CAUTION:
In the case of using Server Authentication (Active Directory authentication), it is necessary to synchronize the time settings of the Active Directory server and the machine (and the PC for login). If the difference in time setting is 5 minutes or longer, an error will occur at the time of login. (The setting of the allowable difference in time can be changed.)

CAUTION:
Since department ID and password are not assigned to domain users, distributing setting information where the department ID is enabled to a device where the server authentication is enabled may make the device unable to be logged in. If the device has become unable to be logged in, follow "Remedy to Be Performed When the Device Has Become Unable to Be Logged in" in this manual.

Access Mode in Sites

With SSO-H, access to Active Directory within site can be prioritized or restricted, so there is a setting called 'Access Mode in Sites'. Sites programmed in Active Directory comprise multiple subnets. In this mode, SSO-H uses site information to access the same site as the device, or the subnet Active Directory.

- The SSO-H default setting is with the site internal access mode OFF.
- Access Active Directory within same site only.
- If there is no Active Directory within the same site, or if connection fails, there will be an authentication error.
- Access another site if Active Directory within the same site cannot be located.
- If there is no Active Directory within the same site, or if connection fails, an Active Directory external to the site will be accessed.
- If all attempts to access Active Directory fail, there will be an authentication error.

The operating specifications of the site internal access mode are as described below.
When first logging in to the login service after booting iR, the domain controller (DC) is obtained from the site list.
However, upon the first login, even if the site functionality is active, connection to DC is random. (This is because, if connection to DC should fail, the site to which the device belongs cannot be ascertained.)
If the device IP address or the domain name are changed, the site settings are acquired once more.

In this mode, at the first login (first authentication of domain to which the device belongs) LDAP-Bind is performed directly to DC and site information acquired by LDAP from DC.

From the acquired site list, the site to which the device subnet belongs is extracted and this becomes the site to which device belongs. Active Directory address is acquired (retrieved from DNS)

Note:
- The Active Directory subnet is assumed to be the same subnet as the device sub-net.
- In the Active Directory addresses, the Active Directories of the same site are listed.
- Active Directories of the same subnet as the device are listed first.
- If there is no Active Directory with the same subnet as the device, Active Directories belonging to different subnets than the device are listed.
- The Active Directories within the same site are accessed in order. Note, however, that where there are multiple Active Directories within the same site, access to those Active Directories will be in the order in which the address list was obtained.
- If there is no Active Directory within the same site, if access outside of the site is programmed, Active Directories outside of the site will be accessed in the order in which the address list was obtained.

Site list acquisition

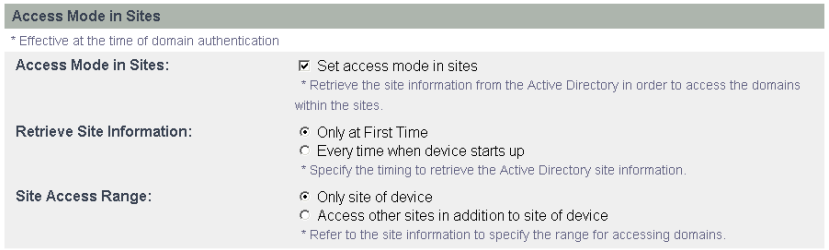
After booting up, upon the first login by LLS or ILS/ RLS, the site list is obtained from the Active Directory. In order to obtain the site list from the Active Directory, Active Directory needs to be accessed in LDAP, so SASL-Kerberos-Bind is used by the login user account. If authentication by Active Directory should fail, an authentication error will be generated and the site list will be acquired again from Active Directory upon the next login.

In SSO-H, the Active Directory to be accessed when acquiring the site list cannot be specified. In other words, if there is no site list, which site's Active Directory is accessed depends upon the order of the Active Directory addresses returned by DNS. Therefore, when acquiring the site list, LDAP may access the Active Di rectory of a different site. Therefore, in such cases, it is sometimes necessary to access across sites or subnets, which means that LDAP protocol needs to have continuity across sites (subnets) (normally, LDAP is port No. 389). Further, if connection with Active Directory fails when acquiring site information, another Active Directory will be accessed.
Site information, once it has been acquired, is cached within the device. The life settings of the cache can be set so that site information in the cache is updated upon the first login after the device boots up, or so that the cache is not updated once acquired.

Settings for access mode in sites

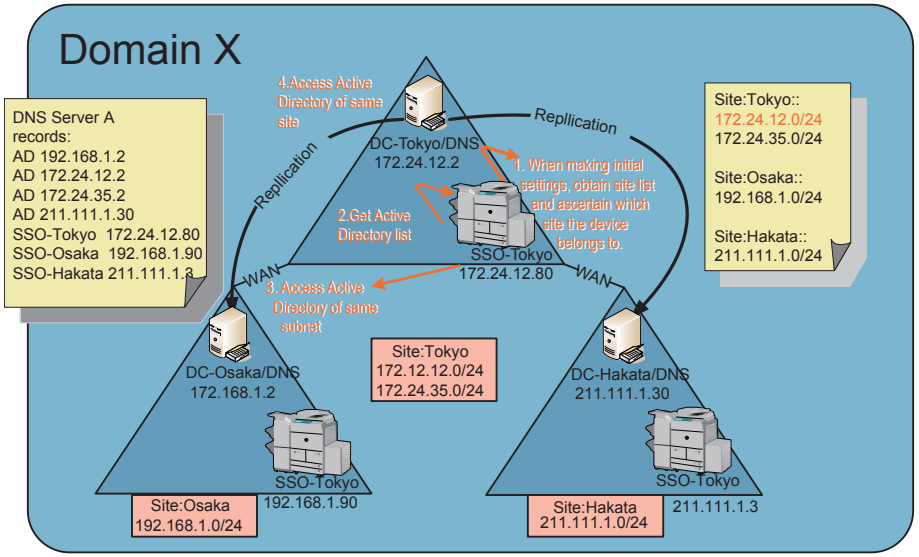
Switching between site internal access mode/ non site internal access mode, as well as detailed mode settings, are done via DMS or iWEMC.

Site internal access mode settings window (DMS)



F-2-373

The figure below shows a sample of processing Access Mode in Sites.
Sample of Processing Access Mode in Sites



F-2-374

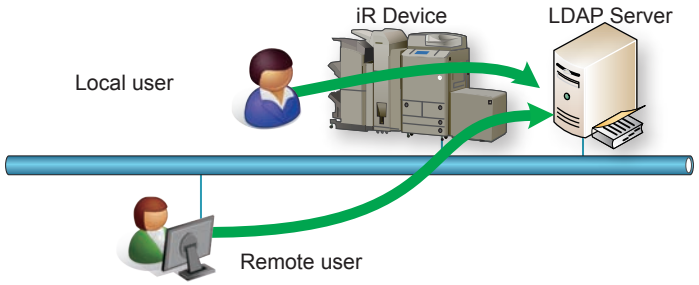
1) SSO-Tokyo acquires site lists from Active Directories.
Note, however, that the Active Directories accessed in order to acquire site lists are in the order in which they were returned by DNS, so there is no guarantee that the same Active Directory will be accessed as in the initial settings (upon device settings or changes to NW settings, etc.).
[Site subnet list]
Site: Tokyo: = 172.24.12.0/24, 172.24.35.0/24
Site: Osaka: = 192.168.1.0/24
Site: Hakata: = 211.111.1.0/24
As a result, since SSO-Tokyo is 172.24.12.80, the subnet is 172.24.12.0/24, and is judged as belonging to site Tokyo.
2) The DNS server obtains its Active Directory list from the primary or secondary DNS, as set in the device.
[Active Directory]
172.24.12.2, 172.24.35.2, 192.168.1.2, 211.111.1.30
3) Of the Active Directories in 2), above, the ones that belong to the same site (Tokyo) are 172.24.12.2 and 172.24.35.2.
Of these, the Active Directory that is the same subnet as SS-Tokyo is 172.24.12.2.
Therefore, this one will be accessed.
4) If access fails at step 3), above, the other Active Directory of the same site, 172.24.35.2, will be accessed.
5) If access fails at step 4), above, also, SSO-Osaka and SSO-Hakata will be accessed (the order will depend on the order of the Active Directories in DNS). Note, however, that this is an optional operation.

Logging into other domains at multi-domain

At multi-domain, if another domain is logged into, based on the site/ subnet information retrieved in the home domain, the Active Directories of the login destination domain/ KDC address list are computed. In the event that the domain controller IP addresses of other domains are outside of the site access range, and only the domain controller within the site is programmed for access, an error message will be displayed to the effect that the site information is incorrect.

Server Authentication (LDAP Authentication)

It is one of the user authentication methods using SSO-H. User authentication is performed with the device linked with the LDAP Server on the network in an LDAP environment.



F-2-375

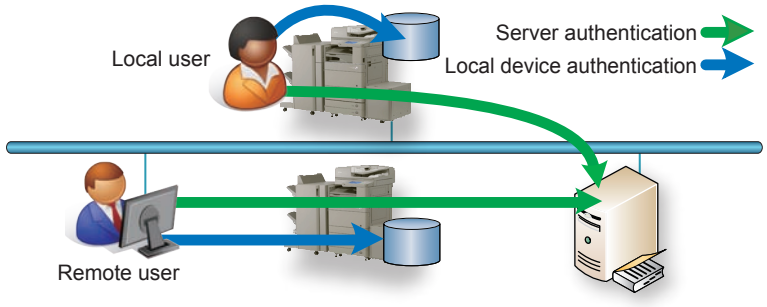
LDAP server authentication can be used for devices that support MEAP User Preference Service (MEAP Specification Ver.56) and MEAP Application Setting Information Management (MEAP Specification Ver.57).
As for models that do not support MEAP User Preference Service and MEAP Application Setting Information Management , [LDAP Server] cannot be selected as the type of the authentication server on the SSO-H Configuration page. Moreover, it is not possible to access the LDAP Server Management screen and the Add Server screen.

Simple bind (a method where the password is not encrypted) is used as the bind (authentication) between SSO-H and LDAP server. It is therefore strongly recommended to always use SSL connection from a security standpoint.
As for the version of LDAP, only Ver.3 is supported.

ON/OFF of SSL connection can be changed on the LDAP Server Management page.
The time-out value of connection is 60 seconds.
In the case of using LDAP server authentication, the characters entered as the user name are not case-sensitive, but the characters entered as the password are case-sensitive.
In the case of SSO-H, authentication is not allowed when the user name includes "* (asterisk)". If authentication is performed with "* (asterisk)" used in the user name, an authentication error occurs.

Server authentication and local device authentication

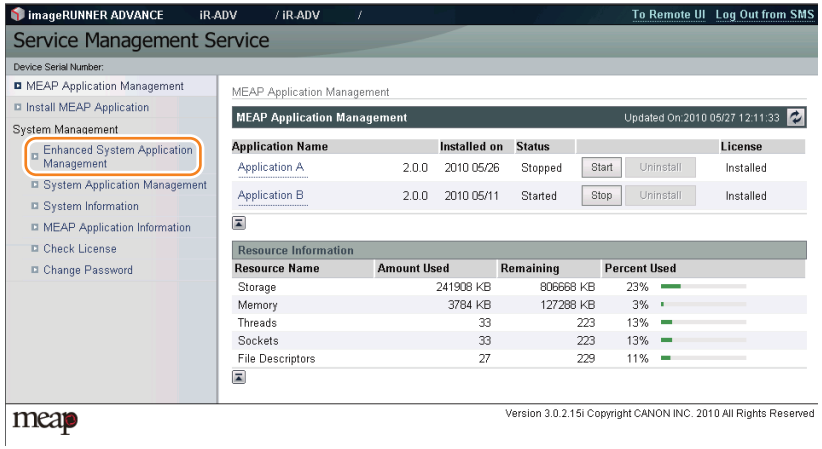
It is a user authentication method provided with both the "server authentication" function and the "local device authentication" function.
It is possible to use server authentication to authenticate the users registered on the authentication server under normal conditions and use local device authentication when a user who cannot be added to the authentication server needs to be temporarily authenticated.
If a trouble occurs in the authentication server, local device authentication can be used as an emergency measure until recovery from the trouble.



F-2-376

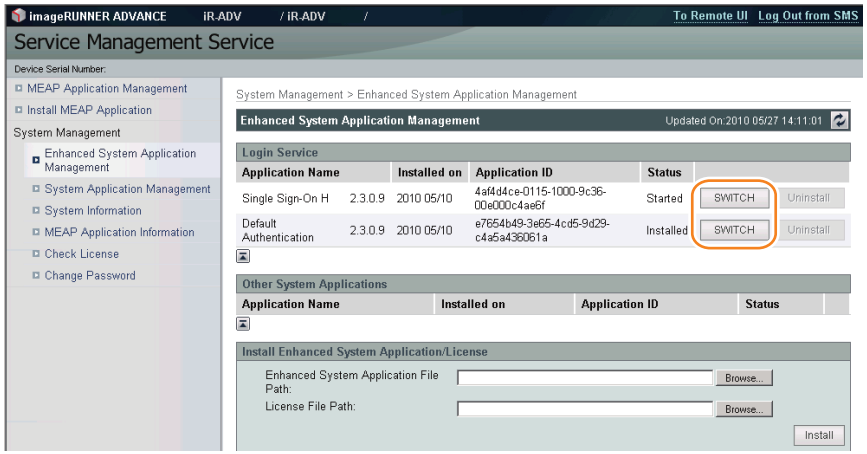
Steps to Change Login Services

1) Click [Enhanced System Application Management] on [System Management].



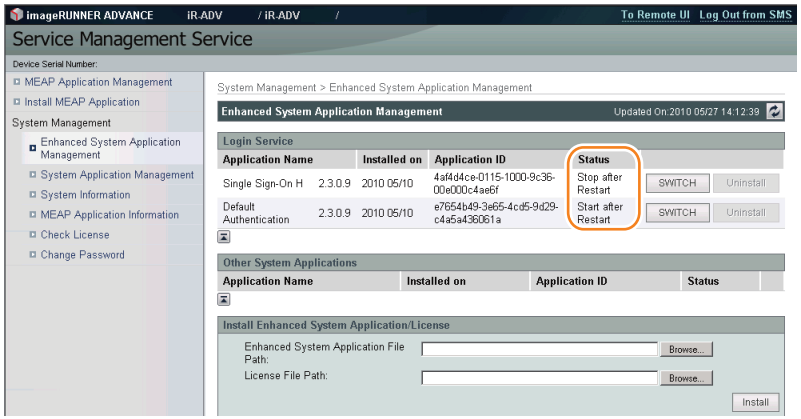
F-2-377

2) A page will appear showing the various selections you can make for the login service. Click [SWITCH] button for the login service to be used.



F-2-378

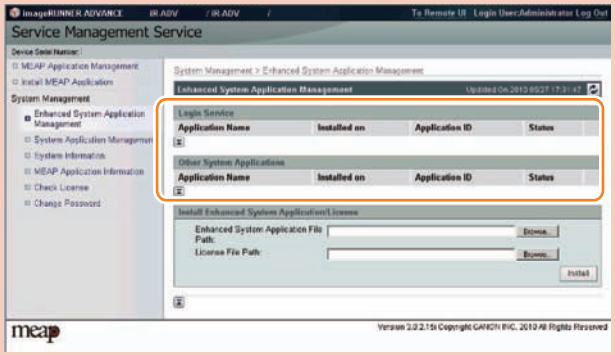
3) When login service application you have selected turns to Start after Restart, restart the device.



F-2-379

CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.



F-2-380

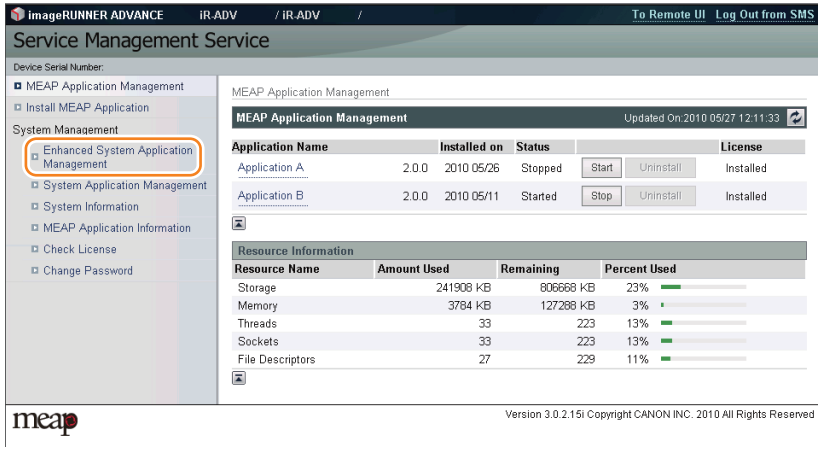
This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

Login Service Installation Procedure

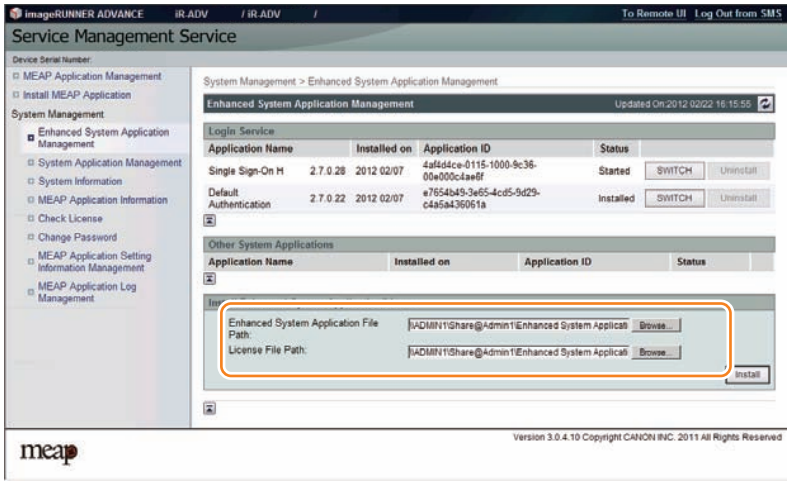
Follow the procedure show below to install login services.

1) Access SMS, and select [System Management] > [Enhanced System Application Management].



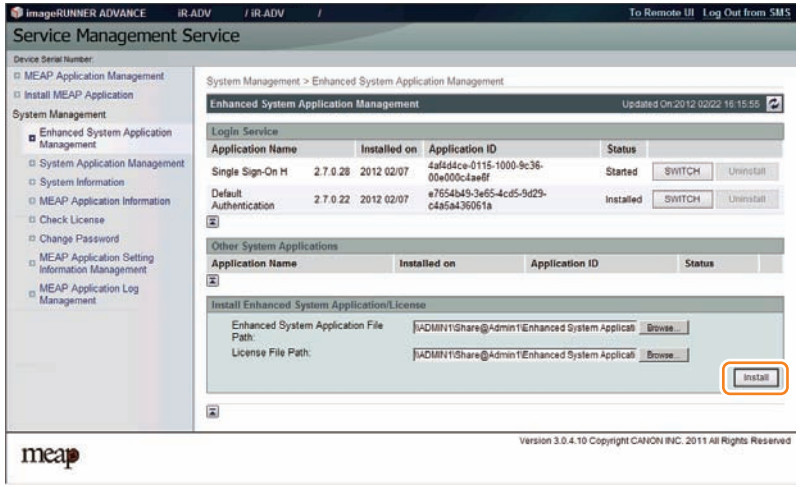
F-2-381

2) Click the [Browse] button, and specify the enhanced system application file and license file.



F-2-382

3) Click [Install] button.

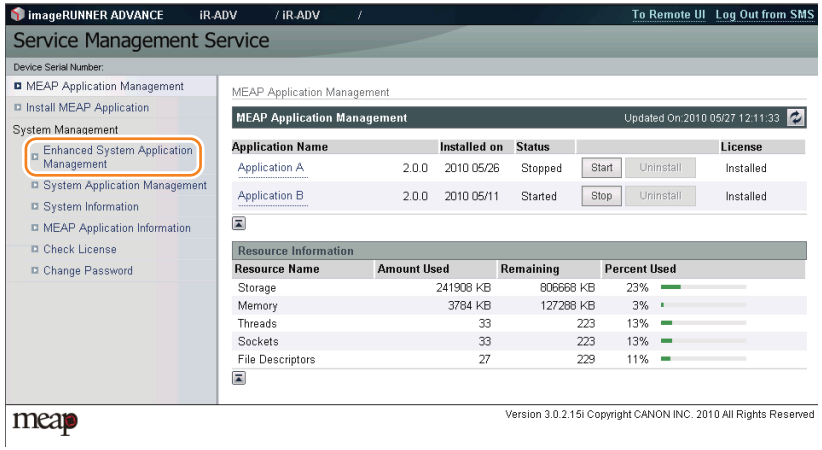


F-2-383

Login Service Uninstallation Procedure

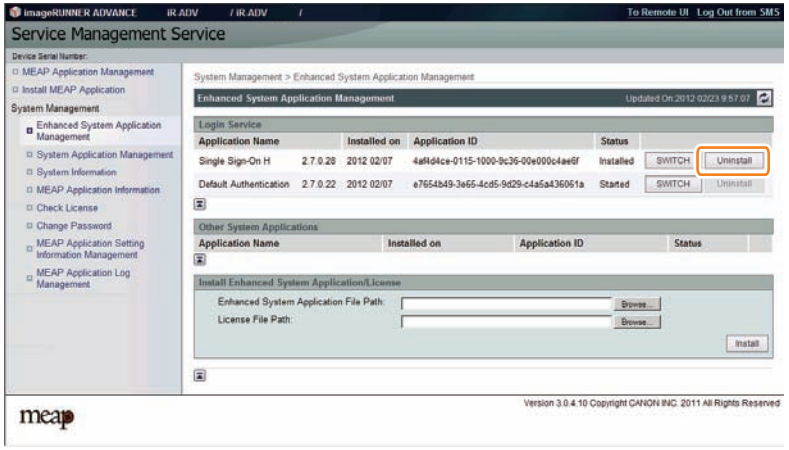
Follow the procedure show below to uninstall login services.
In order to uninstall a login service, the service needs to be stopped ("Installed" status).
Default Authentication cannot be uninstalled even when the service is stopped.

1) Access SMS, and select [System Management] > [Enhanced System Application Management].



F-2-384

2) Click the [Uninstall] button of the login service you want to uninstall.



F-2-385

System Application Management

This function manages the login services for logging in to SMS.
There are two login methods: one is "password authentication" where you enter the password for SMS on the SMS login screen and log in, and the other is "RLS authentication" where you do not use the SMS login screen but enter the user ID and password on the RLS (Remote Login Service) screen for authentication.

Password authentication

Enter the password on the SMS login screen for authentication. Only one password can be set for SMS.
The login procedure is shown below.

1) Access SMS from the browser of a PC on the same network as the MEAP device. The URL is as follows.

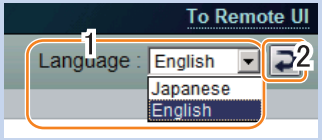
URL: https://<IP address of MEAP device>:8443/sms/
Ex.) https://172.16.188.240:8443/sms/

Note:
To encrypt the password information input when logging in, SSL of the login screen was made effective. However, it is redirected to new URL (effective SSL) even when accessing with URL (non-SSL) before.

2) Enter the password in the password entry field, and click the [Log In] button. The default password is “MeapSmsLogin.” (The password is case-sensitive.)

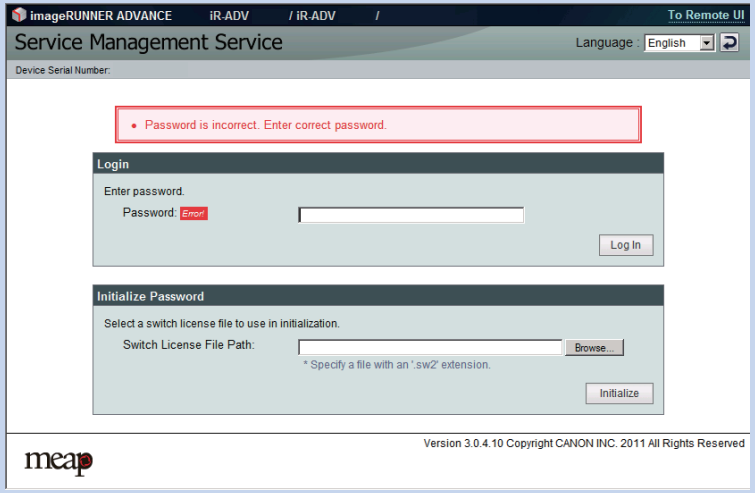
F-2-386

Note:
If you want to change the display language, select the language from the drop-down list of [Language] at the upper right of the login screen, and click the update button.



F-2-387

Note:
If the wrong password is entered, the following window is displayed. The user's system administrator may have changed the password, so confirm the password with the system administrator. Note that there is no special password for service.



F-2-388

RLS Authentication

Login without using the SMS login window but by entering the user ID and password for authentication in the RLS (Remote Login Service) window. The user information (user name and password) used is the information for server authentication or local device authentication. The login procedures are as follows.

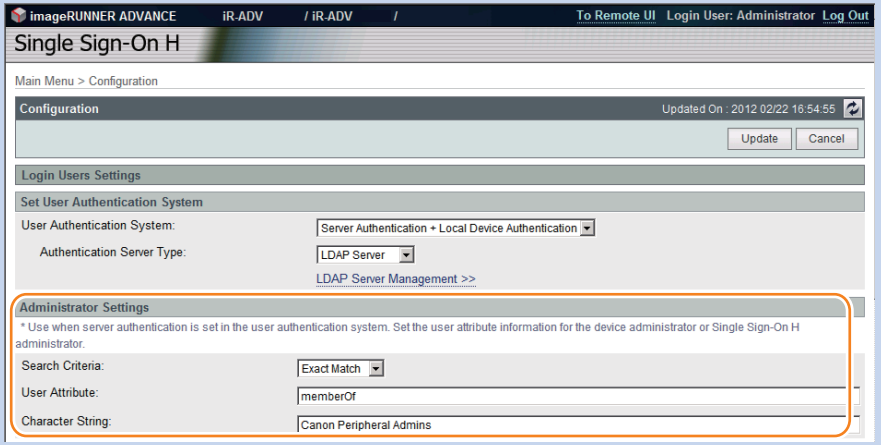
1) Access SMS by RLS Authentication from the PC browser on the same network as the MEAP device.
URL: https://<IP address of MEAP device>:8443/sms/rls/
Ex.) https://172.16.188.240:8443/sms/rls/

Note:
- To encrypt the password information input when logging in, SSL of the login screen was made effective. However, it is redirected to new URL (effective SSL) even when accessing with URL (non-SSL) before.

F-2-389

Note:
- When the device authentication method used is server authentication, enter the user name, password and login destination registered with authentication server and then click 'Log In'.
- If the authentication method used is local device authentication, enter the user name, password and login destination registered in the device and click 'Log In' button.
  The user information is set as below for local device authentication by default. Both are case sensitive.
  - User Name: Administrator
  - Password: password

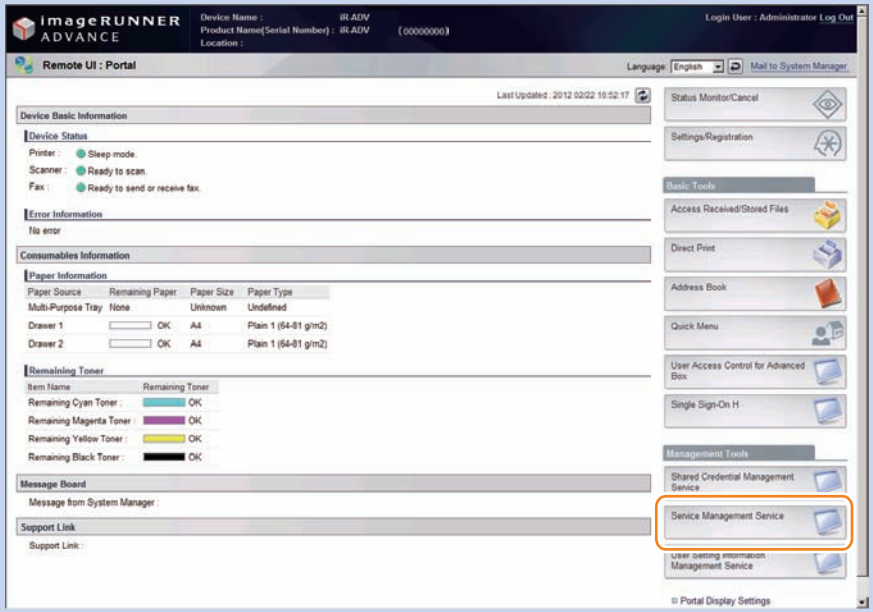
Note:
Only the following users may us SMS via RLS.
- For local device authentication, users with Administrator or Device Admin authority.
- In the case of server authentication, the users who belong to the group (default: Canon Peripheral Admins) specified as the device administrator on the SSO-H Configuration screen.



F-2-390

Note:

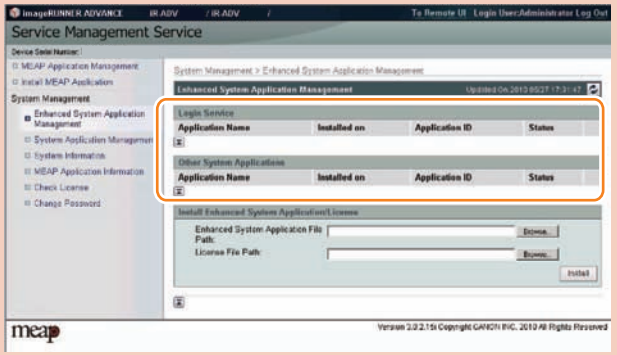
- SMS Access can be gained also from Remote UI.
  Access Remote UI and click on SMS shortcut shown on the lower right of the screen to gain access to SMS.
  When only the password authentication is enabled, the password authentication screen is shown.
  When only the RLS authentication is enabled, no further authentication is needed to access SMS. This is because users have already authorized upon accessing to Remote UI.



F-2-391

CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.



F-2-392

This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

Setting the method to login to SMS

Outline

The method to log into SMS can be specified by one of the following methods.

- If you want to change the password authentication settings: Use RLS authentication to log in, and change the settings.
- If you want to change the RLS authentication settings: Use password authentication to log in, and change the settings.

The following table shows the start/stop combinations of the two login methods.

Combination of Login Methods

	Start RLS Authentication	Stop RLS Authentication
Start Password Authentication	Login available with either method	Login available only with
Stop Password Authentication	Login available only with RLS Authentication	Setting unavailable

T-2-132

CAUTION:

If only login via RLS is programmed, login may be disabled for the following reasons.

- Authentication server is down
- Network problem, no communication with authentication server

In the event of either of these cases, try the following.

1. If local device authentication is active, try logging in with local device authentication.
2. If only server authentication is active, launch in MEAP safe mode from the device service mode.

After launching in MEAP safe mode, the Default Authentication will become active, and you will be able to login to SMS with password authentication. After logging into SMS, set the password authentication login to ON (active) and restore the device from MEAP safe mode to normal mode. Until the problem blocking authentication is resolved, log into SMS with password authentication.

Setting for login by Password Authentication

The procedures for changing the password authentication Start/ stop settings are as follows.

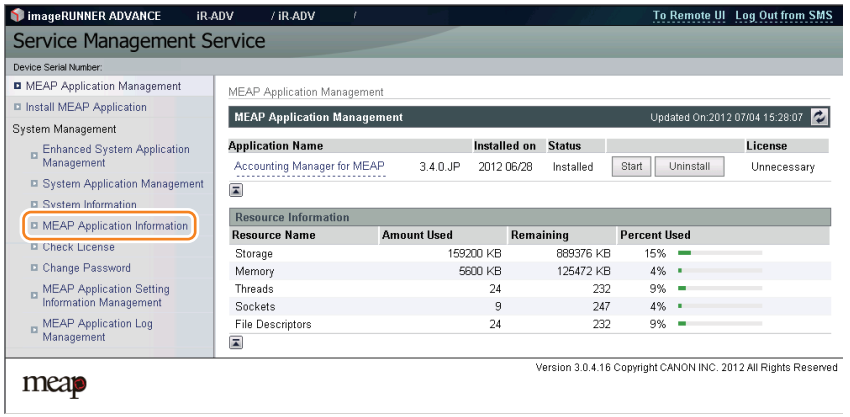
1) Access SMS login screen by RLS Authentication from the PC browser on the same network as the MEAP device.
URL: https://<IP address of MEAP device>:8443/sms/rls/
Ex.) https://172.16.188.240:8443/sms/rls

2) Enter the user name and the password of the user registered as an administrator, select the login destination, and then click the [Log In] button.

Login screen (In case authentication method is SSO-H)

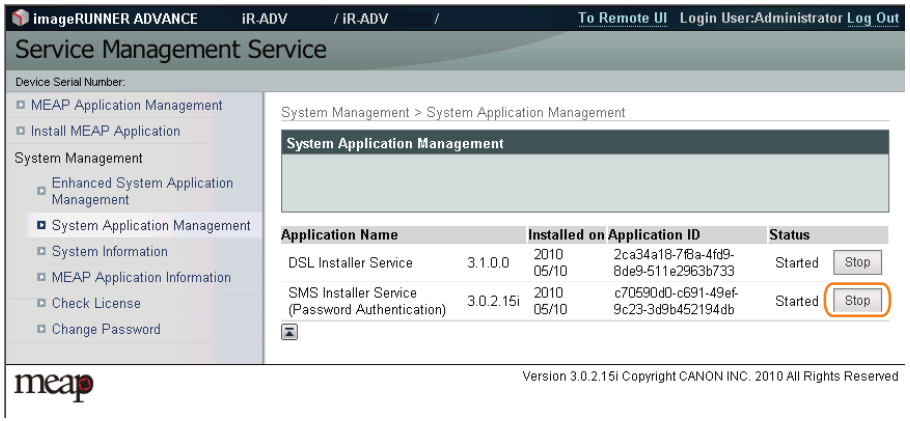
F-2-393

3) Select [System Application Management]



F-2-394

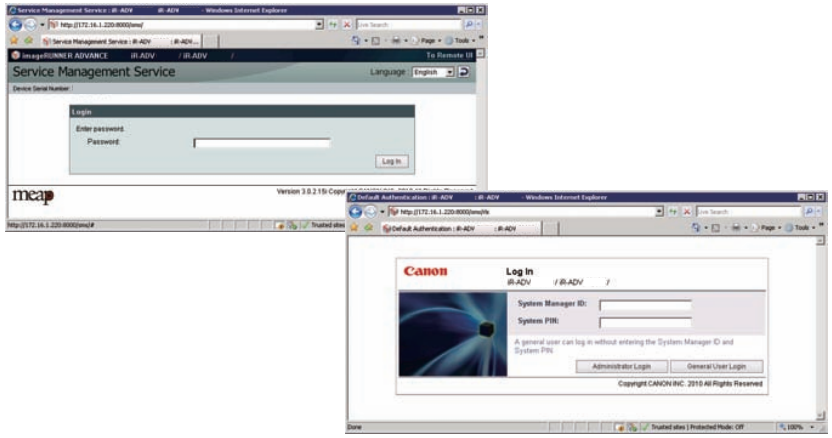
4) Click [Start] or [Stop] button shown in Status field of SMS Installer Service (Password Authentication) to check if the status is changed.



F-2-395

5) Logout once and login again to check to see that the setting is applied properly.
When clicking [Stop] to change the status to [Start], another password authentication login screen is firstly shown. When trying to access the password authentication screen after clicking [Start] to change the status to [Stop], the user is automatically redirected to RLS authentication screen.

Password authentication started screen and Password authentication stopped screen



F-2-396

Setting for login by RLS Authentication

The procedures for changing the RLS authentication Start/ Stop settings are as follows.

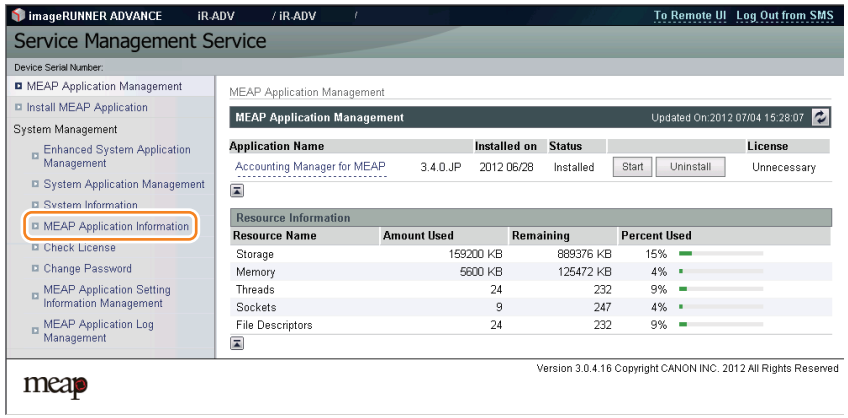
1) Access the SMS login screen using the normal method (password authentication). The URL is shown below.
URL: https://<IP address of MEAP device>:8443/sms/rls/
Ex.) https://172.16.188.240:8443/sms/rls

2) Enter the password in the password entry field, and click the [Log In] button. The default password is "MeapSmsLogin". (Case sensitive)

Login screen by Password Authentication

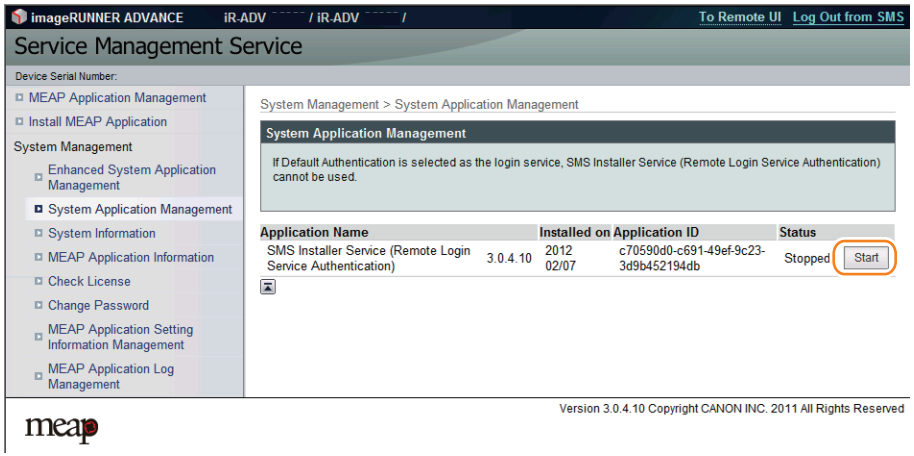
F-2-397

3) Select [System Application Management] on System Management menu.



F-2-398

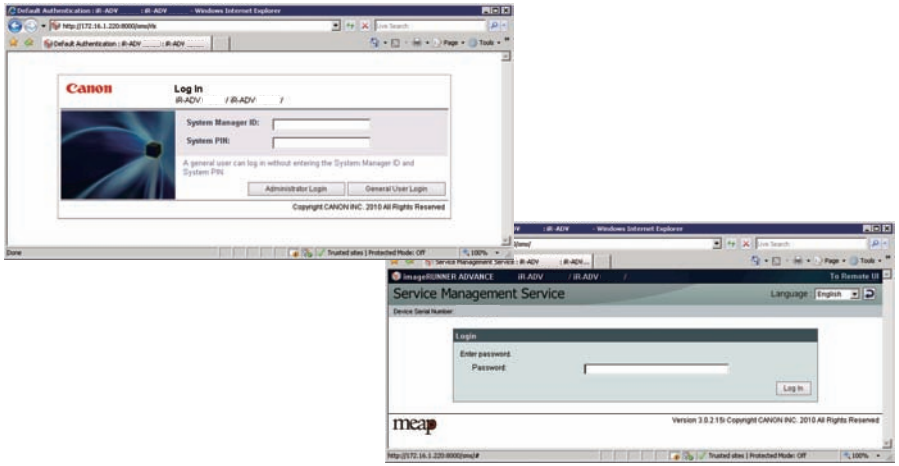
4) Click on [Start] or [Stop] button shown on Status field of SMS Installer Service (Remote Login Service Authentication) to check if the status is changed.



F-2-399

5) Log out and then log in again and access via the RLS authentication login window.
When RLS authentication is set to [Start], another RLS login screen is firstly shown. When accessing to RLS status screen with the setting of [Stop], the user will be redirected to the password authentication screen.

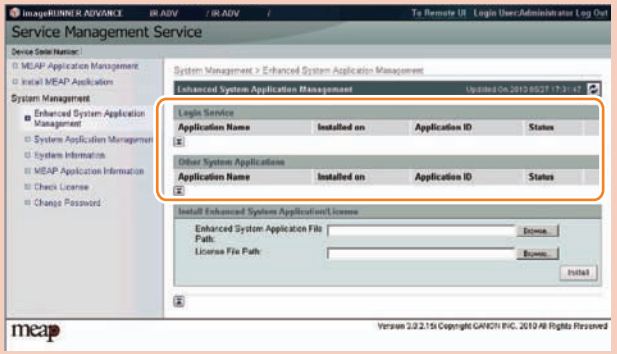
RLS authentication started screen and RLS authentication stopped screen



F-2-400

CAUTION:

In case that the login method to a device is set to SSO-H, if you log in SMS with RLS authentication, no selection is displayed although it is the screen to change the login method.



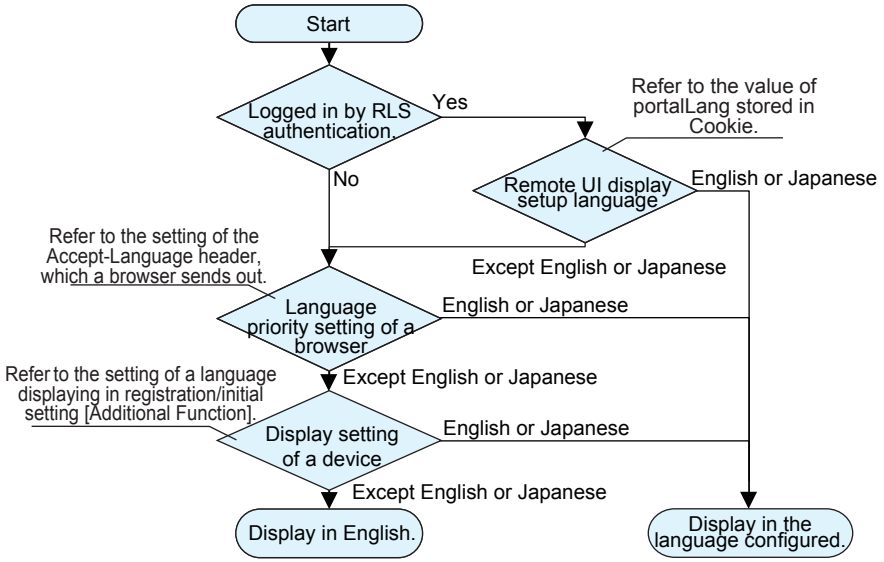
F-2-401

This is the specification to prevent the inconsistent setting which enables to stop SMS Installer Service (Password Authentication) by changing the login method to Default Authentication.

When you want to change the login method to a device, log in the SMS with the password authentication.

Initial Display Languages of SMS

SMS supports English and Japanese. Display language can be changed with selecting by the drop down list on a login page.
The initial display language at the time of accessing SMS depends on the setting.



F-2-402

When accessing by SMS Installer Service (Password Authentication)

It is referred in order of the language priority (setting of the Accept-Language header which a browser sends out) and the display-language setting in the "user mode". When the language setup is other than English or Japanese, it is displayed in English.

When accessing by SMS Installer Service (Remote Login Service Authentication).

Initial display language is set by the language setting (value of portalLang storing in Cookie) selected by the remote UI screen. When the setting is other than English or Japanese, Selection of display language is performed in a similar way with the SMS Installer Service (Password Authentication) mentioned above.

MEAP Application System Information

Outline

You can check the device's platform information and the MEAP application's system information.

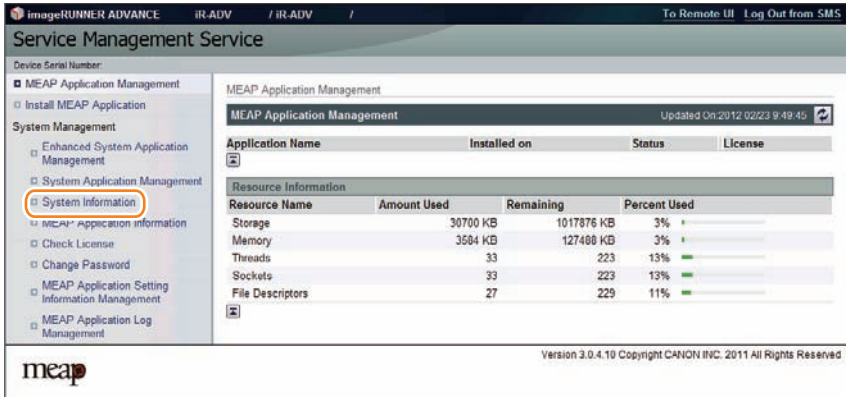
Checking the System Information

System information that can be checked from the screen

- MEAP Specifications version (MEAP Spec Ver)
  - MEAP Contents version
  - Java Virtual Machine version
  - System application information
- The name of the installed system application
  - The installation date of the installed system application
  - Application ID of the installed system application
  - The status of the installed system application

The checking procedure is shown below.

1) Log in to SMS.
2) Select [System Management] > [System Information] on System Management menu.

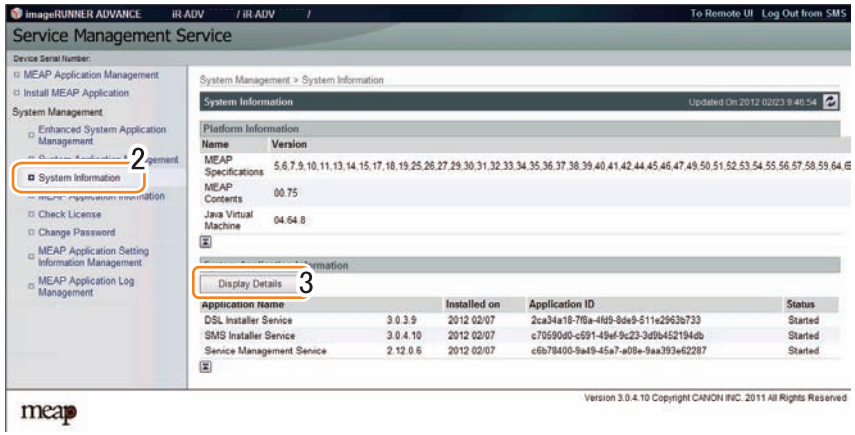


F-2-403

Display of System Information Details

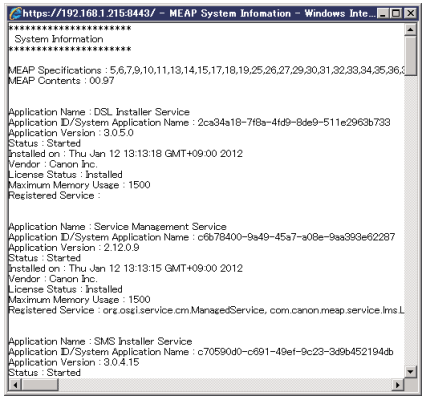
The system information details can be displayed to check more than one pieces of information all at the same time: platform information, system application information, information on the installed MEAP applications, etc.

1) Log in to SMS.
2) Select [System Info] on System Management menu.
3) Click [Display Details] button.



F-2-404

4) System information of each application (including system applications) is shown in an additional window. Copy and paste all the information in a file to attach to AR reports as text information. This function is useful to check status information of each application.



F-2-405

Printing the System Information of a MEAP Application

MEAP system information can be printed out with iR device for confirmation.

> Note:
> The system information of the MEAP application that you checked in the previous section is exactly the same as the system information of the MEAP application that is output.

Follow the steps below when confirming information:

1) Select [Settings/ Registration] > [Management Settings] > [License/ Other] > [MEAP Settings] > [Print System Information] .

> Note:
> When System Manager ID and PIN are set, go to Top screen and log in as System Manager to continue jobs.

2) Press[Yes] button.

F-2-406

> Note:
> MEAP system information was printed out in PDL format conventionally. However, the information has been printed out in text format instead of PDL format, enabling iR devices without PDL installation to print out information (iR C3220 and later).

Content of MEAP system information

Application System Information

```
Application Name: C-Cabinet Gateway for MEAP
Application ID/System Application Name: 03a46668-63e4-4636-9cbb-492b6cef05d5
Application Version: 1.0.0
Status: Resolved
Installed on: Tue Oct 21 14:00:11 GMT+09:00 2003
Vendor : Canon Inc.
License Status : Installed
Maximum Memory Usage : 1024
Registered Service :
```

item	content
Application Name	It is the name (bundle-name) declared in a statement within the application program. It may not necessarily be identical to the name of the program.
Application ID/System Application Name	Application ID (application-id) items which are declared on the declaration statement in the application program are printed.
Application Version	It is the version of the application (bundle-version) declared in a statement within the application program.
Status	It indicates the status of the application in question; specifically, Installed: the application has been installed. Active: the application is being in use. Resolved: the application is at rest.
Installed On	It indicates the date on which the application was installed.
Vendor	It is the name of the vendor that developed the application, and is the name (bundle-vendor) declared in a statement within the application program.
License Status	It indicates the status of the license; specifically, None: no license is needed. Not Installed: no license has been installed. Installed: the appropriate license has been installed. Invalid: the license has been invalidated. Overlimt: the license has been used beyond its permitted limit.
License Expires After	It indicates the date after which the license expires. If the status of the license is 'none', this item will not be printed.
License Upper Limit	It indicates the limit imposed on individual counter readings. If the status of the license is 'none', this item will not be printed.
Counter Value	It is the current counter reading of a specific counter. If the status of the license is 'none', this item will not be printed.
Maximum Memory Usage	It indicates the maximum amount of memory that the application uses. It is the amount (maximum memory usage) declared in a statement within the application program, and is expressed in kilobytes.
Registered Service	It is a list of services that have been registered by the application with the MEAP framework.Some services may not have printable data.

T-2-133

MEAP Application Information

Outline

You can check the MEAP application installed on the device.
The following information can be checked on the MEAP application information screen.

Application Information

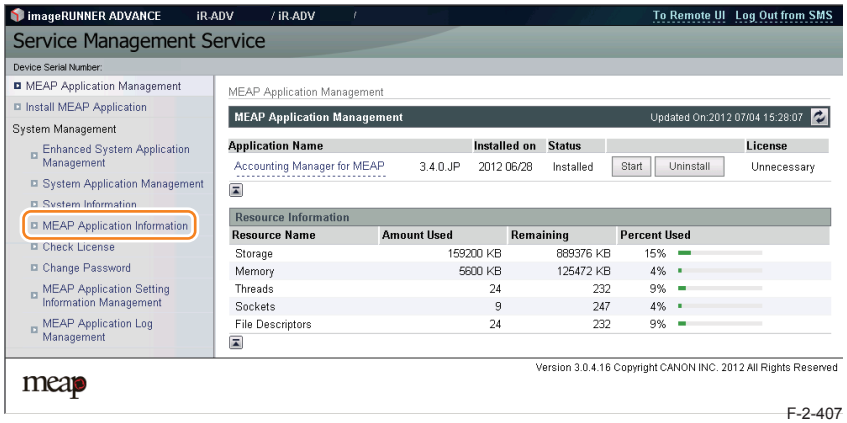
- Application Name
- Version
- Application ID
- Installed on
- Description
- Manufacturer
- Resources Used (Storage, Memory, Threads, Sockets, File Descriptors)

License Information

- Status
- Serial Number
- Expires after
- Type of Counter

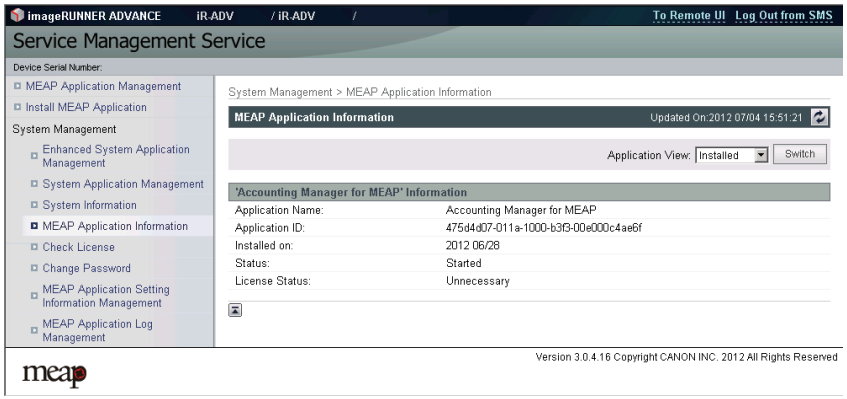
Procedure to Check MEAP Application Information

1) Log in to SMS.
2) Select [System Management] > [MEAP Application Information] on System Management menu.



F-2-407

3) The MEAP application information screen appears. Scroll the screen and check the information of the target application.



F-2-408

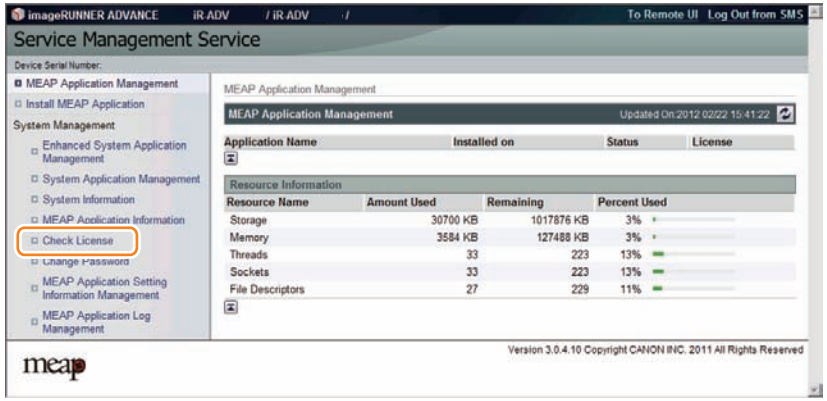
Check License

Outline

You can check the contents of the license file.

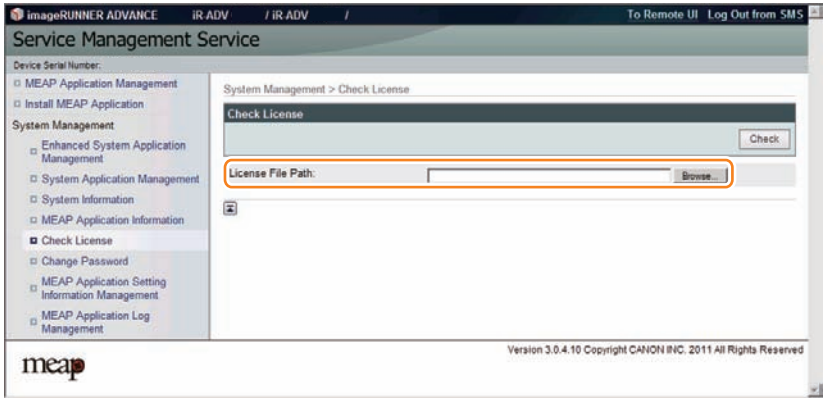
Procedure to Check the License File

1) Log in to SMS.
2) Select [System Management] > [Check License] on System Management menu.



F-2-409

3) Click the [Browse..] button, specify a license file, and click the [Check] button.



F-2-410

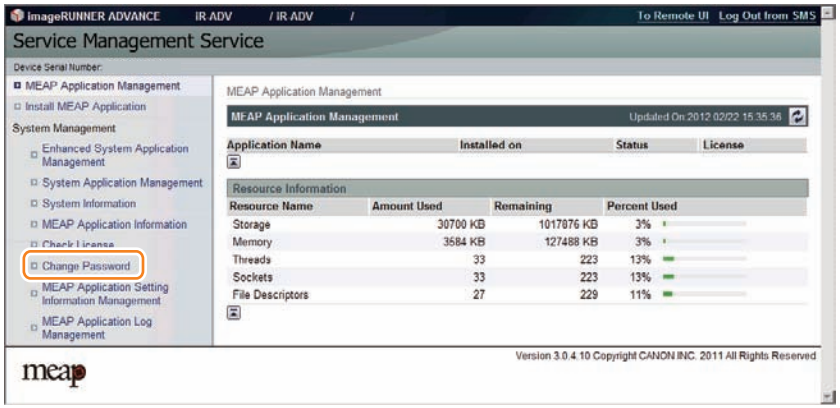
Changing SMS Login Password

Outline

You can change the password for logging into SMS.
If you forgot the login password and you want to change the password back to the default value (MeapSmsLogin), see "If you forgot the password (SMS login password initialization)" in this chapter.

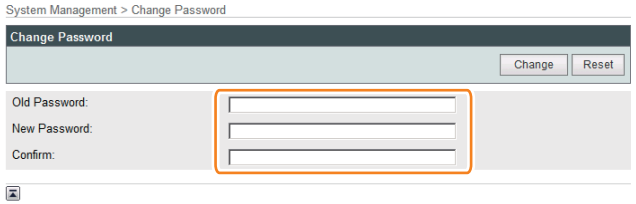
Procedure to Change the SMS Login Password

1) Log in to SMS.
2) Select [System Management] > [Chage Password] on System Management menu.



F-2-411

3) Enter the current password and a new password, and then click the [Change] button.



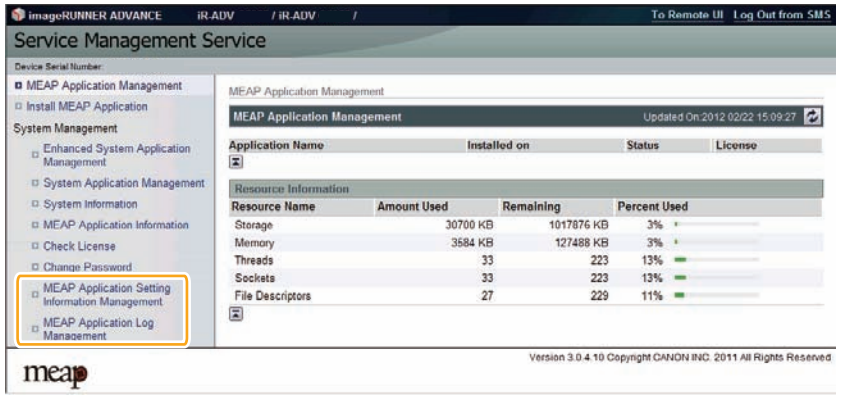
F-2-412

Note:
The [Reset] button on the [Change Password] screen is used to clear the value entered in the text field. It is not a button for changing the SMS login password back to the default value.

MEAP Application Setting Information Management and Log Management

Outline

The MEAP Application Setting Information Management page and the MEAP Application Log Management page provide menu related to "MEAP Application Configuration Service" for managing MEAP application setting information and menu related to "MEAP Application Log Service" for managing log information respectively.



F-2-413

MEAP Application Configuration Service

This service is used to manage the MEAP application setting information. It has functions such as saving setting information to the MEAP area. Ver 57 of MEAP Specifications supports this service.

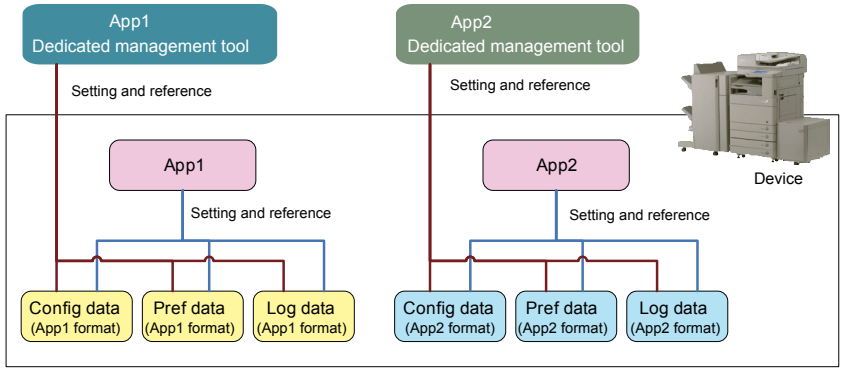
MEAP Application Log Service

This service is used to collect MEAP application logs (debug logs and authentication logs). Ver 58 of MEAP Specifications supports this service.
The collected logs can be downloaded or deleted in user mode.
The settings such as the log level to be saved cannot be made from SMS.
These settings depend on the MEAP application. For detailed information, refer to the manual for the application.

Advantages Obtained When Using the Services

By using MEAP Application Setting Information Management and MEAP Application Log Service, as long as the MEAP application supports these services, you can collectively perform data management tasks.

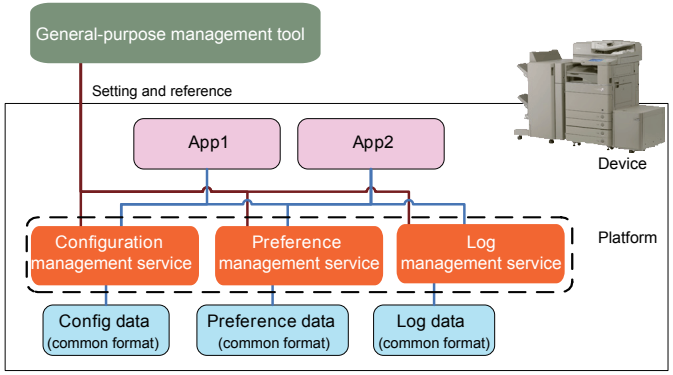
Devices and MEAP applications which do not support new functions



F-2-414

As for devices and MEAP applications that do not support the service, the setting information and log data are managed on an application-by-application basis.

Devices and MEAP applications which support new functions



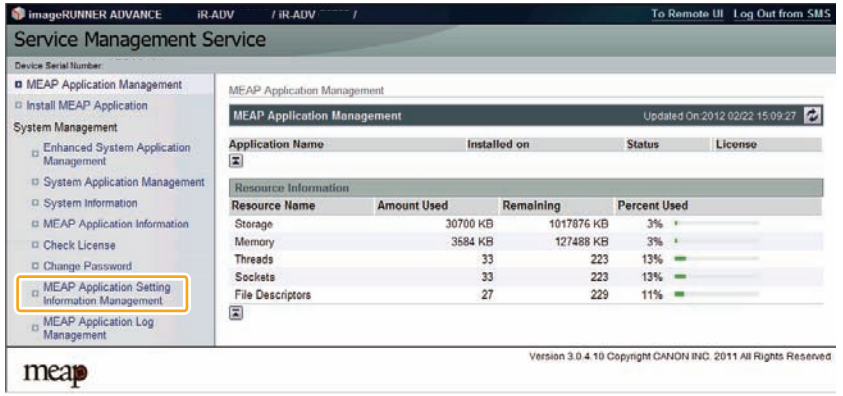
F-2-415

As for devices and MEAP applications that support the service, information can be collectively managed.

MEAP Application Setting Information Management

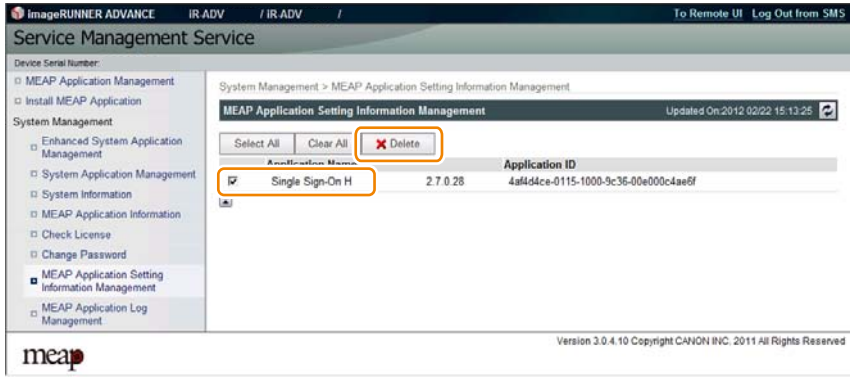
The setting data (stored on the device) of the MEAP applications which support MEAP Application Setting Information Management can be deleted. The procedure is shown below.

1) Log in to SMS.
2) Select [System Management] > [MEAP Application Setting Information Management] on System Management menu.



F-2-416

3) Select an application you want to delete, and click the [Delete] button.



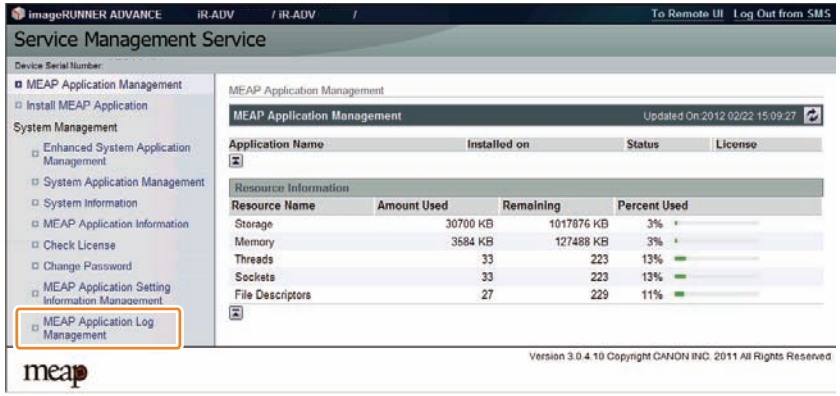
F-2-417

Note:
If a MEAP application that contains setting data which can be shared (not dedicated to the application) is installed, the application name [Shared Setting Information of Applications] is displayed.

■ MEAP Application Log Management

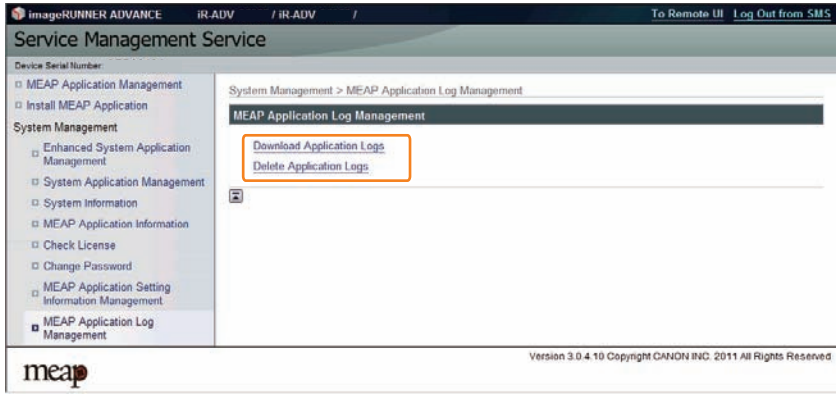
The log data (stored on the device) of the MEAP applications which support MEAP Application Log Service can be downloaded or deleted. The procedure is shown below.

1) Log in to SMS.
2) Select [System Management] > [MEAP Application Log Management] on System Management menu.



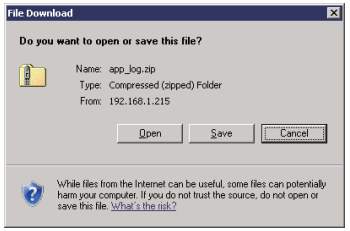
F-2-418

3) Select [Download Application Logs] or [Delete Application Logs].



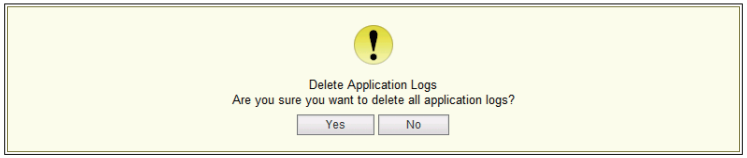
F-2-419

4) To download the logs
The file save dialog for the log file will appear. Specify the destination and save the file.



F-2-420

5) To delete the logs
The confirmation screen will appear to prompt you to delete the logs. Click the [Yes] button to delete the logs.



F-2-421

Maintenance

Backup of the MEAP Application Area and Recovery of the Backup Data Using SST

Outline

When replacing or formatting the HDD, the data in the MEAP application area needs to be temporarily saved to your PC.
This chapter describes information on backing up the data in the MEAP application area and recovering the backup data.

In the case of MEAP-installed devices, the application is license-managed, so the application needs to be reinstalled and reconfigured when replacing or formatting the HDD.
In that case, a license for reinstallation needs to be downloaded and the customer data and configuration information need to be recovered, and these procedures pose heavy burdens on the service technician.

The area used for the MEAP application can be easily saved/recovered by using the backup function of SST (Service Support Tool).
This greatly reduces the work burden on the service technician.
Please note that the application cannot be illegally copied because the backup data can be recovered only when the iR device has the same serial number.

WARNING:

You must not perform any other work (including checking operation) until the HDD has been backed up. This arrangement is to prevent a mismatch of MEAP counter readings and the HDD contents, and any fault in operation arising as the result of failure to observe this will not be covered by the guarantee of operation.

Note:
The application that is installed with a reusable license can be reinstalled by using the same license.

Backup Item Automatically Copied

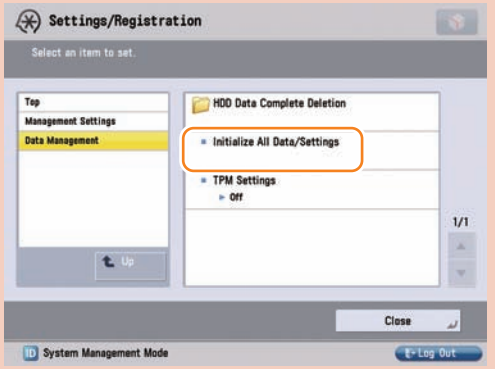
The following data are backed up using SST:

The following data are backed up (saved as Meapbackup.bin) using SST.

- MEAP applications.
- Setup data generated by MEAP applications (Note that image data stored in BOX will not be saved for MEAP applications using BOX function).
- User information data registered for local device authentication in SSO-H
- SMS password

CAUTION:

Do not execute [Initialize All Data/Settings] in user mode during the period from backup using SST to recovery of the data.



F-2-422

When [Initialize All Data/Settings] is executed, the key used to combine encrypted backup data (SMS password, etc.) is initialized, which makes it impossible to combine the data.

It means that SMS cannot be accessed even when the backup data has been recovered using SST.

If you inadvertently executed [Initialize All Data/Settings] and can no longer access SMS, the SMS login password needs to be initialized by following the procedure shown in "When SMS Cannot Be Accessed" in "Login to SMS" in this manual.

Data backed up using SST in the case of iR-ADV devices

In the case of iR-ADV devices, menus are implemented as MEAP application. Therefore the following items can be also backed up (stored as Meapbackup.bin).

- Setting items of each menu in the main menu (Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox,).
  - Favorite settings
  - Default settings
  - Settings of option shortcuts
  - Previous settings
- Settings of quick menu
  - Button size information
  - Wallpaper settings
  - Quick menu button information
  - Restrict quick menu use

Requirements for Backup Using the SST

The following conditions must be met for use of the function:

1) Device Firmware Version

Device Firmware Version for SST (Ver4.2x)

	Boot ROM	System	SST
iR-ADV C2030/C2020 series	Boot ROM is not equipped.	Already supported since the 1st version.	The version supporting the corresponding devices.
imageRUNNER ADVANCE series other than iR-ADV C2030/C2020 series	Already supported since the 1st version.	Already supported since the 1st version.	The version supporting the corresponding devices.

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2) SST Version

Version 4.2.x or later. An earlier version will not permit the use of the function. If needed, upgrade the SST.

3) Space for backup

To back up the HDD of the iR, the PC must have approx 1024MB of free space at maximum. Sizes of backup files depend on actual data capacities to be backed up.

Procedure for backing up the MEAP application area using SST

1) Switching Login Service / Backup of Login User Information

If SSO-H is used for the login service, switch to default authentication before backing up the user information. Although SST will back up local device user information, it is recommended to export the user information just in case. For local device user information backup, go to User Management page of SSO-H site and export the data. (The SSO-H login page opens with the URL "https://<device IP address>:8443/sso/").

CAUTION:

- If a HDD of a system that uses SSO-H is formatted without changing the login service to the default authentication, the error message “The login service must be set again with SMS” appears and the system cannot start up when you attempt to restart the system after formatting.
- If this problem occurs, change the login service to SSO-H with SMS. If you cannot access to SMS since you do not have the IP address of the device, start the system with FIXIP mode -hold down the numeric keys 1 and 7 and turn the power switch on. The IP address “172.16.1.100” will be automatically assigned for the device. Then log in to SMS specifying the address.

2) Starting the device in Download Mode

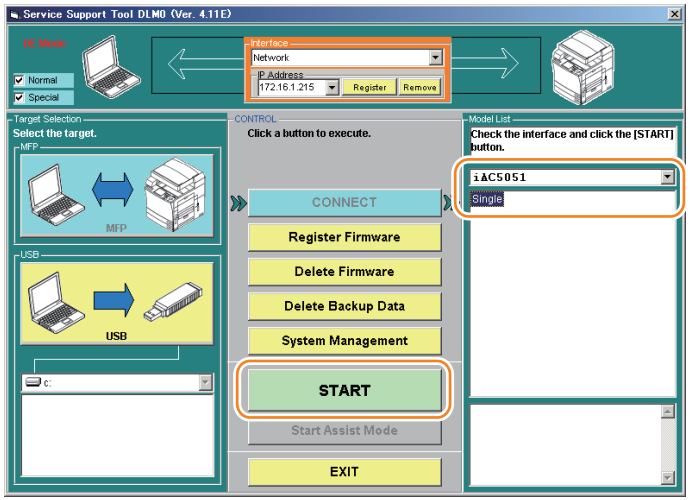
Press [2] and [8] buttons at the same time on the control panel and turn on the main power switch to start the device in Download Mode. Note that SST backup function is enabled only in Download Mode.

3) Connecting the main unit to the PC to start SST

Connect the main unit to the PC with SST installed using the crossing cable and the like to start SST on the PC.

4) Connecting the device using SST

When starting SST, select the target device type as Single and click [Start] button.



F-2-423

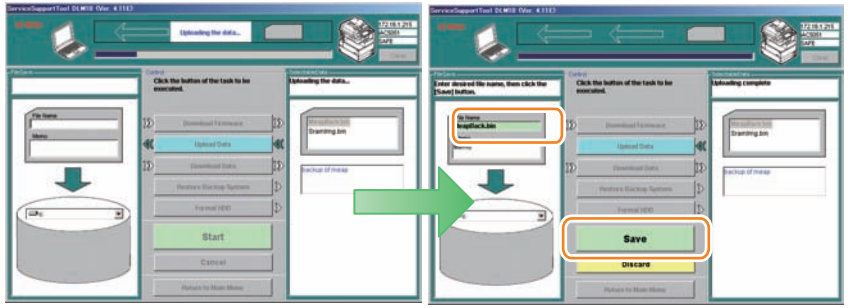
5) Generating backup data to transfer it to the PC (uploading)

Click [Upload Data] button of SST and select “Meapback.bin” as the item to be backed up to click [Start] button.

F-2-424

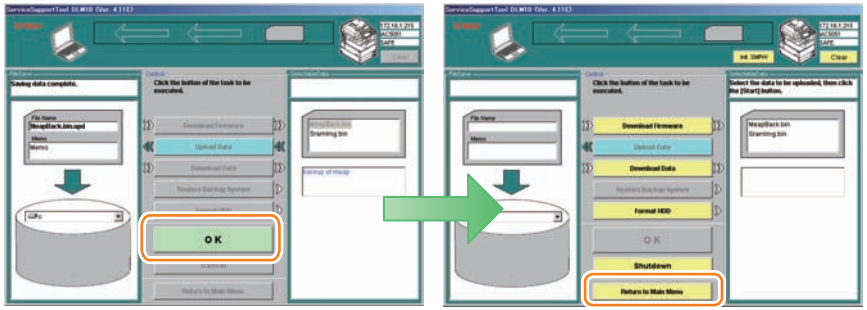
6) Saving backup data

Upon the backup data transferred to the PC, enter an appropriate file name and click [OK] to save the backup data on the PC.



F-2-425

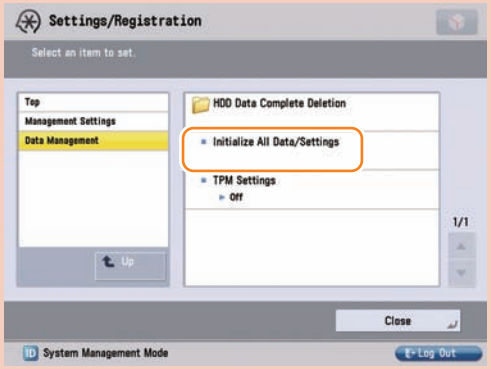
When the file is successfully saved, click [OK] button, and then click [Return to Menu] button.



F-2-426

CAUTION:

Do not execute [Initialize All Data/Settings] in user mode during the period from backup using SST to recovery of the data.



F-2-427

When [Initialize All Data/Settings] is executed, the key used to combine encrypted backup data (SMS password, etc.) is initialized, which makes it impossible to combine the data.

It means that SMS cannot be accessed even when the backup data has been recovered using SST.

If you inadvertently executed [Initialize All Data/Settings] and can no longer access SMS, the SMS login password needs to be initialized by following the procedure shown in "When SMS Cannot Be Accessed" in "Login to SMS" in this manual.

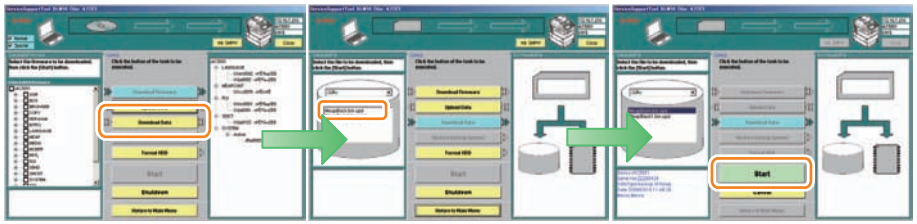
Procedures to Restore Backup Data

1) Connecting to the device

Connect the device using SST by following step 1 to step 4 of the Procedure for backing up the MEAP application area using SST.

2) Restoring backup file

Click [Download Data] button and select the data backed up in the previous step (Meapback.bin) to click [Start Restoring Data]. Note that the data backed up in a different version cannot be restored.



F-2-428

3) Transferring Data

When the data is successfully transferred, click the [OK] button shown on the screen. To continue other jobs, click [Return to Menu] button.

F-2-429

4) Turn off and on the main power switch of the device to gain access in SMS to check that MEAP applications are surely restored.

5) Restore the backup data and setting saved. Note that the user information of the local device is included in the backup data, thus does not need to be restored.

Formatting and Replacing the HDD

Outline

If the HDD is broken or does not function correctly due to failure of the system (excluding the MEAP application), it needs to be formatted or replaced.
When the HDD is formatted or replaced, the files of the MEAP application stored in it will be lost, so make a backup of the MEAP application area according to “Procedure for backing up the MEAP application area using SST” if possible. If a backup cannot be made, the MEAP application and the license files need to be reinstalled.
As for the MEAP counter information, it will not be lost because it is backed up just like the conventional counter.

If a backup cannot be made, a special license file (a license file for installation with the expiration date carried over from the current counter value) is required to reinstall the MEAP application. This special license file is treated as a service tool and cannot be obtained by a general user.
In order to obtain a special license file, a service technician needs to contact a person in charge of support of a sales company.
When contacting the person in charge of support, the service technician also needs to provide the serial number of the device and the name of the MEAP application installed.

In the support departments of regional headquarters of Canon, all license files of the applications that have been issued are filed according to device serial numbers, enabling you to obtain a series of license files through a single screen as long as you can identify the serial number of the device in question.

Note:
The application that is installed with a reusable license can be reinstalled by using the same license.

Formatting the HDD

Procedure to format the hard disk

Follow the following procedure to format the HDD.

1) Connecting to the device
Connect the device using SST by following step 1 to step 4 of "Procedure for backing up the MEAP application area using SST".

2) Formatting the HDD
Select “Format HDD” from SST menu to format the HDD.

Note:
HDD can be formatted also by starting Download mode using the USB memory and executing formatting from the displayed menu.

● HDD replacement procedure

Outline

The procedure for replacing the HDD differs according to whether the HDD functions normally or not.

If the MEAP application area cannot be backed up

If the HDD does not function correctly due to failure or for other reason, the MEAP application area cannot be backed up. It is therefore necessary to reinstall the application after replacing the HDD. The procedure is shown below.

1) Preparation for replacement
   Copy a set of license files for reinstalling the MEAP application (special licenses and reusable licenses) to a laptop for service operation.
   Register a set of system files of a target product to SST. Or, prepare USB thumb drive of the System file transfer settlement.

2) Replacing the drive
   Prepare the necessary service parts of the HDD, and replace the drive.

3) Formatting HDD
   Format the HDD referring to Procedure to format the hard disk.

4) Reinstalling the MEAP application
   When the device has started normally, obtain the jar files of the MEAP applications from the user, and install them using the license files for reinstallation.
   Installation method is the same as normal installation.

5) Importing user information
   As necessary, make login service selections and import user information.

Note:
When you replace the HDD without uninstalling MEAP applications, make sure to reinstall the previously installed applications. Unless reinstalling them, MEAP counter will not be released and the message “The number of applications that can be installed has exceeded the limit. Try to install this application after uninstalling other applications.” is displayed so that the installation of new applications may not be accepted. If you want to install new applications in this case, once reinstall the applications in-stalled before formatting and uninstall unnecessary applications.

● If the MEAP application area can be backed up

If the MEAP application area can be backed up, it can be recovered after replacing the HDD, so it is not necessary to prepare the special licenses for reinstallation.

1) Preparation for replacement
   Back up the MEAP application area of the device according to the procedure for backing up the MEAP application area using SST.

2) Replacing the drive
   Prepare the necessary service parts of the HDD, and replace the drive.

3) Formatting HDD
   Format the HDD referring to Procedure to format the hard disk.

4) Restorering the backup file
   Restore the backup data referring to the Procedures to Restore Backup Data.

5) Importing user information
   As necessary, make login service selections and import user information.

MEAP Safe Mode (level 2)

Outline

Use safe mode if you need to start up the system without worrying about extra applications. It will start up only those system software files (including SMS) that normally start up as default files while preventing MEAP applications and the like from starting up.

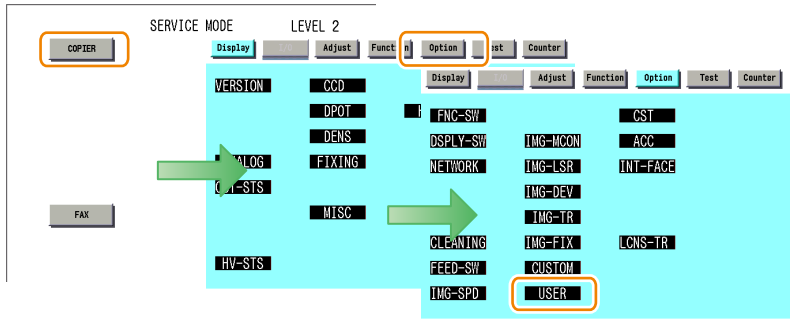
When you have made changes and restart the device, the control panel will indicate 'MPSF' in its lower right corner. The MEAP applications that may have been active before you shut down the equipment will not start up on their own. Make use of safe mode when restoring the system software as when MEAP applications or services cause a fault as the result of a conflict or wrong sequence of registration/use. You can access to SMS in this condition so that you can take necessary measures, for example, you can stop application that may cause the trouble.

If default authentication has been selected, the mode of authentication remains valid; otherwise, the message "The login service must be set again with SMS" ap pears. Change the login service as necessary.

Starting in Safe Mode

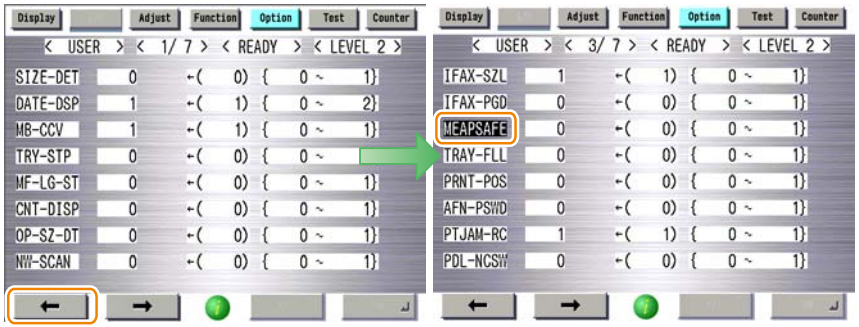
1) Startup [SERVICE MODE] in level 2.

2) Press [COPIER] >[Option] > [USER] buttons.



F-2-430

3) Press ← or → button for several times until [MEAPSAFE] button is shown. Click [MEAPSAFE] button.



F-2-431

4) Press the 1 key on the control panel keypad to change the setting to '1'; then, click [OK] button.

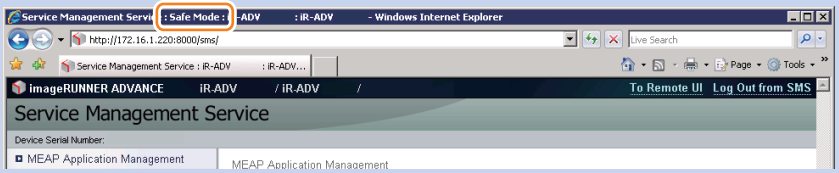
F-2-432

5) Check that the notation ‘MPSF’ has appeared in the upper left corner of the screen; then, restart the device.

F-2-433

Note:
If accessed to SMS in MEAP SAFE mode, the device started mode is shown on the title bar of the browser.

An example of the title bar displayed at the time of startup in MEAP SAFE mode
Service Management Service : <Device Name>:<Product Name>: Safe Mode

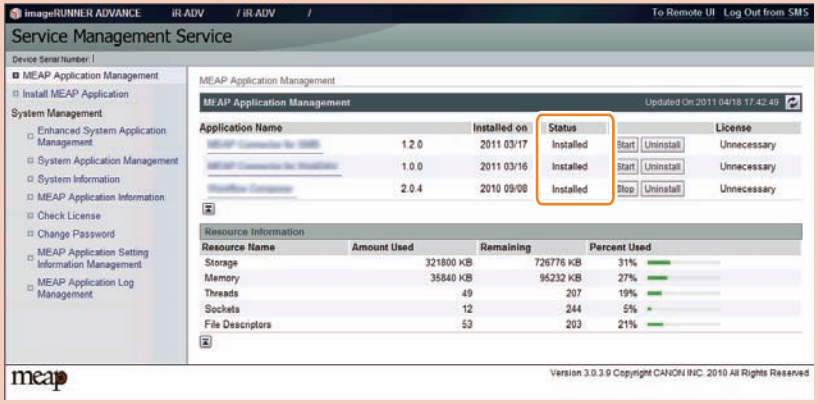


F-2-434

CAUTION:

If the device has been started in MEAP SAFE mode, all the MEAP applications stop and the status becomes "Installed".

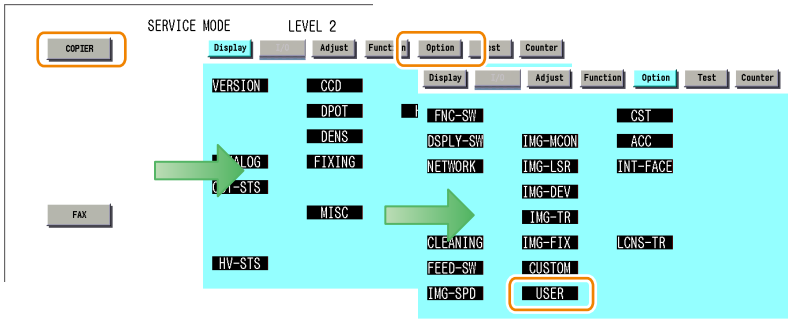
This status remains unchanged even if the MEAP SAFE mode is canceled and the device is started again in normal mode. It is therefore necessary to access SMS after normal startup and start the MEAP application.



F-2-435

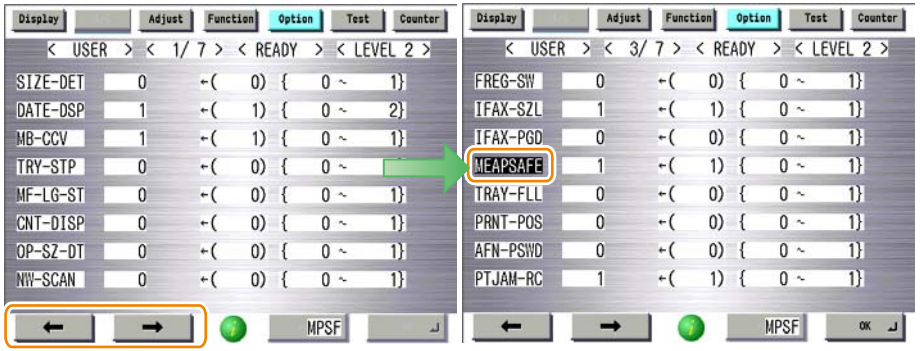
How to cancel MEAP SAFE mode

1) Startup [SERVICE MODE] in level 2.
2) Press [COPIER] >[Option] > [USER] buttons.



F-2-436

3) Press ← or → button for several times until [MEAPSAFE] button is shown. Click [MEAPSAFE] button.



F-2-437

4) Press the 0 key on the control panel keypad to change the setting to '0'; then, press [OK] button.

F-2-438

5) Start service mode again after rebooting the device, and check that the displayed setting value has changed to "0" and that [MPSF] is no longer displayed at the upper left of the screen.

F-2-439

Collection of MEAP Console Logs

Overview

When debugging a MEAP application, console logs need to be collected in some cases. The following shows how to collect MEAP console logs using commercially available terminal software and service mode.

What to Prepare

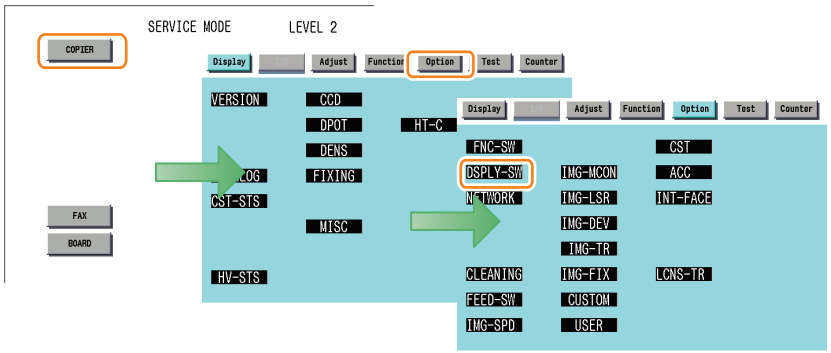
- PC connected with the same network as the device
- Commercially available terminal software

Note:
In the procedure shown in this manual, "Tera Term Pro" and "Hyper Terminal" are used as the terminal software.

Work Procedure

Device Setting Procedure

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.

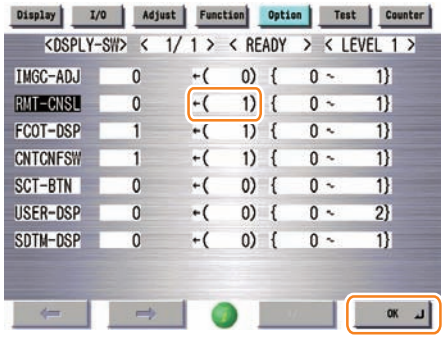


F-2-440

3) Press [RMT-CNSL] button.

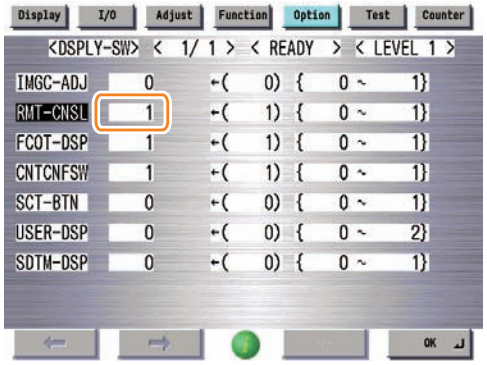
F-2-441

4) Press either 1 (activate remote console function) on control panel (the numerical value input in the field is displayed), and press [OK] button.



F-2-442

5) Check to see that it is reflected in setting field, and restart the device.

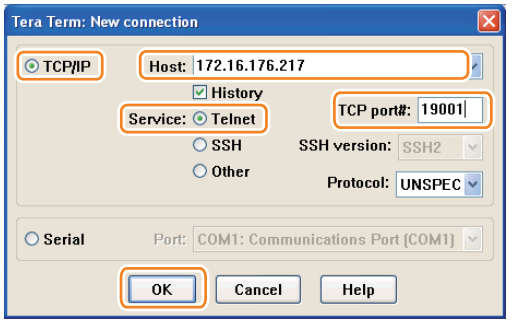


F-2-443

PC setting procedure (when Tera Term is used)

1) Install the terminal software on the PC.

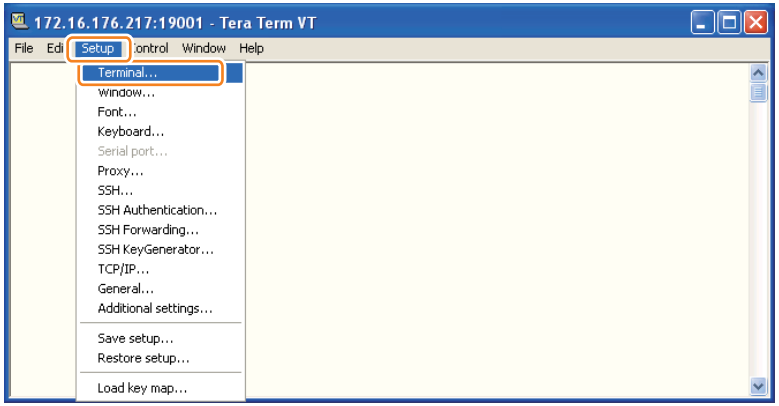
2) Start the terminal software, make the following settings, and then click the "OK" button.



F-2-444

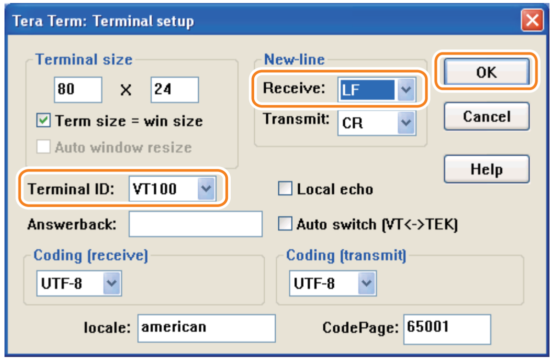
Connection	: Select [TCP/IP] (Default)
Host	: Device Host Name or IP Address
Service	: Select "Telnet"
TCP port#	: Enter 19001

3) The connection window will open. Select [Terminal…] from the [Setup] menu.



F-2-445

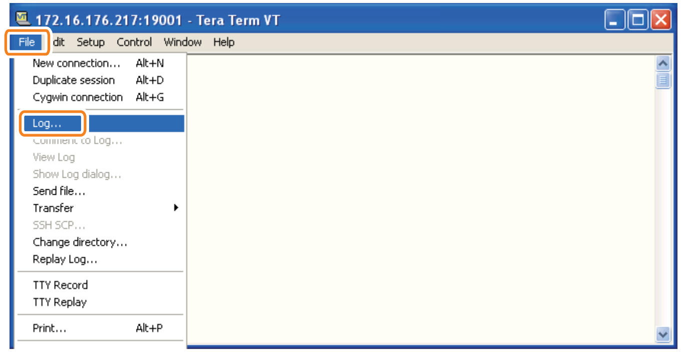
4) The terminal setting screen will appear. Make the following settings, and then click the "OK" button.



F-2-446

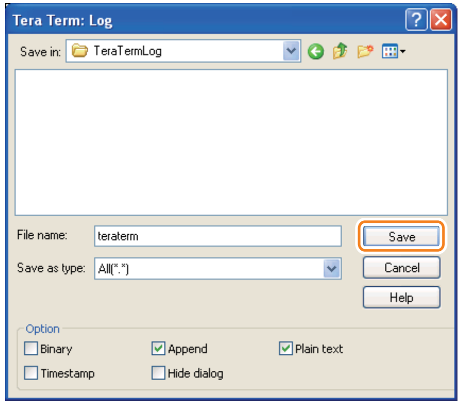
Terminal ID : VT100
New-line Receive : LF

5) Select [Log...] from the [File] menu.



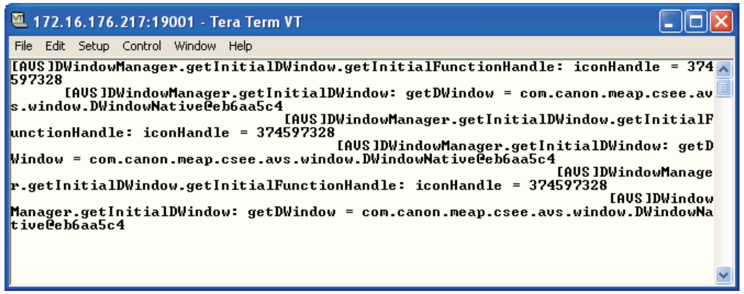
F-2-447

6) The dialog for specifying the save destination of the log file will appear. Set the save destination path and the file name, and then click the [Save] button.



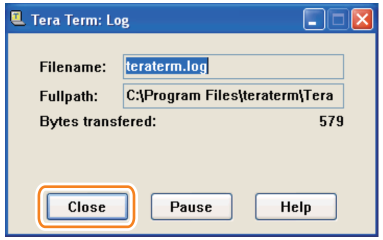
F-2-448

7) Perform the operation whose log you want to collect.



F-2-449

8) Click the [Close] button in the log dialog.

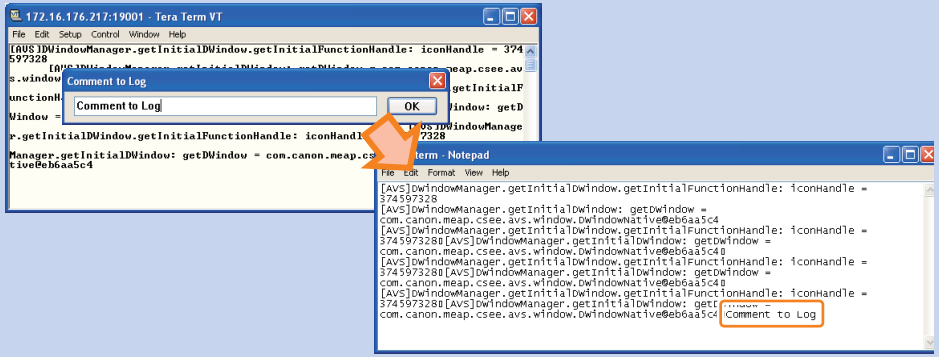


F-2-450

Note:
To suspend log collection, click the [Pause] button.

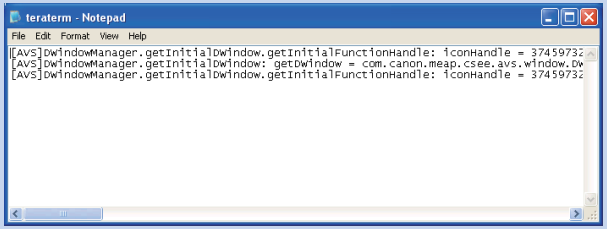
Note:
While collecting logs, the following operations are available from the [File] menu.

Comment to Log... :
You can add a comment to the log being collected. The added comment is reflected in the log file.



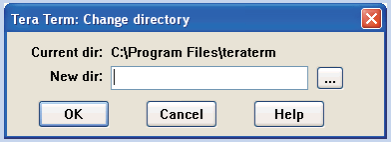
F-2-451

Show Log dialog... :
The logs that have been collected are pasted on Notepad and displayed.



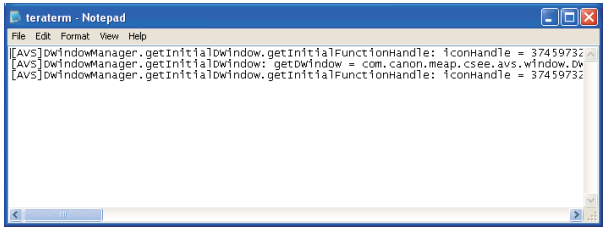
F-2-452

Change directory... :
The preliminarily set save destination of the log file can be changed.



F-2-453

9) Open the file saved in the save destination, and check that the logs are stored correctly.



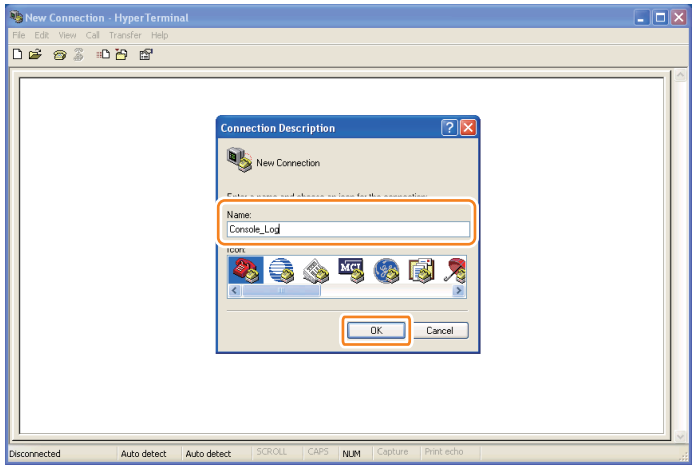
F-2-454

Note:
Depending on the MEAP application, the log output setting needs to be made in order to collect logs.

CAUTION:
After collecting logs, the remote console function of the device needs to be disabled (select [SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [DSPLY-SW] > [RMT-CNSL] > 0, and restart the device).

PC setting procedure (when Hyper Terminal is used)

1) Start Hyper Terminal, set the connection name in the [Connect Description] dialog that appears on the screen, and then click the OK button.

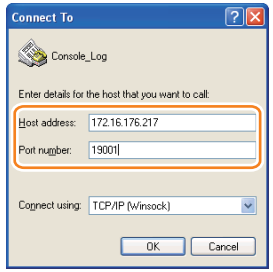


F-2-455

2) Set [TCP/IP(Winsock)] for [Connect using].

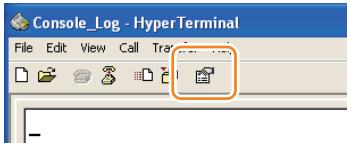
F-2-456

3) Enter the IP address of the target device in [Host address], and enter "19001" (fixed) in [Port number].



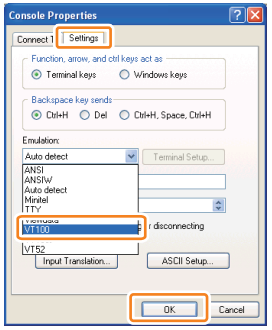
F-2-457

4) Click the "Properties" icon on the Hyper Terminal screen.



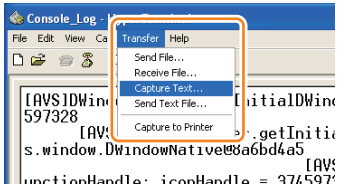
F-2-458

5) The [Console Properties] dialog will appear. Select the [Settings] tab, select [VT100] for [Emulation], and then click the [OK] button.



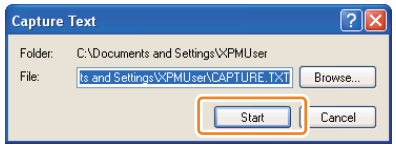
F-2-459

6) Return to the Hyper Terminal window, and select [Transfer] > [Capture Text...] from the menu.



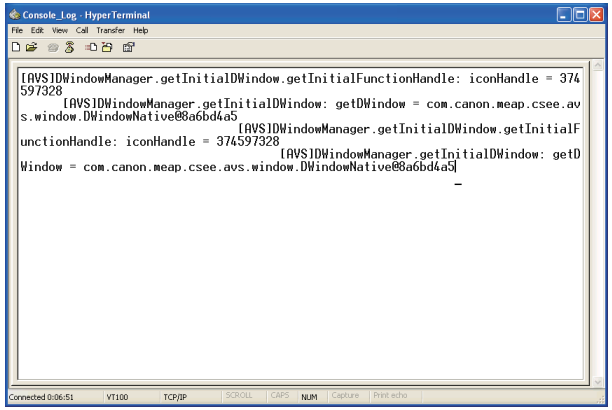
F-2-460

7) The dialog for specifying the save destination of the log file will appear. Specify the save destination.



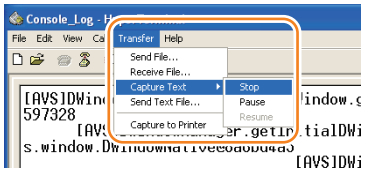
F-2-461

8) Perform the operation whose log you want to collect.



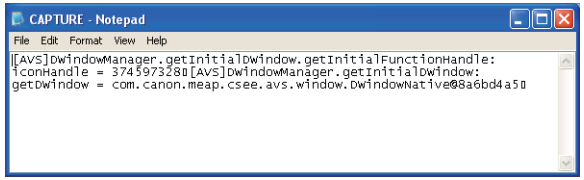
F-2-462

9) Select [Transfer] > [Capture Text...] > [Stop] from the menu.



F-2-463

10) Open the file saved in the save destination, and check that the logs are stored correctly.



F-2-464

Note:
Depending on the MEAP application, the log output setting needs to be made in order to collect logs.

CAUTION:

After collecting logs, the remote console function of the device needs to be disabled (select [SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [DSPLY-SW] > [RMT-CNSL] > 0, and restart the device).

■ Using USB Devices

● USB Driver

Two types of USB drivers

While the USB driver that can be used in iR series is only the USB driver designed exclusively for MEAP application (hereinafter referred to as “MEAP driver”), not only MEAP driver but also USB system driver (hereinafter referred to as “system driver”) can be used in iR-ADV series.

System driver and MEAP driver cannot be used together. When either of them is used, the other driver cannot be used.

USB driver setting (iR-ADV series):

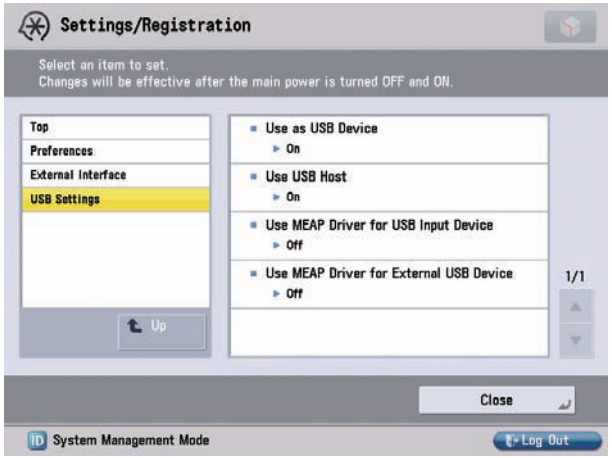
System driver is active by default in iR-ADV series.

The driver can be changed in Settings/Registration (user mode).

Usually, It is not necessary to change the setting because it is specified in the MEAP application side.

Only in the case of a special MEAP application, it is necessary to change the USB driver setting.

For details, refer to specifications of MEAP application side.



F-2-465

Note:
The [Use USB Host] menu on the screen is hidden at the time of shipment.
To display this menu, start [SERVICE MODE] in level 2, and then change the value of [COPIER] > [Option] > [USER] > [USBH-DSP] from ‘0’ to ‘1’.

Operating mode settings [Use MEAP driver as USB input device]	Conventional USB keyboard enabled MEAP application	Software keyboard application (System Driver/ MEAP Driver)	System driver supported MEAP application
ON * MEAP driver (conventional compatibility mode)	Can use USB keyboard. Can work only on the conventional applications that support the MEAP application driver.	Cannot use USB keyboards. (Device cannot be detected.)	Cannot use USB keyboards.
OFF (*default) * Native driver	Cannot use USB keyboards. (Device cannot be detected.)	Can use USB keyboards.	Can use USB keyboards. Via software keyboards only.

T-2-135

Note:
When any settings changes are made, the device must be restarted.

Setting the USB driver for each USB device (MEAP driver preference registration)

If it is set to use the system driver, the conventional applications that support the MEAP application driver cannot use the USB input device.
Therefore, for the USB drivers used by USB devices/MEAP applications, there is setting function (MEAP driver preference registration) to give priority to the MEAP driver.
If you register the ID of the USB device by using this function, the USB device can use the MEAP driver despite the Additional Function settings.

Using this function requires the conditions below:

- Supported MEAP SpecVer: 26
- Describe the idVendeor(VID) and idProdutc(PID) of USB device in the manifest or activate/ deactivate the VID and PID by calling API from MEAP applications.

The driver setting that is used in a manifest file is reflected in the following timing.

When registering from a manifest file.

- The registration will be enabled when an application is activated and device is restarted.
- The registration will be disabled when an application is stopped and device is restarted.

Note:
You can display/check the used driver setting at “USB device report print” described below regardless of whether it is registered from a manifest file or is registered from API.

Availability for MEAP application of the USB device A (either HID keyboard or Mass Storage) plugged to iR device

Registration status of USB device A	When the HID keyboard is installed > USB Settings: [Use MEAP Driver for USB Input Device] When the Mass Storage is installed > USB Settings: [Use MEAP Driver for External USB Device]	Native application	MEAP application		
			System driver supported application	System driver not supported/ conventional application	Application with VID/ PID declared in Manifest for x
Not registered	OFF	YES	YES	NO	
	ON	NO	NO	YES	
Registered	OFF	NO	NO	YES	YES
	ON	NO	NO	YES	YES

T-2-136

YES: USB device available NO: USB device not available

Availability for MEAP applications of USB devices B and C (either HID keyboard or Mass Storage) plugged to iR device

Registration status of USB device B	Setting to use MEAP driver (Additional Functions mode)	USB device	Native application	MEAP application		
				System driver supported application	System driver not supported / conventional application	Application with VID/PID declared in Manifest for B
Registered	Not used (Native driver to be used)	B	YES	YES	NO	
		C	YES	YES	NO	
	To be used	B	NO	NO	YES	
		C	NO	NO	YES	
Not registered	Not used (Native driver to be used)	B	NO	NO	YES	YES
		C	YES	YES	NO	NO
	To be used	B	NO	NO	YES	YES
		C	NO	NO	YES	YES

T-2-137

YES: USB device available NO: USB device not available

Specifications for the use of USB keyboards

Characters that could be entered on the software keyboard displayed on the conventional control panel can be entered using a USB connected keyboard.

- When the software keyboard window is displayed, characters can be entered from the USB keyboard (in-line entry not possible).
- When the software keyboard window is not displayed, entered characters will not be remembered.
- The characters, which can be entered from a USB keyboard, is only a character, which can be entered from the software keyboard.
- Even if characters are entered from the USB keyboard, the software keyboard window will not change (the corresponding key does not invert or change color).
- Input from the USB keyboard can be accepted at the same time as input from the software keyboard or numeric keys.
- Since the device supports Plug and Play, the USB keyboard can be disconnected/ connected freely. However, do not disconnect and connect during in deep sleep (when in sleep with setting "low" at "the power consumption in sleep"). It is out of an operation guarantee to disconnect and connect the USB keyboard in deep sleep.
- When USB device is attached to iR device, iR devices do not shift to deep sleep mode.
- Keyboard layout changes according to the keyboard layout settings in the Settings/ Registration screen. In addition, function keys and ten keys which are not displayed in the software keyboard cannot be used. (Keyboard which the operation check was conducted is 84-key Keyboard, but this does not mean that the operation of all 84-key Keyboards is guaranteed.)

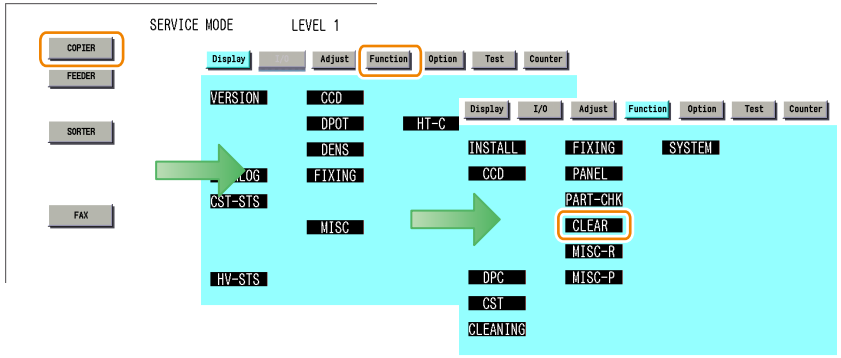
Note:
The factory shipment default setting is to enable the use of native (main unit functionality) USB keyboards. Therefore, in order to use MEAP application keyboards, [Use MEAP driver for USB input device] under [System management settings (initial settings/ registration)] needs to be set to ON (factory shipment setting is OFF).
Operations change as described below in accordance with ON/ OFF settings.
ON: when using MEAP application keyboard
OFF: when using native (main unit functionality) keyboard (factory shipment default)

Initialization of MEAP driver priority registration

When any trouble occurs regarding USB driver settings and it is necessary to reset the setting information, you can reset the MEAP driver preference registration by using service mode.

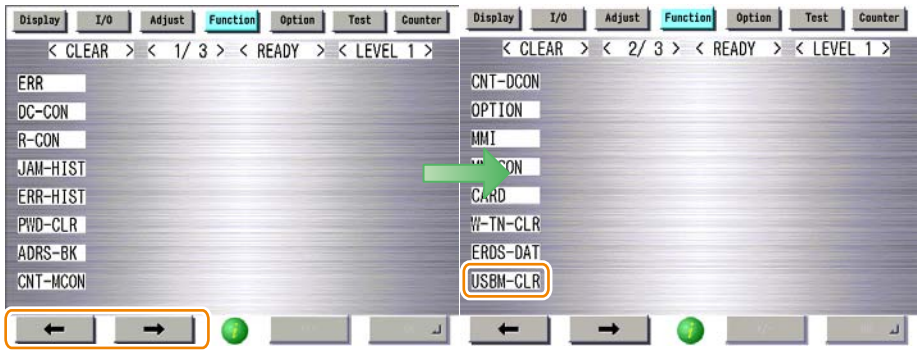
Steps to initialize preference use registration

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Function] > [CLEAR] > buttons.



F-2-466

3) Press ← or → button for several times until [USBM-CLR] is shown on the screen. Press [USBM-CLR] button.



F-2-467

4) Press [OK] button to restart this device.

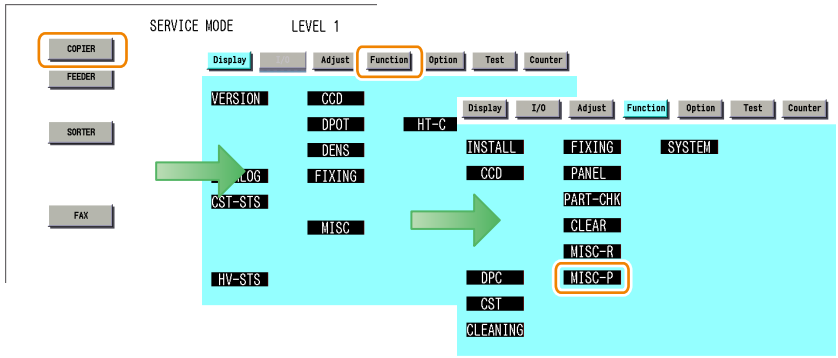
F-2-468

USB Device report print

To check the vendor IDs (idVendor) and the product IDs (idProduct) registered in this device by means of declaration in Manifest file of MEAP applications, output the USB Device repot report print.

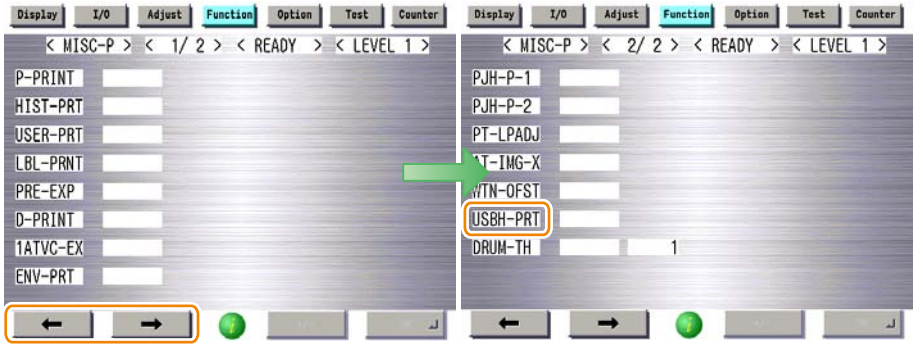
Steps to output the USB Device report print

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Function] > [MISC-P] > buttons.



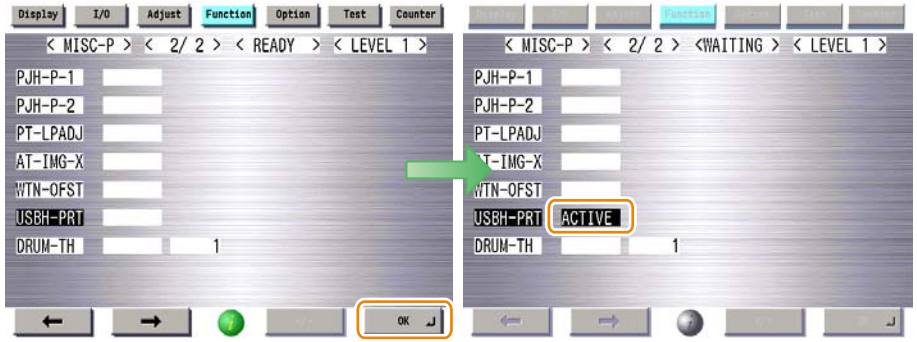
F-2-469

3) Press ← or → button for several times until [USBH-PRT] is shown. Press [USBH-PRT] button.



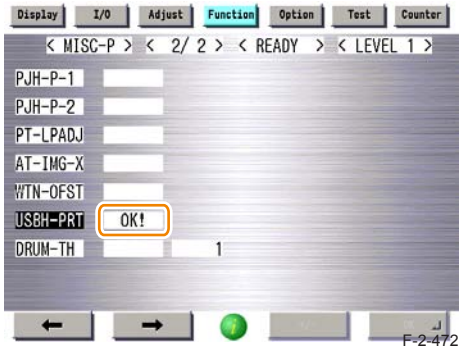
F-2-470

4) When pressing [OK] button, [ACTIVE] blinks on the status field.



F-2-471

5) When [OK] is shown on the status field, the status print is output. Check the contents of the print.



F-2-472

Example of output result

```
                              ********************************
                              *** USB Device report print ***
                              ********************************


USB device information

T: Bus=01 Lev=02 Prnt=03 Port=01 Cnt=01 Dev#= 5 Spd=480 MxCh= 0
D: Ver=2.00 Cls=00(>ifc) Sub=00 Prot=00 MxPS=64 #Cfgs= 1
P: Vendor=066f ProdID=4210 Rev=10.02
S: Manifacturer=SigmaTel, Inc.
S: Product=STIr42xx
S: SerialNumber=0002F0F7261287A5
C:* #Ifs= 1 Cfg#= 1 Atr=80 MxPwr=100mA
I: If#= 0 Alt= 0 #EPs= 2 Cls=fe(app.) Sub=02 Prot=00 Driver=irda-usb
E: Ad=81(I) Atr=02(Bulk) MxPS=512 Ivl=0ms
E: Ad=01(O) Atr=02(Bulk) MxPS=512 Ivl=0ms
```

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USB device information Content

Display the information of the USB device, which the device recognized.
If not displayed, there may be some fault occurred.
Some of standard optional devices are not displayed on a report.
The details of each item are as follows.

T : Topology
Internal hierarchical structure, which a USB device is connected, is shown. The number of a connected bus, the hierarchical structure and connection speed can be indicated.

D : Device
Information of USB devices is shown.

P : Product
Product information of USB devices is shown. Vendor ID and Product ID can be recognized here.

S : String
The character string embedded in a USB device is shown. A manufacture name and a product name can be recognized here.

C : Configure
The configuration information of a USB device is shown. * mark is to know whether it is active.

I : Interface
The interface information of a USB device is shown. Interface class and the driver to handle can be recognized.

The value and the content of Driver are as follows.

Labeling	Content
usbhid	It is displayed when the USB system driver is assigned to the input device connected.
usb-storage	It is displayed when storage devices (USB memory storage etc.) are connected.
irda-usb IrDA	It is displayed when the dongle is connected.
hub	It is displayed when HUB is connected.
gpusb	It is displayed when the USB driver only for MEAP application is assigned to the input device connected.
gpusbex	It is displayed when a USB device, which specific vendor ID/ Product ID are preferentially registered using a manifest and MEAP API, is connected and the USB driver only for MEAP application is assigned.

T-2-138

E:Endpoint
The Endpoint information of a USB device is shown.

Right or wrong of report output

Connecting device		User installation	Report printing
HID		Available	Yes
Storage		Available	Yes
FAX		Not available	No
USB Device Port	IrDA	Not available	Yes
	Multimedia Card Reader	Not available	Yes
	IC Card Reader	Not available	Yes
Image Data Analyzer Board-A1		Not available	No
Hub	Internal Hub*	Not available	No
	External Hub	Available	Yes

* USB Device Port-B1 Hub for device ports installed at the introduction

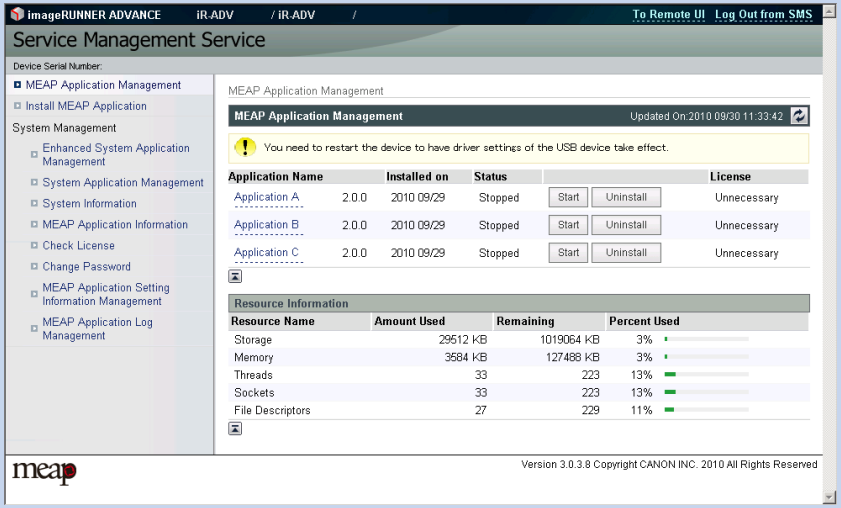
T-2-139

The content of MEAP preferred device information

Display the information of the application or a USB device, which preferentially registered with MEAP application.
By seeing this information, it can check which Application ID of the MEAP application is in the status using a specific USB device.

AppID : Application ID
VID : Vendor ID
PID : Product ID

Note:
By starting, stopping or uninstalling a MEAP application, the driver settings of the USB device may be changed. If the device needs to be restarted following this setting change, a message prompting the user to restart the device is displayed.



F-2-474

Integrated Authentication Function

Sharing the Authentication Information

Separately managing the authentication information at login and the authentication information for MEAP applications creates inconveniences such as that the authentication process is executed many times.
In order to solve this problem, the device has an integrated authentication function. This function allows authentication information to be shared between MEAP applications in a MEAP environment.
The supported version of MEAP Specifications is Ver.59, which needs to be supported by both the device and the MEAP application in order to use this function.
There are 2 types of authentication information that can be shared: Volatile Credential whose registered information is discarded at the time of logout or shutdown of the device and Persistent Credential whose registered information is not discarded at the time of logout.

Volatile Credential

Volatile Credential is used in cases where the authentication information is shared between applications which use the same security domain for authentication.
The credential is registered mainly by the login application, therefore the applications which access the security domain that was used for authentication by the login application can use the credential.

Persistent Credential

Persistent Credential is used to help entry of authentication information when accessing a different security domain for authentication.
The credential is registered mainly by general MEAP applications, and the authentication information can be reused when the same user logs in for the second time or later.

Comparison of Functions

		Volatile Credential	Persistent Credential
Registered information		Character strings and arbitrary Java objects	Character strings only User ID/Password/ Domain/Arbitrary character strings
Lifetime	Registration	At login (the login application), and at any timing of registration by an application	At any timing of registration by an application
	Deletion	Can be used until logout/shutdown.	Can be used until deletion by the application or management tool.
Encryption of credential data		Not supported	Data retained on the HDD is encrypted.
Store (Save) to		Memory in the device	HDD in the device

T-2-140

Disabling the Integrated Authentication Function

If you do not want Volatile Credential to be used from a security standpoint, the function can be disabled.

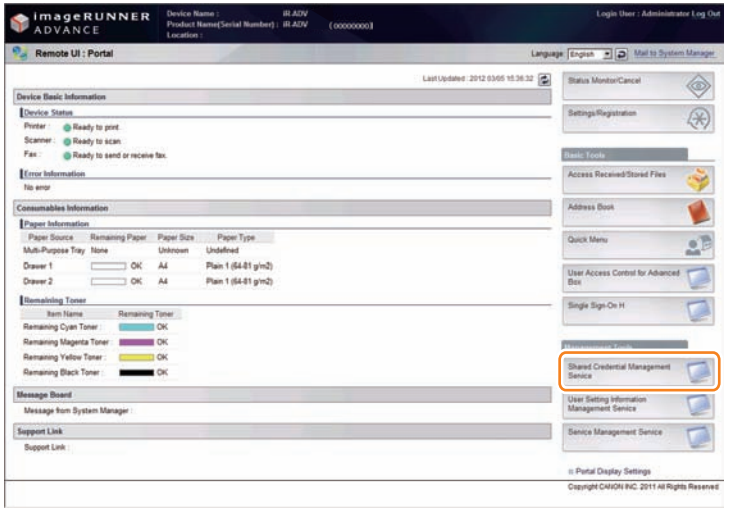
The function can be disabled from remote UI or service mode.

Persistent Credential cannot be disabled.

On the setting screen of remote UI, the function can be disabled on a protocol-by-protocol basis.

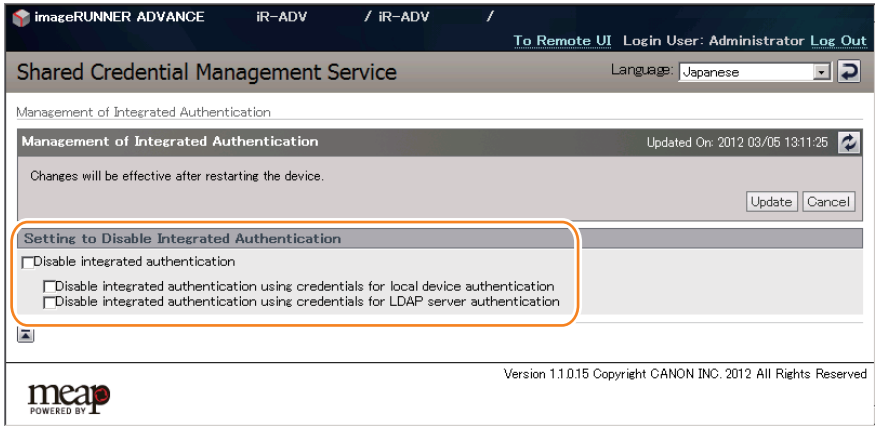
Remote UI

You can access the setting screen on remote UI for disabling integrated authentication as shown below.



F-2-475

Select the item you want to disable, and click the [Update] button.



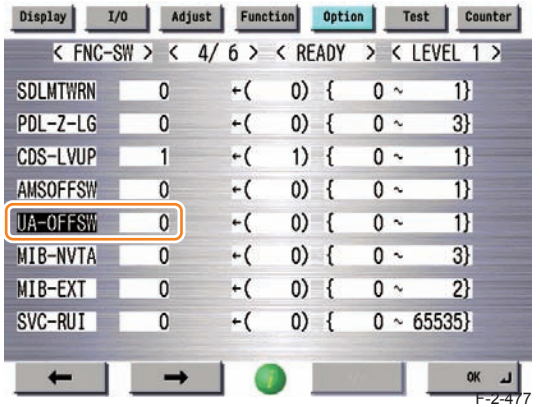
F-2-476

- [Disable integrated authentication]: The integrated authentication function is disabled regardless of the authentication method.
- [Disable integrated authentication using credentials for local device authentication]: The integrated authentication function is disabled only at the time of local device authentication.
- [Disable integrated authentication using credentials for LDAP server authentication]: The integrated authentication function is disabled only at the time of LDAP server authentication.

Service mode

The location of the service mode setting for disabling integrated authentication:

Setting value: 0 = Enabled, 1 = Disabled



F-2-477

■ Points to Note When Enabling the [Quick Startup Settings for Main Power] Setting

If some of the MEAP applications are running on the device, the following problems will occur.

● The [Quick Startup Settings for Main Power] setting cannot be enabled.

If a MEAP application that restricts the device from shifting to deep sleep mode is running, even when the setting of [Quick Startup Settings for Main Power] is enabled (On), the device starts normally instead of quick startup.
In that case, it does not affect the behavior of the MEAP application.

● Changes made in the settings of a MEAP application are not reflected.

If the startup setting [Quick Startup Settings for Main Power] is enabled (On), even when the Main Power Supply Switch of the machine is turned OFF, a shutdown process is not executed internally.
Therefore, in the case of a MEAP application where changes in settings are enabled when the device is restarted, changes in settings are not reflected just by changing the settings.
Follow either of the restart procedures shown below to enable the changes made in the settings.

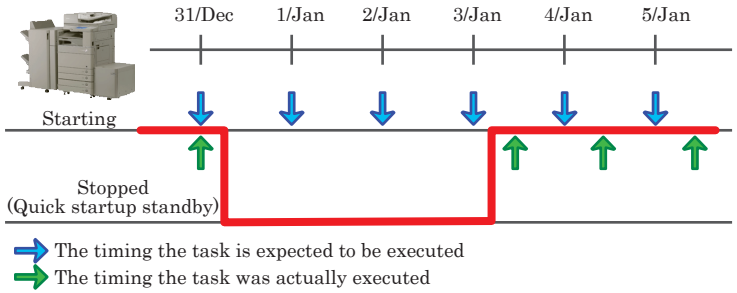
- Execute restart from remote UI.
- Turn OFF the Main Switch, and then turn it ON within 20 seconds.

● After recovery from quick startup, MEAP applications do not work properly.

MEAP applications that are scheduled to execute processes at specified times may not work properly after recovery from quick restart.
Unexpected problems such as that the application executes a task at an unexpected timing may occur.
Problems may occur in the following two cases.

In the case of "Schedule: Execute the task every 24 hours"

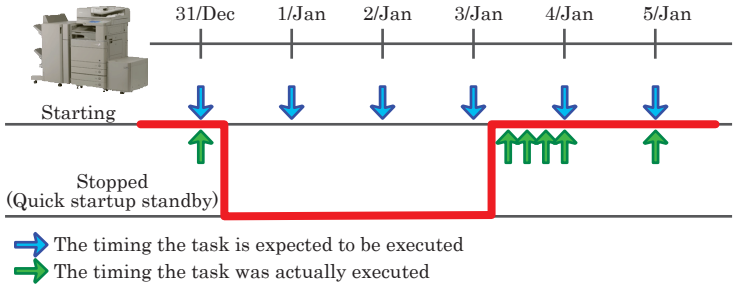
A schedule is set to start the specified task at the specified time and repeat "fixed-delay execution".
If execution is delayed for some reason, the delay time is ignored.
Problem: If 24 hours have passed since the last execution of the task, the task is executed only once.
=> The task may be executed at a timing other than the time the user expects it to be executed.



F-2-478

In the case of "Schedule: Execute the task at 00:00 every day"

A schedule is set to start the specified task at the specified time and repeat "fixed-rate execution".
If execution was delayed for some reason, two or more tasks are continuously executed to "make up for the delay".
Problem: The tasks of Jan. 1, Jan. 2, and Jan. 3 are executed after quick startup.

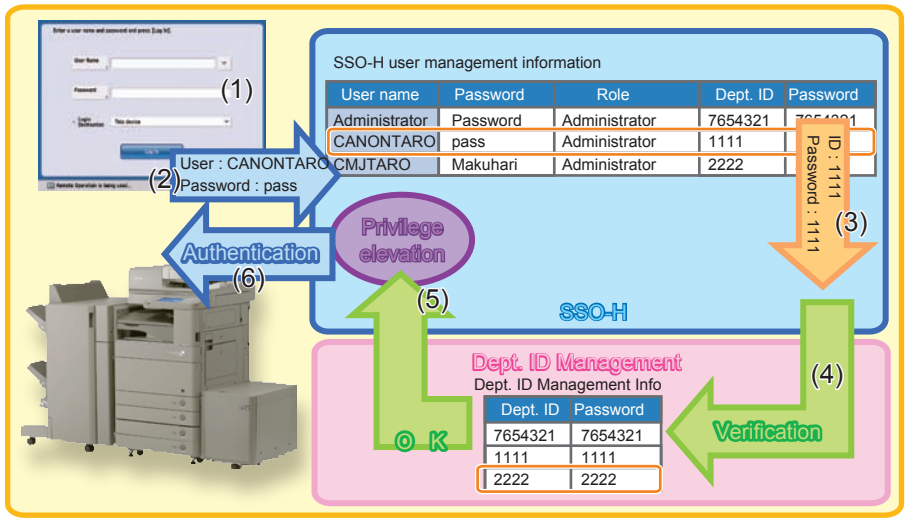


F-2-479

Remedy to Be Performed When the Device Has Become Unable to Be Logged in

Overview

Department ID Management and SSO-H (Local Device Authentication) manage user information separately. Therefore, in order to allow coexistence of Department ID Management and SSO-H, it is necessary that the information of SSO-H and the information of Department ID Management are the same.



F-2-480

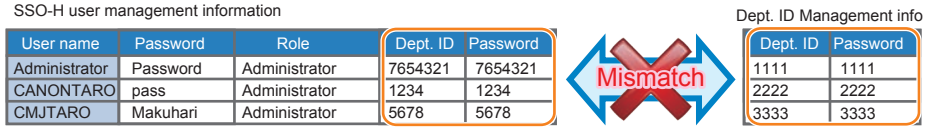
1) The user enters the ID and password of SSO-H to a device where both SSO-H and Department ID Management are enabled.
2) SSO-H checks the entered ID and password with the SSO-H user information table.
3) SSO-H sends the department ID and password which correspond to the entered ID and password to the department ID management function.
4) The department ID management function checks the department ID and password sent from SSO-H with the user information table.
5) The user is elevated to the corresponding privilege.
6) The user is authenticated.

If the department ID and password registered in the user information of SSO-H do not coincide with the department ID and password registered in the Department ID Management, the authentication ends in failure and the user can no longer log in to the device.

Note :
Even if the department ID and password registered in the user information of SSO-H do not coincide with the department ID and password registered in the Department ID Management, login is possible when all of the following conditions are satisfied.
- System manager information of the device ([Settings/Registration] > [Management Settings] > [User Management] > [System Manager Information Settings]) is set.
- Login is performed as a user with the administrator right of SSO-H.

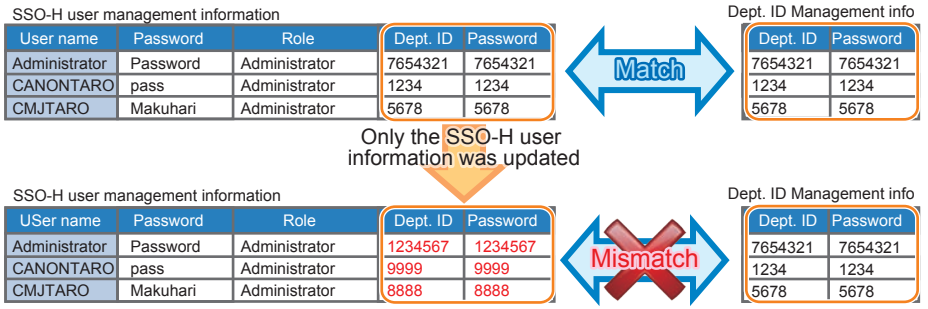
The user information of SSO-H does not coincide with the user information of Department ID Management in the following cases:

- The user information of SSO-H was different from that of Department ID Management when Department ID Management was enabled.
  Department ID Management was enabled before changing the department ID and password registered in SSO-H to match with the information of Department ID Management.



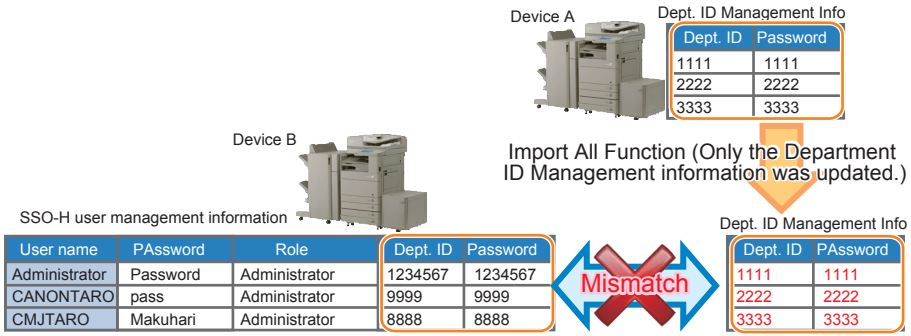
F-2-481

- Only one of information was updated, resulting in mismatch.
  Only the department ID and password registered in SSO-H or those in Department ID Management were changed.



F-2-482

- Only the information of Department ID Management was updated, resulting in mismatch.
  Only the Department ID Management information was changed in "Import All Function", resulting in mismatch. (The SSO-H user information cannot be changed in Import All Function.)



F-2-483

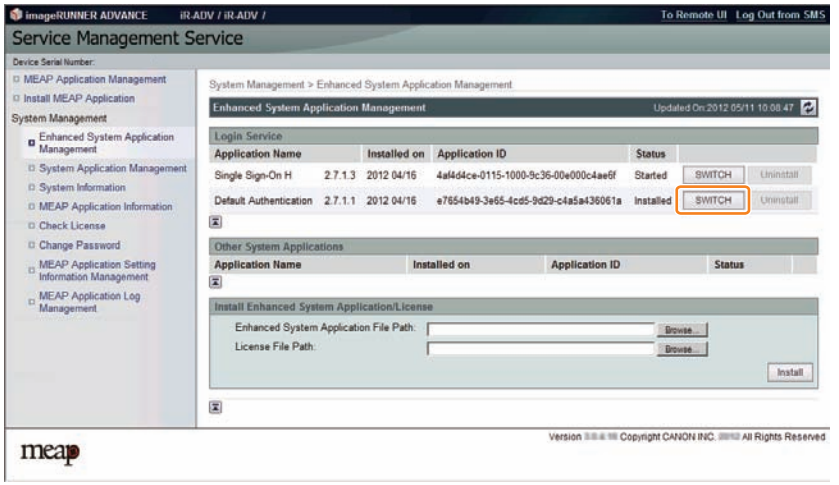
Remedy

If the device became unable to be logged in due to mismatch of the department ID/password, perform the following remedy.

Note :
Since the device can be logged in if all of the following conditions are satisfied, performing only the step 6 of this section can clear the mismatch of the department ID/password.
- System manager information of the device ([Settings/Registration] > [Management Settings] > [User Management] > [System Manager Information Settings]) is set.
- Login is performed as a user with the administrator right of SSO-H.

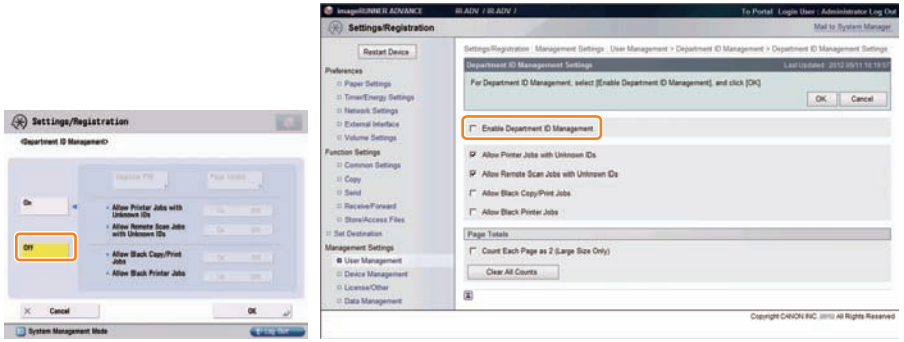
Procedure

1) Change the authentication method to DA (Default Authentication).
   Access SMS, and select [Default Authentication] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)



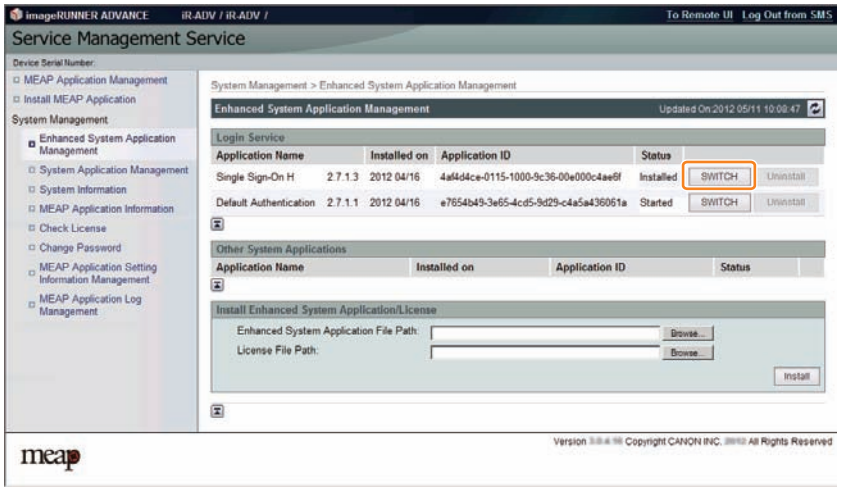
F-2-484

2) Restart the device.
   Restart the device in order to reflect the changes in login service.
3) Disable Depart ID Management.
   In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [OFF]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and deselect [Enable Department ID Management].



F-2-485

4) Change the authentication method back to SSO-H authentication.
Access SMS, and select [Single Sign-On H] in [Enhanced System Application Management] > [Login Service]. (How to log in to SMS can be found in "Login to SMS".)

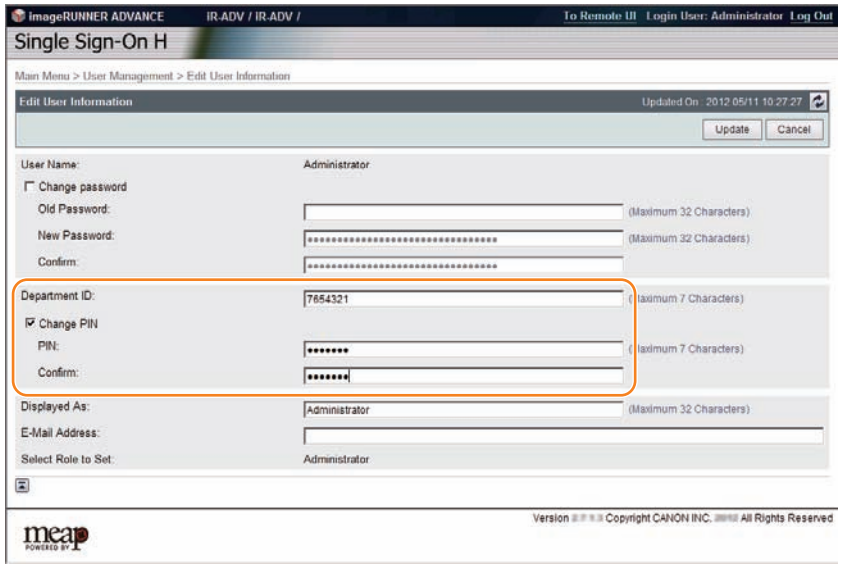


F-2-486

5) Restart the device.
Restart the device in order to reflect the changes in login service.

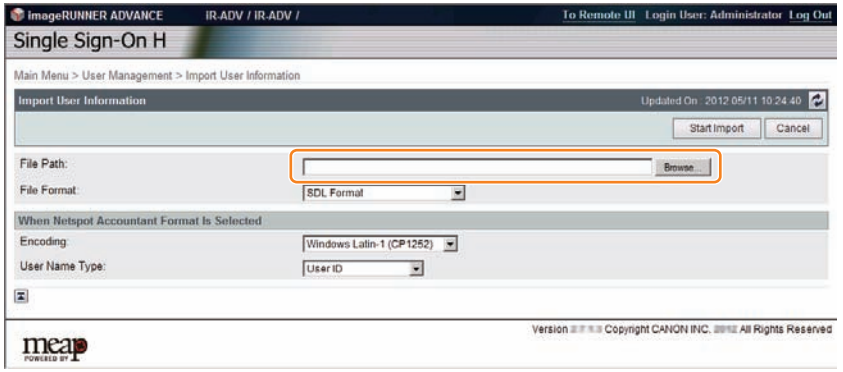
6) Change the user registration information of SSO-H.
Access the URL shown below, and change the content to the information registered in Department ID Management.
Or, import the setting file whose content you want to use.

SSO-H user registration information edition screen:
(SSO management screen [Main Menu] > [User Management] > [Edit User Information] or https://<IP address>:8443/sso/Edit).



F-2-487

SSO-H user registration information import screen:
(SSO management screen [Main Menu] > [User Management] > [Import User Information] or (https://<IP address>:8443/sso/Import).



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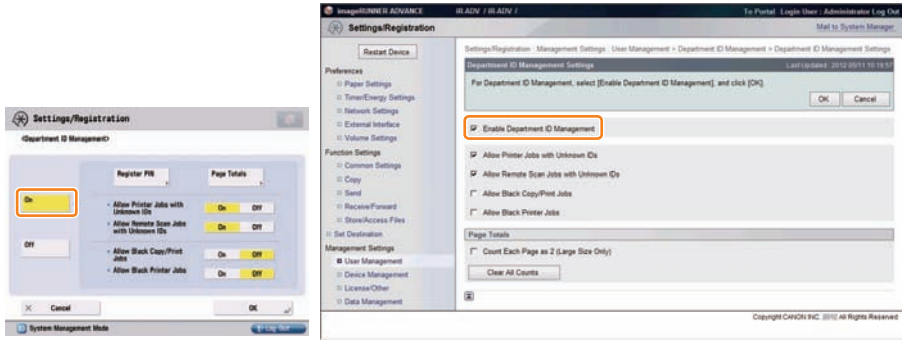
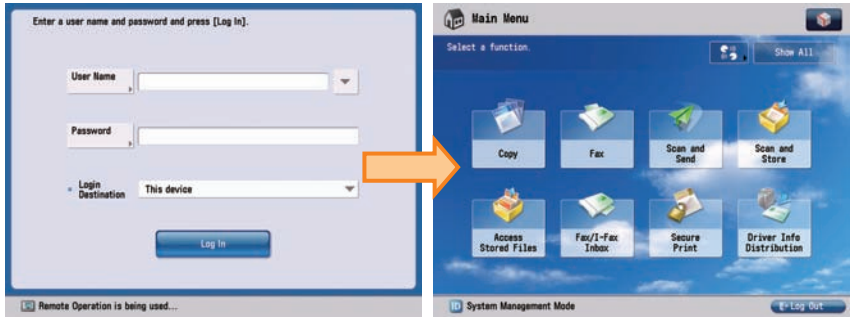
7) Enable Depart ID Management.
In user mode ([Settings/Registration]), select [Management Settings] > [User Management] > [Department ID Management] > [ON]. In the case of remote UI, access [Settings/Registration] > [Management Settings] > [User Management] > [Department ID Management] > [Department ID Management Settings], and select [Enable Department ID Management].



F-2-489

8) Check that the device can be logged in.
Log off and then log on to check that the device can be logged in with an environment where Local Device Authentication and Department ID Management are enabled.



F-2-490

Reference material

Glossary

Terms & Acronyms	Definitions and Explanations
Application	A program unit to provide users with solutions.
Application ID	An identifier assigned to each application. A unique ID is assigned to each MEAP application.
Applet (Applet Type Application)	A MEAP application type created in Java. This type of applications show buttons on the touch panel display.
Code Sign	Information to check if an application is genuine. An application marketed in the normal procedure has a code sign assigned by LMS. MEAP platform rejects applications without Canon code signs for being installed or executed on the device.
CPCA (Common Peripheral Controlling Architecture)	Common Peripheral Controlling Architecture. CPCA defines an object model of peripheral deices. A client can control a device by creating or modifying objects in the device.
CPCA Java CL (Class Library)	CPCA Java Class Library. A Java class library, which is used to control a device.
Default Authentication -Department ID Management	The login service used when the department ID control is used but other authentication controls are not used. When the Department ID control is turned on, the login dialog prompts the users to enter the department ID and password. The dialog appears the initial screen of both the control panel on the MEAP device and Remote UI
Device Specification ID	ID allocated to each device type. This represents CPCA API specification and the version number to use MFP generic functions or obtain information including maximum allowable copies.
Esplet (Esplet Type Application)	A MEAP application type created in Java. This type of applications do not show user interfaces either on Local UI or Web. Esplet is a coined word created by Canon, consisting of [Espresso] or Italian coffee and [let] derived from Applet/Service.
File Description	An identifier for the OS to identify the destination file requested by a program. A program descriptor includes an identifier and information such as a file name and size, which helps OS to judge the file to be edited.
HID class	HID stands for Human Interface Device, representing man-machine interfaces of PC components and peripheral devices. HID class means USB class classified as HID.
iR Native application	The functionalities that existing imageRUNNER has such as Copy, Universal Send and Mailbox.
ISV (Independent Software Vendor)	Independent Software Vender. Software manufacturer who develops and/or sells applications and tools but does not entire computer systems. Refers application developer in this document.

Terms & Acronyms	Definitions and Explanations
J2ME (Java2 Platform Micro Edition)	Java 2 Platform Micro Edition. One of Java Platforms licensed by Sun Microsystems, Inc. It is applied for MEAP. Other devices such as cellular phones and PDA.
J2RE (Java 2 Runtime Environment)	A set of basic programs to run applications developed in the programming language of Java2. This set includes Java virtual machine providing runtime environment for Java applications among others. Java applets do not require J2RE since these are executed on Web browsers using Java runtime environment provided on browsers. However, standalone Java applications require Java runtime environment such as J2RE for execution. Runtime environments can be downloaded for free of charge from the Web site of Sun Microsystems, the Java developer.
Java	A programming language developed by Sun Microsystems, in the U. S. A. Low dependent on models and OSes and runs on various platforms. Taking advantage of this feature, many applications that runs on web servers uses Java. The MEAP platform uses J2ME - a type of Java.
JavaScript	A script language developed by Netscape Communications, in the U.S. A., runs on web browsers such as Netscape Navigator and Internet Explorer. Allows web designers to create interactive pages with HTML files such as animated buttons and display of timetables.
Java VM (Java Virtual Machine)	JAVA Virtual Machine. The Java byte code interpreter. The Virtual Machine acts as an interpreter for processing the byte code using the native instruction set.
License Access Number	A number issued for accessing license file. The Licensing server requires entries of application ID, expiration date/times information, and the number of access numbers, to issue license access numbers
Licensae File	A software manufacture of a MEAP application provides the users with the license files. Specifies the terms of agreement that a user concludes with the manufacturer. Required for installing a MEAP application.
LMS (License Management System)	The license is required for installing a MEAP application in a MEAPenabled iR device. LMS is the server issuing [License Files] as well as license access numbers.
Login Service	Manages user information of MEAP device. Authenticates users with user names and passwords. Three login services are available for MEAP device - Default Authentication, which provides department ID control, SDL (Simple Device Login) and SSO (Single Sign-On).
Mass Storage class	Mass Storage means a storage device with large capacity, generally secondary storage devices. Mass Storage class means USB class classified in the secondary storage device group.
MEAP (Multifunction Embedded Application Platform)	Multifunctional Embedded Application Platform. Provides an environment for executing application programs on a peripheral device. Uses the Java platform (J2ME - Java 2 platform Micro Edition) to run Java application for MEAP.
MEAP Contents	Required to install an MEAP application to a MEAP device.

Terms & Acronyms	Definitions and Explanations
MEAP Specifications (MEAP Spec Version)	MEAP Spec Version, the term used for the SDK. The version number that shows the APIs of the MEAP platform other than CPCA, such as network and security. The version number is not assigned for each device model. MEAP Application Runs on MEAP platform. Consists of application files (*.jar) and the license file (*.lic).
MEAP-enabled iR device	imageRUNNER (iR) devices with built-in MEAP platform.
MFP (Multi Function Peripheral)	Multi Function Peripheral. Peripheral device that supports more than one function, such as digital copier, printer, scanner, and fax.
OSGi (Open Service Gateway Initiative)	Open Service Gateway Initiative. See "http://www.osgi.org/".
Portal Service	The web portal to gain access to a MEAP-enabled device. This service has been integrated in Remote UI top page in iR ADVANCE series.
Protocol	A set of rules applied to data transmission procedures over network. Major communication protocols include: • FTP: File Transfer Protocol. This is a communication protocol or protocolimplemented commands to provide file transfer between a host and clients over TCP/IP network. • DHCP: An upward compatible protocol of BOOTP. This communication protocol allocates a dynamic IP address to each client machine upon communication startup on TCP/IP network and collects the allocated IP address when communication is completed. The server allocates one of multiple IP addresses and notifies the setup information to a client. • BOOTP: A communication protocol to automatically load setup information including IP address and a domain name from the server to a client on TCP/IP network. • RARP: A communication protocol to request IP address information via the network adaptor address (MAC address) of a client. • IPP: A communication protocol to execute remote printing between the print server and clients via Internet. • TCP/IP: A standard communication protocol required to access to Internet and other large-scale network.
Proxy Server	Provides functions to store data fetched from remote servers. When a user request to display a web page that has been displayed and stored in the proxy, the proxy server read the stored data but does not access the remote server where the original page is present, for efficient access services. When a proxy server receives a URL from a PC, it searches the file in the cache and sends it to the PC if the requested file is found. If the requested file is not stored in the cache, it accesses the remote server of the URL to acquire the file and, at the same time, stores the acquired file in the cache so that the proxy server can quickly send the file at the next request.
Redistribution module	A built-in module of an application created with SDK. Applications without this module cannot work on MEAP platform.

Terms & Acronyms	Definitions and Explanations
SDK (Software Development Kit)	The kit containing information and tools required for software development.
Service	A functional unit or an application program working on MEAP platform. [Applications] are generally termed [Services] in Java world.
Servlet (Servlet Type Application)	A MEAP application type created in Java. This type of applications is designed to show user interface on the Web browser.
SMS (Service Management Service)	The web-base service to provide user interfaces for application life cycle management.
Socket	A virtual interface of an application for network communication. A user only needs to specify a socket as a unit of an address and a port from an application. This establishes the network connection for data transmission, eliminating complication related to detailed communication procedures.
SSO-H (Single Sign-On H)	Login service providing features of both local device authentication and domain authentication. The former is the method that iR device independently authorizes users; whereas the latter is that iR device links to the domain controller on the network in the Active Directory environment to authorize users.
Thread	A unit for program execution. A multi-task system allowing multiple programs to run concurrently assigns a memory space and other resources independently to each program, providing users with a feel as if only a program is running. At least one thread is generated upon a program generated.
URL (Uniform Resource Locator)	The method to denote Web page locations on Internet and the like. For instance, a URL on the Web is denoted as [http://www.w3.org/default. html]. [http] at the beginning means that an address following this is in a web page on the Internet.
USB	Abbreviation of Universal Serial Bus. This is the interface standard to link between information devices.
USB system driver	The general-purpose driver that control the behavior of the device, there are HID class driver, Mass Storage class driver and so on.

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Option for exclusive individual measure

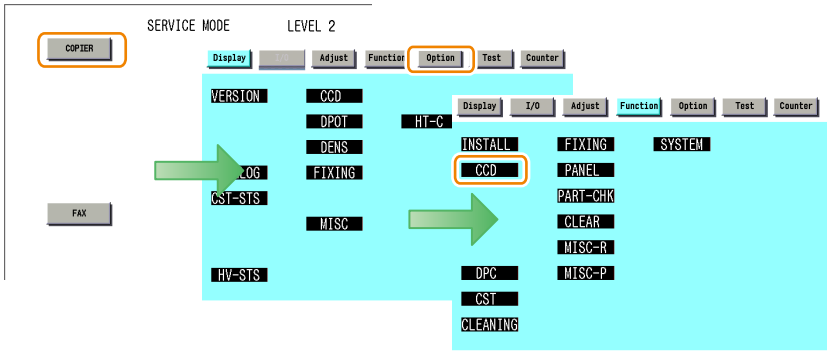
Display Setting of Copy Icon (level2)

Make a setting as to whether to display/hide the copy screen (copy tab) on the control panel. This is the specification for users who want to customize hiding it on control panel.

Default value
1: display
Setting range, item
0: hide 1: display

Setting Procedure

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.

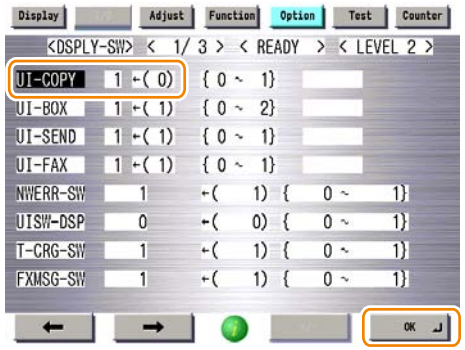


F-2-491

3) Press [UI-COPY] button.

F-2-492

4) Press either 0 (hide) or 1 (display) on control panel (the numerical value input in the field is displayed), and press [OK] button.



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5) Check to see that it is reflected in setting field, and restart the device.

■ Error at starting up the MEAP application/Setting to hide JAM screen (level 2)

In the case that operation is restricted by MEAP application, hide the warning screen of error/JAM (such as JAM screen, door opening, no-toner). In the case that these errors occur, there will be a display indicating 'call the service personnel' etc.

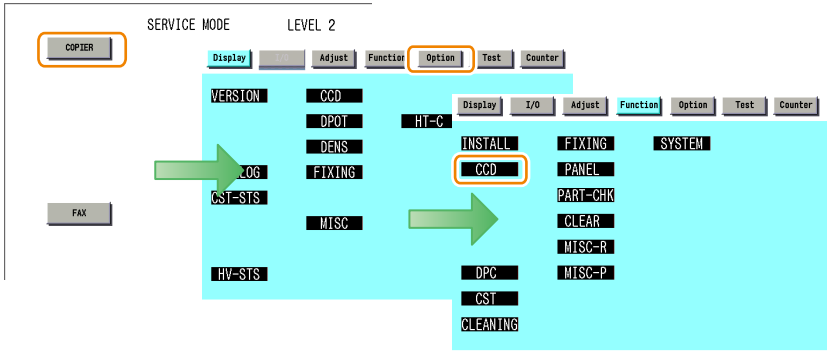
Note:
Part of the warning screens is displayed if shifting to the device screen.
- As for the screens for jam and no-toner, the warning screen (animation) can be displayed by pressing the followings: [Device Screen] > [Recovery Procedure]
- As for the screen for door opening, the warning screen cannot be displayed because there is no display for [[Device Screen] > [Recovery Procedure]

Default value
1: No activation of warning display

Setting range, item
0: display warning screen 1: hide warning screen

● Setting Procedure

1) Start [SERVICE MODE] in Level 1.
2) Press [COPIER] > [Option] > [DSPLY-SW] buttons.



F-2-494

3) Press [ANIM-SW] button.

F-2-495

4) Press either 0 (display warning screen) or 1 (hide warning screen) on control panel (the numerical value input in the field is displayed), and press [OK] button.

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5) Check to see that it is reflected in setting field, and restart the device.

Embedded RDS

Product Overview

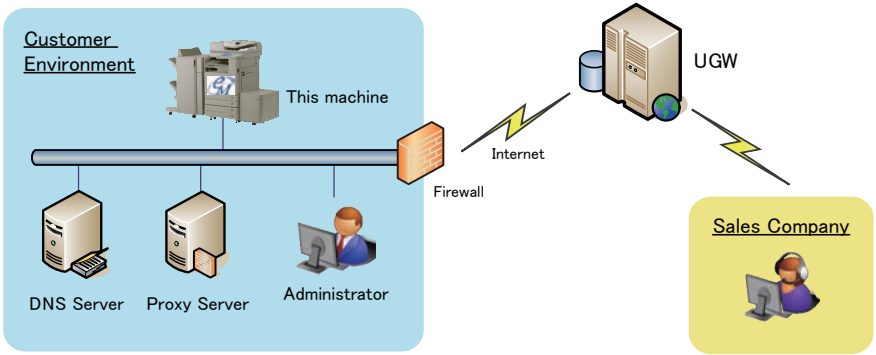
Overview

Embedded RDS (hereinafter referred to as E-RDS) is a monitoring program that runs on the host machine. When the monitoring option is enabled by making the setting on this machine, information such as the status change of the machine, counter information, and failure information are collected. The collected device information is sent to a remote maintenance server called UGW (Universal Gateway Server) via Internet, thus allowing for e-Maintenance/ imageWARE Remote (Remote Diagnosis System).

The following device information/ status can be monitored.

- Billing counts
- Parts counter
- Firmware info
- Service call error log
- Jam log
- Alarm log
- Status changes (Toner low/ out, etc.)

Since high confidentiality is required for the information shown above, it performs communication between this machine and the UGW using HTTPS/ SOAP protocol.



The e-Maintenance/ imageWARE Remote system configuration

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Features and benefits

E-RDS embedded with a network module in advance can realize a front-end processing of e-Maintenance/ imageWARE Remote system without attaching any extra hardware equipment.

Major Functions

Service Call Button

If a user touches service call button on the touch panel display when corrupt image, paper jams, or/ and other problem has occurred, E-RDS generates an alarm and notifies it to UGW. Moreover, E-RDS also notifies cancellation and the completion of the request

Service Browser

Service browser is a web browsing functionality only for service technicians in charge, and is used for referring to the FAQ contents which is connected to UGW.
In order to grasp on which devices the service browser is enabled, when the status of the service browser is changed from disabled (0: OFF) to enabled, E-RDS sends the browser information to the UGW.

Service mode menu Transmission

E-RDS sends the target service mode menu data to UGW in the following cases:

- When a specific alarm and service call error are detected
- When the setting is changed in service mode

The following shows the transmission timing and the target data for transmission in service mode menu:

Transmission timing	Transmitting data			Error retry
When the following alarm is detected. Alarm codes for transmission: 0x060002, // Fixing 0x060004 - 0x069999, // Fixing 0x090005 - 0x099999, // Dram 0x100006 - 0016, 0x100022 - 0099, 0x100101 - 9900, // Development 0x300001 - 0x309999 // High voltage	COPIER	Display	ANALOG	No
			HV-STS	
			CCD	
			DPOT	
			DENS	
			FIXING	
			SENSOR	
			MISC	
			HT-C	
			HV-TR	
			P-PASCAL	

Transmission timing	Transmitting data			Error retry
When the following service call error is detected. Error codes for transmission: E000 - E00F, // Fixing E020, // Development ATR E060 - E06F // High voltage	COPIER	Display	ANALOG	No
			HV-STS	
			CCD	
			DPOT	
			DENS	
			FIXING	
			SENSOR	
			MISC	
			HT-C	
			HV-TR	
			P-PASCAL	
When a value is set to [COPIER - Adjust] subordinate's Service mode menu. (Transmission will be done at 60 min, later of setting)	COPIER	Adjust		Yes
When the first communication test is done. (For transmission process, 5 minutes after the execution)	COPIER	Display	ANALOG	Yes
			HV-STS	
			CCD	
			DPOT	
			DENS	
			FIXING	
			SENSOR	
			MISC	
			HT-C	
			HV-TR	
			P-PASCAL	
		Adjust		

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NOTE:
Target transmission data are only the items under LEVEL1 and 2 in the service mode.

Limitations

Service Mode Menu Transmission Function

1) In the following cases, service mode menu data is not transmitted.
   - When an unsent alarm log or service call log has been detected by E-RDS at power-on
   - When an alarm log or service call log to be resent due to a transmission failure is detected
   - When transmission of service mode menu executed at the time of detection of an alarm or a service call error ended in failure
   - If a new alarm or service call error occurs while service mode menu data is being obtained after detection of an alarm or a service call error, the data being obtained is not sent.

2) If alarms/service call errors successively occur, and if the time of the host machine is corrected or changed while the log is being sent, service mode menu data may not be properly sent. It is because a Link No.* may be applied to the old log although it should be applied to the new log.

   * Link No.:
   A common number for linking the service mode menu data with the alarm log/service call log data to be sent
   After completion of log transmission, the service mode menu data is obtained, and is sent with this number attached.

3) Transmission of the data of changes made in service mode menu settings is not performed instantly, but performed when a specified period of 60 minutes elapse after the change of service mode menu settings is detected or when a communication test is performed at the time of power-on. (There is a time lag.)

4) When service mode menu settings ([COPIER] > [Adjust]) are made, transmission is performed even when no change is made in the target data to be transmitted. Transmission of service mode data is also performed when changes are made in the service mode setting value not subject to transmission (items other than Level 1, 2) or when settlement of a value is performed without changing the setting value.

Service cautions

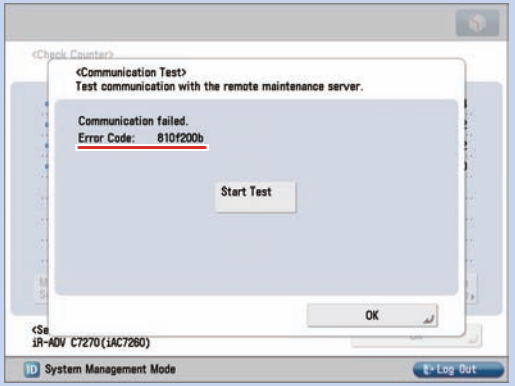
1) After clearing RAM of the Main Controller PCB SRAM Board, initialization of the E-RDS setting (ERDS-DAT) and a communication test (COM-TEST) need to be performed. Failure to do so will result that the counter transmitting value to the UGW may become unusual.
Also, after replacing the main controller board, all settings must be reprogrammed.

2) The following settings in service mode must not be change unless there are specific instructions to do so. Changing these values will cause error in communication with UGW.
   - Set port number of UGW
     [SERVICE MODE] > [COPIER] > [Function] > [INSTALL] > [RGW-PORT]
     Default : 443
   - URL setting of UGW
     [SERVICE MODE] > [COPIER] > [Function] > [INSTALL] > [RGW-ADR]
     Default : https://a01.ugwdevice.net/ugw/agentif010

3) If the e-Maintenance/imageWARE Remote contract of the device is invalid, be sure to turn OFF the E-RDS setting (E-RDS : 0).

4) Communication tests can be conducted in user mode.* When conducting a communication test in user mode, pay attention on the following points:
   - During a communication test in user mode, do not take any actions such as pressing a key. Actions are not accepted until the communication test is completed (actions are ignored).
   - When a communication test is being conducted from service mode or user mode, do not conduct a communication test from the other. These operations are not guaranteed.

NOTE:
*The user can conduct a communication test and seen the communication test result. If the communication results in failure, an error code (a hexadecimal number, 8 digits) appears on the touch panel display.



E-RDS Setup

Confirmation and preparation in advance

To monitor this machine with e-Maintenance/ imageWARE Remote, the following settings are required.

(1) Advance confirmation

Confirm with the UGW administrator that the device to be monitored with e-Maintenance/ imageWARE Remote is registered in the UGW.

(2) Advance preparations

The following network-related information needs to be obtained from the user's system administrator in advance.

Information item 1

IP address settings

- Automatic setting : DHCP, RARP, BOOTP
- Manual setting : IP address, subnet mask and gateway address to be set

Information item 2

Is there a DNS server in use?

If there is a DNS server in use, find out the following.

- Primary DNS server address
- Secondary DNS server address

Information item 3

Is there a proxy server?

If there is a proxy server in use, find out the following.

- Proxy server address
- Port No. for proxy server

Information item 4

Is proxy server authentication required?

If proxy server authentication is required, find out the following.

- User name and password required for proxy authentication

(3) Network settings

Based on the results of the information obtained in (2) Advance preparations, make this machine network related settings.

See Users' Guide for detailed procedures.

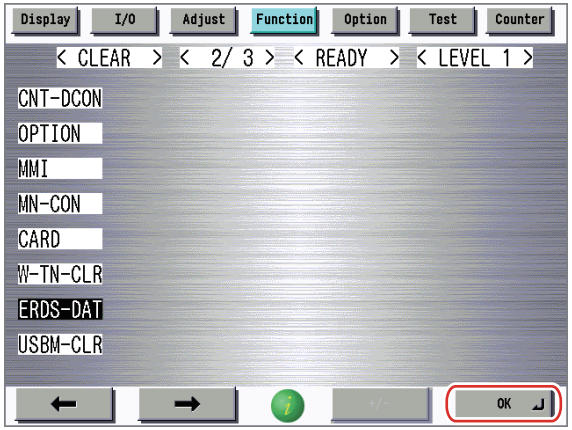
CAUTION:

When changes are made to the above-mentioned network settings, be sure to reboot this machine.

Steps to E-RDS settings

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] and touch the [OK] button.

NOTE:
This operation initializes the E-RDS settings to factory setting values.
For the setting values to be initialized, see the section of "Initializing E-RDS settings".



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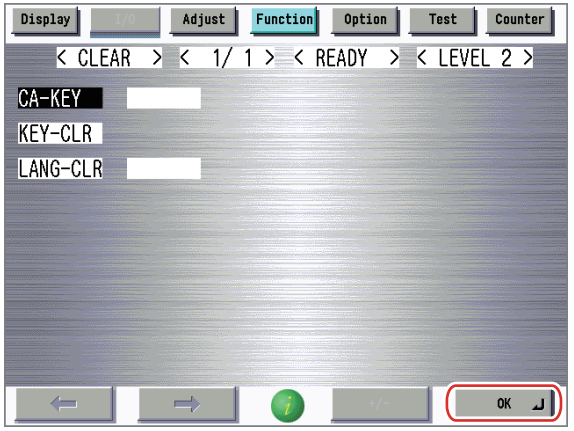
3. Perform installation or deletion of the CA certificate if necessary, and reboot this machine.

- Installation of the CA certificate: Perform installation from SST or Remote UI.
- Deletion of the CA certificate: When the following operation is performed, the CA certificate in the factory setting is automatically installed.

CAUTION:
After following procedure, the registered key and CA certificate are deleted, and only the CA certificate installed at the time of shipment is registered.
It is therefore necessary to check with the user in advance.

(1) Start [Service Mode] at Level 2.

(2) Select [COPIER] > [Function] > [CLEAR] > [CA-KEY] and touch the [OK] button.



F-2-499

"OK!" is displayed if the CA certificate is initialized. When "NG!" is displayed, see the section of "Troubleshooting" to execute the remedy, and then perform initialization of the CA certificate again and check to see if the CA certificate is initialized.

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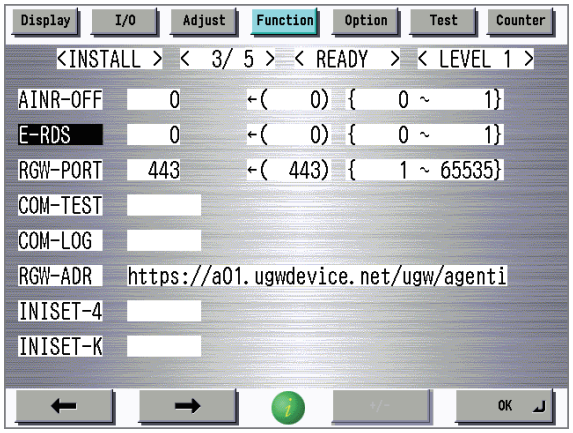
(3) Reboot this machine.

CAUTION:
If a key and a CA certificate have been registered in order to use a function other than E-RDS, it is necessary to register again from SST or Remote UI.

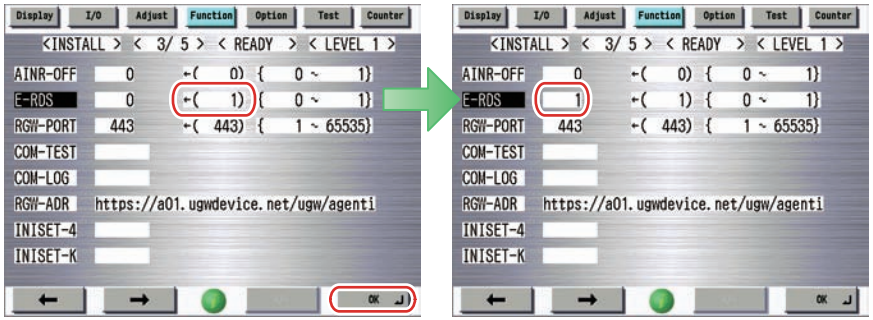
4. Start [Service Mode] at Level 1.
5. Select [COPIER] > [Function] > [INSTALL] > [E-RDS].



F-2-501

6. Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)

NOTE:
This operation enables the communication function with UGW.



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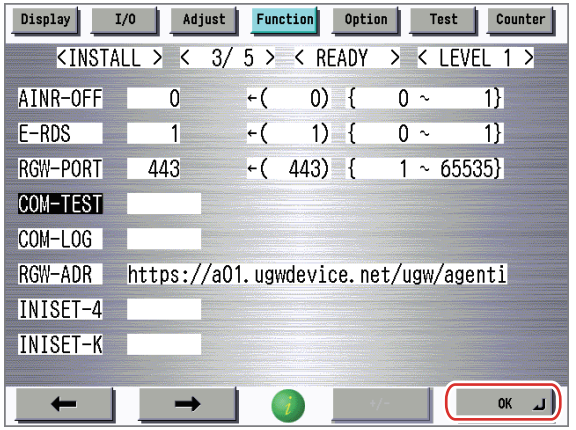
CAUTION:

The following settings i.e. RGW-PORT and RGW-ADR in Service mode must not be change unless there are specific instructions to do so.

Changing these values will cause error in communication with UGW.

7. Select [COM-TEST] and then touch [OK].

NOTE:
This initiates the communication test between the device and the UGW.



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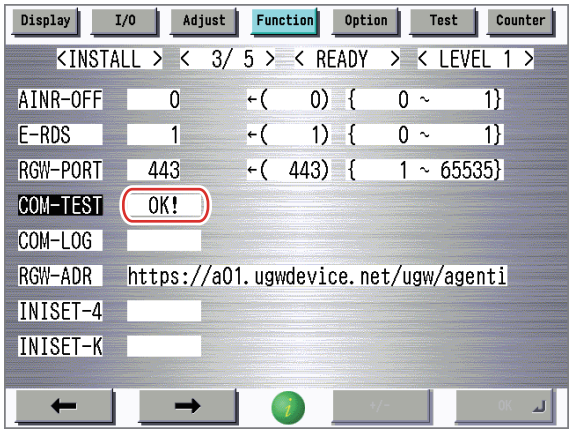
If the communication is successful, "OK!" is displayed. If "NG!" (failed) appears, refer to the "Troubleshooting" and repeat until "OK!" is displayed.



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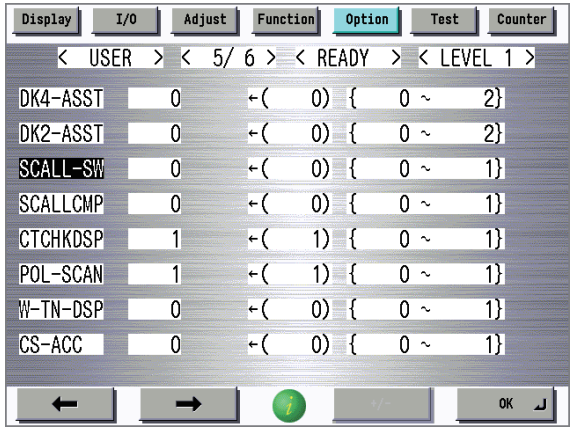
NOTE:
The communication results with UGW can be distinguished by referring to the COM-LOG. By performing the communication test with UGW, E-RDS acquires schedule information and starts monitoring and meter reads operation.

Steps to Service Call button settings

Steps for settings to display the service call button

In order to use the "Service Call" button, follow the procedure shown below to display the "Service Call" button.

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Option] > [USER] > [SCALL-SW].



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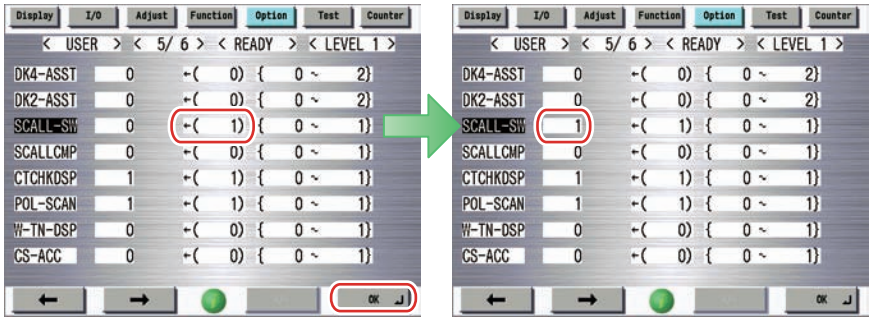
3. Touch the numeric button [1] on the control panel (the setting value is changed to 1) and touch the [OK] button. (The data is reflected to the setting value field.)



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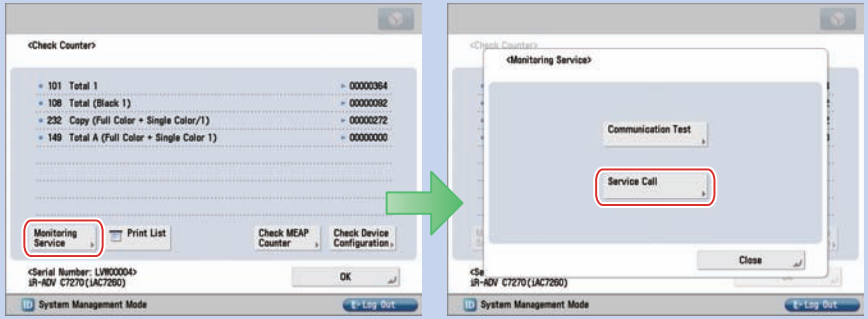
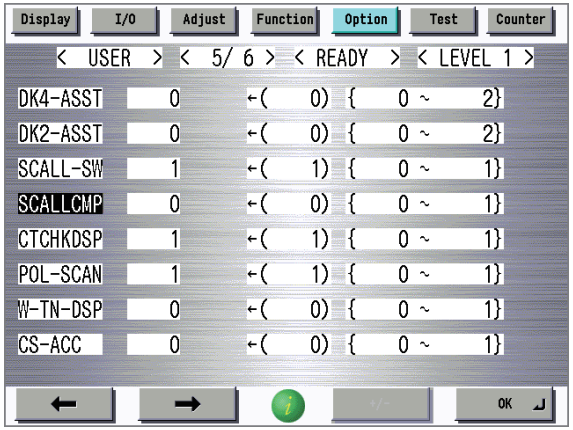
NOTE:
When the function is enabled, the [Service Call] button is displayed on the Monitoring Service screen by touching the [Monitoring Service] button on the Check Counter screen.



Steps for settings of service call completion

When the service technician completes the work for the service call, follow the instruction as described below to execute the service call completion work.

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Option] > [USER] > [SCALLCMP].



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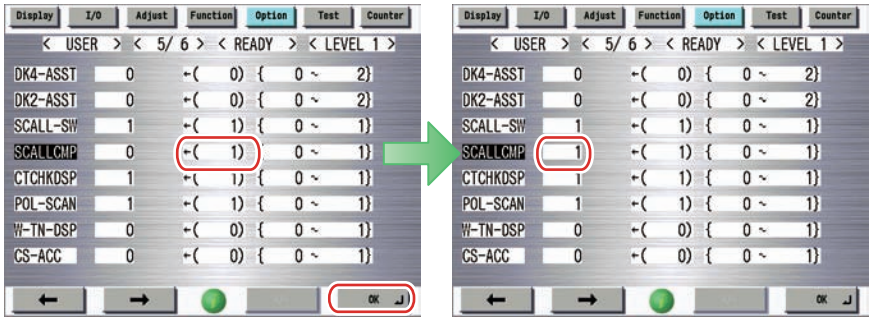
3. Touch the numeric button [1] or [0] on the control panel (the setting value is changed to 1 or 0) and touch the [OK] button. (The data is reflected to the setting value field.)

NOTE:
E-RDS generates an alarm of service call completion at this timing, and sends the alarm to UGW.



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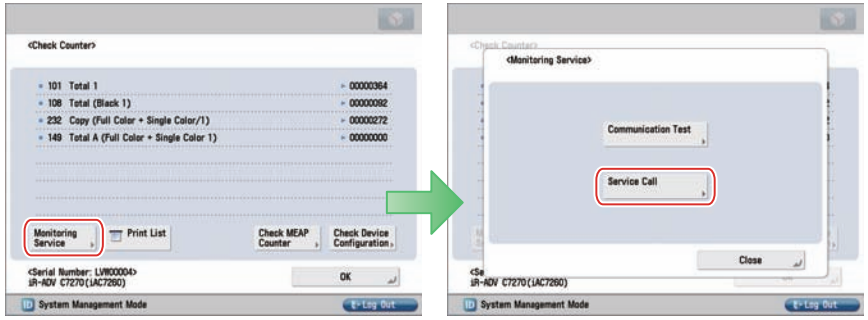
NOTE:
In the current condition, touching the [OK] button completes the service call regardless of whether 0 or 1 is set.

Steps for service call request

Users should follow the instructions as described below to request a service call.

1. Touch the [Counter Check] button on the control panel to display the Check Counter screen.
2. Touch the [Monitoring Service] button, and touch the [Service Call] button on the Monitoring Service screen.



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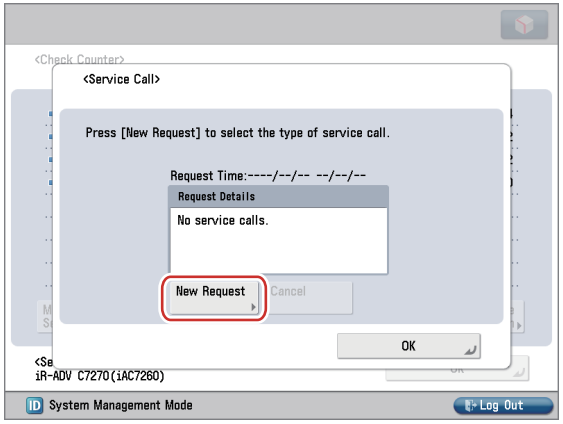
3. Touch the [New Request] button on the Service Call screen.



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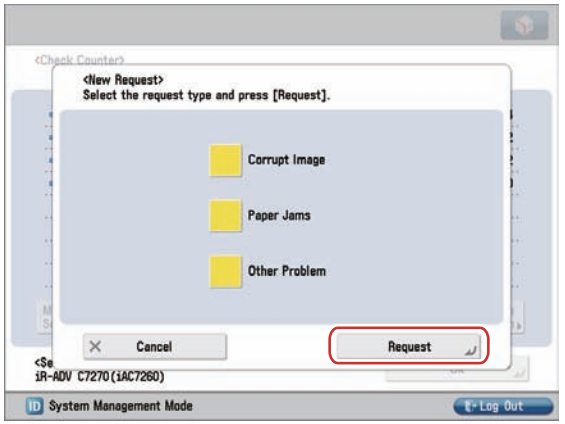
CAUTION:

When a service call has been already requested, another service call cannot be sent. The previous service call needs to be canceled, or a service technician needs to perform processing for service call completion.

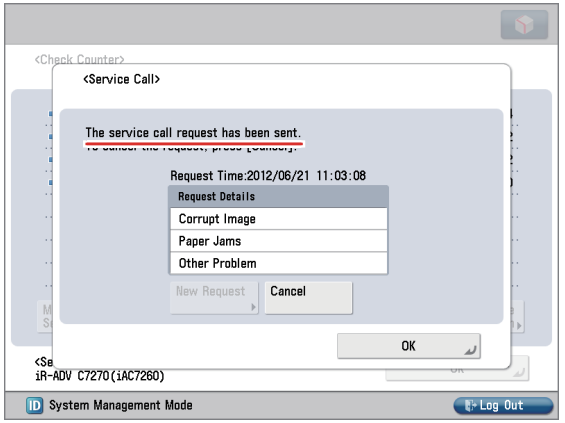
4. Select the request details and touch the [Request] button.

NOTE:
E-RDS generates an alarm of service call request at this timing, and sends the alarm to UGW.



F-2-511

5. If the service call request is successful, "The service call request has been sent." is displayed. If "Could not send the service call request." appears, refer to the "Troubleshooting" and repeat until "The service call request has been sent." is displayed.



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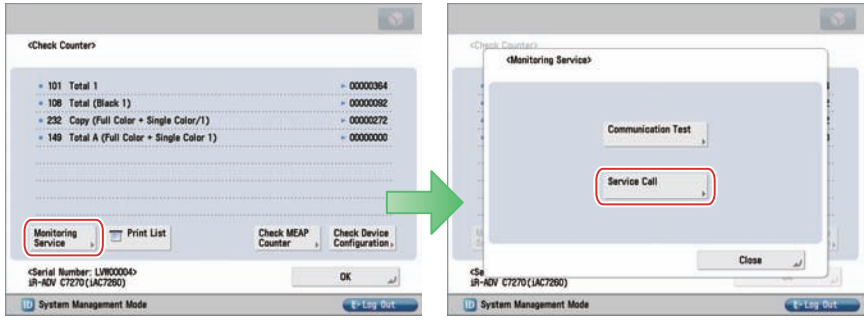
Steps for service call cancellation

To cancel the service call, follow the instructions as described below.

1. Touch the [Counter Check] button on the control panel to display the Check Counter screen.
2. Touch the [Monitoring Service] button, and touch the [Service Call] button on the Monitoring Service screen.



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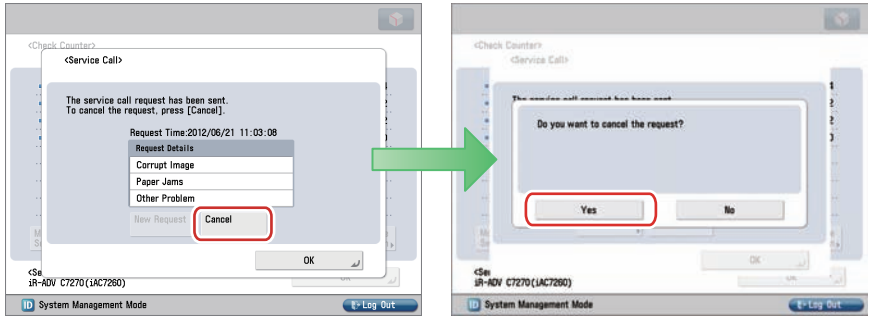
3. Touch the [Cancel] button, and touch the [Yes] button in the check screen.

NOTE:
E-RDS generates an alarm of service call cancellation at this timing, and sends the alarm to UGW.



F-2-514

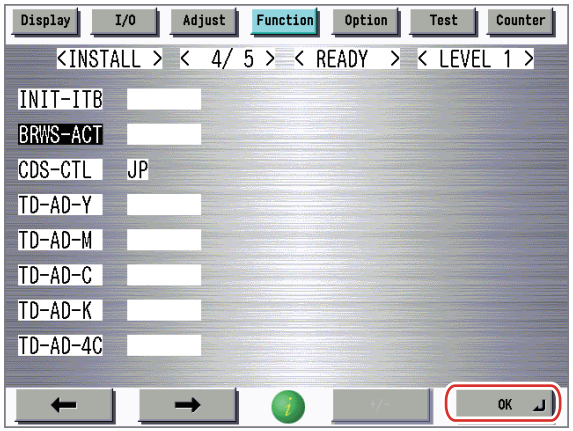
4. "The request has been canceled." is displayed.

F-2-515

Steps to Service Browser settings

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [INSTALL] > [BRWS-ACT] and then touch [OK].

NOTE:
When the status of the function is changed from disabled to enabled, E-RDS sends the browser information to the UGW.



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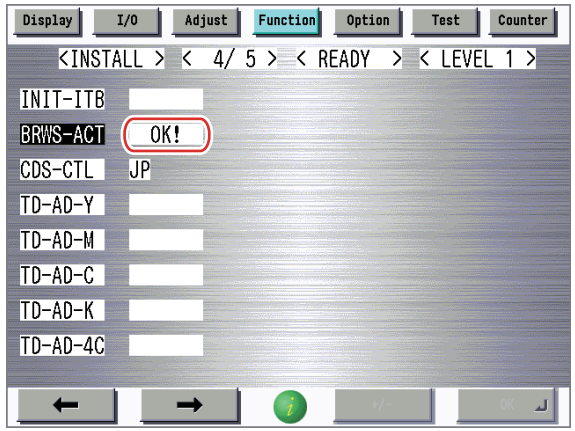
If the connection is established with UGW successfully, "OK!" is displayed. When "NG!" is displayed, perform the steps referring to "Troubleshooting" until connection is established with UGW.



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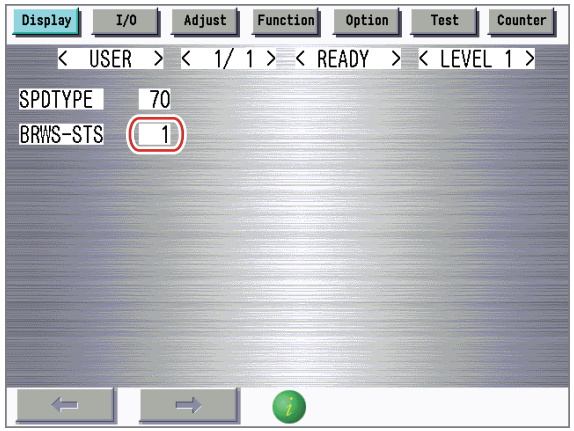
3. Reboot this machine.

4. Make sure that "1 (: ACTIVE)" is set under [COPIER] > [Display] > [USER] > [BRWS-STS].



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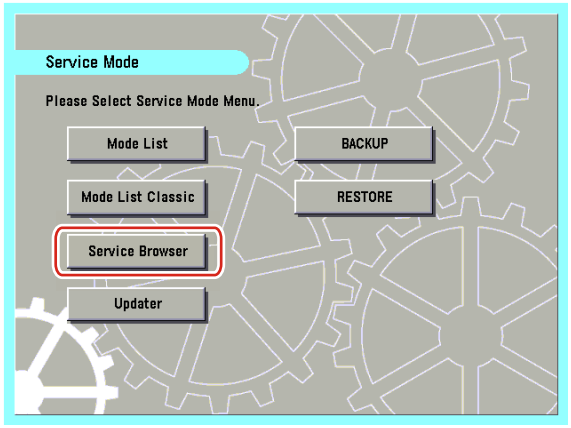
5. When the above-shown setting values are enabled, [Service Browser] is displayed in the Service Mode screen.



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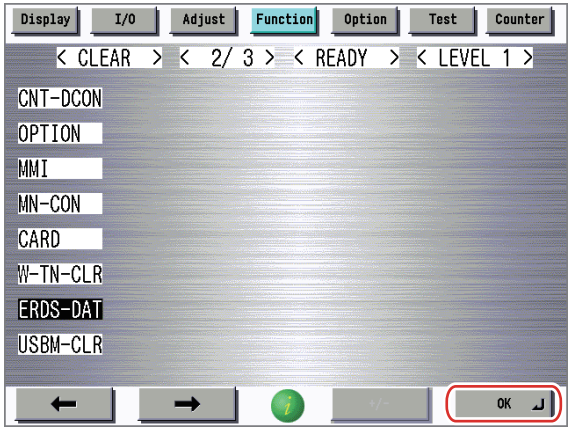
NOTE:
Generally, once service browsing is enabled (BRWS-STS : 1), it cannot be disabled (BRWS-STS : 0) again*. To disable service browsing, clear SRAM.
* The function is disabled (BRWS-STS: 2) by executing BRWS-ACT again.

Initializing E-RDS settings

It is possible to clear the SRAM data of E-RDS and change the E-RDS setting back to the default value.

Initialization procedure

1. Start [Service Mode] at Level 1.
2. Select [COPIER] > [Function] > [CLEAR] > [ERDS-DAT] and then touch [OK].



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Setting values and data to be initialized

The following E-RDS settings, internal data, and Alarm filtering information are initialized.

- COPIER > Function > INSTALL > E-RDS
- COPIER > Function > INSTALL > RGW-ADR
- COPIER > Function > INSTALL > RGW-PORT
- COPIER > Function > INSTALL > COM-LOG

CAUTION:

In case of replacing the CA certificate file, even if initialization of E-RDS is executed, the status is not returned to the factory default.

When installing the certificate file other than the factory default CA certificate file, it is required to delete the certificate file after E-RDS initialization and install the factory default CA certificate file.

For detailed procedures, see "Steps to E-RDS settings - step 3.".

FAQ

No.1

Q: In what case does a communication test with UGW fail?

A: The following cases can be considered in the becoming "NG!" case.

1. Name resolution was failed due to an incorrect host name or DNS server has been halted.
2. Network cable is blocked off.
3. Proxy server settings is not correct.

No.2

Q: When does E-RDS send counter information to UGW? How many data is sent?

A: The schedule of data transmitting, the start time are determined by settings in the UGW side. The send time cannot be specified on the E-RDS side. Data is sent once every 16 hours.

The data size of counter information is approx. 285 KB.

No.3

Q: Will data which failed to be sent due to an error in communication with UGW be resent?

A: Data shown below will be resent.

- Jam log
- Service call log
- Alarm log
- Service mode menu

  The newest data is resent only when the settings are changed in service mode.
- Browser information

  It is resent only when the web browser option is enabled.

Data is resent endlessly (after 5, 10, 15, 20, 25, and 30 minutes since the occurrence of communication error; once 30 minutes have passed, it is resent at 30-minute intervals) until it is sent successfully. Resend continues even if the power is turned OFF and then ON.

No.4

Q: What is the upper limit of the number of COM-LOGs? What is the upper limit of the number of characters of error information displayed in a COM-LOG?

A: Up to 30 log data can be saved. The data size of error information is maximum 128 characters.

No.5

Q: Although Microsoft ISA as a proxy server is introduced, the authentication check is failed. Can E-RDS adopt with Microsoft ISA?

A: E-RDS must comply with "Basic" while "Integrated" authentication is used for Microsoft ISA (as default); therefore, authentication with E-RDS is available if you change the setting to "Basic" authentication on the server.

No.6

Q: Can I turn this machine power off during the e-Maintenance/ imageWARE Remote system operation?

A: While operating the e-Maintenance/ imageWARE Remote system, the power of the device must be ON. If power OFF is needed, do not leave the device power OFF for long time.
It will become "Device is busy, try later" errors if the power supply of network equipment such as HUB is made prolonged OFF.

No.7

Q: Although a Service call error may not be notified to UGW, the reason is what?

A: If a service technician in charge turns off the power supply of this machine immediately after error occurred once, It may be unable to notify to UGW because data processing does not take a time from the controller of this machine to NIC though, the data will be saved on the RAM.
If the power supply is blocked off while starting up, the data will be inevitably deleted.

No.8

Q: How does E-RDS operate while this machine is placed in the sleep mode?

A: While being in Real Deep Sleep, and if data to be sent is in E-RDS, the system wakes up asleep, then starts to send the data to the UGW. The system also waits for completion of data transmission and let the device to shift to asleep status again.
However, transition time to the Real Deep Sleep depends on the device, and the transition to sleep won't be done if the next data transmission will be done within 10 minutes.

No.9

Q: Is E-RDS compatible with Department counter?

A: No, E-RDS does not support Department counter.

No.10

Q: Is there any setting to be made on the device side to enable the service mode menu transmission function? Moreover, what is Service mode menu set as the object of transmission?

A: No steps peculiar to Transmitting Service mode menu. As for the data that applies to transmission of the service mode, see the "Service mode menu Transmission".

No.11

Q: What service browser data is transmitted to UGW by E-RDS in what timing?

A: The service browser data to be transmitted and the transmission timing are shown below.

Transmission timing	Detailed procedure	Transmission information	Error occurs
When the service browser is enabled from the disabled state [OFF]	1) Specify the service browser setting in the service mode menu. 2) Send browser information to UGW. 3) Once obtaining OK response from UGW, enable the service browser mode [ACTIVE]. (To use the setting, it is necessary to reboot this machine)	Service browser mode: [Register] WEB browser option: [ON] or [OFF] according to the license status	Retransmission is not performed. ("Disabling [OFF]" continues to be set.)

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No.12

Q: Can I make another service call request when I have already requested a service call?

A: No, you cannot make another service call request if you have already made a service call request.
Touch the [Cancel] button to cancel the service call which you'd made. Or the service technician performs a service call completion process.

No.13

Q: Is the "Requesting" status cancelled when this machine is rebooted?

A: The requesting status is not cancelled even if the device is rebooted. The information of the notified service call request (the time that the request was made, the service call request description) is also retained during the "Requesting" status.

No.14

Q: Counter information could not be sent at the scheduled send time due to the power of this machine being turned OFF. Will the counter information be sent later when the power of this machine is turned ON?

A: Yes. When a scheduled send such as that for counter could not be executed due to the power of this machine being turned OFF, etc., and the scheduled send time has already passed at power-on, the send is executed immediately.

The following shows data send according to the status of this machine.

Send types	Status of this machine		
	Power ON	Power OFF	Sleep
Scheduled send	Sent	Not sent*1	Sent*2
Immediate send (Service call log / Alarm log / Jam log)	Sent	-	Sent*2

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*1: Immediately sent if the send time has already passed at power-on.

*2: Sent after recovery from sleep mode.

No.15

Q: Some part of information seems to be suppressed as screens passes: Settings/ Registration > Preferences > Network > TCP/ IP Settings, when the device is connected with a PS server unit. How the authentication information such as CA certificate is dealt?

A: The certificate-related items are displayed. Even when the device is connected with a PS Server Unit, E-RDS functions.

Troubleshooting

No.1

Symptom: A communication test (COM-TEST) results NG!

Cause: Initial settings or network conditions is incomplete.

Remedy 1: Check and take actions mentioned below.

1) Check network connections

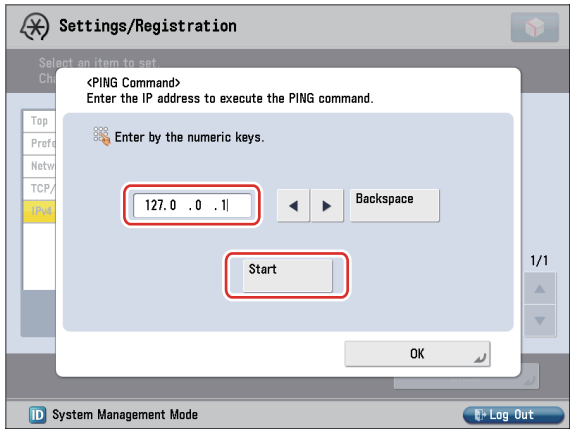
Is the status indicator LED for the HUB port to which this machine is connected ON?

YES: Proceed to Step 2).

NO: Check that the network cable is properly connected.

2) Confirm loop back address (* In case of IPv4)

Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [IPv4 Settings] > [PING Command], enter "127.0.0.1", and touch the [Start] button.



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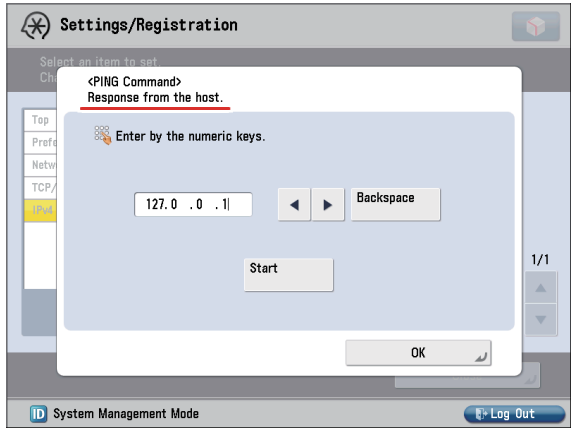
Does the screen display "Response from the host."? (See the next figure.)

YES: Proceed to Step 3).

NO: There is a possibility that this machine's network settings are wrong. Check the details of the IPv4 settings once more.



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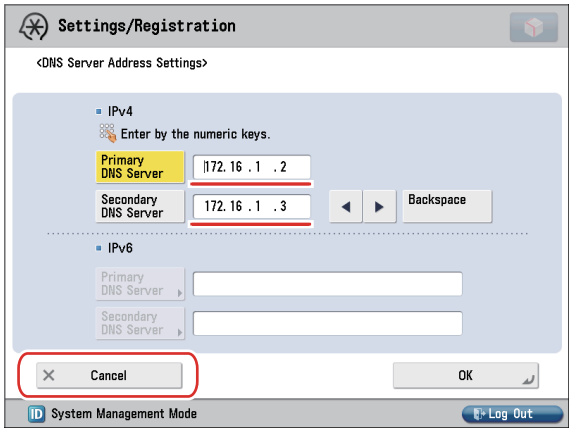
3) Confirmation from another PC connected to same network.
Request the user to ping this machine from a PC connected to same network.
Does this machine respond?
YES: Proceed to Step 4).
NO: Confirm the details of this machine's IP address and subnet mask settings.

4) Confirm DNS connection
(a) Select [Settings/Registration (User Mode)] > [Preferences] > [Network] > [TCP/IP Settings] > [DNS Settings] > [DNS Server Address Settings], write down the primary and secondary addresses of the DNS server, and touch the [Cancel] button.



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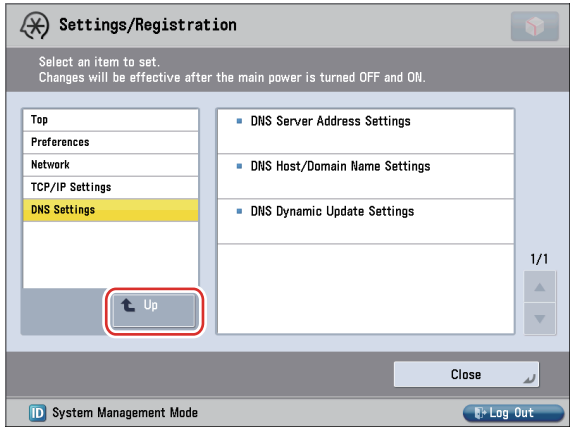
(b) Touch the [Up] button.



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(c) Select [IPv4 Settings] > [PING Command], enter the primary DNS server noted down in step a) as the IP address, and touch the [Start] button.

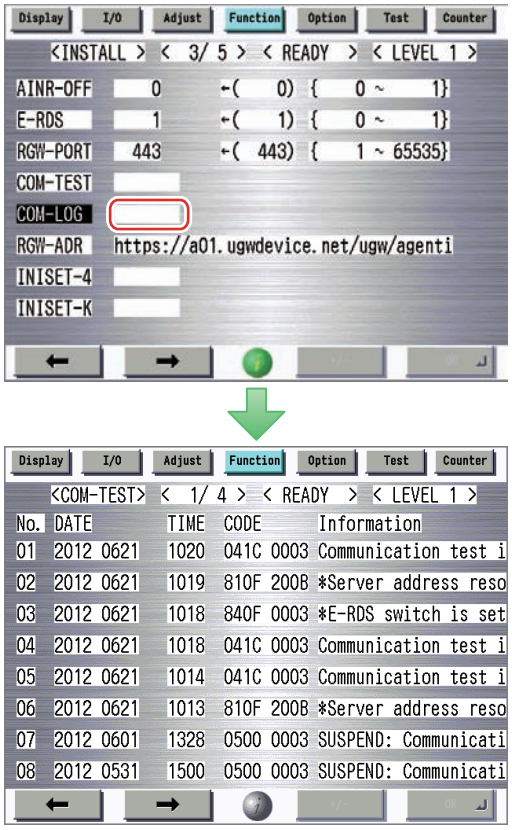
Does the screen display "Response from the host."?
YES: Proceed to Remedy 2.
NO: Enter the secondary DNS server noted down in step a) as the IP address, and then touch the [Start] button.

Does the screen display "Response from the host."?
YES: Proceed to Remedy 2.
NO: There is a possibility that the DNS server address is wrong. Reconfirm the address with the user's system administrator.

Remedy 2: Troubleshooting using communication error log (COM-LOG)

1) Start [Service Mode] at Level 1.

2) Select [COPIER] > [Function] > [INSTALL] > [COM-LOG] and touch the blank field on the right side. The communication error log list screen is displayed.



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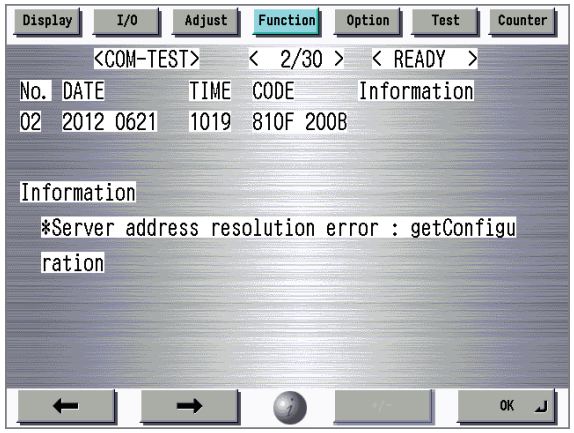
NOTE:
- Only the initial part of error information is displayed in the communication error log list screen.
- "*" is added to the top of the error text in the case of an error in communication test (method name: getConfiguration or communicationTest) only.

3) When each line is selected, the communication error log detailed screen is displayed as shown in the figure below. (Example: No. 02)



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NOTE:
- A detailed description of the error appears below 'Information'. (Max 128 characters)
- Touch the [OK] button to return to the communication error log list screen.

4) When a message is displayed, take an appropriate action referring to "Error code and strings".

No.2

Symptom: A communication test results NG! even if network setting is set properly.

Cause: The network environment is inappropriate, or RGW-ADR or RGW-PORT settings for E-RDS have been changed.

Remedy: The following points should be checked.

1) Check network conditions such as proxy server settings and so on.

2) Check the E-RDS setting values.

- Check the communication error log from COM-LOG.
- Check whether RGW-ADR or RGW-PORT settings has changed. If RGW-ADR or RGW-PORT settings has changed, restore initial values. For initial values, see "Service cautions".

No.3

Symptom: There was a log, indicating "Network is not ready, try later" in error details of COM-LOG list.

Cause: A certain problem occurred in networking.

Remedy: Check and take actions mentioned below.

1) Check networking conditions and connections.

2) Turn on the power supply of this machine and perform a communication test about 60 seconds later.

No.4

Symptom: "Unknown error" is displayed though a communication test (COM-TEST) has done successfully.

Cause: It could be a problem at the UGW side or the network load is temporarily faulty.

Remedy: Try again after a period of time. If the same error persists, check the UGW status with a network and UGW administrator.

No.5

Symptom: Enabling Service Browser (BRWS-ACT) results NG!

Cause: A communication test with UGW has not been performed, or a communication test result is NG!

Remedy: Perform a communication test, and check that the test with UGW finishes successfully.

No.6

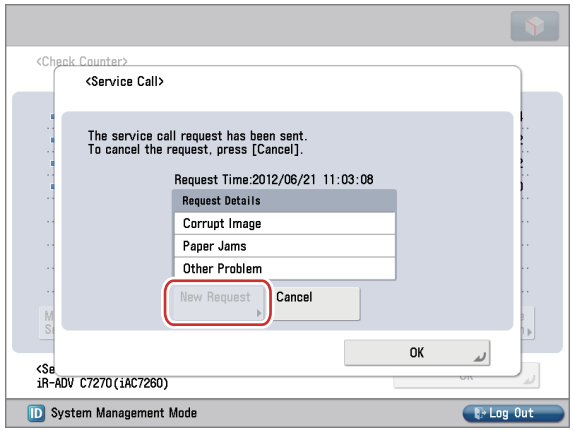
Symptom: The display indicates that the service browser is enabled (BRWS-STS: 1), but the service browser fails to be activated.

Cause: The main power switch of this machine has not been turned OFF and then ON. ON/OFF of the service browser is enabled after reboot.

Remedy: Turn OFF and then ON the main power of this machine.

No.7

Symptom: A service call request cannot be made because the [New Request] button is grayed out.



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Cause: There has been already a service call request.

Remedy: Perform either of the following remedy works:

- Touch the [Cancel] button to cancel the service call request that has been made.
- A service technician performs a complete processing for the service call request that has been made.

No.8

Symptom: Initializing the CA certificate (CA-KEY) results in NG!

Cause: Initialization process of the CA certificate has completed abnormally.

Remedy: Initialize the HDD.

No.9

Symptom: A service call request is failed, and a message "Could not send the service call request" is displayed.

Cause: A communication test with UGW has not been performed, or a communication test result is NG!

Remedy: Perform a communication test, and check that the test with UGW finishes successfully.

No.10

Symptom: When a communication test (COM-TEST) is repeatedly executed, an error occurs.

Cause: During communication conducted after execution of a COM-TEST, another COM-TEST was executed again.

Remedy: When repeatedly executing COM-TEST, execute COM-TEST at intervals of 5 minutes or more.

Error code and strings

The following error information is displayed on the communication error log details screen. (Here, "server" means UGW.)

- The error information are displayed in the following form.
  [*] [Error strings] [Method name] [Error details provided by UGW]

NOTE:
"*" is added to the top of the error text in the case of an error in communication test (method name: getConfiguration or communicationTest) only.

No.	Code	Error strings	Cause	Remedy
1	0000 0000	SUSPEND: mode changed.	Unmatched Operation Mode	Initialize the E-RDS setting (ERDS-DAT).
2	0500 0003	SUSPEND: Communication test is not performed.	Rebooting the device while the communication test had not been performed although E-RDS is enabled.	Perform a communication test (COM-TEST).
3	0xxx 0003	Server schedule is not exist	Blank schedule data have been received from UGW.	Perform and complete a communication test (COM-TEST).
4	0xxx 0003	Communication test is not performed	Communication test has not completed.	Perform and complete a communication test (COM-TEST).
5	84xx 0003	E-RDS switch is setted OFF	A communication test has been attempted with the E-RDS switch being OFF.	Set E-RDS switch (E-RDS) to 1, and then perform a communication test (COM-TEST).
6	8600 0002 8600 0003 8600 0101 8600 0201 8600 0305 8600 0306 8600 0401 8600 0403 8600 0414 8600 0415	Event Registration is Failed	Processing (event processing) within the device has failed.	Turn the device OFF/ ON. If the error persists, replace the device system software. (Upgrade)
7	8700 0306	SRAM version unmatch!	Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of E-RDS.	Turn the device OFF/ ON.
8	8700 0306	SRAM AeRDS version unmatch!	Improper value is written in at the head of the Main Controller PCB 2 SRAM domain of Ae-RDS.	Turn the device OFF/ ON.

No.	Code	Error strings	Cause	Remedy
9	8xxx 0004	Operation is not supported	Method which E-RDS is not supporting attempted.	Contact help desk
10	8xxx 0101	Server response error (NULL)	Communication with UGW has been successful, but an error of some sort has prevented UGW from responding. When (Null) is displayed at the end of the message, this indicates that there has been an error in the HTTPS communication method.	Perform and complete a communication test (COM-TEST).
11	8xxx 0201 8xxx 0202 8xxx 0203 8xxx 0204 8xxx 0206	Server schedule is invalid	During the communication test, there has been some kind of error in the schedule values passed from UGW.	When the error occurs, report the details to the support section. After the UGW side has responded, try the communication test again.
12	8xxx 0207 8xxx 0208	Internal Schedule is broken	The schedule data in the inside of E-RDS is not right.	Perform a communication test (COM-TEST).
13	8xxx 0221	Server specified list is too big	Alarm/Alert filtering error: The number of elements of the list specified by the server is over restriction value.	Alert filtering is not supported by UGW.
14	8xxx 0222	Server specified list is wrong	Alarm filtering error: Unjust value is included in the element of the list specified by the server.	Alert filtering is not supported by UGW.
15	8xxx 0304	Device is busy, try later	The semaphore consumption error at the time of a communication test.	Try again a communication test after a period of time.
16	8xxx 0709	Tracking ID is not match	When upgrading firmware, the TrackingID notified by Updater differs from the thing of UGW designates.	Obtain the sublog, and contact the support department of the sales company.
17	8xxx 2000	Unknown error	Some other kind of communication error has occurred.	Perform and complete a communication test (COM-TEST).
18	8xxx 2001	URL Scheme error(not https)	The header of the URL of the registered UGW is not in https format.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
19	8xxx 2002	URL server specified is illegal	A URL different to that specified by the UGW has been set.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
20	8xxx 2003	Network is not ready, try later	Communication attempted without confirming network connection, just after booting up a device in which the network preparations are not ready.	Check the network connection, as per the initial procedures described in the troubleshooting. Perform a communication test (COM-TEST) about 60 seconds later, after turn on the device.
21	8xxx 2004	Server response error ([Hexadecimal]) [Error detailed in UGW][*1]	Communication with UGW has been successful, but an error of some sort has prevented UGW from responding.	Try again after a period of time. Check detailed error code (Hexadecimal) and [Error details in UGW] from UGW displayed after the message.
22	8xxx 200A	Server connection error	• TCP/IP communication fault • The IP address of device is not set.	• Check the network connection, as per the initial procedures described in the troubleshooting. • When proxy is used, make the settings for proxy, and check the status of the proxy server.
23	8xxx 200B	Server address resolution error	Server address name resolution has failed.	• Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010. • Check that Internet connection is available in the environment.
24	8xxx 2014	Proxy connection error	Could not connect to proxy server due to improper address.	Check proxy server address / port and re-enter as needed.
25	8xxx 2015	Proxy address resolution error	Could not connect to proxy server due to name resolution error of proxy address.	• Check that the proxy server name is correct. If the proxy server name is correct, check the DNS connection, as per the initial procedures described in the troubleshooting. • Specify the IP address as the proxy server name.
26	8xxx 201E	Proxy authentication error	Proxy authentication is failed.	Check the user name and password required in order to login to the proxy, and re-enter as needed.

No.	Code	Error strings	Cause	Remedy
27	8xxx 2028	Server certificate error	• No route certificate installed in device. • Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device. • The date and time of the device is not correct.	• Install the latest device system software. (Upgrade) • Correctly set the date and time of the device. • Execute CLEAR > CA-KEY, and turn OFF and then ON the device. (The CA certificate at the time of shipment is automatically installed.)
28	8xxx 2029	Server certificate verify error	The server certificate verification error occurred.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
29	8xxx 2046	Server certificate expired	• The route certificate registered with the device has expired. • Certificate other than that initially registered in the user's operating environment is being used, but has not been registered with the device. • The device time and date is outside of the certificated period.	Check that the device time and date are correctly set. If the device time and date are correct, upgrade to the latest system software.
30	8xxx 2047	Server response time out	Due to network congestion, etc., the response from UGW does not come within the specified time. (HTTPS level time out)	If this error occurs when the communication test is being run or Service Browser is being set, try again after a period of time.
31	8xxx 2048	Service not found	There is a mistake in the UGW URL, and UGW cannot be accessed. (Path is wrong)	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
32	8xxx 2052	URL error	The data which is not URL is inputted into URL field.	Check that the value of URL of UGW (RGW-ADR) is https://a01.ugwdevice.net/ugw/agentif010.
33	8xxx 2058	Unknown error	SOAP Client fails to obtain SOAP Response. Possibility of a problem in UGW or of a temporary problem in the network load.	Perform and complete a communication test (COM-TEST).
34	8xxx 2063	SOAP Fault	SOAP communication error has occurred.	Check that the value of port number of UGW (RGW-PORT) is 443.
35	xxxx xxxx	Device internal error	An internal error, such as memory unavailable, etc., has occurred during a device internal error phase.	Turn the device OFF/ ON. Or replace the device system software. (Upgrade)
36	xxxx xxxx	SUSPEND: Initialize Failure!	Internal error occurred at the initiating E-RDS.	Turn the device OFF/ ON.

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*1: [Hexadecimal]: indicates an error code returned from UGW.
[Error details in UGW]: indicates error details returned from UGW.

Updater

Overview

Outline

Updater provides functions that enable network communication with Content Delivery System V1.0 (hereinafter CDS) or Local CDS to install firmware, MEAP applications and system options.

- Firmware Installation
  Updater function enables users to distribute firmware through CDS or Local CDS via Internet. Particularly on e-Maintenance/UGW (called NETEYE in Japan)-enabled devices, firmware can be updated remotely, which effectively slashes costs incurred in field services.

- MEAP Application/System Option Installation
  By linking devices to CDS and License Management System (providing the function to manage licenses; hereinafter LMS), applications can be installed in devices via Updater, regardless of those not embedded (MEAP application) or embedded (system options) in devices.

Installing Firmware

With link to Updater, service technicians provide firmware install services in the following 3 methods.

Distribution Method	Download Commanded by:	Update Timing	Downloadable Firmware Versions		
			Previous Ver	Current Ver	Newer Ver
a. UGW-linked Download / Update (Full-remote update)	UGW	Auto	No	Yes*1	Yes*2
b. UGW-linked Download (Remote Distribution / Update)	UGW	Manual	Yes	Yes*1	Yes
c. Manual Download / Update (On-site Update via Service mode)	Local UI	Auto	No	Yes*1	Yes*2
		Manual	Yes	Yes*1	Yes
d. Local CDS Download and Update (iW EMC + DFU Plug-in*3)	iW EMC + DFU Plug-in *3	Auto	No	No	Yes*2
e. Update by the SST	SST	-	Yes	Yes	Yes

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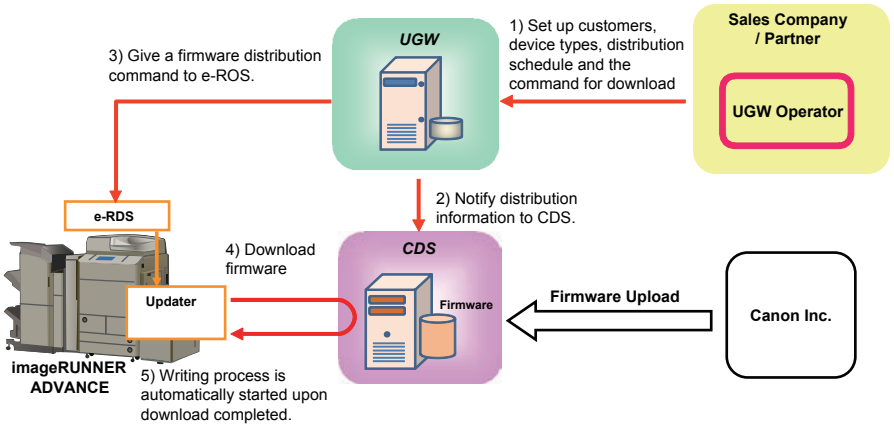
*1:You can select the version allowed Remote Update.

*2: Only the versions for which remote update is allowed can be selected.

*3: Device Firmware Update Plug-in

a. UGW-linked Download and Update (Full-Remote Update)
If the device is linked to UGW and the distribution schedule and update setting are registered on UGW in advance, full remote firmware update is available on an imageRUNNER ADVANCE-series device. Upon downloaded from CDS, the firmware is updated on the device.



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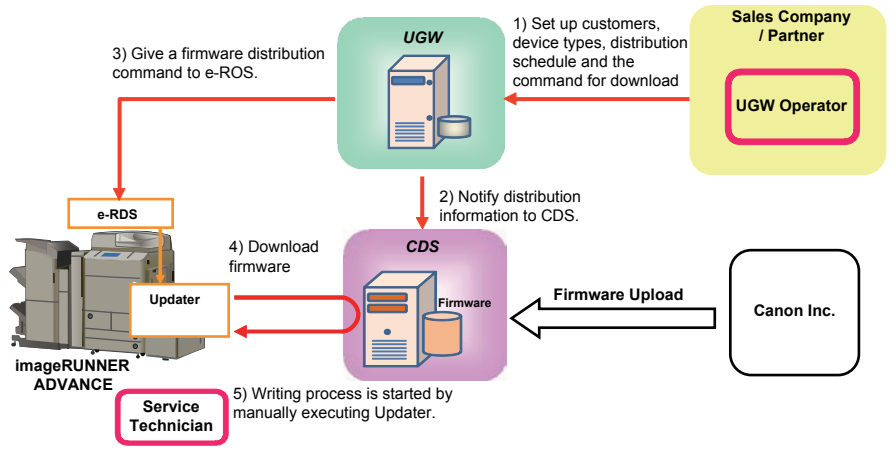
b. UGW-linked Download (Remote Distribution / Update)
If the device is linked to UGW and the distribution schedule is registered on UGW in advance, firmware can be distributed to an imageRUNNER ADVANCE-series device before a service technician actually visits the customer site. This allows the service technician to update the firmware manually immediately after completing device inspection.



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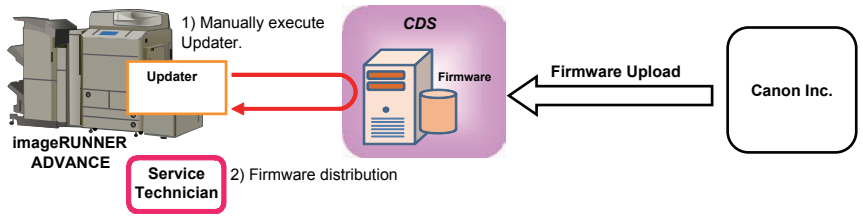
c. Manual Download and Update (On-site Update via Service Mode)

If an imageRUNNER ADVANCE-series device has connection with the external network, a service technician can gain access to CDS via Service mode to download and update firmware. This allows service technicians to update the firmware as needed on the customer site even without PCs.



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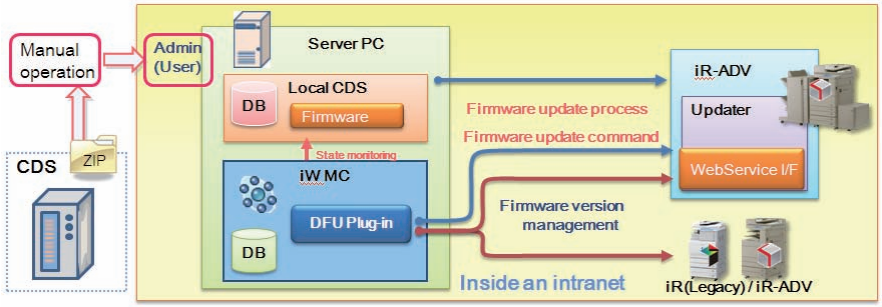
NOTE:
"External network" here means the network connecting the device to CDS via Internet.

d. As preparation for distribution, obtain firmware from the update CDS using iW EMC + Device Firmware Update Plug-in (DFU Plug-in) and register the firmware in the local CDS. In service mode of the host machine, make preparations to allow reception of firmware distributed from the local CDS. The firmware can be updated on the user's intranet by executing the task from Device Firmware Update Plug-in on iW EMC.



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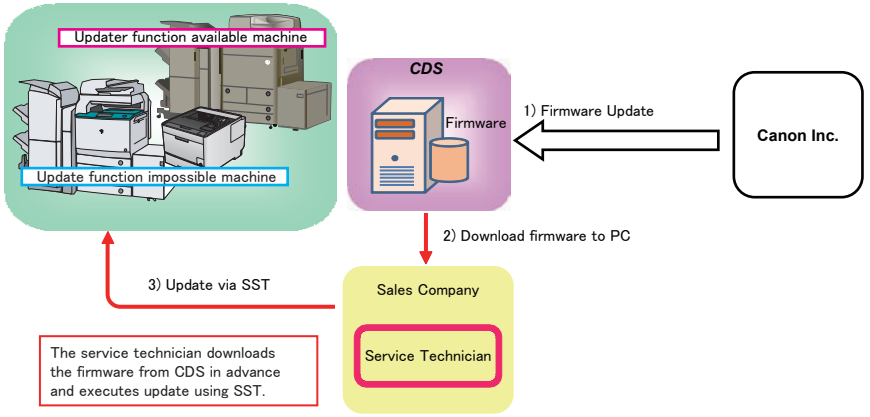
e. SST update

In the cases of devices other than imageRUNNER ADVANCE series and devices of imageRUNNER ADVANCE series that are not connected with external network, the foregoing three methods cannot be used to distribute firmware. Firmware released in the future will be distributed via CDS instead of distribution using a master CD. In the field, these firmware can be downloaded from CDS using a PC web browser.



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NOTE:
Users are able to gain firmware distribution in the following 4 methods by introducing CDS. See User Manual for detailed information.

Distribution Method	Download Commanded by	Update Timing	Downloadable Firmware Versions		
			Previous Ver	Current Ver	Newer Ver
Manual download/ update via Local UI	Local UI	Auto	No	No	Yes *1
		Manual	No	No	Yes *1
Manual download/ upload via Remote UI	Remote UI	Auto	No	No	Yes *1
		Manual	No	No	Yes *1
Special download/ upload via Remote UI	Remote UI	-	Specific version only (Obtain it separately)		
Periodical update via Local UI	Local UI	Auto	No	No	Yes *1

*1: Only the latest version of Remote update-enabled version is downloadable.

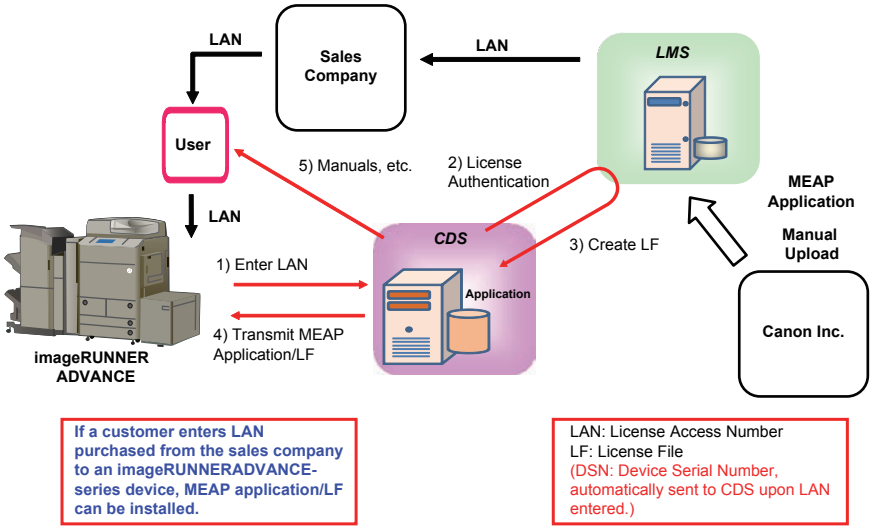
Installing MEAP Application/System Option

The following is the installation method of MEAP application/system option which is enabled by applying CDS.

a. LMS-linked MEAP Application/System Option Installation

If an imageRUNNER ADVANCE-series device is connected to the external network, user or service technician can gain access to CDS from User mode to install a MEAP application or a system option.

Installing MEAP Application



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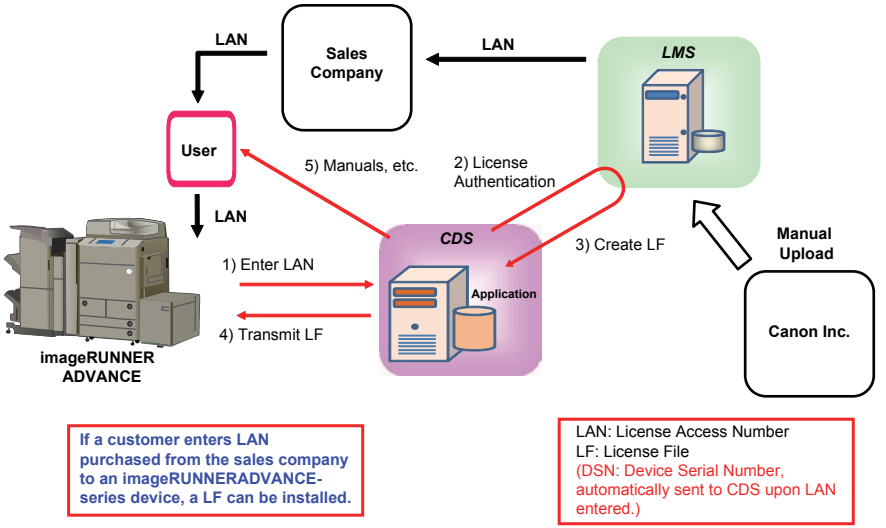
Installing System Option



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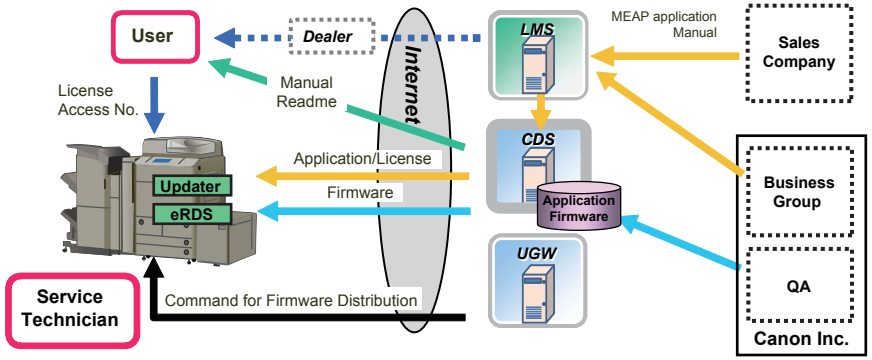
System Configuration

The figure below schematically shows the system configuration.

CDS



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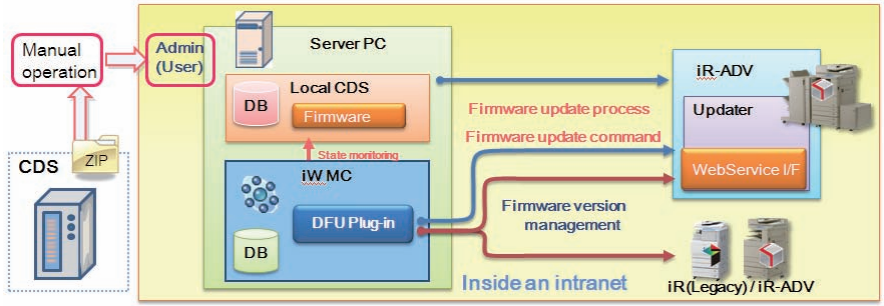
Local CDS



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List of Functions

The matrix below shows the list of functions provided by Updater.

Category	Function	Service Mode	User Mode	Remote UI	UGW-linked
Firmware	Checking firmware compatibility	Yes	-	-	-
	Checking special firmware	Yes	-	-	-
	Checking latest firmware version	-	Yes	Yes	-
	Registering/deleting firmware distribution schedule	Yes	Yes	Yes	-
	Confirming and downloading firmware	Yes	Yes	Yes	Yes
	Updating downloaded firmware	Yes	Yes	Yes	-
	Cancelling downloaded firmware	Yes	Yes	Yes	-
	Acquiring firmware distribution information registered from UGW	-	-	-	Yes
	Notifying firmware version information	-	-	-	Yes
	Periodical update	-	Yes	-	-
MEAP application/ system option	Inquiring license for MEAP application/system option	-	Yes	Yes	-
	Installing MEAP application / system option	-	Yes	Yes	-
System Management	Settings	Yes	-	-	-
	Testing communications	Yes	Yes	Yes	-
	Displaying update logs	Yes	Yes	Yes	-
	Displaying system logs	Yes	Yes	Yes	-
Internal system error notification	Notifying internal system error occurrence to distribution server	Yes	Yes	Yes	Yes

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Local CDS

Category	Function
Firmware	Checking latest firmware version
	Registering/deleting firmware distribution schedule
	Confirming and downloading firmware
	Updating downloaded firmware
MEAP application/ system option	Inquiring license for MEAP application/system option
	Installing MEAP application / system option
System Management	Settings
	Testing communications
	Displaying update logs
	Displaying system logs
Internal system error notification	Notifying internal system error occurrence to distribution server
	xxxxx

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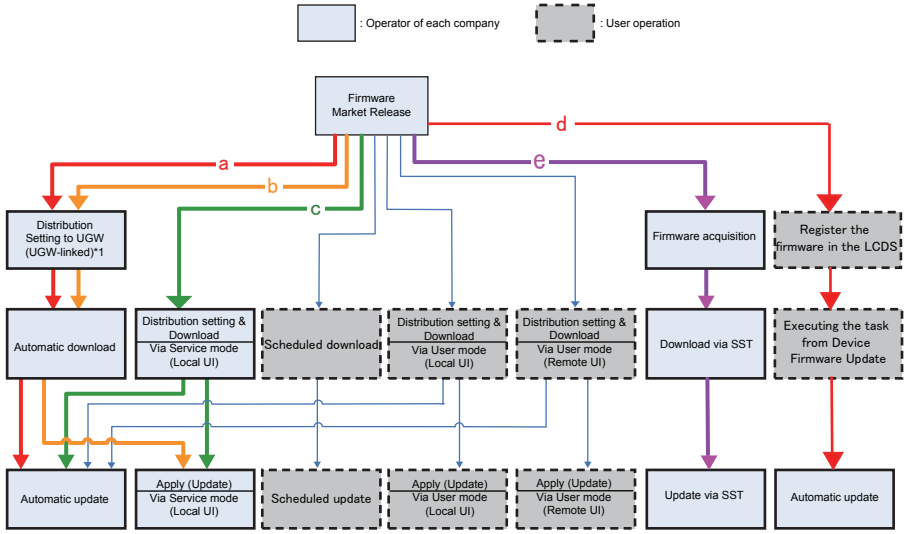
Distribution Flow

Firmware Installation Flow

Service technicians provide firmware install services in the following 4 methods.

a: UGW-linked download and update
b: UGW-linked download
c: Manual download and update
d: Local CDS Download and Update (iW EMC + DFU Plug-in)
e: Update via SST



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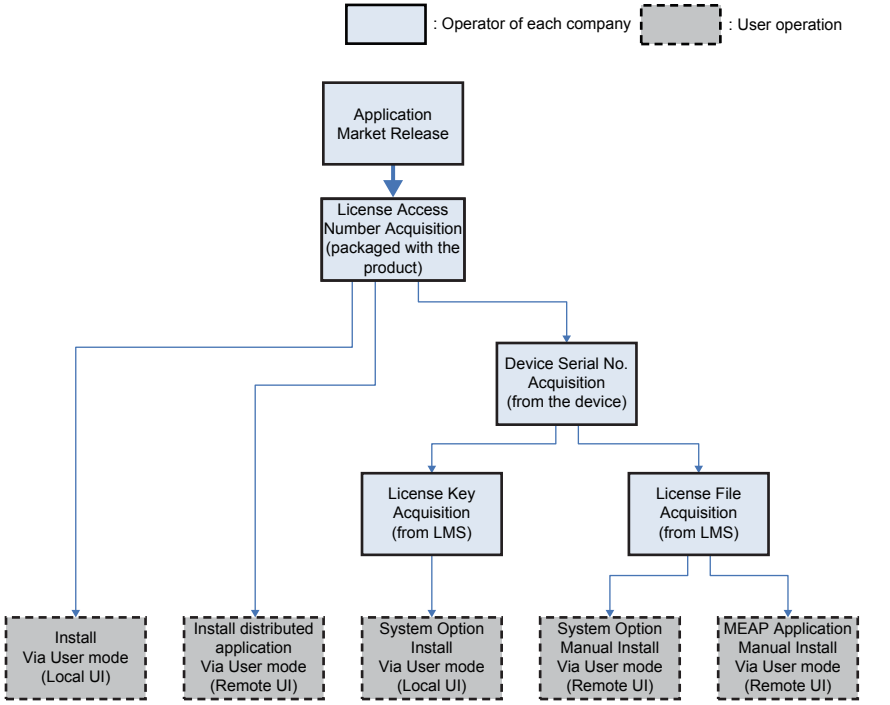
*1: Schedules for UGW-linked distribution are maintained on CDS.

MEAP Application/System Option Installation Flow

MEAP application/system option installation method using service mode is not provided.
Be sure to use the user mode to install.



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Limitations and Cautions

Limitations

Changing Date/Time on Device

When a user changes the date/time setting on the device (including change of the setting according to daylight saving time), the firmware distribution may not be performed as scheduled.
But there is not the problem if it is time adjustment of several minutes with NTP servers.

Change of Setting from Service mode

Any settings from Service mode will be enabled after restarting the device.

Cautions

Concurrent use of Updater functions

Multiple users cannot use Updater functions on a device concurrently by using it together with Remote UI.

Coexistence of Remote UI and other tools

Users logged in SMS (Service Management Service) are unable to use Update functions from Remote UI.

Using Updater function from Remote UI

Upon the following operations done, Updater functions are suspended from Remote UI for certain duration.

- When a user exits Web browser without clicking [Portal] or [Log Out] button in the setting of Remote Login Service via SMS
- When a user exits Web browser without clicking [Portal] button in the setting of not to use Remote Login Service via SMS.
- When a user exits Web browser without clicking [Log out from SMS] or [To Remote UI] button.

Wait for EOJ (end of job) Function

Firmware update will be triggered only after the following jobs are completed.
This is the Updater-specific specification.

Job/Function type	Receiving	Printing	Queued print jobs	Sending	Queued send jobs
COPY	-	Wait for EOJ	Wait for EOJ	-	-
PRINT	Wait for EOJ (end of job)	Wait for EOJ	Wait for EOJ	-	-
FAX	Wait for EOJ	Wait for EOJ	Wait for EOJ	Wait for EOJ	Wait for EOJ
I-FAX Receipt	Cancel processing to trigger update *	Wait for EOJ	Wait for EOJ	Wait for EOJ	Wait for EOJ
Report Print	-	Wait for EOJ	Wait for EOJ	-	-
SEND	-	-	-	Cancel processing to trigger update *	Cancel processing to trigger update *

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*The data are guaranteed even if cut off in the middle of a job.It becomes the recovery object after the device reboot and carry out send / reception again.

Even during transfer, Pull SCAN job processing is cancelled soon after scanning is completed.
Firmware update is cancelled if the jobs are not completed within 10 minutes. If this occurs, the error code, 8x001106, will be returned (different numbers will be shown for x depending on the execution modes).
Firmware update is executed if the jobs stated above are not in the queue.
Follow the shutdown sequence to reboot the device after the firmware is updated.

Preparation

Overview of Preparation

The following should be prepared before using Updater.

- For updating of firmware

Service Mode	COPIER > FUNCTION > INSTALL		COPIER > OPTION > FNC-SW			
	CDS-CTL		CDS-UGW	CDS-FIRM	LOCLFIRM	LCDSFLG
Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Enabling [Local CDS]
UGW-linked Download and Update	Yes	Yes	Yes	-	-	-
UGW-linked Download	Yes	Yes	Yes	-	-	-
Manual Download and Update	Yes	Yes	-	-	-	-
Manual Download and Update via Local UI	Yes	Yes	-	Yes	-	-
Manual Download and Update via Remote UI	Yes	Yes	-	Yes	-	-
Special Download and Update via Remote UI	Yes	-	-	-	Yes	-
Scheduled update via Local CDS	-	-	-	Yes	-	Yes

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- For Install of Application

Installation Method	Network Settings	Enabling [Install Application/ Options] Button of User Mode
LMS-linked Installation	Yes	-
LMA-linked installation via Local UI	Yes	Yes
LMS-linked installation via Remote UI	Yes	Yes

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Setting Sales Company's HQ

When using devices input in the markets listed below, the default setting of Sales Company's HQ should be changed before obtaining firmware distributed from CDS. Unless the setting is changed properly, the desired firmware may not be able to be selected.

Market	Default Setting of Sales Company's HQ	Setting of Sales Company's HQ after Change
Canada	US	CA
Latin America	US/SG	LA
Hong Kong	SG	HK

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Go to the following screen to change the setting of Sales Company's HQ.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER > FUNCTION > INSTALL > CDS-CTL

NOTE:
The list below shows the setting of Sales Company's HQ for CDS-CTS by market.
Check and adhere to the appropriate setting for your market.
<List of Sales Company's HQ and the settings for CDS-CTL>

Japan = JP
USA = US
Singapore = SG
Europe = NL
Korea = KR
China = CN
Hong Kong = HK
Australia = AU
Canada = CA
Latin America= LA

Network Settings

Connecting to External Network

The method of connecting to external network is similar to a normal network connection method. Refer to user manual of the device for details.

NOTE:
- See User Manual for how to connect the device to the external network.
- Before using UGW link or User mode, see the sections below to prepare as required.
  "Enabling UGW Link"
  "Enabling [Update Firmware] Button of User Mode"
  "Enabling [Install Application/Options] Button of User Mode"

“External Network” here means the network connecting the device to CDS via Internet.

Connection to the local CDS

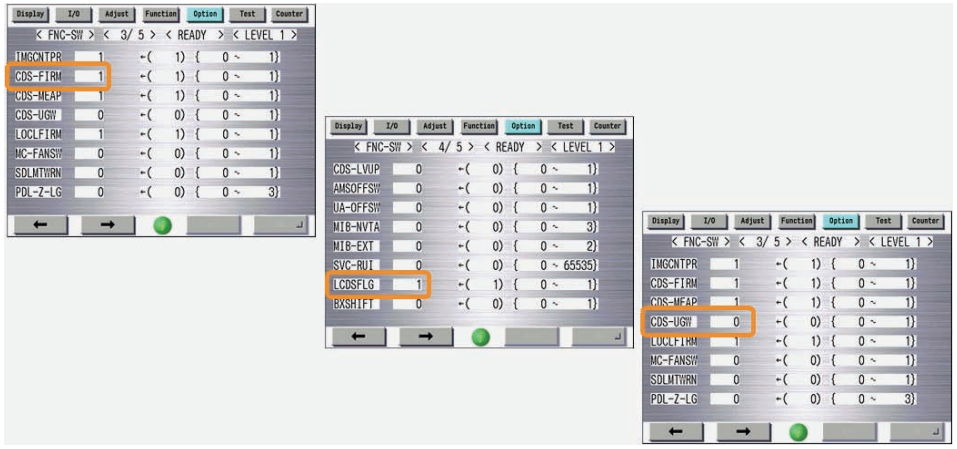
When updating firmware using iW EMC + Device Firmware Update Plug-in (DFU Plug-in), start service mode and enable the following setting.

[COPIER] > [OPTION] > [FNC-SW] > [CDS-FIRM]

[COPIER] > [OPTION] > [FNC-SW] > [LCDSFLG]

Then, disable the following setting.

[COPIER] > [OPTION] > [FNC-SW] > [CDS-UGW]



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[COPIER] > [OPTION] > [FNC-SW]		CDS	Local CDS
CDS-FIRM	To set whether to permit update of the firmware by user (administrator). When "1: Enabled" is set, Updater can be activated from the user mode. 0 to 1 0: Disabled, 1: Enabled	1	1
LCDSFLG	Whether to display or hide the screen for setting the server to be connected 0: Hide 1: Display	0	1
CDS-UGW	To set whether to permit update of the firmware from the UGW server. When "1: Enabled" is set, Updater accepts the operation from the UGW server in cooperation with CDS. 0 to 1 0: Disabled 1: Enabled	1	0

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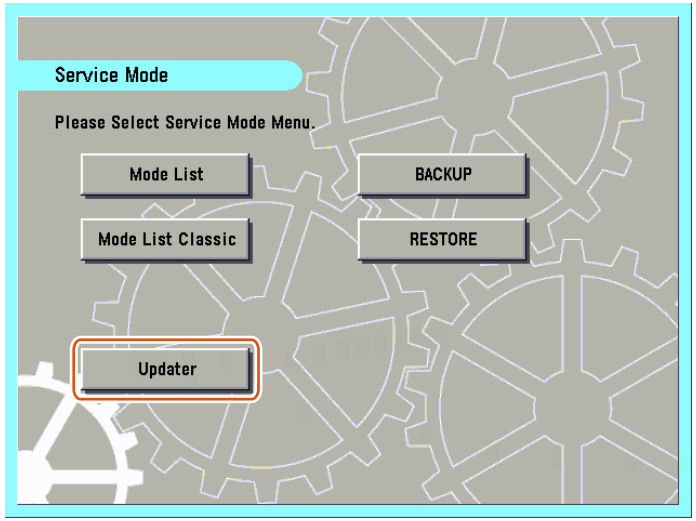
Confirming URL Setting of Distribution Server

This section describes how to confirm the URL setting of the distribution server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



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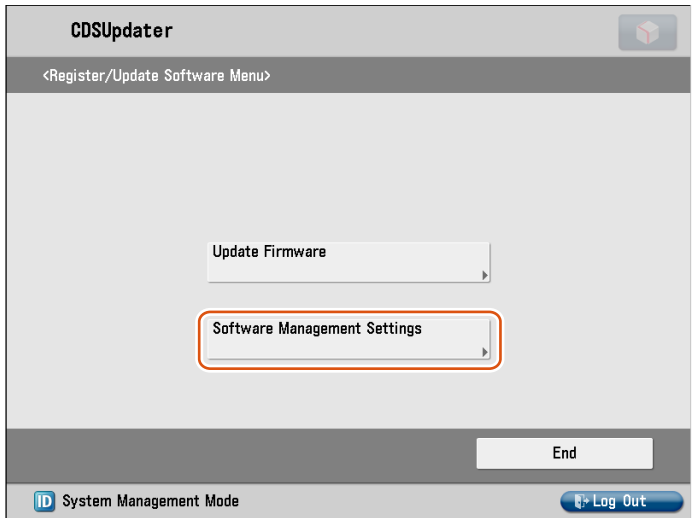
3. Press [Software Management Settings] button.



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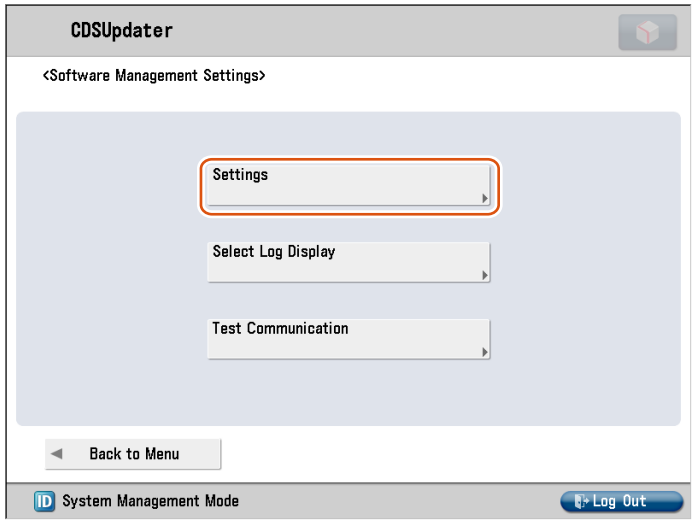
4. Press [Settings] button.



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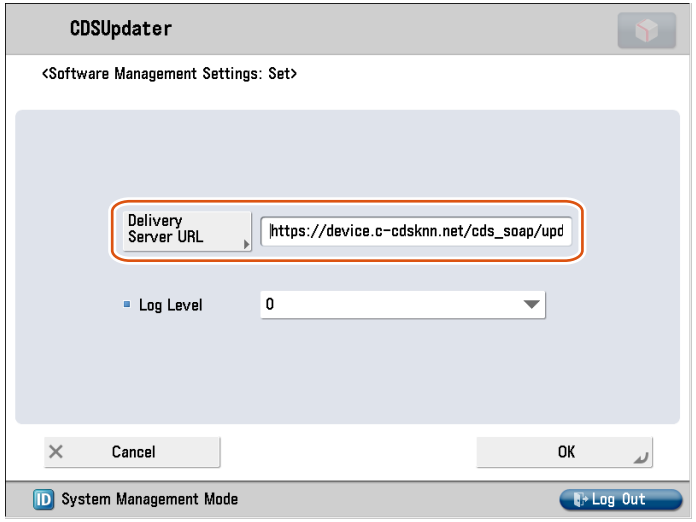
5. Ensure to enter “https://device.c-cdsknn.net/cds_soap/updaterif” in the field beside the [Delivery Server URL] button.
If the URL is not entered or a wrong URL is entered in the field, click [Delivery Server URL] button to show the virtual keypad. Check the URL and enter the correct one.

Delivery Server CDS



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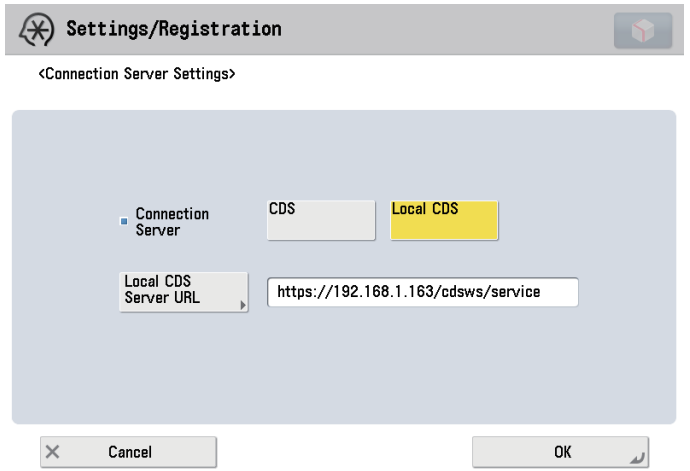
Delivery Server Local CDS



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Note:
- For the URL of the L-CDS server, enter the address beginning with "htts://" specified in L-CDS. If the port number has not been specified, 443 is internally added as the port number.
- To display the button of the local CDS, execute Settings/Registration > Management Settings > License/Other > Register/Update Software. It is not displayed in service mode.

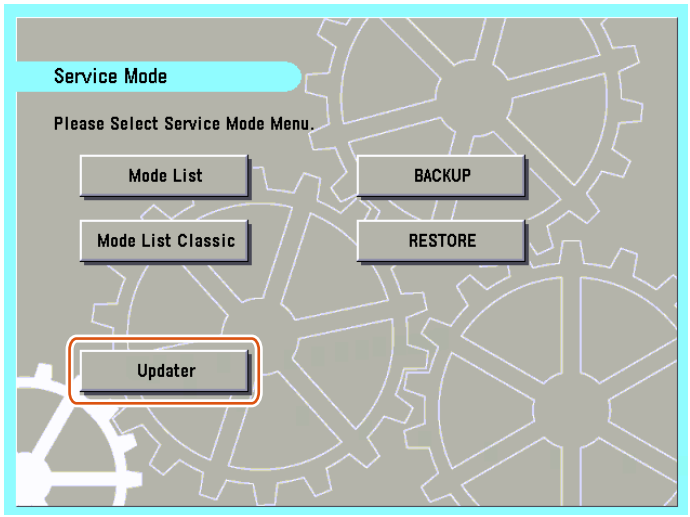
6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

Communication Test

This section describes how to check if the communication is normally done to the distribution server and/or the file server.

Note:
CDS and RDS are another servers.You need the communication test of CDS by all means even if You succeed in a communication test of the RDS.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



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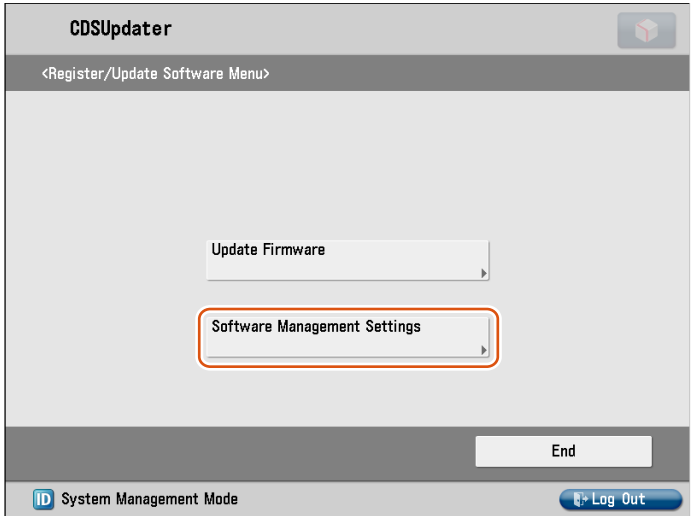
3. Press [Software Management Settings] button.



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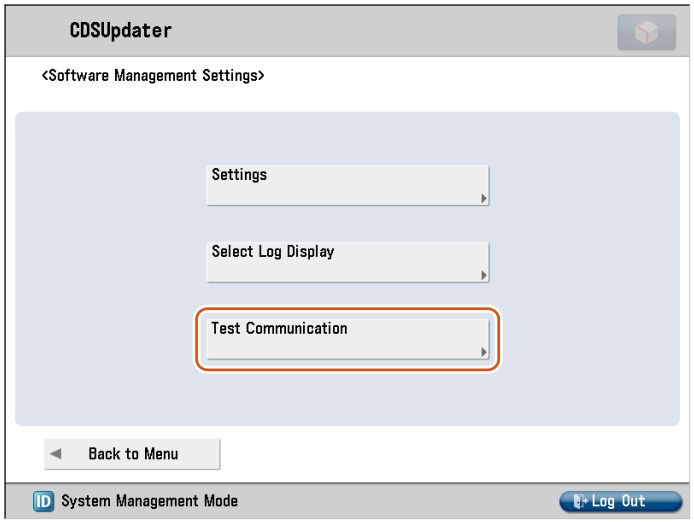
4. Press [Test Communication] button.



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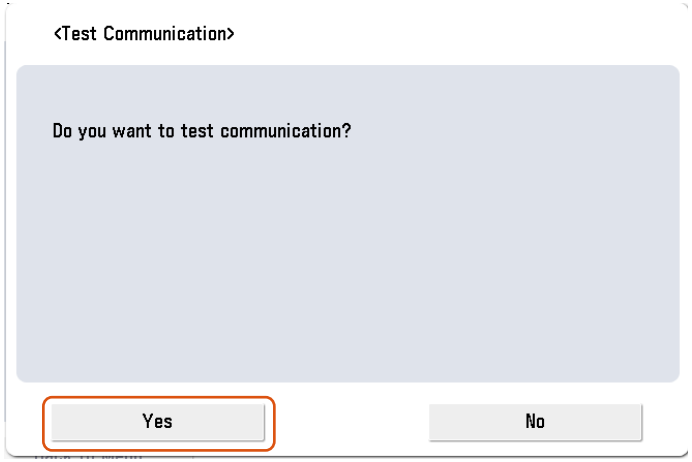
5. Press [Yes] button.



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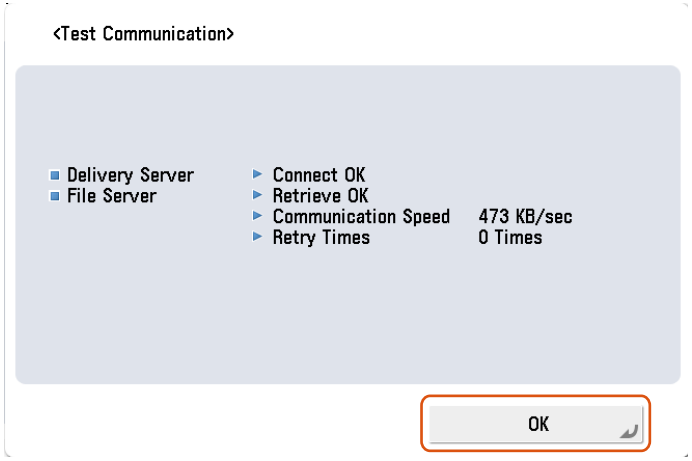
Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).
Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.



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Enabling UGW Link

When installing the firmware in the method of “UGW-linked Download and Update” or “UGW-linked Download”, the following should be set before actually using UGW link.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-UGW (0 -> 1)
	Setting of UGW WebPortal	In [Customer Management] screen, set [Do not distribute firmware] to [Distribute firmware].
Sales Company's HQ	Setting of Authorities on UGW WebPortal	See "Analysis>Firmware Distribution Information" to grant the appropriate authorities to each account.

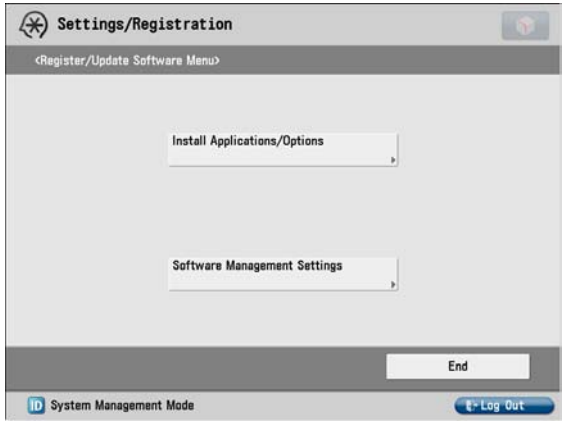
NOTE:
- See “imageWARE Remote Operator’s Manual / e-Maintenance Business Operation Manual“ for how to operate UGW WebPortal.
- [Distribute Firmware] should be set on [Customer Management] screen for staff in charge of setting for [Enter customer information] or [Command for firmware distribution] in order to allow them to select the desired device on [Firmware Distribution Information] screen.
- If [Distribute Firmware] is not shown on [Customer Management] screen of UGW WebPortal, appropriate authorities may not be set to each account in Firmware Distribution Information. Contact the Sales Company HQ concerned for confirmation.

Enabling [Update Firmware] Button of User Mode

To allow users to install firmware using Updater, the setting of firmware installation should be set to ON for users in advance.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-FIRM (0 -> 1)

- User Mode screen for Updater when the setting is not enabled (CDS-FIRM(0)):



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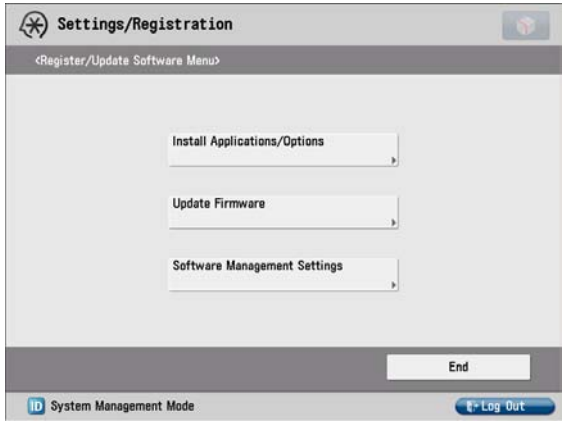
- User Mode screen for Updater when the setting is enabled (CDS-FIRM(1)):



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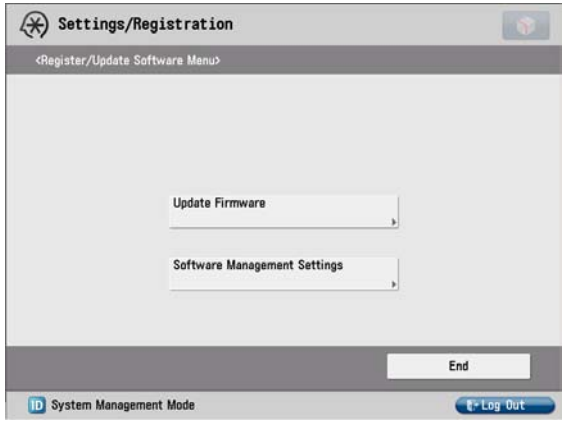
Enabling [Install Application/Options] Button of User Mode

To allow users to install applications using Updater, the setting of application installation should be set to ON for users in advance.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-MEAP (0 -> 1)

- User Mode screen of Updater when the setting is not enabled (CDS-MEAP(0)):



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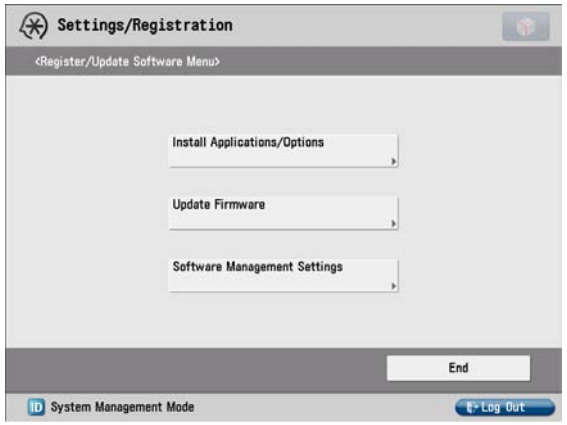
- User Mode screen of Updater when the setting is enabled (CDS-MEAP(1)):



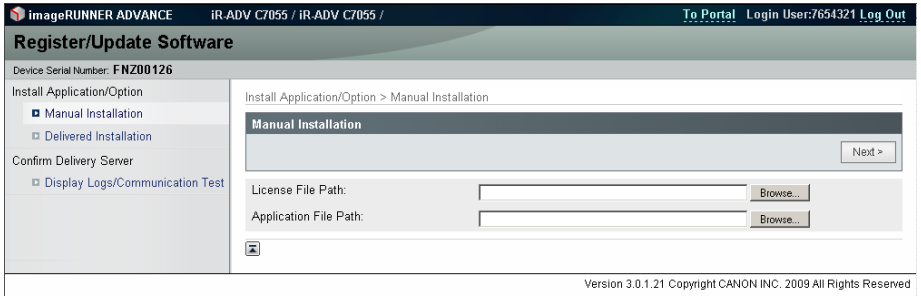
F-2-553

Enabling [Manual Update] Button of User Mode (Remote UI)

To allow users to install firmware from Updater using the file on Local PCs, the setting of firmware installation should be set to ON for users in advance.

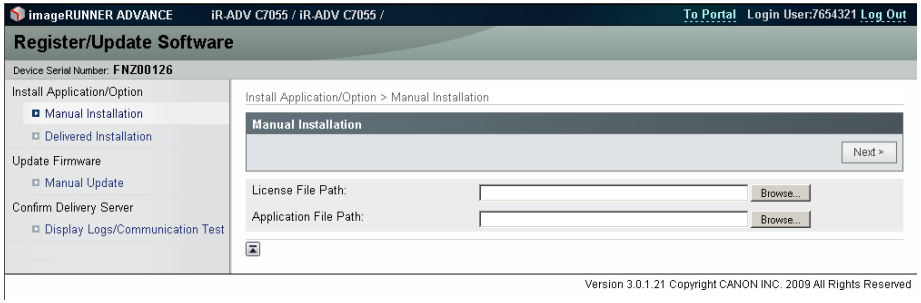
Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >LOCLFIRM (0 -> 1)

- Remote UI screen of Updater when the setting is not enabled (LOCLFIRM (0)):



F-2-554

- Remote UI screen of Updater when the setting is enabled (LOCLFIRM (1)):

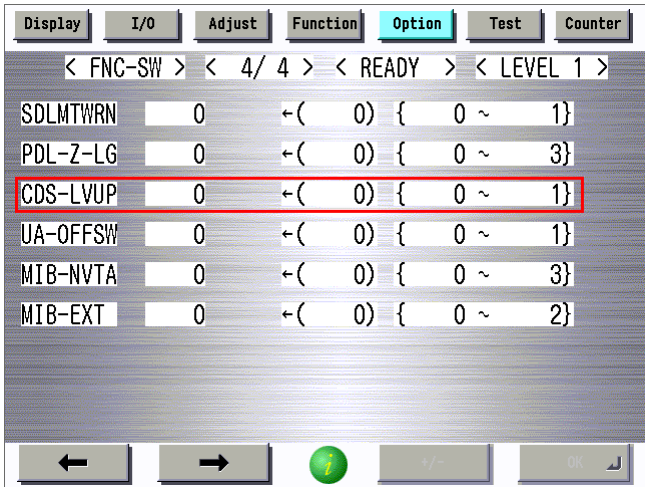


F-2-555

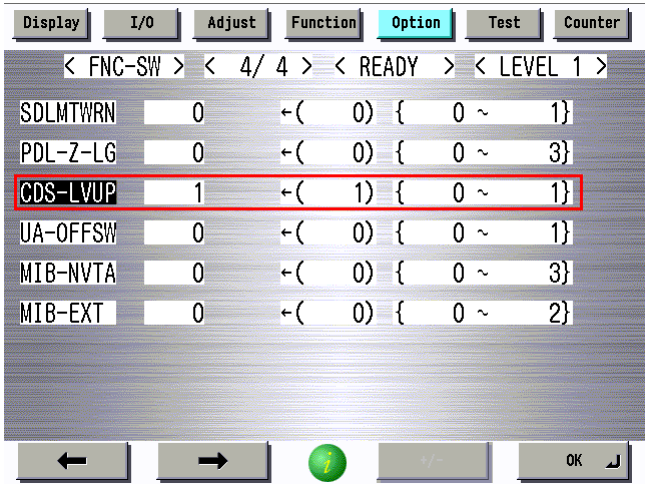
Note:
In order to use manual update of the remote UI, firmware for manual update is required. Since firmware update is not supposed to be done by users at this point, we have no plan to provide dedicated firmware. Just in case it becomes necessary to support such update on the host machine side, the default value of LOCLFIRM in service mode is set to "1". On the RUI, the setting of manual update can be made in the following location.
RUI > Settings/Registration > License/Other > Register/Update Software > Update Firmware > Manual Update

Enabling [Scheduled Update] Button of User Mode

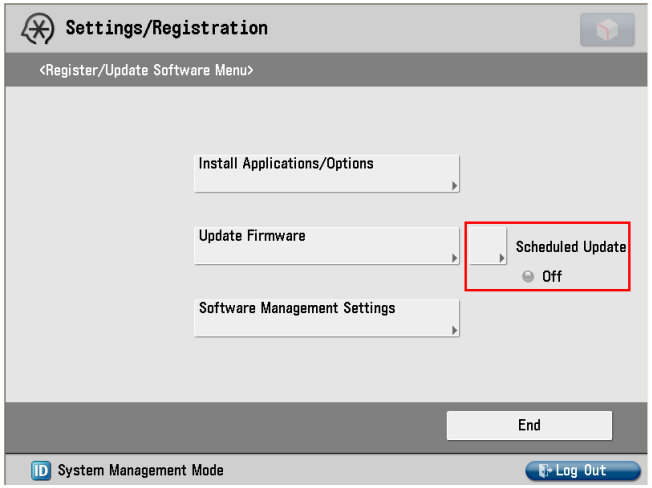
Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-LVUP (0 -> 1)



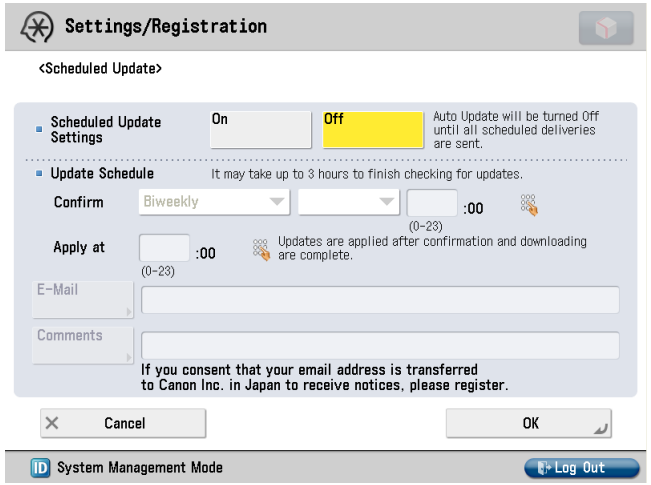
F-2-556



F-2-557


Settings/Registration
<Register/Update Software Menu>
Install Applications/Options
Update Firmware
Scheduled Update
Off
Software Management Settings
End
System Management Mode
Log Out

F-2-558


Settings/Registration
<Scheduled Update>
Scheduled Update Settings
On
Off
Auto Update will be turned Off until all scheduled deliveries are sent.
Update Schedule
It may take up to 3 hours to finish checking for updates.
Confirm
Biweekly
:00
(0-23)
Apply at
:00
(0-23)
Updates are applied after confirmation and downloading are complete.
E-Mail
Comments
If you consent that your email address is transferred to Canon Inc. in Japan to receive notices, please register.
Cancel
OK
System Management Mode
Log Out

F-2-559

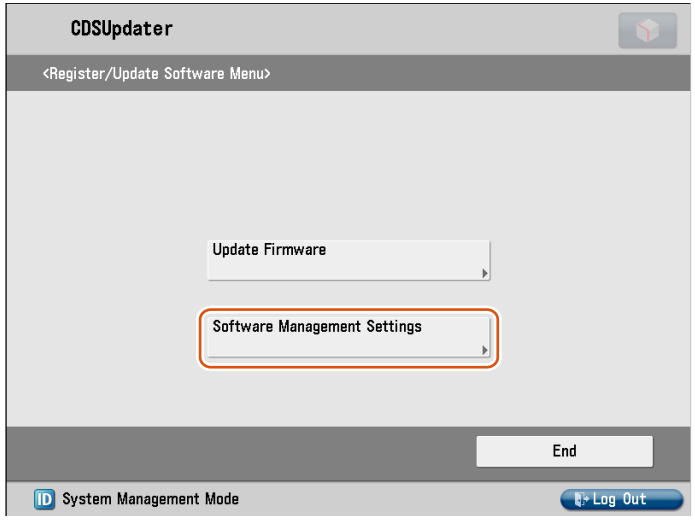
System Management Operations

Various Setting

Setting URL of Distribution Server

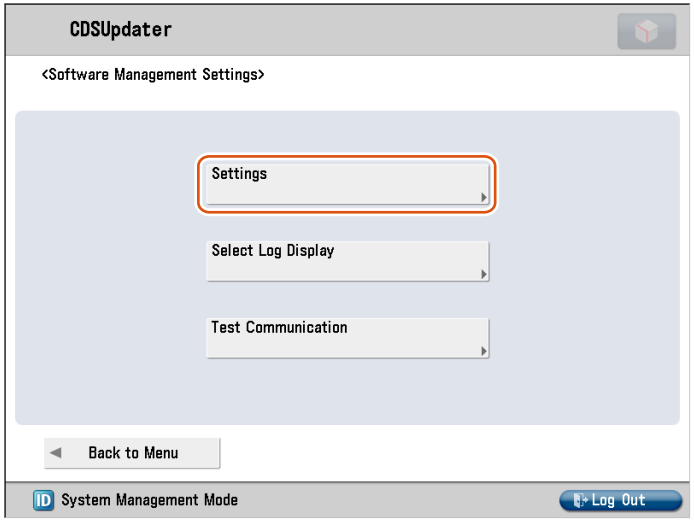
This section describes how to set URL of the distribution server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



F-2-560

4. Press [Settings] button.



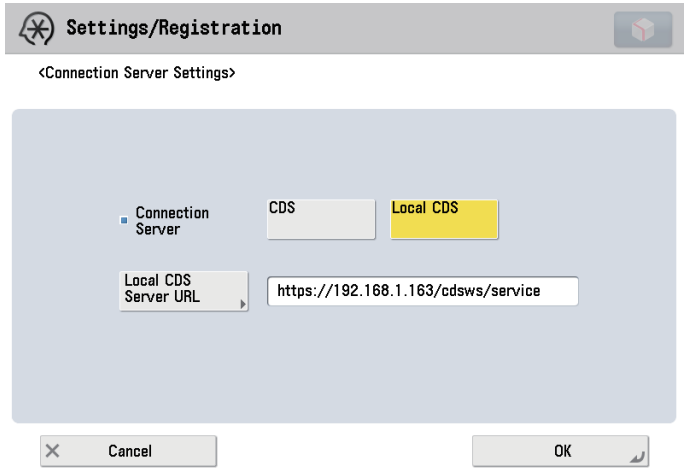
F-2-561

5. Press [Delivery Server URL] to show the virtual keypad. Enter the URL.

- [Delivery Server URL]:
  Enter the "https://device.c-cdsknn.net/cds_soap/updaterif"

F-2-562

- [Delivery Server Local CDS]



F-2-563

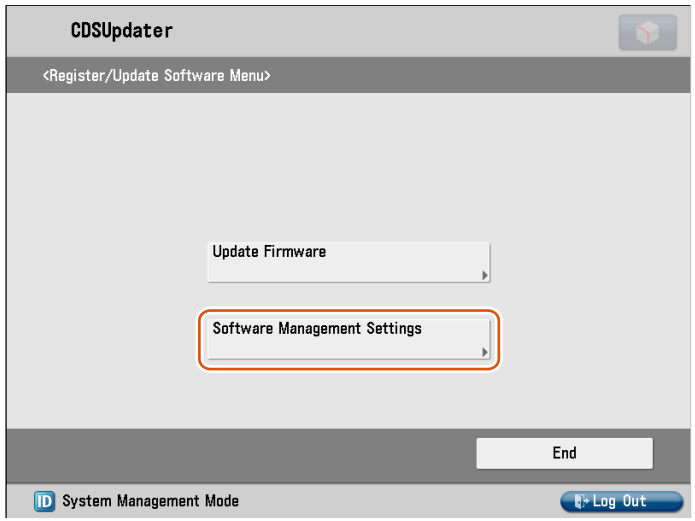
Note:
- For the URL of the L-CDS server, enter the address beginning with "htts://" specified in L-CDS. If the port number has not been specified, 443 is internally added as the port number.
- To display the button of the local CDS, execute Settings/Registration > Management Settings > License/Other > Register/Update Software. It is not displayed in service mode.
- The URL setting of the local CDS server can be made through the following 2 methods:
  - Manual input on this screen
  - Distribute the setting information from Device Firmware Update Plug-in (DFU Plug-in), and remotely make the setting.

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

Setting Log Level

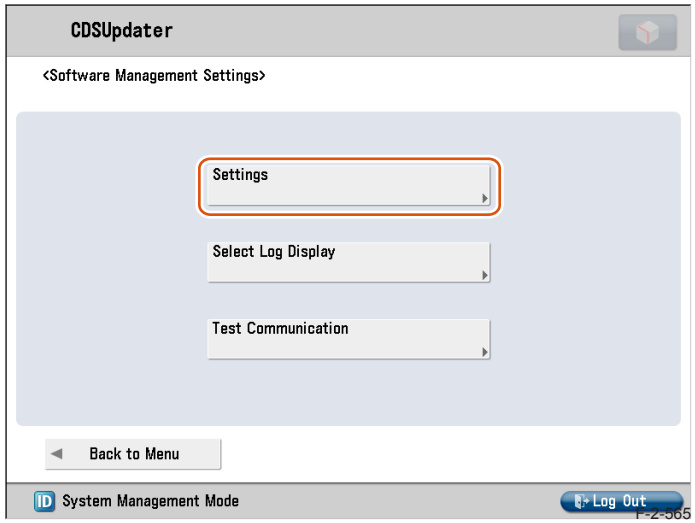
This section describes how to set system log levels.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



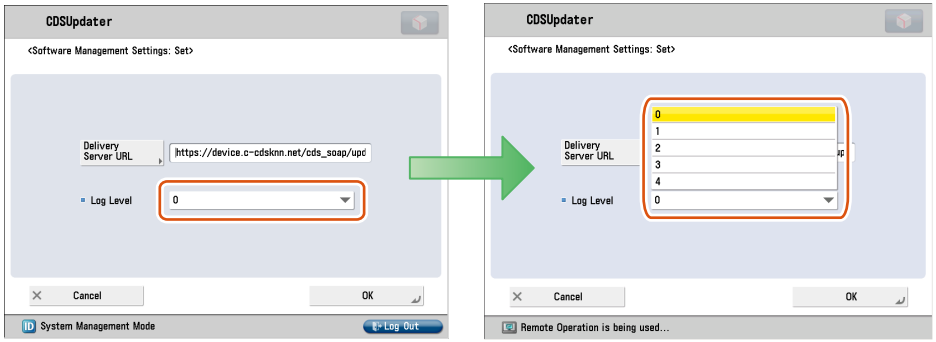
F-2-564

4. Press [Settings] button.



F-2-565

5. Select a log level from [Log Level] dropdown list.



F-2-566

- [Log Level]:
  Select one of 5 levels ranging from [0] to [4].
  See the table below for logs output in each level.

Log Level	Log Output				
	Trace	Information	Important Message	Ordinary Error	System Error
0	-	-	-	-	Yes
1	-	-	-	Yes	Yes
2	-	-	Yes	Yes	Yes
3	-	Yes	Yes	Yes	Yes
4	Yes	Yes	Yes	Yes	Yes

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NOTE:
This list shows the contents of the Log Output.

Log Output	Description
Trace	Detailed logs for debug
Information	Logs related to operations done on the system
Important Message	Update logs output by firmware type Installation logs by MEAP application Logs related to enabled functions by system option
Ordinary Error	Logs for ordinary errors
System Error	Logs for internal system errors

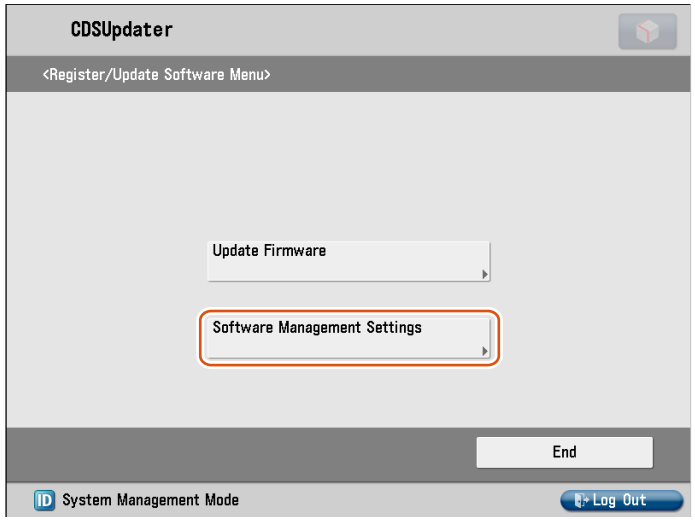
6. Press [OK] button to set the selected log level. Now the log level is successfully set.

Displaying Logs

Update Logs

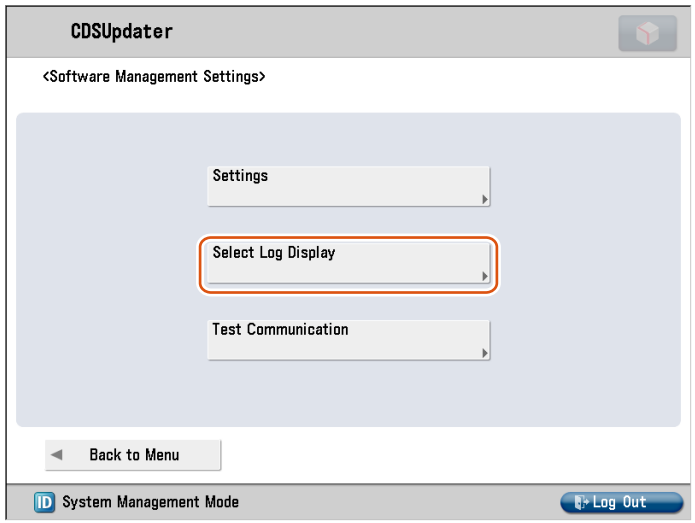
This section describes how to confirm System Option/MEAP Application Installation Logs and Firmware Update Logs.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



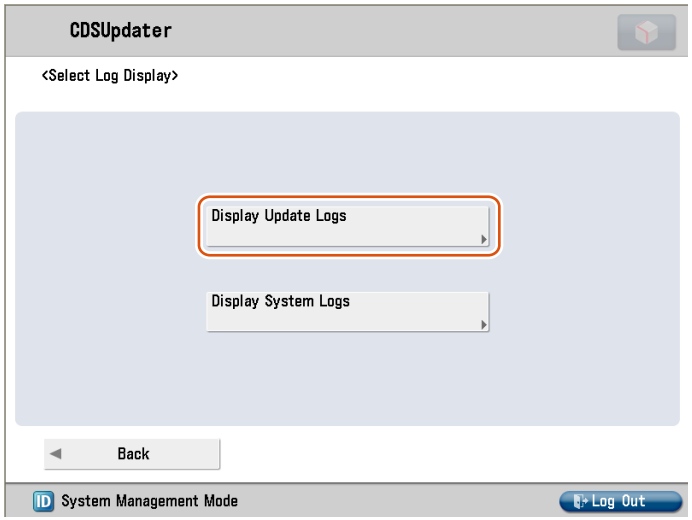
F-2-567

4. Press [Select Log Display] button.



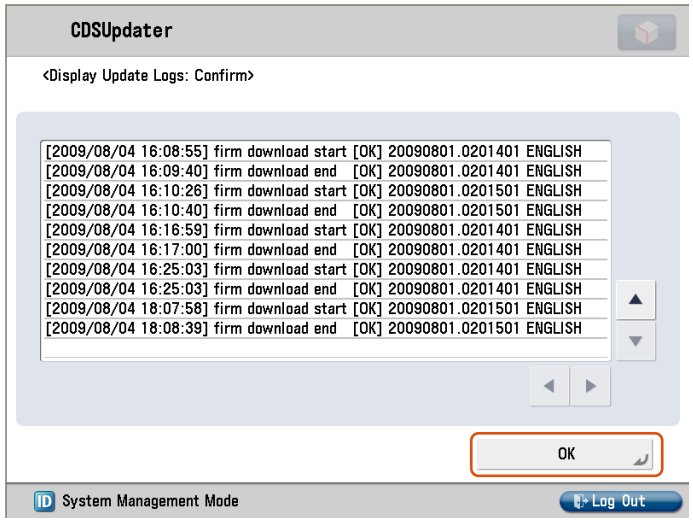
F-2-568

5. Press [Display Update Logs] button.



F-2-569

6. System Option/MEAP Application Installation Logs and Firmware Update Logs are shown. Press [OK] button to exit this operation.



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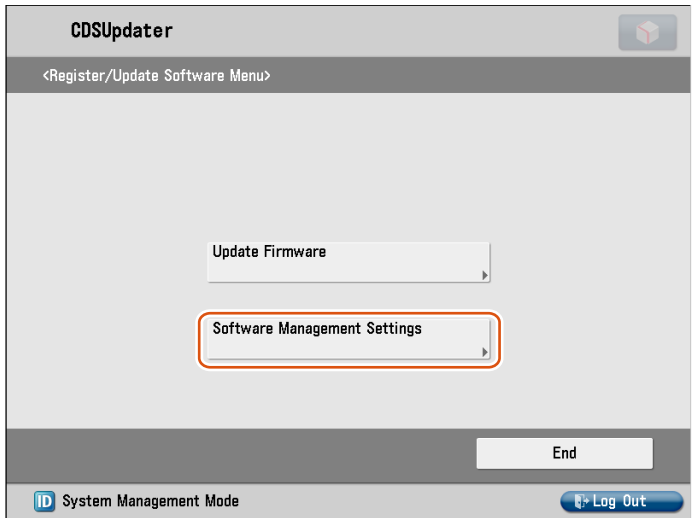
System Logs

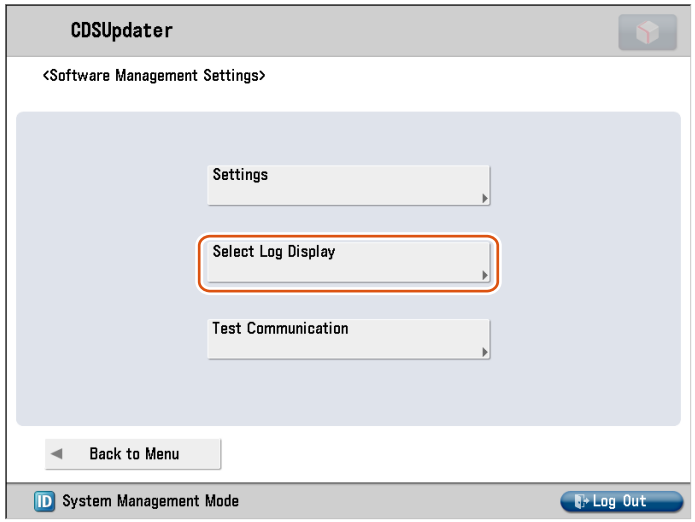
This section describes how to confirm System Logs.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



F-2-571

4. Press [Select Log Display] button.



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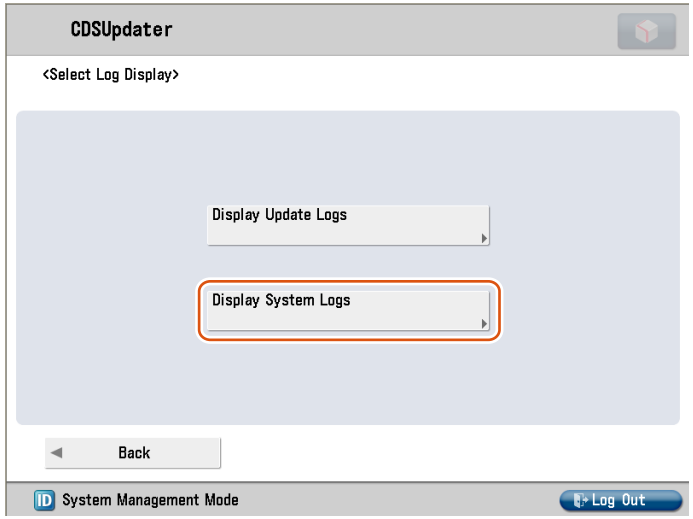
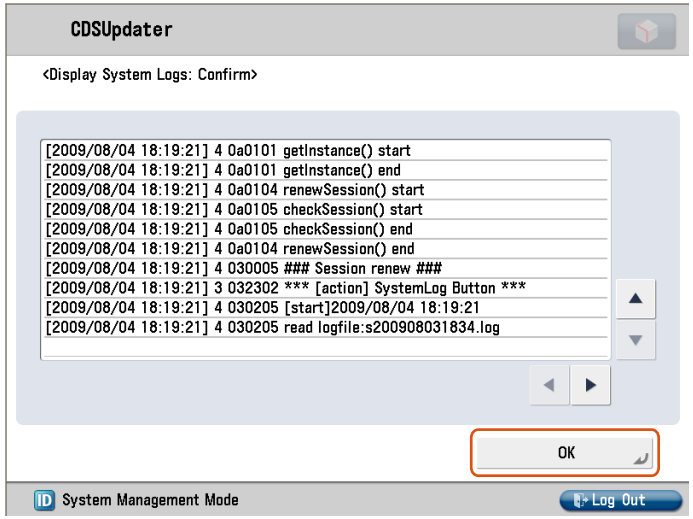
5. Press [Display System Logs] button.



F-2-573

6. Updater internal logs are displayed.
   Press [OK] button to exit this operation.



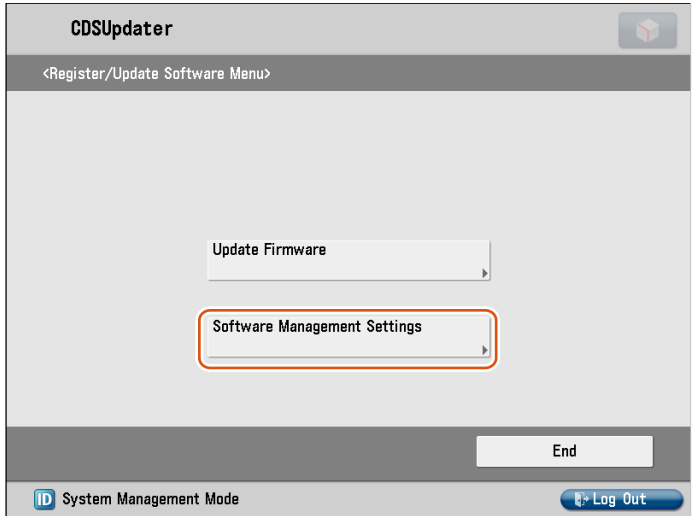
F-2-574

NOTE:
See the section of "Debug Logs" under “Version Upgrade via CDS”, “Version Upgrade” of Chapter 6 “Troubleshooting” of this manual for more detailed information.

Communication Test

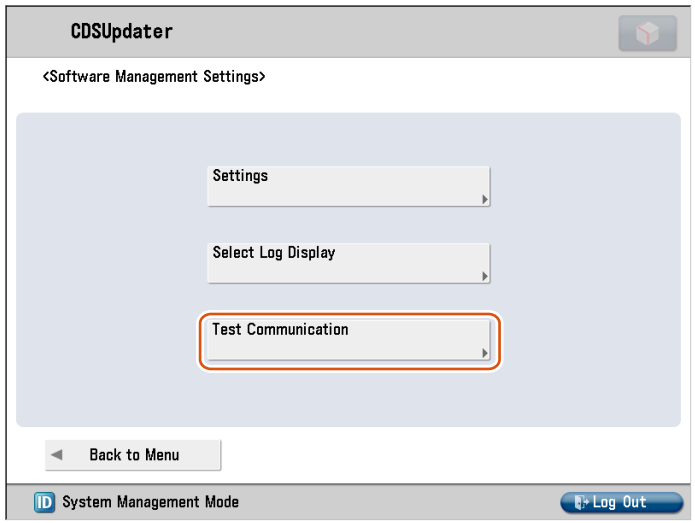
This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.
3. Press [Software Management Settings] button.



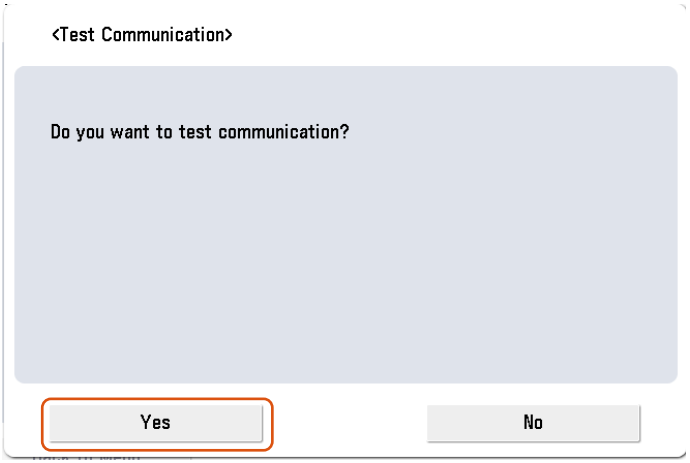
F-2-575

4. Press [Test Communication] button.



F-2-576

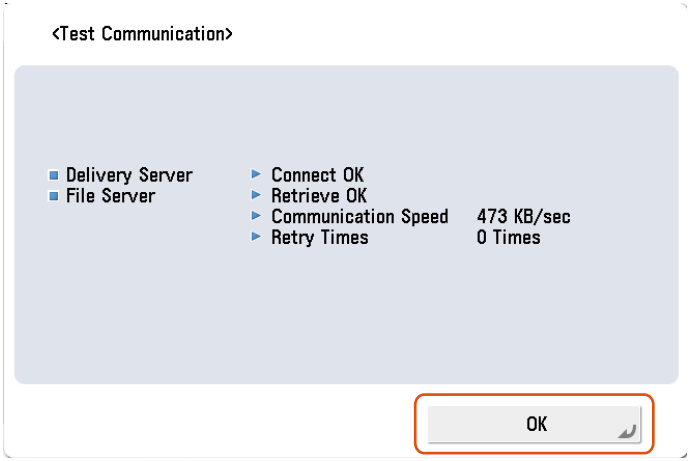
5. Press [Yes] button.



F-2-577

Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).
Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.



F-2-578

Caution:
Carry out the communication test with both Embedded RDS and CDS.

Maintenance

Upgrading Updater

The firmware installed in the device should be also upgraded when upgrading Updater. See the section of “Version upgrade” , Chapter 6 “Troubleshooting” of this manual for how to update firmware.
The setting information and logs (update logs/system logs) are inherited in the upgraded version.

Formatting Hard Disk

Since Updater is a MEAP application, its contents can be temporarily saved in the MEAP application storage area on PC via SST during formatting or replacing HDD. See MEAP Service Manual for further information.
The settings initialized in format or replacement should be restored. See "Preparation" in chapter 2 of this manual for details.

NOTE:
When formatting or replacing HDD, distribution schedule, downloaded firmware (not updated yet) and logs (update/system logs) will be deleted.

How to Replace Controller Boards

The steps are different depending on which of 2 controller boards are to be replaced.

- Main Controller Board PCB 1
  No steps follow.

- Main Controller Board PCB 2 (including SRAM)
  The network and service mode setting should be set again after initialization. See "Preparation" in chapter 2 of this manual for details.

How to Replace Devices

All settings should be set again because no data are inherited. See "Preparation" in chapter 2 of this manual for details.

FAQ

FAQ on Installing Firmware

No.1

Q: Is it also possible to downgrade firmware with using CDS?

A: Firmware can be downgraded in some methods shown in the table below.
If download and update are performed consecutively, firmware can't be downgraded.

Distribution Method	Downgrade Possibility
UGW-linked Download and Update	No
UGW-linked Download	Yes
Manual Download and Update(Timing to Apply : Manual)	Yes
Manual Download and Update(Timing to Apply : Automatic)	No

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No.2

Q: When installing firmware, does it take less time in "manual download and update" compared to "update via SST"?

A: It depends on the number of devices to update firmware.
When updating the firmware on a device, it takes more time in "manual download and update" compared to "update via SST" (It depend on network environment.).
As for the time to update firmware to multiple devices, "manual download and update" takes less time compared to "update via SST" because updating the firmware to multiple devices can be executed simultaneously.

No.3

Q: How can we confirm that the firmware is properly updated after "UGW-linked download and update" done?

A: You can confirm this in E-mail or the Device List on UGW-linked screen.
E-mail to notify firmware update will be sent from CDS server to the addresses set as destinations at the time of distribution setting to notify update completion.
On UGW-linked screen, search the device of your interest on [Select Device] screen to find the distribution status per device as shown in the search result.

No.4

Q: In the course of "UGW-linked download", what will happen if the user downloads the firmware before the service technician update the firmware downloaded with "UGW-linked download" before?

A: The previously downloaded firmware in the method of "UGW-linked download" will be overridden by the subsequently downloaded one.
This is because only one downloaded firmware can be held on the device.
The firmware downloaded in the method of "Service mode-linked download" and "UGW-linked download" can be checked/deleted from User mode, but cannot be updated, so it cannot be updated by the user unnoticed by the service technician.

No.5

Q: What happens if the user registers another distribution schedule when the distribution schedule has been set in "manual download and update"?

A: The distribution schedule subsequently registered by the user will override the existing schedule. This is because only one distribution schedule can be held. Any existing distribution schedule is deleted and the newly registered distribution schedule is made valid.

No.6

Q: How is an individual response edition of firmware distributed?

A: Any individual response edition of firmware can be installed in all the methods provided by service technicians. Before installing the individual response edition, ensure to obtain the ID and password separately.

No.7

Q: If the device is down during firmware update, can the device be started using the older firmware version?

A: No, it is impossible to start the device using older versions. If this occurs, the service technician in charge should reinstall the firmware via SST. See "Troubleshooting on Firmware Installation" in chapter 6 of this manual for details.

No.8

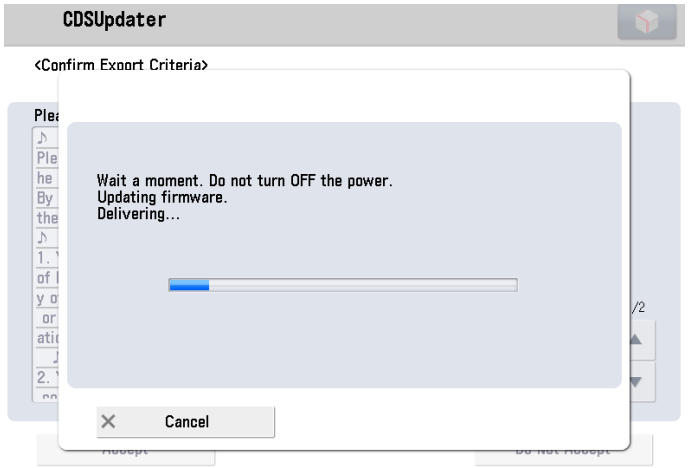
Q: If the device is down during firmware download, is it possible to download the firmware again?

A: Firmware cannot be downloaded again automatically. Instead, the error is notified in E-mail.
The user should register the firmware distribution schedule again accordingly.

No.9

Q: Can we cancel the operation during firmware download?

A: Yes. [Cancel] button is shown.



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No.10

Q: E-mail is sent to users to notify update completion. Can service technicians also receive such a notification?

A: Yes. The notification E-mail is also set for the service technician in charge if the user enters his/her E-mail address at the time of firmware distribution setting.
Multiple E-mail addresses can be entered in the field.Delimit each E-mail address with “,” (comma) or “;” (semicolon) when you enter multiple E-mail addresses in the field.

No.11

Q: How long does the firmware update take?

A: Approx. 30 min. However, this does not include the download time. Download time relies on the network environment.

■ FAQ on the Local CDS Operation Environment

● FAQ on the Number of Devices That Can Be Managed

Q: How many devices can be managed by 1 set of DFU Plug-in + Local CSD?

A: Up to 1000 devices can be registered. However, only up to 5 updaters can access the local CSD at a time.

● FAQ on Firmware Distribution Task

Q: If the version of the firmware on the local CDS is the same with or older than the firmware on the device, what will occur when firmware update is performed? (Will an error occur because firmware to be distributed does not exist?)

A: The firmware will not be updated, and the result will be "normally completed".

● FAQ on Firmware Update Process

Q: Won't timer shutdown occur during a firmware update process?

A: Updater deactivates the timer shutdown function at the start of a firmware update process. Therefore shutdown will not occur during update.

● Operation during Firmware Update

Q: Can the following operations be performed during device firmware update?

- Automatic timer shutdown
- Shutdown from the local UI
- Reboot from the remote UI
- Switching between authentication applications from SMS

A: Updater deactivates the following functions during device firmware update.

- Timer shutdown
- Shutdown from the local UI
- Reboot from the remote UI
- Access to SMS

■ FAQ on Installing MEAP Application/System Option

No.1

Q: What happens if a MEAP application is installed in the system with insufficient HDD free space?

A: An error message is shown. Upon starting installation, the MEAP application checks the required space against free space to judge installation availability.

No.2

Q: Can we cancel the operation during installation of MEAP application?

A: Yes: [Cancel] button is shown.

No.3

Q: Is the device automatically restarted after the system option is enabled?

A: The device is not automatically restarted. Users should restart the device manually.

■ FAQ on General Matters of Updater

No.1

Q: What preparation is needed in each installation method?

A: See the table below for preparation required in each installation method.

- For updating firmware

Service Mode	COPIER > FUNCTION > INSTALL		COPIER > OPTION > FNC-SW			
	CDS-CTL		CDS-UGW	CDS-FIRM	LOCLFIRM	LCDSFLG
Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Enabling [Local CDS]
UGW-linked Download and Update	Yes	Yes	Yes	-	-	-
UGW-linked Download	Yes	Yes	Yes	-	-	-
Manual Download and Update	Yes	Yes	-	-	-	-
Manual Download and Update via Local UI	Yes	Yes	-	Yes	-	-
Manual Download and Update via Remote UI	Yes	Yes	-	Yes	-	-
Special Download and Update via Remote UI	Yes	-	-	-	Yes	-
Scheduled update via Local CDS	-	-	-	Yes	-	Yes

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- For install Application

Installation Method	Network Settings	Enabling [Install Application/ Options] Button of User Mode
LMS-linked Installation	Yes	-
LMA-linked installation via Local UI	Yes	Yes
LMS-linked installation via Remote UI	Yes	Yes

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No.2

Q: How can operations using Updater be masked on the users' side?

A: Be sure to perform the following from the service mode.

- Masking Firmware Installation

Setting Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-FIRM (1 -> 0)
Setting Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >LOCLFIRM (1 -> 0)

- Masking Application Installation

Setting Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-MEAP (1 -> 0)

No.3

Q: Can the communication be cancelled during the communication test?

A: Yes. During the communication test, “Cancel” button is displayed.

3 Periodic service

- Replacement of consumables
- Periodically replaced parts
- Consumable parts
- Periodical maintenance

Replacement of consumables

IR-ADV C9280 PRO/C7280i/C9270 PRO(200V)/ C7270(200V)/C7270i Series

No.	Name	Q'ty
1	Toner Cartridge (Bk)	1
2	Toner Cartridge (C)	1
3	Toner Cartridge (M)	1
4	Toner Cartridge (Y)	1

T-3-1

IR-ADV C9270 PRO(100V)/C7270(100V,120V)/C7260/ C7260i Series

No.	Name	Q'ty
1	Toner Cartridge (Bk)	1
2	Toner Cartridge (C)	1
3	Toner Cartridge (M)	1
4	Toner Cartridge (Y)	1

T-3-2

Periodically replaced parts

Host machine

No.	Parts name	Parts number	Q'ty	Estimated life
1	Toner Filter	FL3-7553	1	500,000 pages
2	Ozone Filter	FL3-4101	2	500,000 pages
3	Dustproof Filter	FL2-0439	1	500,000 pages
4	Primary Charging Assembly	FM0-0892	1	1,400,000 pages
5	Pre-transfer Charging Assembly	FM0-0862	1	1,400,000 pages
6	Primary Charging Wire	FL2-8915	1	150,000 pages
7	Charging Wire Cleaner 1	FL2-7750	1	150,000 pages
8	Charging Wire Cleaner 2	FL3-7560	1	150,000 pages
9	Pre-transfer Charging Wire	FL2-8807	1	150,000 pages
10	Pre-transfer Charging Wire Cleaner 1	FL2-7750	1	150,000 pages
11	Pre-transfer Charging Wire Cleaner 2	FL3-7560	1	150,000 pages
12	Primary Etching Grid	FC8-2295	1	150,000 pages
13	Grid Cleaning Pad	FL3-4090	1	150,000 pages

T-3-3

Consumable parts

Host machine

A* : imaga RUNNER ADVANCE C9280 PRO/C7280i
B* : imaga RUNNER ADVANCE C9270 PRO/C7270/C7270i
C* : imaga RUNNER ADVANCE C7260 /C7260i

No.	Parts name	Series	Parts number	Q'ty	Estimated life
1	Developing Assembly (Bk)		FM0-2709	1	500,000 pages
2	Developing Assembly (Y)		FM0-2706	1	500,000 pages
3	Developing Assembly (M)		FM0-2707	1	500,000 pages
4	Developing Assembly (C)		FM0-2708	1	500,000 pages
5	Cleaner Blade (Bk)	A*	FC8-2281	1	530,000 pages
		B*		1	550,000 pages
		C*		1	500,000 pages
6	Cleaner Scoop-up Sheet (Bk)	A*	FL2-8652	1	530,000 pages
		B*		1	550,000 pages
		C*		1	500,000 pages
7	Edge Scraper 1 (Bk)	A*	FL2-8653	1	530,000 pages
		B*		1	550,000 pages
		C*		1	500,000 pages
8	Edge Scraper 2 (Bk)	A*	FL2-8654	1	530,000 pages
		B*		1	550,000 pages
		C*		1	500,000 pages
9	ITB		FM4-6624	1	550,000 pages
10	ITB Cleaning Blade		FL3-4920	1	200,000 pages
11	Primary Transfer Roller (Y/M/C/Bk)		FC0-2331	1 ea.	550,000 pages
12	Secondary Transfer Inner Roller		FC7-9325	1	550,000 pages
13	Secondary Transfer Outer Roller		FL3-8693	1	550,000 pages
14	Secondary Transfer Static Eliminator		FM3-9841	1	550,000 pages
15	ITB Inner Surface Scraper		FL3-9149	1	550,000 pages
16	Fixing Film Unit		FM0-0413	1	300,000 pages
17	Pressure Roller		FM0-0387	1	300,000 pages
18	Fixing Web		FC0-8030	1	300,000 pages
19	Fixing Heat Soaking Roller		FC0-7967	1	300,000 pages
20	Bearing for Heat Soaking Roller		XG9-0810	2	300,000 pages
21	Pickup Roller (Left/Right Deck)		FC5-2524	1 ea.	500,000 sheets
22	Feed Roller (Left/Right Deck)		FC5-2526	1 ea.	500,000 sheets
23	Separation Roller (Left/Right Deck)		FC5-2528	1 ea.	500,000 sheets
24	Pickup Roller (Cassette)		FC5-2524	1 ea.	500,000 sheets
25	Feed Roller (Cassette)		FC5-2526	1 ea.	500,000 sheets
26	Separation Roller (Cassette)		FC5-2528	1 ea.	500,000 sheets
27	Feed Roller (Multi-purpose Tray)		FB1-8581	1	120,000 sheets
28	Separation Roller (Multi-purpose Tray)		FC6-6661	1	120,000 sheets
29	Waste Toner Container		FM0-4545	1	Change alarm lights at 50,000 pages (200,000 images)

T-3-4

Options

Duplex Color Image Reader Unit-F1

No.	Parts name	Parts number	Q'ty	Estimated life	Remarks
1	Pickup Roller	FC8-5577	1	80,000 sheets	Replaced based on the number of actually fed paper
2	Separation Roller	FL2-9608	1	80,000 sheets	
3	Retard Roller	FB2-7777	1	80,000 sheets	
4	Dust Collecting Sheet	FC8-5633	2	80,000 sheets	
5	Dust Collecting Sheet Type E	FC8-5727	8	80,000 sheets	
6	Stamp	F26-7610	1	7,000 sheets	

T-3-5

Paper Deck Unit-C1

No.	Parts name	Parts number	Q'ty	Estimated life	Remarks
1	Pickup Roller	FF5-7829	1	250,000 sheets	
2	Separation Roller	FF5-7830	1	250,000 sheets	
3	Feed Roller	FF6-1975	1	250,000 sheets	

T-3-6

POD Deck Lite-A1

No.	Parts name	Parts number	Q'ty	Estimated life	Remarks
1	Pickup Roller	FF5-7829	1	500,000 sheets	
2	Separation Roller	FF5-7830	1	500,000 sheets	
3	Feed Roller	FF6-1975	2	500,000 sheets	

T-3-7

Multi Deck-A1

No.	Parts name	Parts number	Q'ty	Estimated life	Remarks
1	Pickup Roller	FF5-7829	3	500,000 sheets	
2	Separation Roller	FB5-6586	3	500,000 sheets	
3	Feed Roller	FF6-1975	3	500,000 sheets	
5	Pickup Clutch	FH6-5145	6	4,000,000 pages	
6	Pickup Roller Release Solenoid	FH6-5146	3	4,000,000 pages	

T-3-8

Staple Finisher-L1

No.	Parts name	Parts number	Q'ty	Estimated life	Remarks
1	Stapler	FM2-0665	1	500,000 sheets	
2	Saddle Stapler	FL2-0846	1	100,000 sheets	
3	Delivery Static Eliminator (L)	FC5-3667	1	1,000,000 sheets	
4	Delivery Static Eliminator (R)	FC5-5571	1	1,000,000 sheets	
5	Inlet Static Eliminator	FL2-0822	1	1,000,000 sheets	
6	Swing Middle Static Eliminator	4F3-0929	1	1,000,000 sheets	
7	Buffer Roller	FC5-3442	1	1,000,000 sheets	
8	Return Roller (Rear)	4A3-0950	1	1,000,000 sheets	
9	Return Roller (Front)	4A3-0951	1	1,000,000 sheets	

T-3-9

Periodical maintenance

Printer engine

Symbols Δ: Cleaning ×: Lubrication □: Adjustment ■: Inspection

No.	Location for maintenance	Number of locations	Interval	Description	Remarks
1	Developing Assembly Cover (C/M/Y)	1 ea.	150K	Δ	
2	Developing Assembly Cover (Bk)	1	150K	Δ	
3	Transparency Sensor	1	150K	Δ	
4	Pre-fixing Feed Belt	1	550K	Δ	Specified in the number of sheets on a A4 size conversion basis
5	Post-secondary Transfer Sensor	1	550K	Δ	
6	Registration Sensor	1	550K	Δ	
7	Paper Width Sensor	4	550K	Δ	
8	ITB Drive Roller	1	550K	Δ	
9	ITB Steering Roller	1	550K	Δ	
10	Post Upper Duct	1	150K	Δ	
11	Shield Plate (Primary Charging Assembly)	1	150K	Δ	
12	Shield Plate (Pre-transfer Charging Assembly)	1	150K	Δ	
13	Developing Lower Toner Tray	1	500K	Δ	
14	Catch Sheet	1 ea.	150K	Δ	
15	Drum Heater	1	500K	×/Δ	

T-3-10

Reader

Symbols Δ: Cleaning ×: Lubrication □: Adjustment ■: Inspection

No.	Location for maintenance	Number of locations	Interval	Description	Remarks
1	Surface of the Original Glass (Large)		Whenever needed	Δ	Including the position of the White Plate on the back surface of the glass
2	Surface/rear surface of the Original Glass (Small)		Whenever needed	Δ	
3	Scanner Rail		Whenever needed	Δ/×	

T-3-11

ADF

Symbols Δ: Cleaning ×: Lubrication □: Adjustment ■: Inspection

No.	Location for maintenance	Number of locations	Interval	Description	Remarks
1	Post-separation Sensor	1	160K sheets or 12 months	Δ	• Scanner Sensor only
2	Post-separation Sensor 2	1	160K sheets or 12 months	Δ	• Cleaned based on the number of actually fed paper
3	Post-separation Sensor 3	1	160K sheets or 12 months	Δ	
4	Lead Sensor	1	160K sheets or 12 months	Δ	
5	Registration Sensor	1	160K sheets or 12 months	Δ	
6	Delivery Sensor	1	160K sheets or 12 months	Δ	
7	Registration Roller	1	80K sheets or 6 months	Δ	
8	Lead Roller 1	1	80K sheets or 6 months	Δ	
9	Lead Roller 2	1	80K sheets or 6 months	Δ	
10	Lead Roller 3	1	80K sheets or 6 months	Δ	
11	Pullout Roller	1	80K sheets or 6 months	Δ	
12	Feed Roller	1	80K sheets or 6 months	Δ	
13	Delivery Roller	1	80K sheets or 6 months	Δ	
14	Rollers/Slave Rollers	-	80K sheets or 6 months	Δ	
15	Scrapers	-	80K sheets or 6 months	Δ	
16	ADF height adjustment	-	80K sheets or 6 months	□	Adjustment

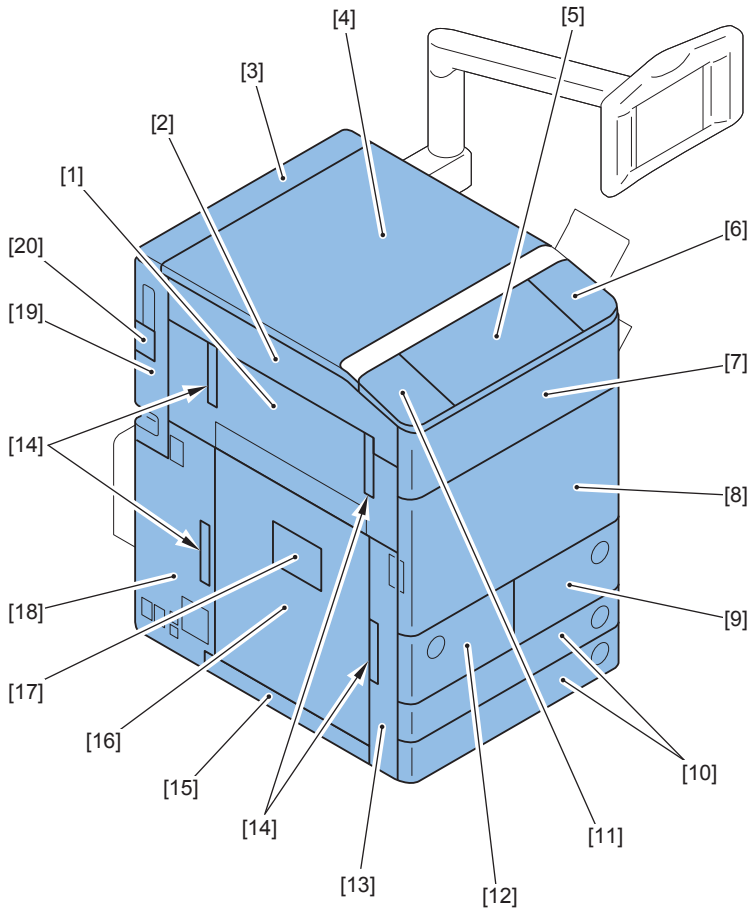
T-3-12

4 Parts Replacement and Cleaning

- List of Parts
- Main Controller System
- Laser Exposure System
- Image Formation System
- Fixing System
- Pickup Feed System
- External Auxiliary System
- Options

List of Parts

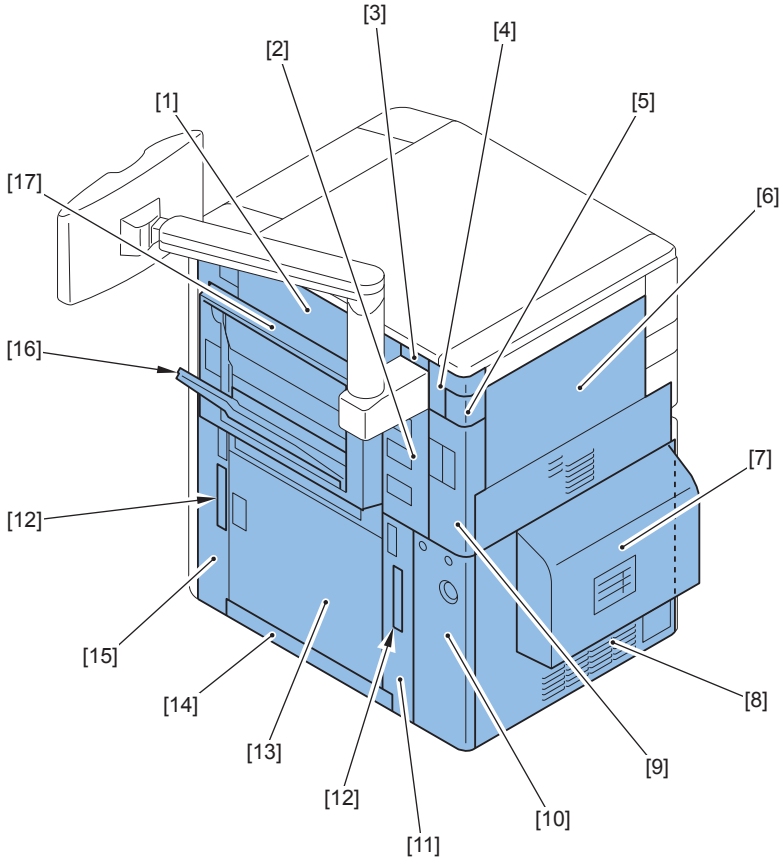
List of External / Internal Cover



F-4-1

Key No.	Name	Reference
[1]	Left Middle Cover	(Refer to page 4-345)
[2]	Left Upper Cover	(Refer to page 4-344)
[3]	Box Upper Cover	(Refer to page 4-343)
[4]	Upper Cover	-
[5]	Upper Middle Cover	-
[6]	Upper Right Cover	-
[7]	Front Upper Cover	(Refer to page 4-339)
[8]	Front Cover	-
[9]	Deck Right Cover	-
[10]	Cassette Front Cover	-
[11]	Upper Left Cover	-
[12]	Deck Left Cover	-
[13]	Left Lower Cover 2	-
[14]	Handle Cover	-
[15]	Left Lower Cover 1	-
[16]	Reverse Door Cover	-
[17]	Reverse Door Face Cover	-
[18]	Left Lower Cover 3	(Refer to page 4-345)
[19]	Box Left Cover	-
[20]	Box Left Connector Cover	-

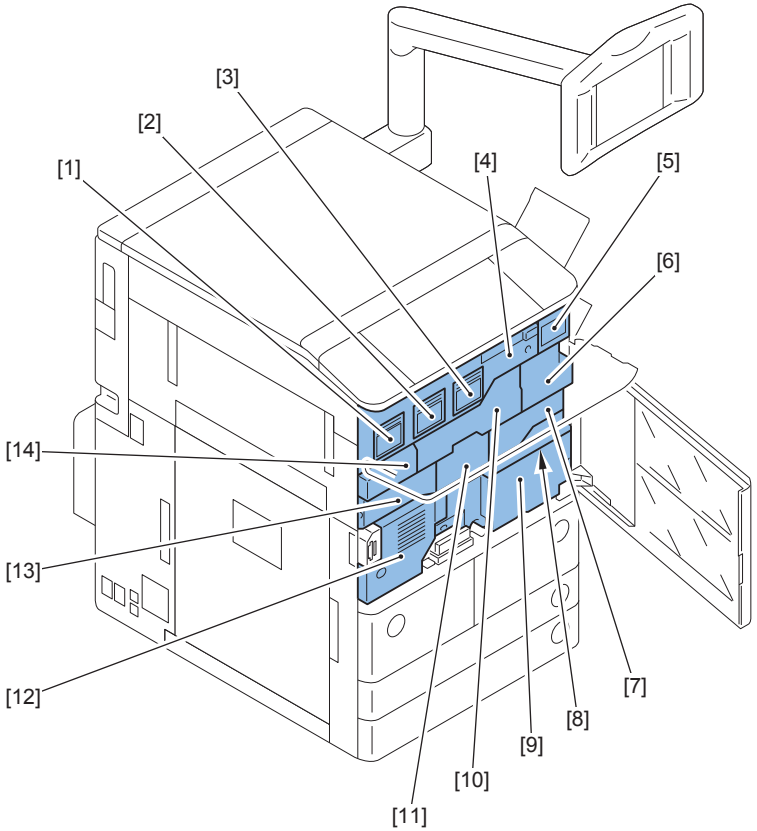
T-4-1



F-4-2

Key No..	Name	Reference
[1]	Right Upper Cover 1	(Refer to page 4-341)
[2]	Right Middle Cover	-
[3]	Right Upper Cover 2	(Refer to page 4-342)
[4]	Box Right Cover	(Refer to page 4-342)
[5]	Box Right Connector Cover	-
[6]	Rear Upper Cover	-
[7]	Noise Reduction Cover	-
[8]	Rear Lower Cover	(Refer to page 4-346)
[9]	HDD Cover	-
[10]	Waste Toner Container Cover	-
[11]	Right Lower Cover 3	-
[12]	Handle Cover	-
[13]	Vertical Path Cover	-
[14]	Right Lower Cover 1	-
[15]	Right Lower Cover 2	-
[16]	Multi-purpose Tray	-
[17]	Multi-purpose Tray Cover	-

T-4-2

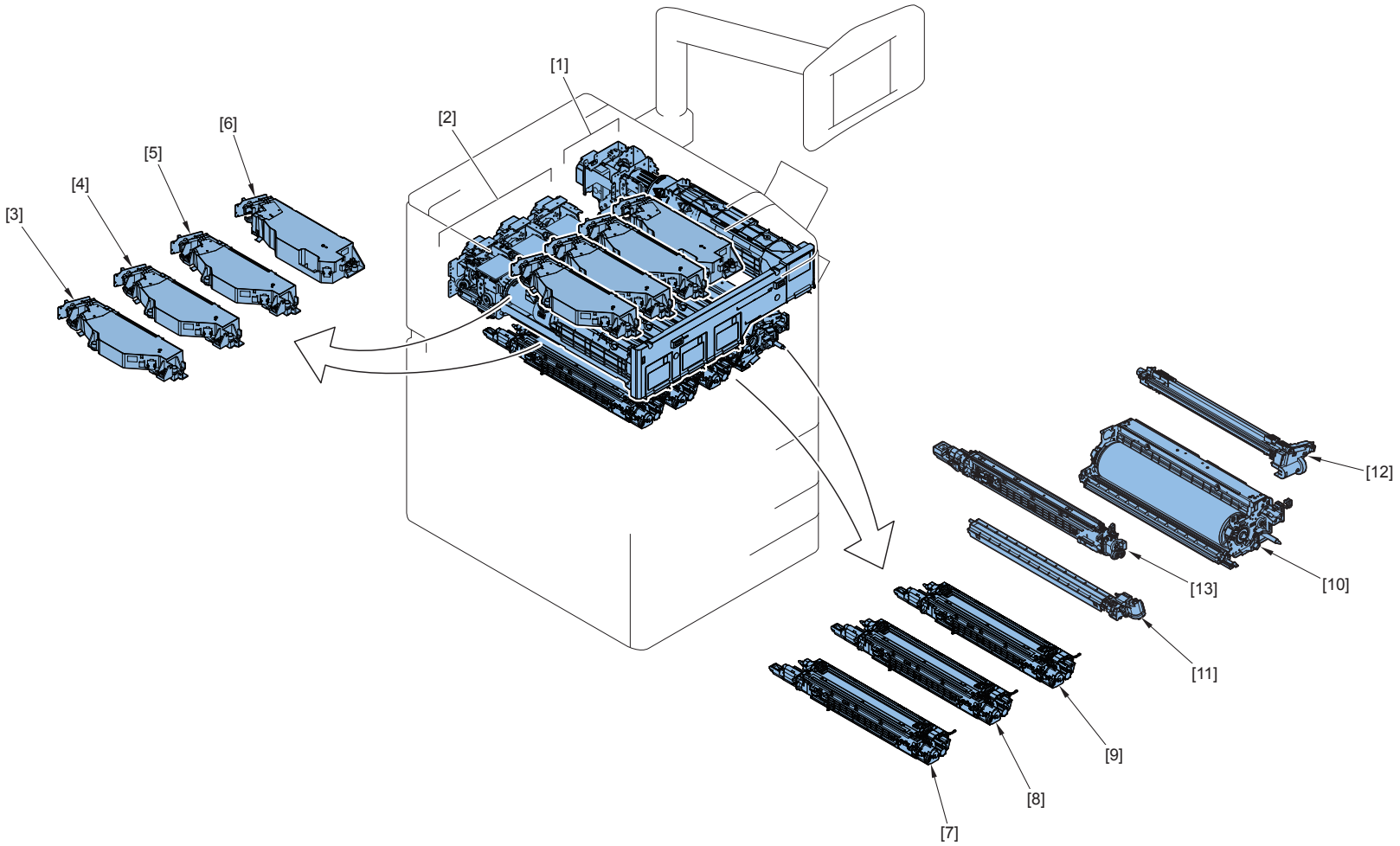


F-4-3

Key No.	Name	Reference
[1]	Toner Container Replacement Cover (Y)	-
[2]	Toner Container Replacement Cover (M)	-
[3]	Toner Container Replacement Cover (C)	-
[4]	Toner Container Replacement Unit Inner Cover	(Refer to page 4-339)
[5]	Toner Container Replacement Cover (Bk)	-
[6]	Front Inner Handle Right Cover	-
[7]	ITB Inner Right Cover	-
[8]	Fixing Feed Right Upper Inner Cover	-
[9]	Fixing Feed Right Lower Inner Cover	-
[10]	Process Unit Inner Cover	-
[11]	ITB Inner Middle Cover	-
[12]	Fixing Feed Left Inner Cover	-
[13]	ITB Inner Left Cover	-
[14]	Front Inner Handle Left Cover	-

T-4-3

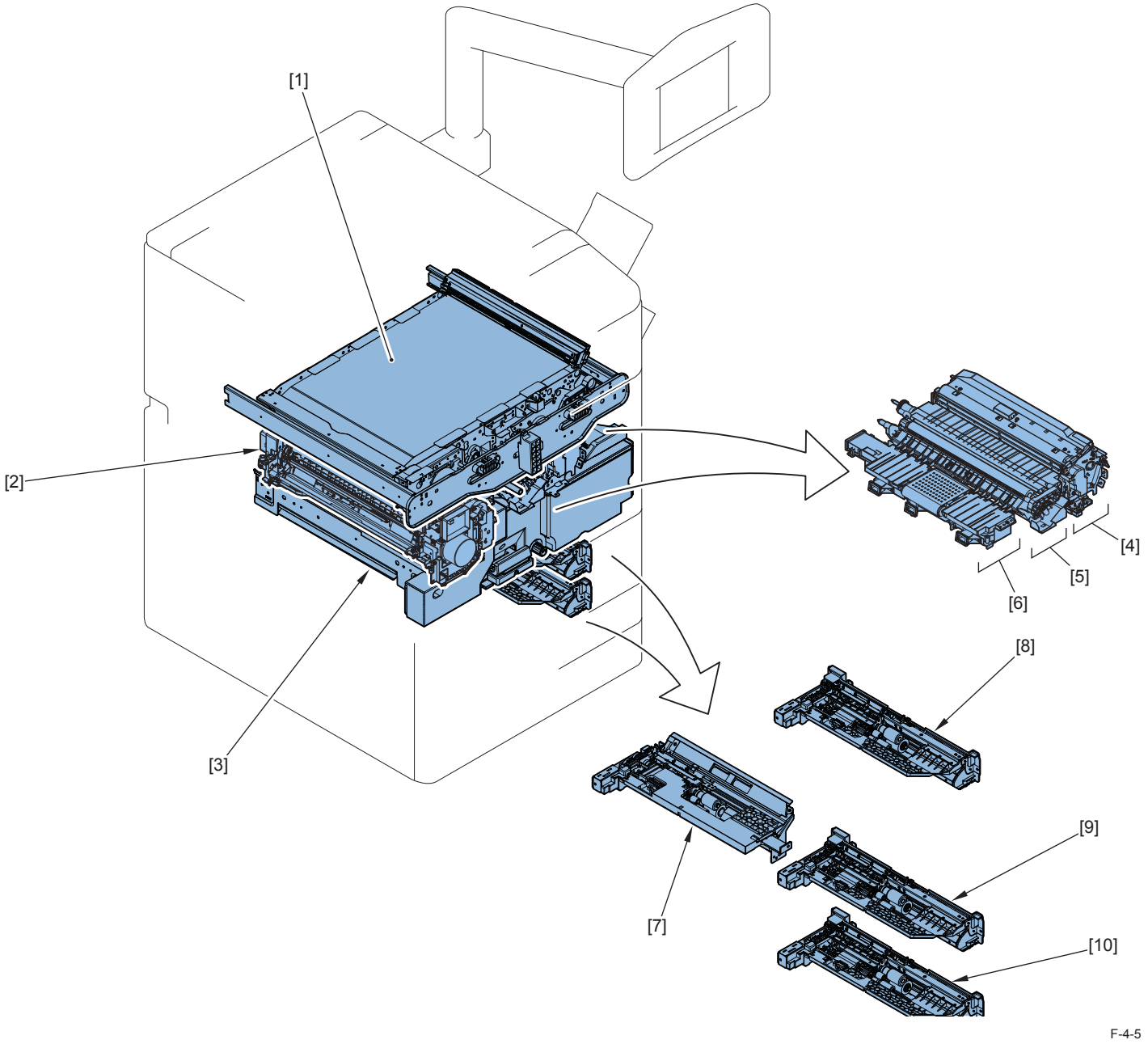
List of Main Unit



F-4-4

Key No.	Name	Reference
[1]	Hopper Unit (Bk)	(Refer to page 4-261)
[2]	Hopper Unit (Y)/(M)/(C)	(Refer to page 4-267)
[3]	Laser Scanner Unit (Y)	(Refer to page 4-127)
[4]	Laser Scanner Unit (M)	(Refer to page 4-127)
[5]	Laser Scanner Unit (C)	(Refer to page 4-127)
[6]	Laser Scanner Unit (Bk)	(Refer to page 4-127)
[7]	Process Unit (Y)	(Refer to page 4-239)
[8]	Process Unit (M)	(Refer to page 4-239)
[9]	Process Unit (C)	(Refer to page 4-239)
[10]	Drum Unit (Bk)	(Refer to page 4-214)
[11]	Pre-transfer Charging Assembly	(Refer to page 4-203)
[12]	Primary Charging Assembly	(Refer to page 4-199)
[13]	Developing Assembly (Bk)	(Refer to page 4-232)

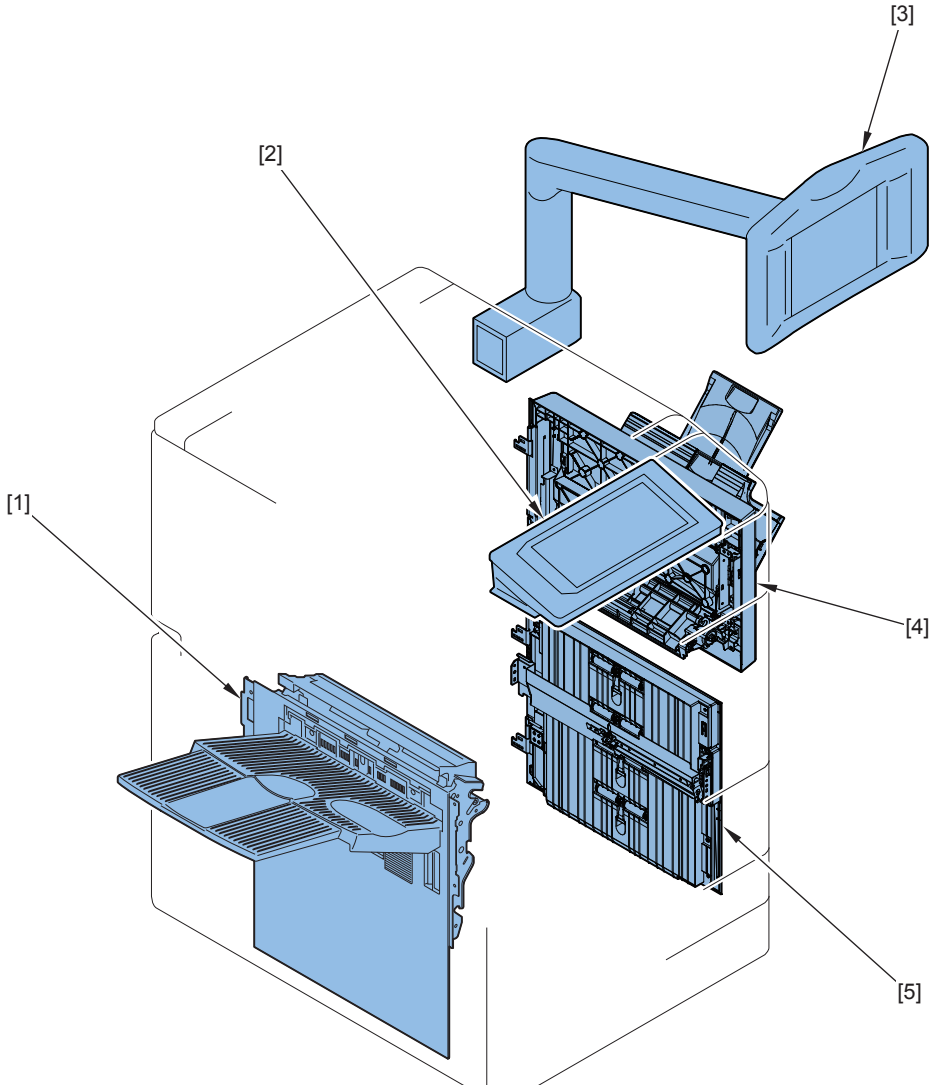
T-4-4



F-4-5

Key No.	Name	Reference
[1]	ITB Unit	(Refer to page 4-136)
[2]	Fixing Unit	(Refer to page 4-285)
[3]	Fixing Feed Unit	(Refer to page 4-310)
[4]	Registration Unit	(Refer to page 4-334)
[5]	Secondary Transfer Outer Unit	(Refer to page 4-168)
[6]	Pre-Fixing Feed Belt Unit	(Refer to page 4-332)
[7]	Left Deck Pickup Unit	(Refer to page 4-327)
[8]	Right Deck Pickup Unit	(Refer to page 4-326)
[9]	Cassette 3 Pickup Unit	(Refer to page 4-326)
[10]	Cassette 4 Pickup Unit	(Refer to page 4-326)

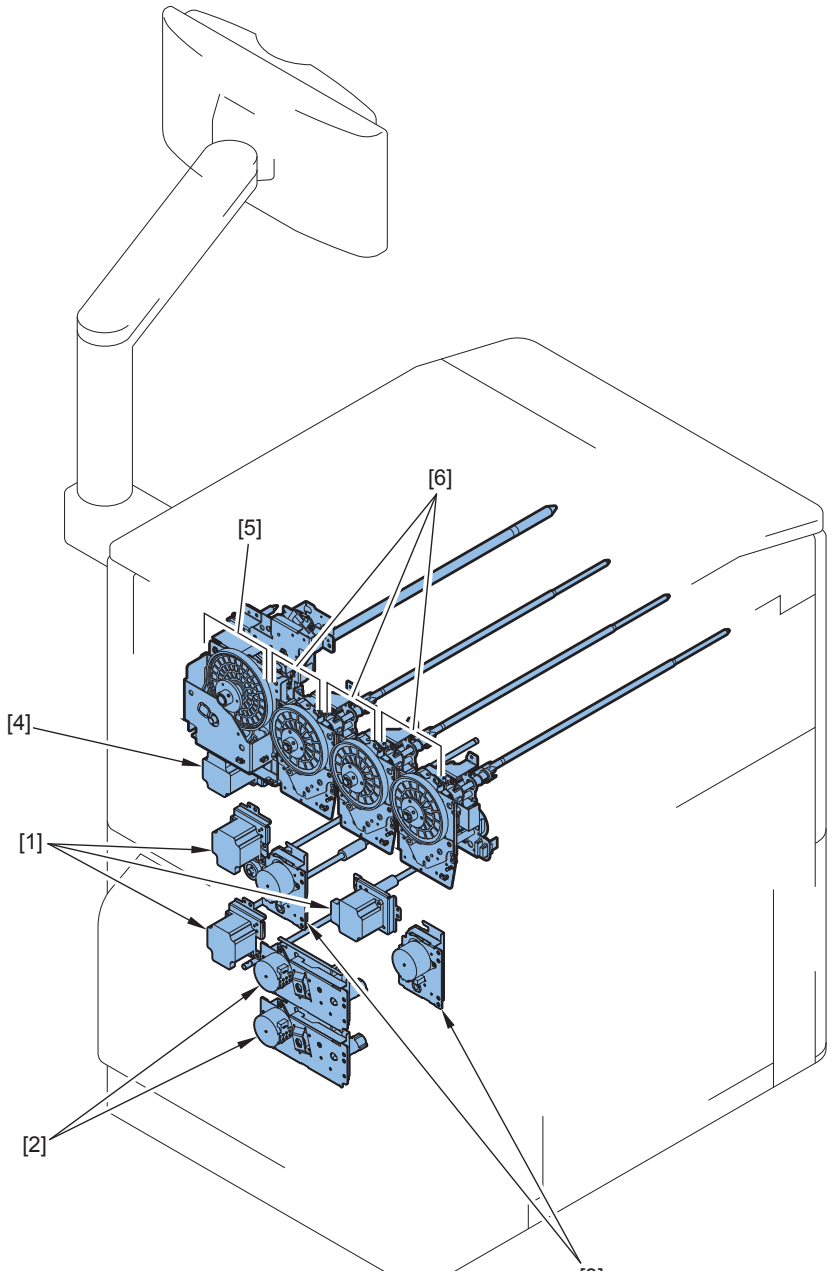
T-4-5



F-4-6

Key No.	Name	Reference
[1]	Reverse Delivery Unit	(Refer to page 4-331)
[2]	Flat Control Panel Unit	(Refer to page 4-95)
[3]	Upright Control Panel Unit	(Refer to page 4-100)
[4]	Multi-purpose Tray Pickup Unit	(Refer to page 4-325)
[5]	Vertical Path Unit	(Refer to page 4-326)

T-4-6

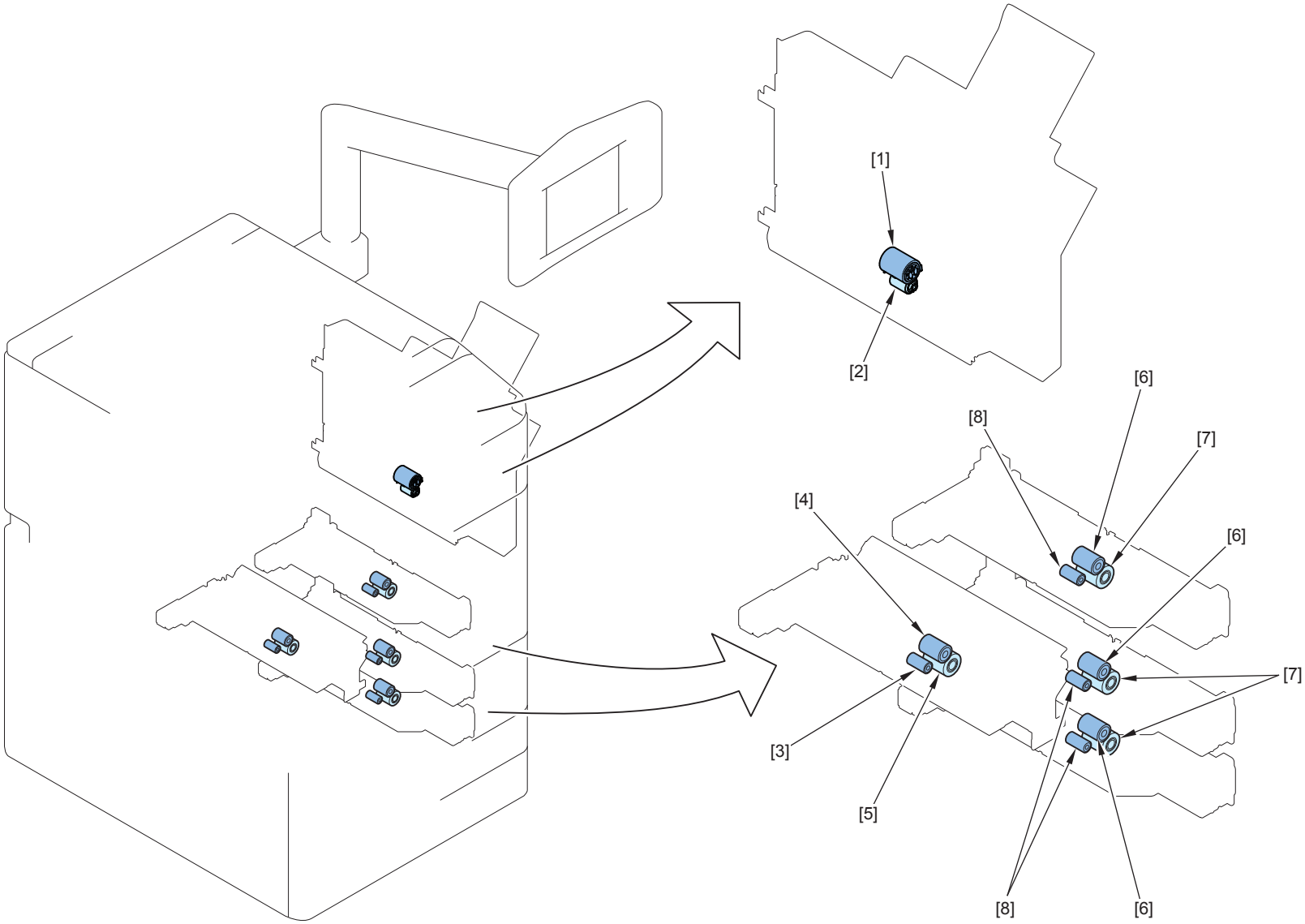


F-4-7

Key No.	Name	Reference
[1]	Vertical Path Drive Unit	-
[2]	Cassette Drive Unit	-
[3]	Deck Drive Unit	-
[4]	Multi Pickup Drive Unit	-
[5]	Drum Drive Unit (Bk)	(Refer to page 4-254)
[6]	Process Drive Unit (Y)/(M)/(C)	(Refer to page 4-276)

T-4-7

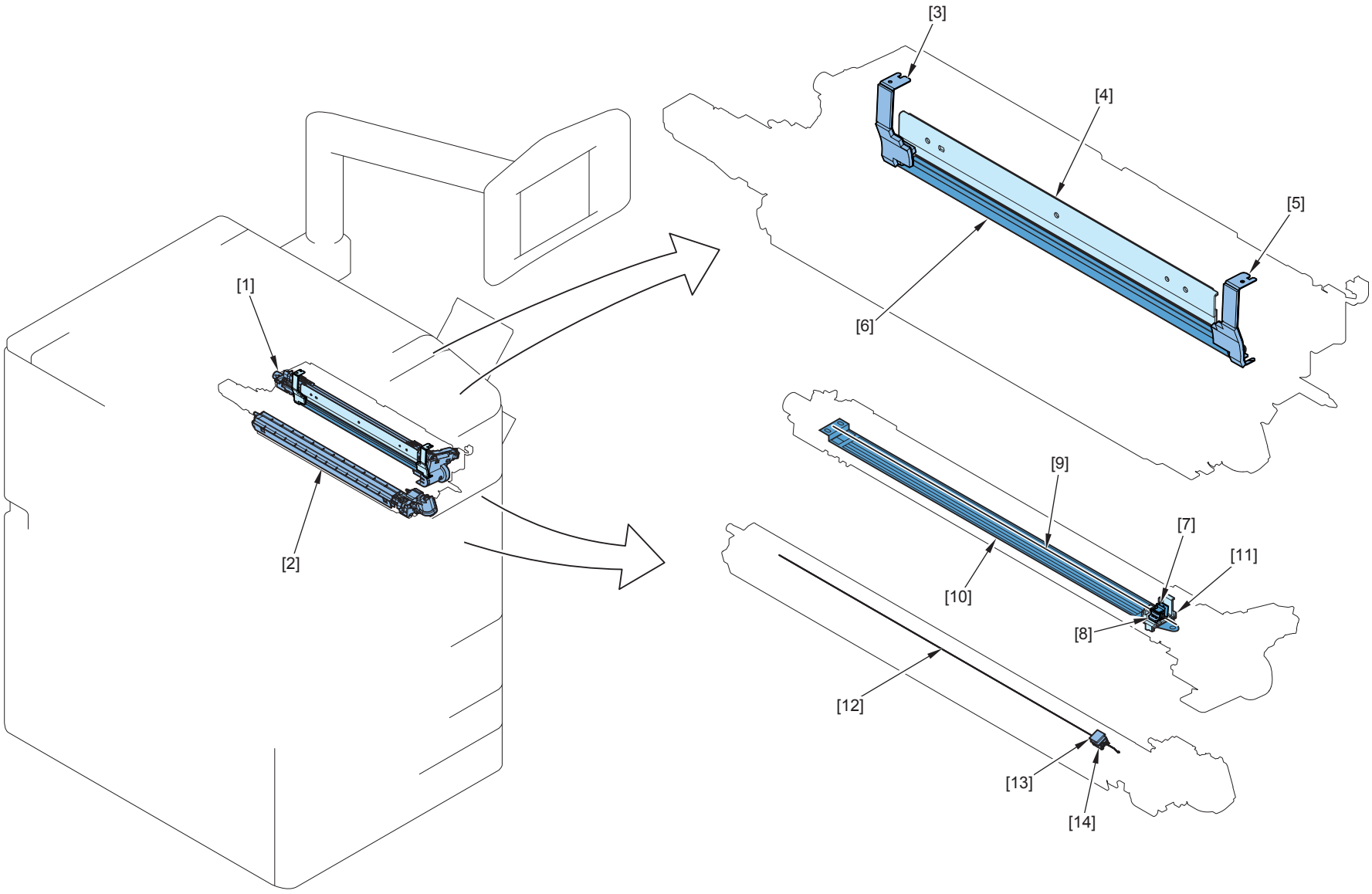
List of Periodical Consumable Parts/Locations for Periodical Cleaning



F-4-8

Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	Multi-purpose Tray Roller	Multi-purpose Tray Pickup Unit	(Refer to page 4-312)	-
[2]	Multi-purpose Tray Separation Roller	Multi-purpose Tray Pickup Unit	(Refer to page 4-313)	-
[3]	Left Deck Pickup Roller	Left Deck Pickup Unit	(Refer to page 4-318)	-
[4]	Left Deck Separation Roller	Left Deck Pickup Unit	(Refer to page 4-318)	-
[5]	Left Deck Feed Roller	Left Deck Pickup Unit	(Refer to page 4-318)	-
[6]	Right Deck Separation Roller	Right Deck Pickup Unit	(Refer to page 4-315)	-
	Cassette 3 Separation Roller	Cassette 3 Pickup Unit	(Refer to page 4-320)	-
	Cassette 4 Separation Roller	Cassette 4 Pickup Unit	(Refer to page 4-323)	-
[7]	Right Deck Feed Roller	Right Deck Pickup Unit	(Refer to page 4-315)	-
	Cassette 3 Feed Roller	Cassette 3 Pickup Unit	(Refer to page 4-320)	-
	Cassette 4 Feed Roller	Cassette 4 Pickup Unit	(Refer to page 4-323)	-
[8]	Right Deck Pickup Roller	Right Deck Pickup Unit	(Refer to page 4-315)	-
	Cassette 3 Pickup Roller	Cassette 3 Pickup Unit	(Refer to page 4-320)	-
	Cassette 4 Pickup Roller	Cassette 4 Pickup Unit	(Refer to page 4-323)	-

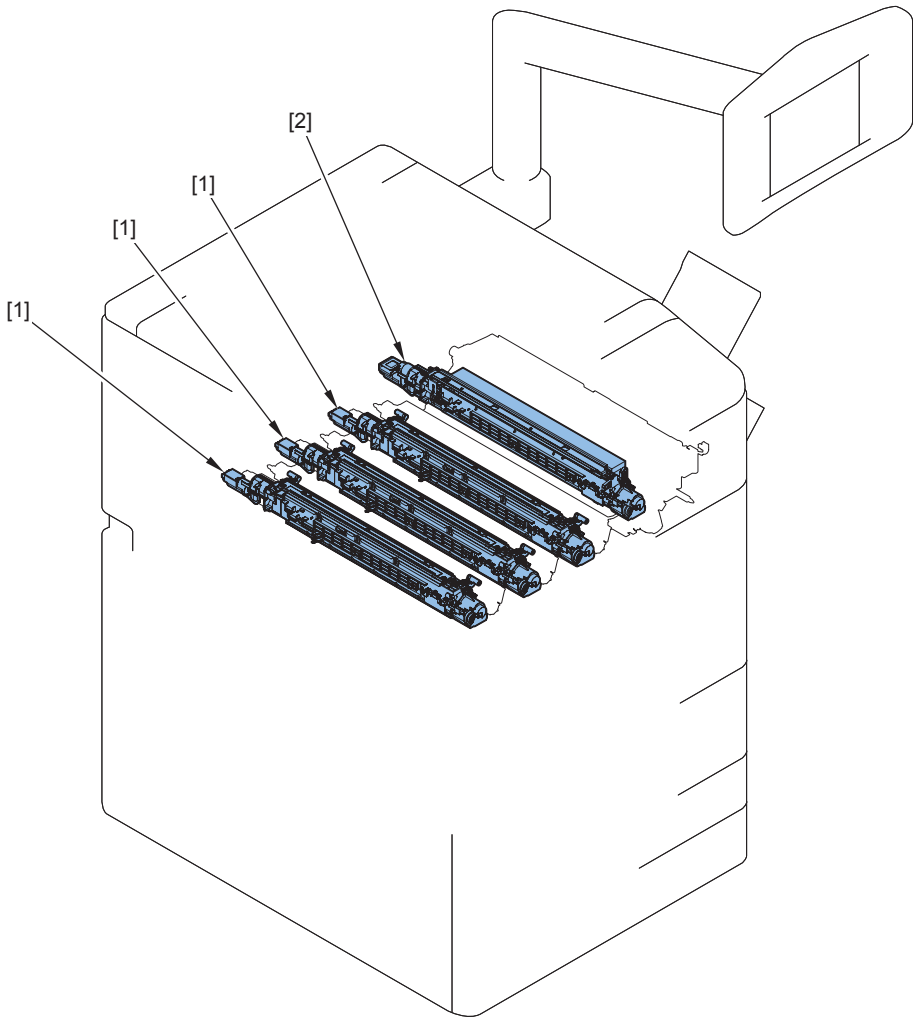
T-4-8



F-4-9

Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	Primary Charging Assembly	Drum Unit (Bk)	(Refer to page 4-184)	When Replacing the Primary Charging Assembly (Refer to page 4-185)
[2]	Pre-transfer Charging Assembly	Drum Unit (Bk)	(Refer to page 4-203)	When Replacing the Pre-transfer Charging Assembly (Refer to page 4-204)
[3]	Edge Scraper 1 (Bk)	Drum Unit (Bk)	(Refer to page 4-227)	-
[4]	Drum Cleaning Blade (Bk)	Drum Unit (Bk)	(Refer to page 4-219)	-
[5]	Edge Scraper 2 (Bk)	Drum Unit (Bk)	(Refer to page 4-227)	-
[6]	Drum Cleaning Scoop-up Sheet (Bk)	Drum Unit (Bk)	(Refer to page 4-225)	-
[7]	Primary Charging Wire Cleaning Pad Slider	Primary Charging Assembly	(Refer to page 4-195)	-
[8]	Primary Charging Wire Cleaning Pad Holder	Primary Charging Assembly	(Refer to page 4-194)	-
[9]	Primary Charging Wire	Primary Charging Assembly	(Refer to page 4-196)	When Replacing the Primary Charging Wire Unit (Refer to page 4-203) When Replacing the Primary Charging Wire (Refer to page 4-200) Cleaning the Primary Charging Assembly (Refer to page 4-199)
[10]	Grid Plate	Primary Charging Assembly	(Refer to page 4-189)	When Replacing the Grid Plate (Refer to page 4-192)
[11]	Grid Cleaning Pad	Primary Charging Assembly	(Refer to page 4-192)	-
[12]	Pre-transfer Charging Wire	Pre-transfer Charging Assembly	(Refer to page 4-210)	When Replacing the Pre-transfer Charging Assembly (Refer to page 4-204) When Replacing the Pre-transfer Charging Wire (Refer to page 4-213) Cleaning the Pre-transfer Charging Assembly (Refer to page 4-212)
[13]	Pre-transfer Charging Wire Cleaning Pad Slider	Pre-transfer Charging Assembly	(Refer to page 4-207)	-
[14]	Pre-transfer Charging Wire Cleaning Pad Holder	Pre-transfer Charging Assembly	(Refer to page 4-207)	-

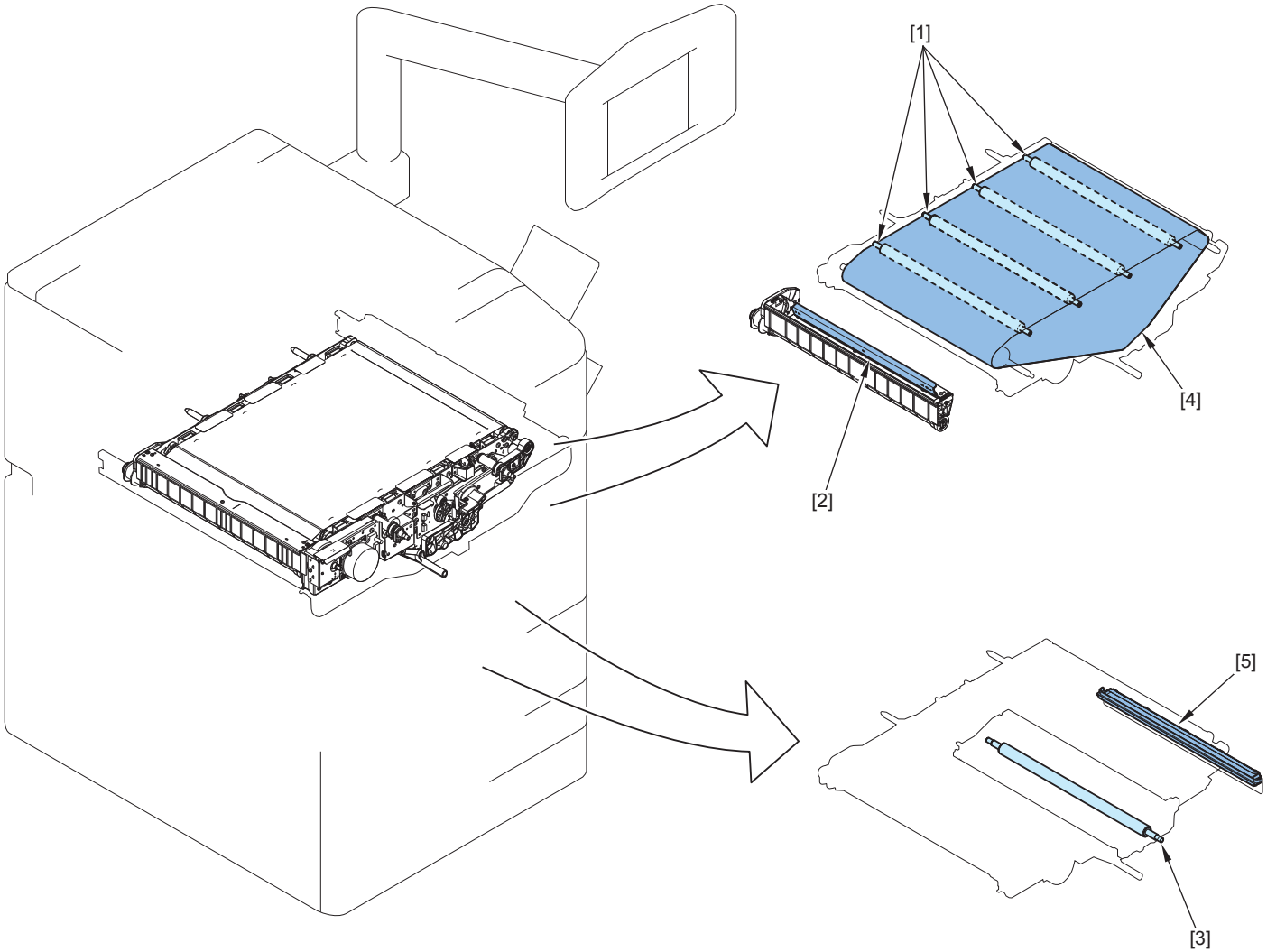
T-4-9



F-4-10

Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	Developing Assembly (Y)/(M)/(C)	Process Unit (Y)/(M)/(C)	(Refer to page 4-242)	When Replacing the Drum Unit (Y)/(M)/(C) (Refer to page 4-248) Cleaning the Toner Catch Sheet (Y)/(M)/(C) (Refer to page 4-247)
[2]	Developing Assembly (Bk)	Product Configuration	(Refer to page 4-232)	When Replacement the Developing Assembly (Refer to page 4-237)

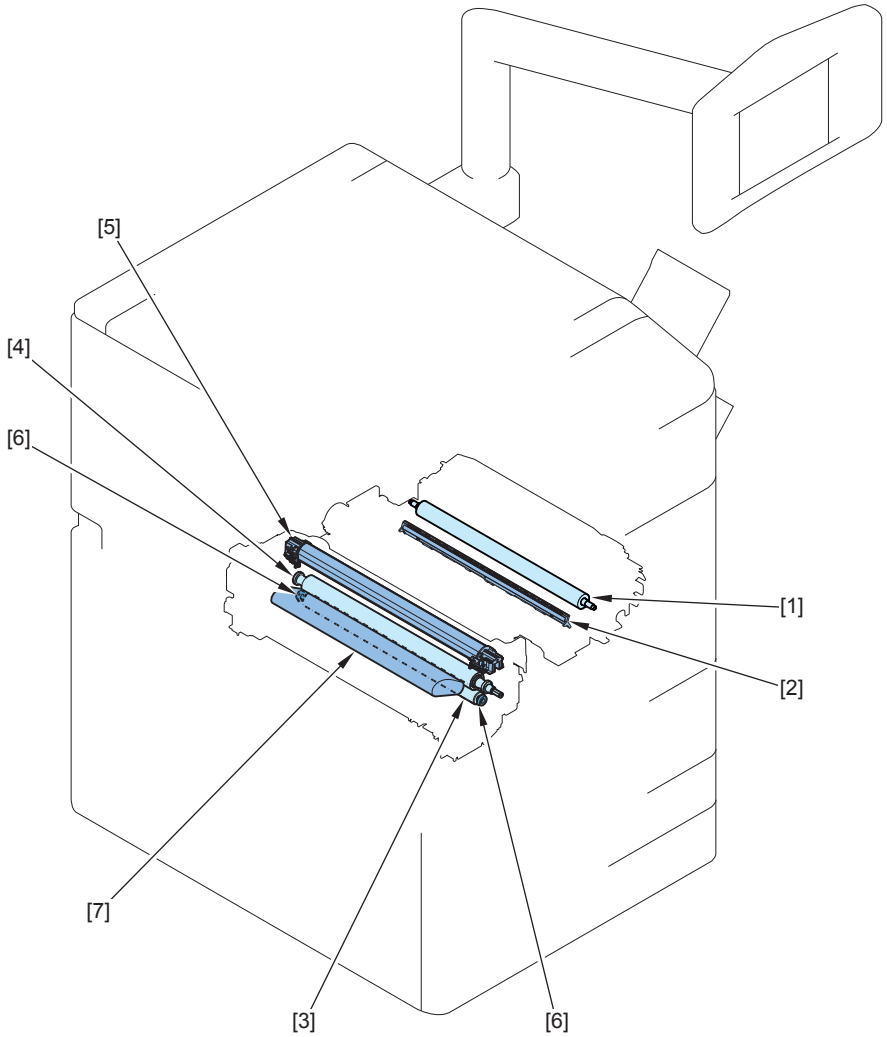
T-4-10



F-4-11

Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	Primary Transfer Roller	ITB Unit	(Refer to page 4-157)	When Replacing the Primary Transfer Roller (Refer to page 4-159)
[2]	ITB Cleaning Blade	ITB Unit	(Refer to page 4-140)	After Replacing the ITB Cleaning Blade Unit (Refer to page 4-144)
[3]	Secondary Transfer Inner Roller	ITB Unit	(Refer to page 4-159)	-
[4]	ITB	ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133) Cleaning when replacing the ITB (Refer to page 4-156)
[5]	ITB Inside Scraper	ITB Unit	(Refer to page 4-161)	-

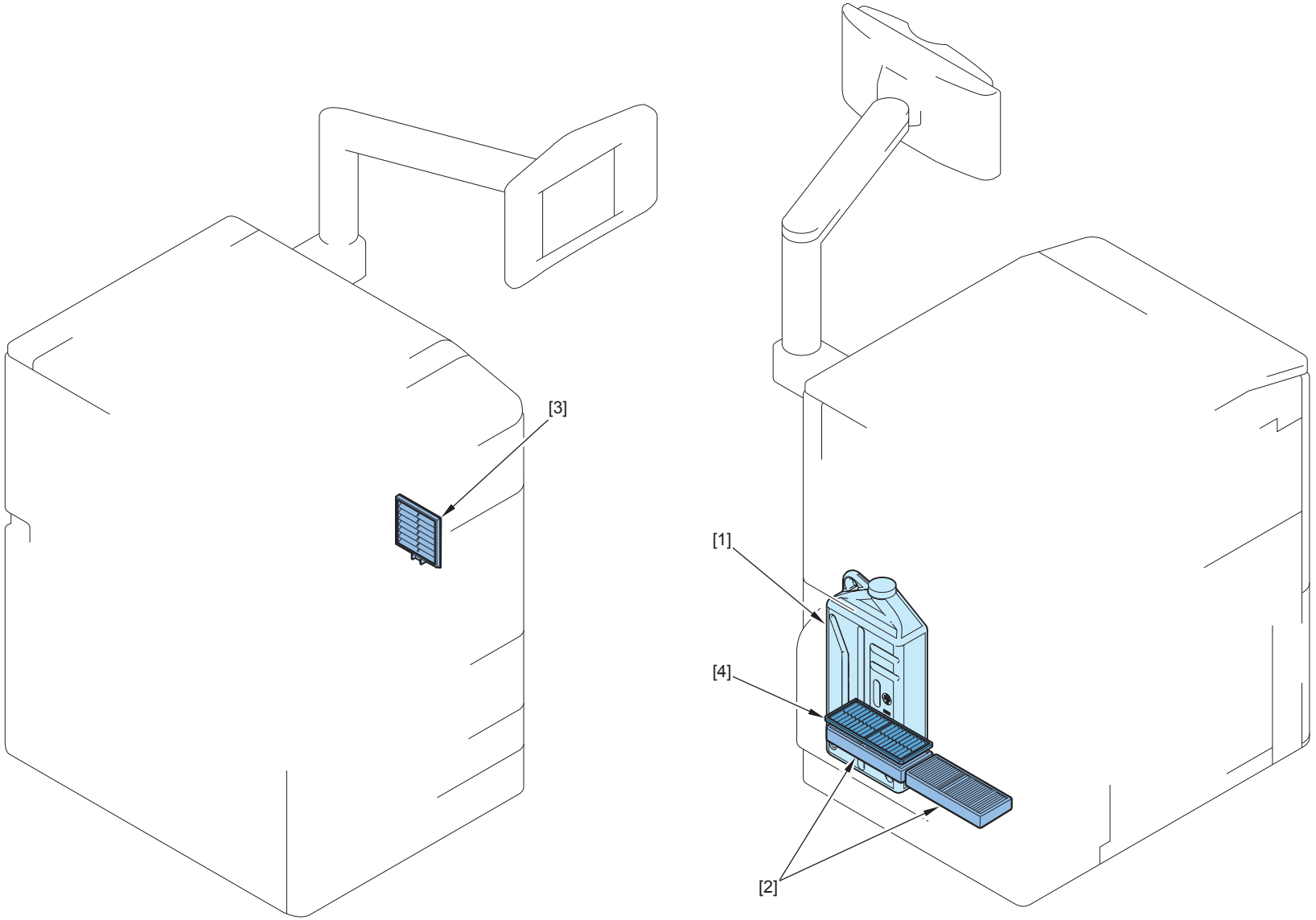
T-4-11



F-4-12

Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	Secondary Transfer Outer Roller	Secondary Transfer Unit	(Refer to page 4-170)	-
[2]	Secondary Transfer Static Eliminator	Secondary Transfer Unit	(Refer to page 4-169)	-
[3]	Fixing Heat Soaking Roller	Fixing Unit	(Refer to page 4-302)	-
[4]	Fixing Pressure Roller Unit	Fixing Unit	(Refer to page 4-301)	-
[5]	Fixing Film Unit	Fixing Unit	(Refer to page 4-300)	-
[6]	Ball Bearing	Fixing Unit	(Refer to page 4-302)	-
[7]	Fixing Web	Fixing Unit	(Refer to page 4-288)	-

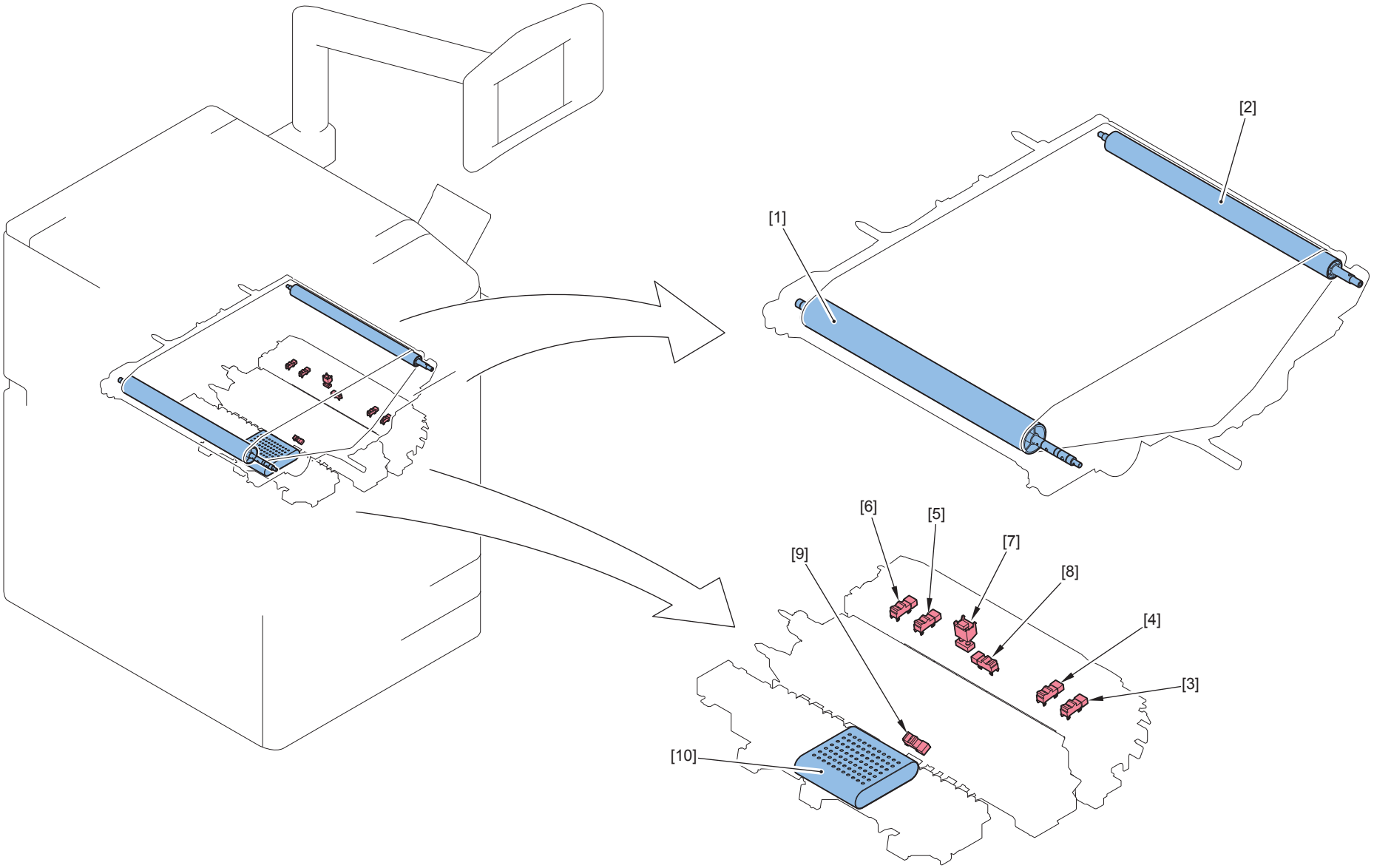
T-4-12



F-4-13

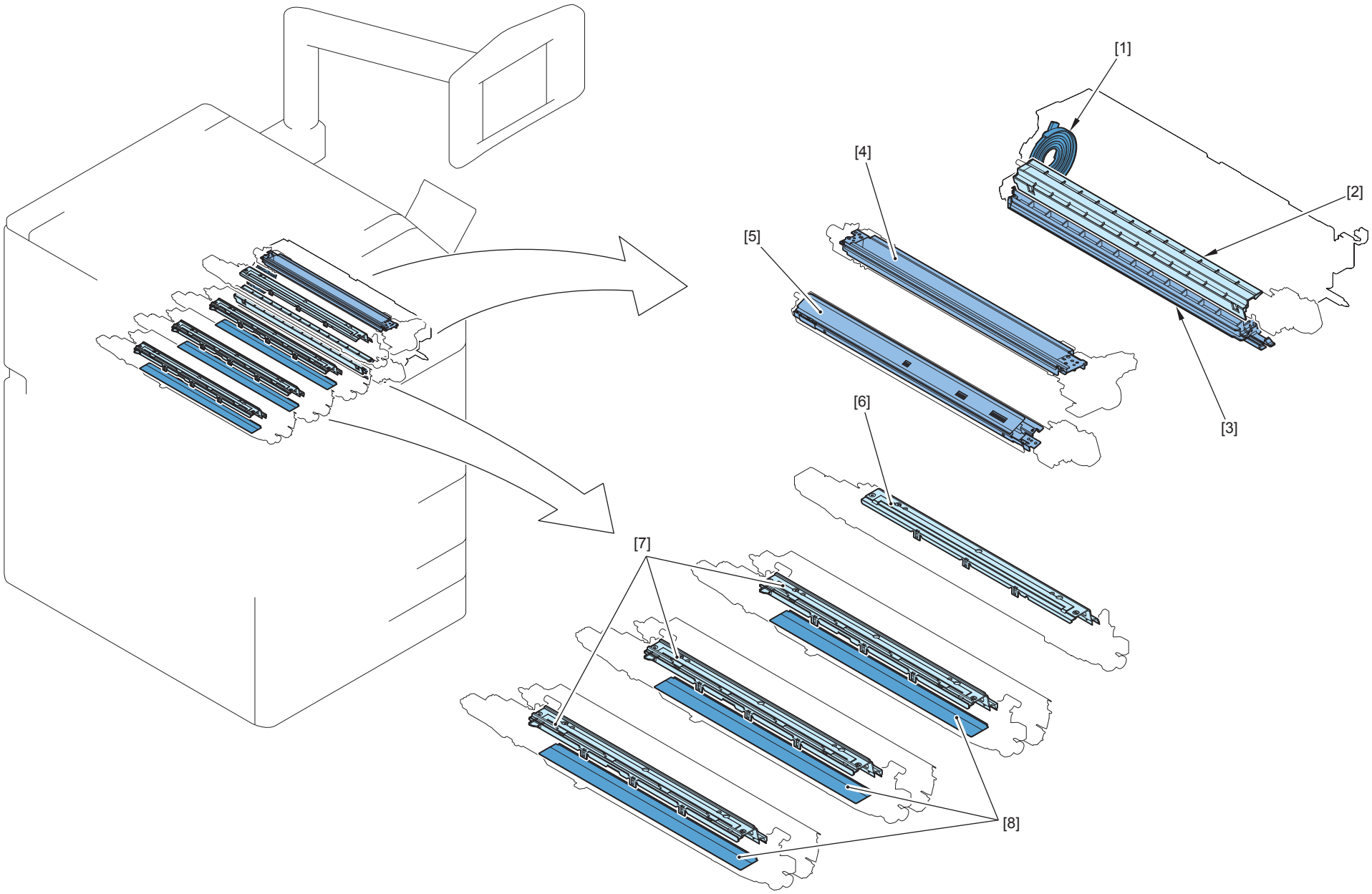
Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	Waste Toner Container	Product Configuration	(Refer to page 4-277)	-
[2]	Ozone Filter	Product Configuration	(Refer to page 4-347)	-
[3]	Primary Charging Dustproof Filter	Product Configuration	(Refer to page 4-349)	-
[4]	Fixing Dustproof Filter	Product Configuration	(Refer to page 4-347)	-

T-4-13


[1]
[2]
[3]
[4]
[5]
[6]
[7]
[8]
[9]
[10]

Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	ITB Driver Roller	ITB Unit	(Refer to page 4-156)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
[2]	ITB Steering Roller	ITB Unit	(Refer to page 4-156)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
[3]	Original Size Sensor 1	Registration Unit	(Refer to page 4-335)	-
[4]	Original Size Sensor 2	Registration Unit	(Refer to page 4-335)	-
[5]	Original Size Sensor 3	Registration Unit	(Refer to page 4-335)	-
[6]	Original Size Sensor 4	Registration Unit	(Refer to page 4-335)	-
[7]	Transparency Sensor	Registration Unit	(Refer to page 4-335)	-
[8]	Registration Sensor	Registration Unit	(Refer to page 4-335)	-
[9]	Post-secondary Transfer Sensor	Secondary Transfer Unit	(Refer to page 4-333)	-
[10]	Pre-fixing Feed Belt	Pre-Fixing Paper Feed Unit	(Refer to page 4-333)	-

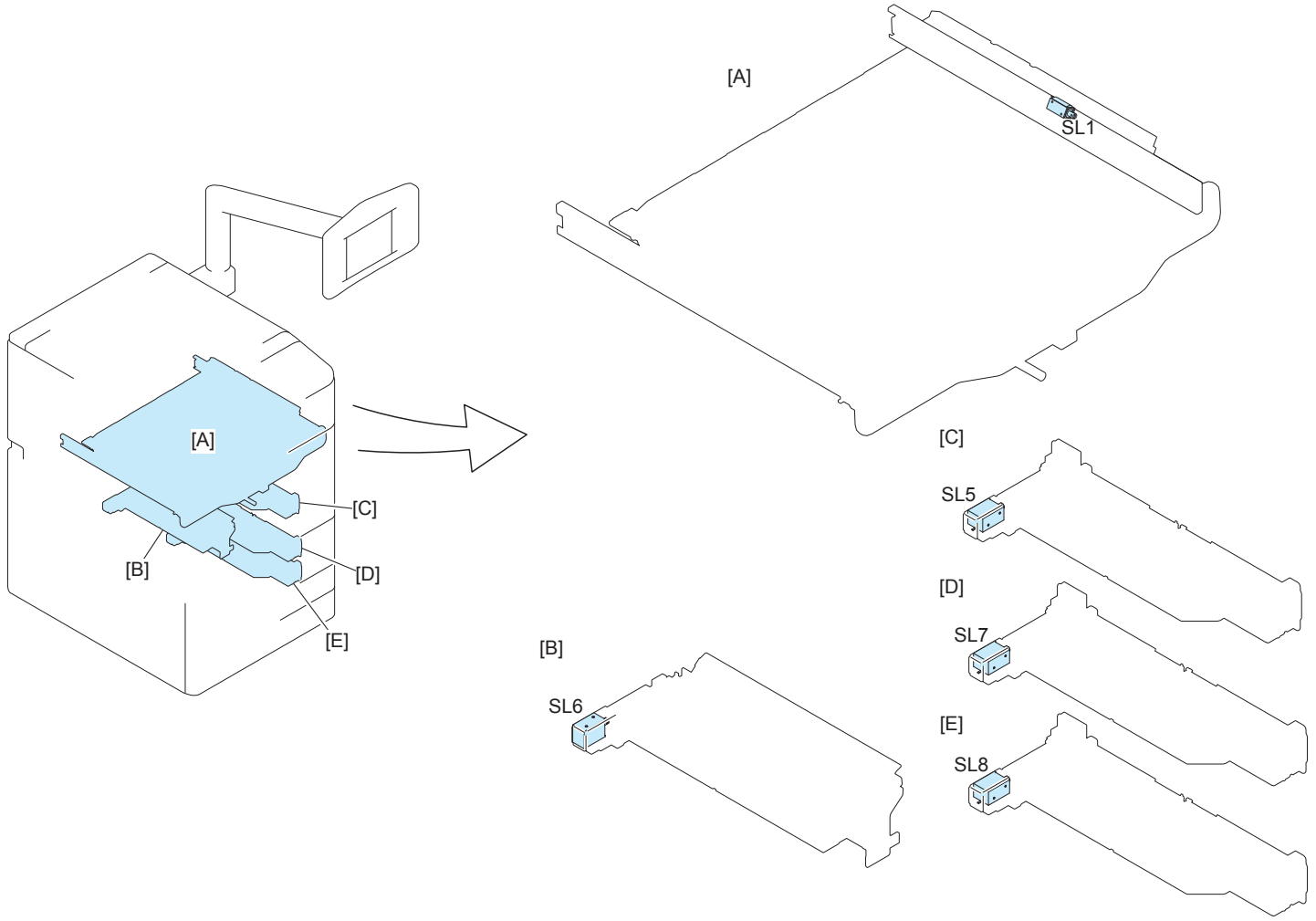
T-4-14


[1]
[2]
[3]
[4]
[5]
[6]
[7]
[8]

Key No.	Name	Main Unit	Reference	Adjustment during parts replacemen
[1]	Drum Sliding Shaft Support	Drum Unit (Bk)	(Refer to page 4-221)	-
[2]	Pre-transfer Upper Duct	Pre-transfer Charging Assembly	(Refer to page 4-212)	-
[3]	Toner Catch Tray (Bk)	Drum Unit (Bk)	(Refer to page 4-224)	-
[4]	Primary Charging Shield Plate	Primary Charging Assembly	(Refer to page 4-199)	-
[5]	Pre-transfer Shield Plate	Pre-transfer Charging Assembly	(Refer to page 4-212)	-
[6]	Sleeve Cover (Bk)	Developing Assembly (Bk)	(Refer to page 4-238)	-
[7]	Sleeve Cover (Y)/(M)/(C)	Process Unit (Y)/(M)/(C)	(Refer to page 4-247)	-
[8]	Toner Catch Sheet (Y)/(M)/(C)	Process Unit (Y)/(M)/(C)	(Refer to page 4-247)	-

T-4-15

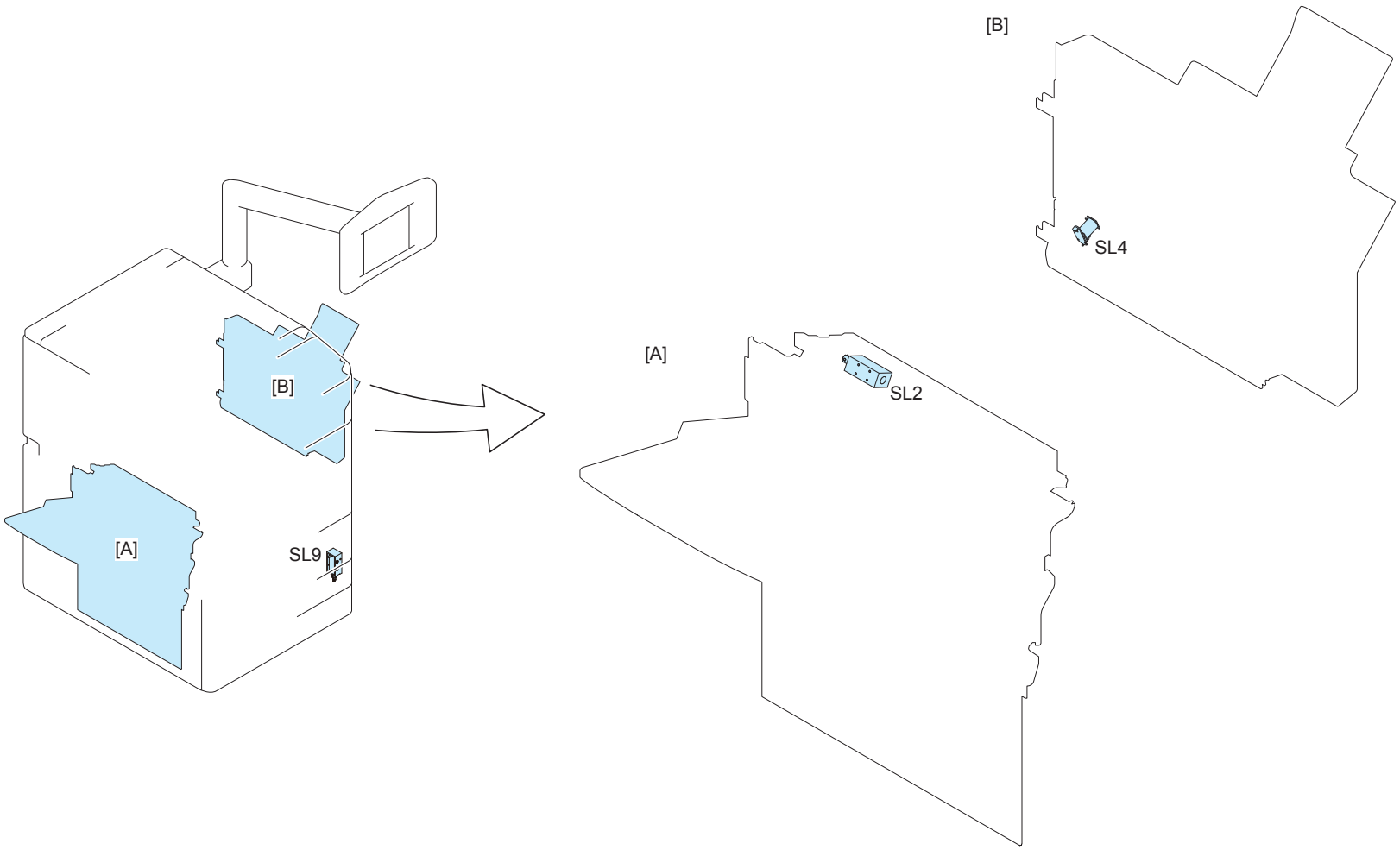
List of Clutch / Solenoid



F-4-14

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
SL1	Registration Patch Shutter Solenoid	ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
SL6	Left Deck Pickup Solenoid	Left Deck Pickup Unit	(Refer to page 4-327)	-
SL5	Right Deck Pickup Solenoid	Right Deck Pickup Unit	(Refer to page 4-326)	-
SL7	Cassette 3 Pickup Solenoid	Cassette 3 Pickup Unit	(Refer to page 4-326)	-
SL8	Cassette 4 Pickup Solenoid	Cassette 4 Pickup Unit	(Refer to page 4-326)	-

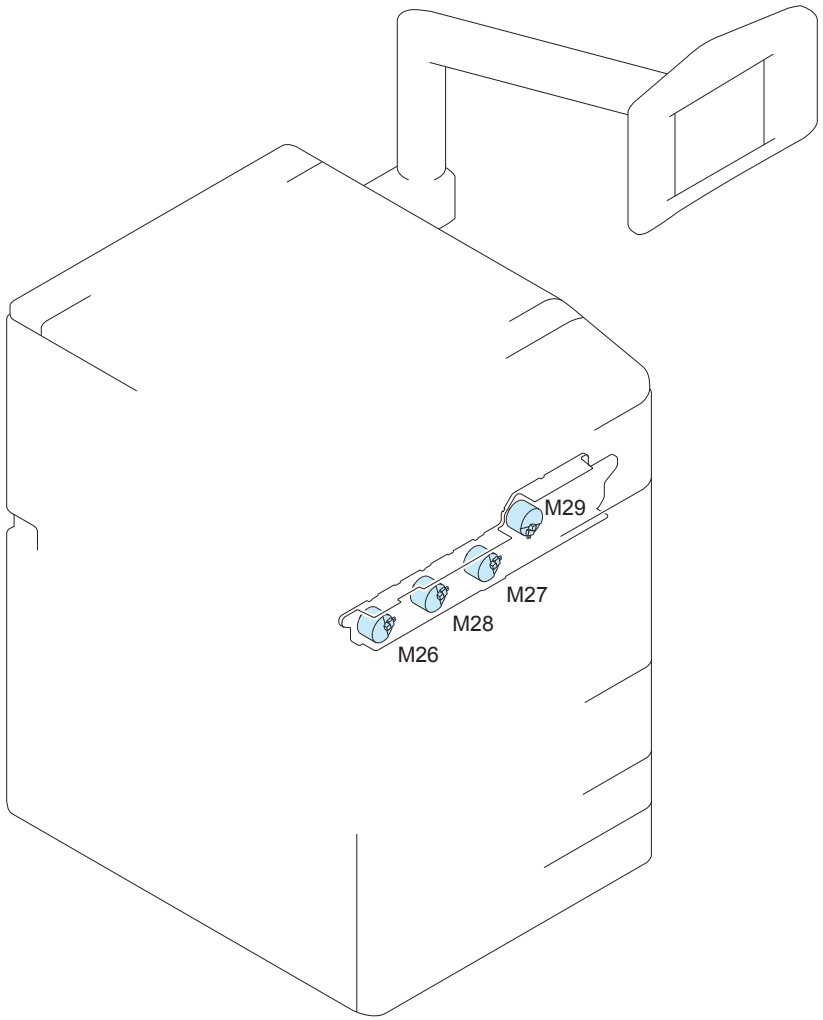
T-4-16



No.	Name	Main Unit	Reference	Adjustment during parts replacemen
SL9	Remote Shut down Solenoid	Product Configuration	-	-
SL2	Delivery Flapper Solenoid	Reverse Delivery Unit	(Refer to page 4-331)	-
SL4	Multi-purpose Tray Pickup Solenoid	Multi-purpose Tray Pickup Unit	(Refer to page 4-325)	-

T-4-17

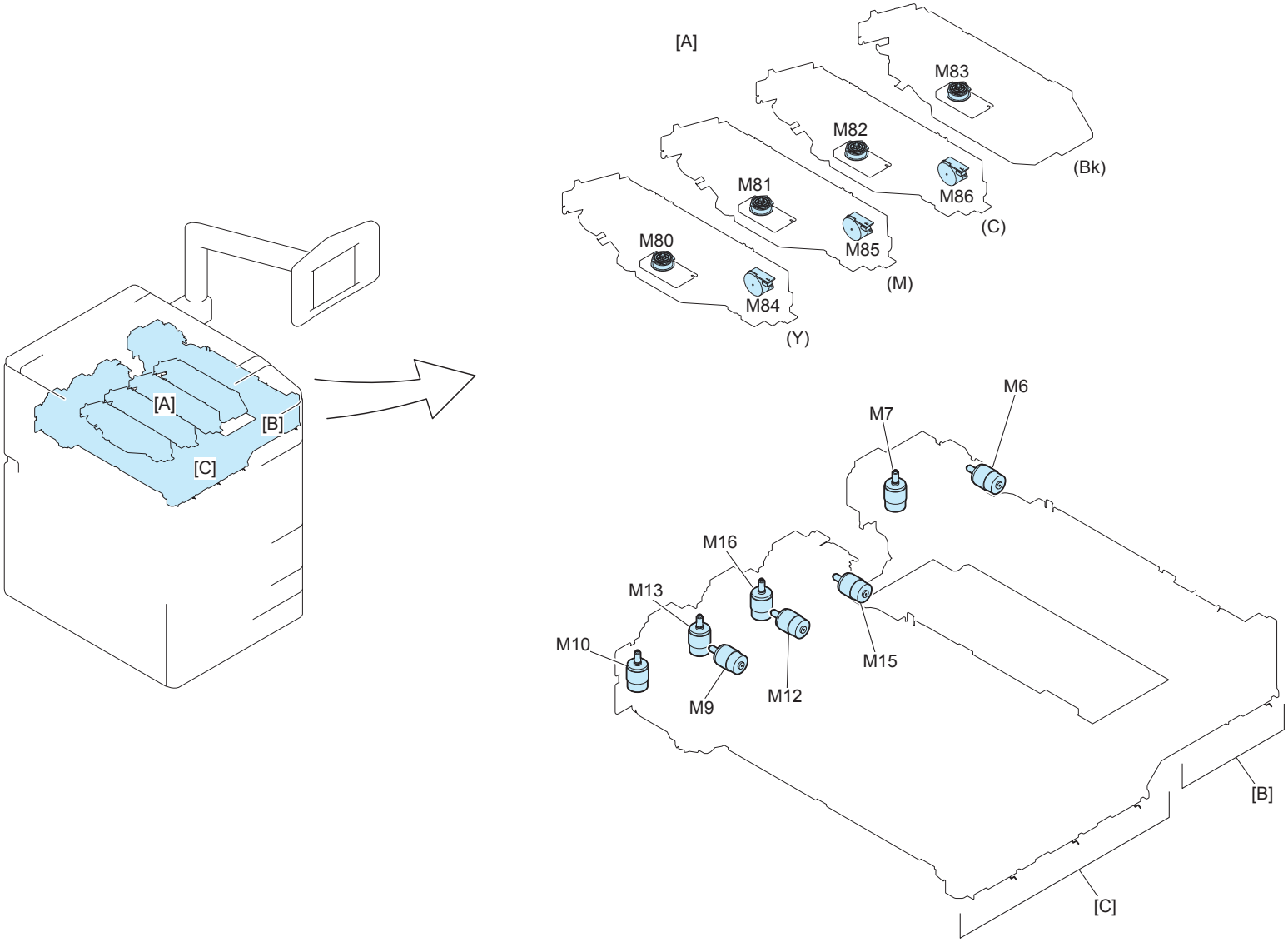
List of Motor



F-4-15

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
M26	Developing Stirring Motor (Y)	Product Configuration	-	-
M27	Developing Stirring Motor (C)	Product Configuration	-	-
M28	Developing Stirring Motor (M)	Product Configuration	-	-
M29	Developing Stirring Motor (Bk)	Product Configuration	-	-

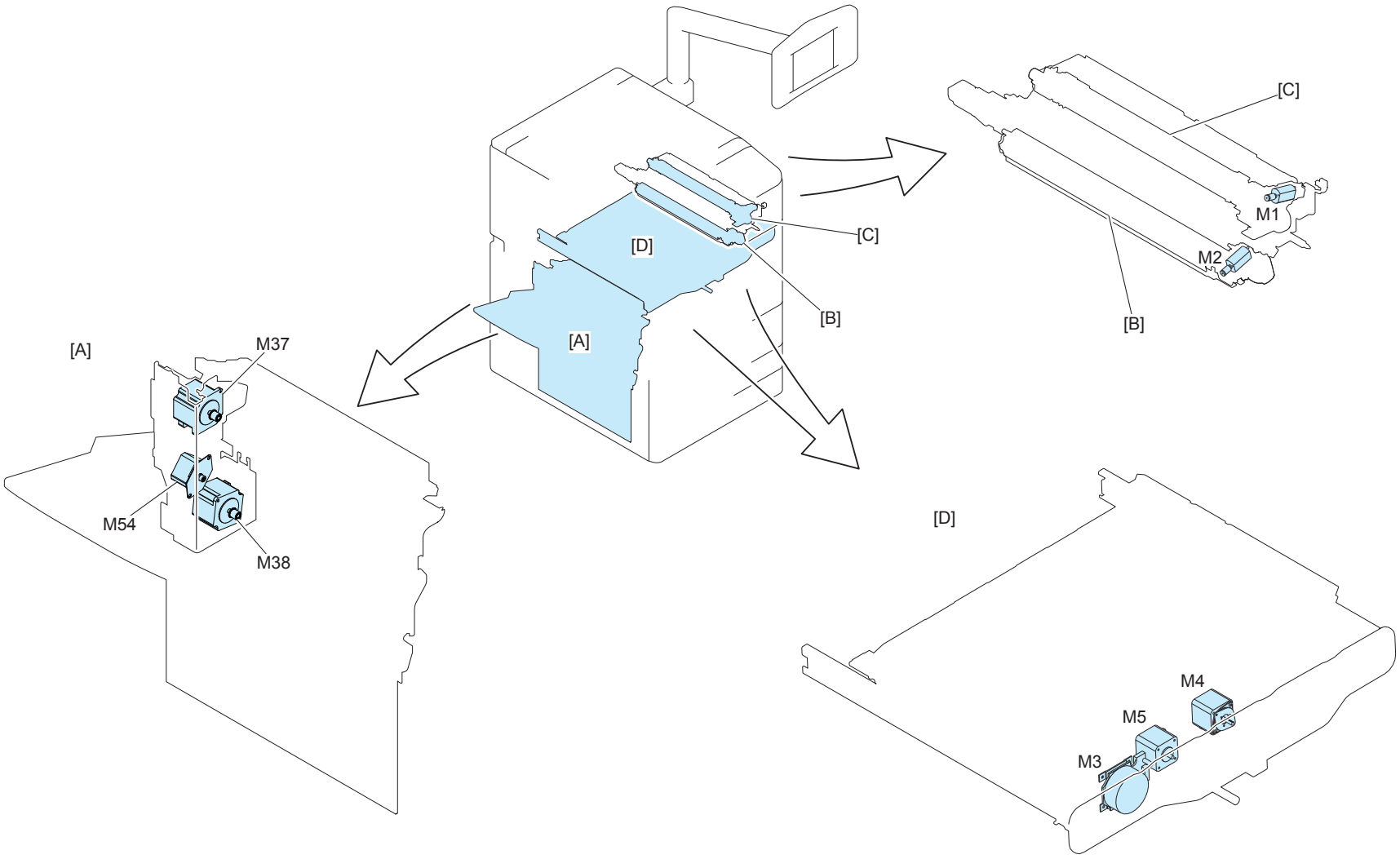
T-4-18


[A]
[B]
[C]
[A]
M83
M82
M86
(Bk)
M81
(C)
M80
M85
(M)
M84
(Y)
M6
M7
M16
M13
M10
M15
M12
M9
[B]
[C]

F-4-16

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
M6	Hopper and Stirring Supply Motor (Bk)	[B] Hopper Unit (Bk)	(Refer to page 4-261)	-
M7	Toner Container Drive Motor (Bk)	[B] Hopper Unit (Bk)	(Refer to page 4-261)	-
M9	Hopper and Stirring Supply Motor (Y)	[C] Hopper Unit (Y)/(M)/(C)	(Refer to page 4-267)	-
M10	Toner Container Drive Motor (Y)	[C] Hopper Unit (Y)/(M)/(C)	(Refer to page 4-267)	-
M12	Hopper and Stirring Supply Motor (M)	[C] Hopper Unit (Y)/(M)/(C)	(Refer to page 4-267)	-
M13	Toner Container Drive Motor (M)	[C] Hopper Unit (Y)/(M)/(C)	(Refer to page 4-267)	-
M15	Hopper and Stirring Supply Motor (C)	[C] Hopper Unit (Y)/(M)/(C)	(Refer to page 4-267)	-
M16	Toner Container Drive Motor (C)	[C] Hopper Unit (Y)/(M)/(C)	(Refer to page 4-267)	-
M80	Laser Scanner Motor (Y)	[A] Laser Scanner Unit (Y)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
M81	Laser Scanner Motor (M)	[A] Laser Scanner Unit (M)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
M82	Laser Scanner Motor (C)	[A] Laser Scanner Unit (C)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
M83	Laser Scanner Motor (Bk)	[A] Laser Scanner Unit (Bk)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
M84	Skew Correction Motor (Y)	[A] Laser Scanner Unit (Y)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
M85	Skew Correction Motor (M)	[A] Laser Scanner Unit (M)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
M86	Skew Correction Motor (C)	[A] Laser Scanner Unit (C)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)

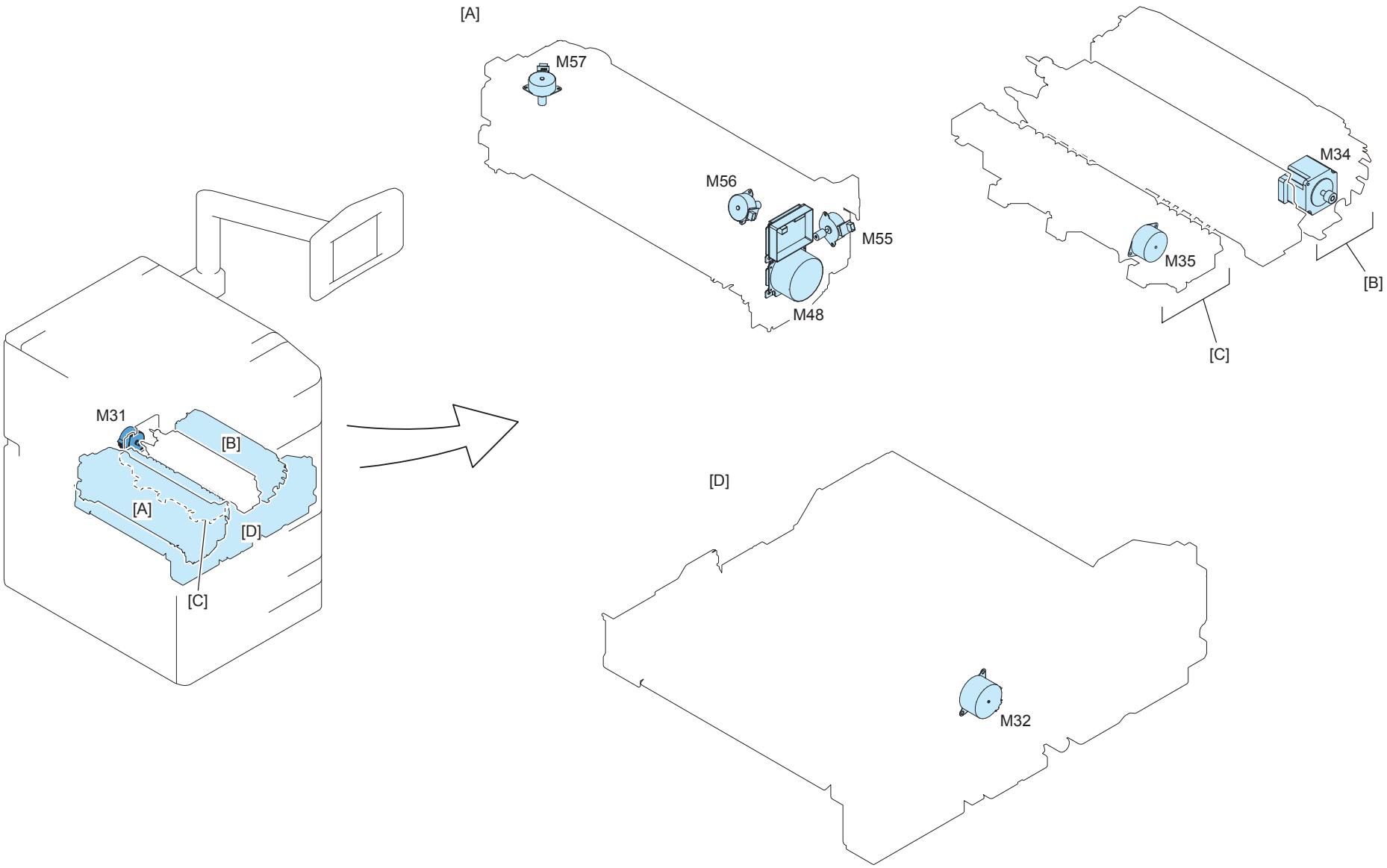
T-4-19



F-4-17

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
M37	Delivery Motor	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
M38	Reverse Motor	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
M54	Reverse Detachment Motor	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
M1	Primary Charging Wire Cleaning Motor	[C] Primary Charging Assembly	(Refer to page 4-184)	-
M2	Pre-transfer Charging Wire Cleaning Motor	[B] Pre-transfer Charging Assembly	(Refer to page 4-203)	-
M3	ITB Drive Motor	[D] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
M4	Steering Drive Motor	[D] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
M5	Primary Transfer Roller Detachment Motor	[D] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)

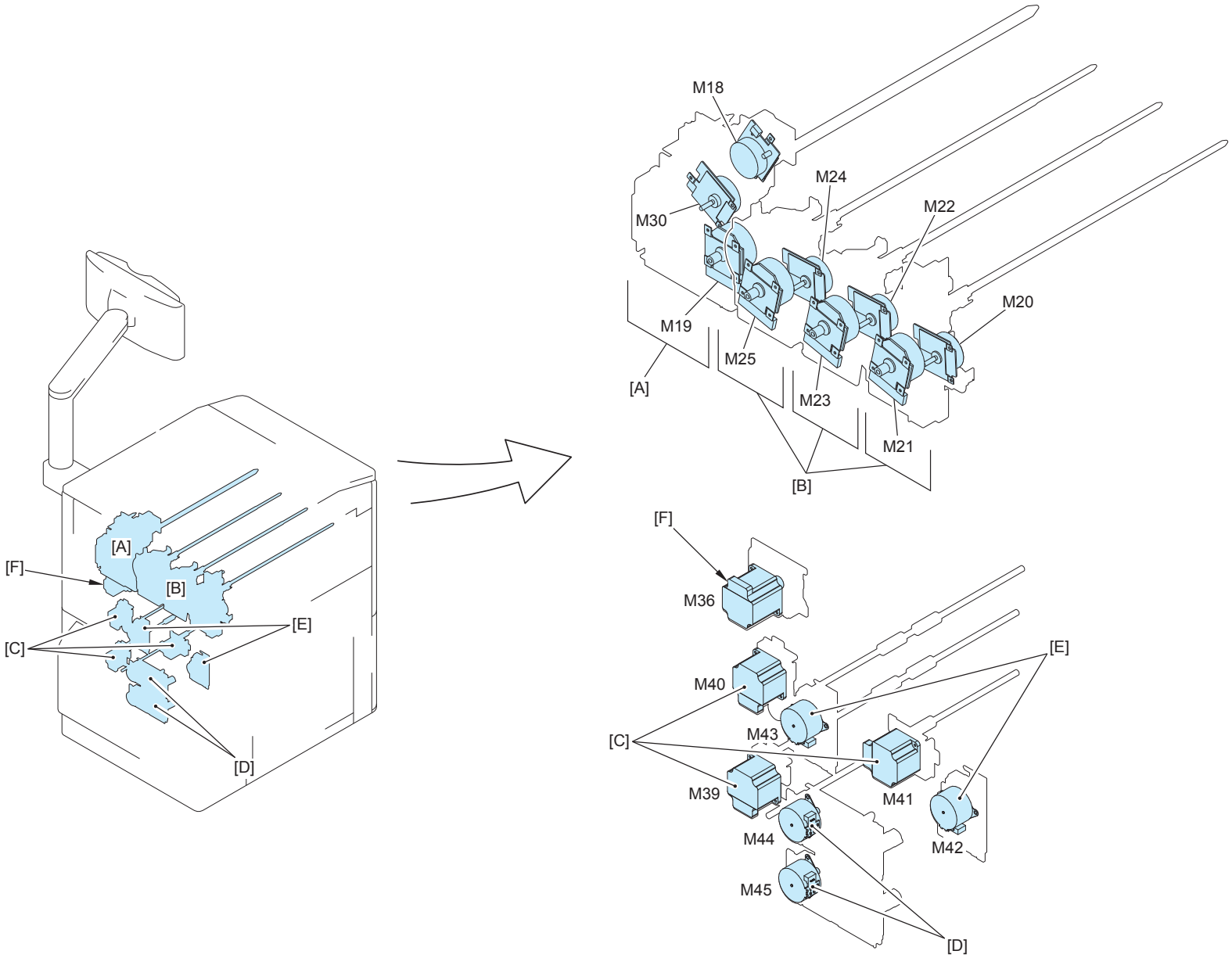
T-4-20



F-4-18

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
M48	Fixing Motor	[A] Fixing Unit	(Refer to page 4-305)	-
M55	Web Motor	[A] Fixing Unit	(Refer to page 4-285)	-
M56	Core Shutter Motor	[A] Fixing Unit	(Refer to page 4-285)	-
M57	Reciprocation Motor	[A] Fixing Unit	(Refer to page 4-285)	-
M31	Secondary Transfer Roller Detachment Motor	Product Configuration	(Refer to page 4-285)	-
M34	Registration Motor	[B] Registration Unit	(Refer to page 4-285)	-
M35	Pre-fixing Feed Motor	[C] Pre-Fixing Paper Feed Unit	(Refer to page 4-285)	-
M32	Duplex Left Motor	[D] Fixing Feed Unit	(Refer to page 4-285)	-

T-4-21

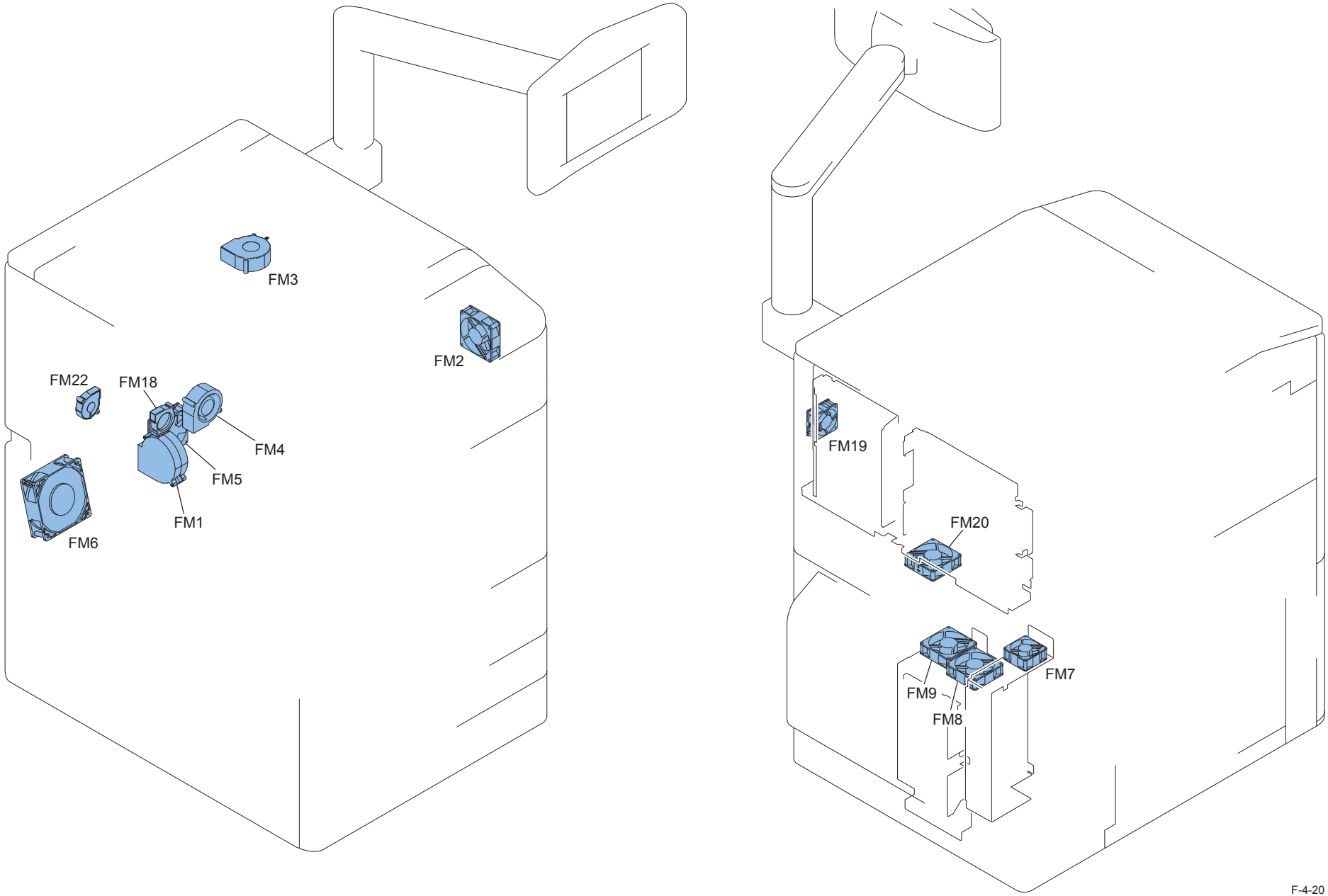

M18
M24
M22
M30
M20
M19
M25
[A]
M23
M21
[B]
[F]
[A]
[B]
[E]
[C]
[D]
[F]
M36
[E]
M40
M43
[C]
M39
M41
M44
M42
M45
[D]

F-4-19

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
M18	Developing Sleeve Drive Motor (Bk)	[A] Drum Drive Unit (Bk)	(Refer to page 4-261)	-
M19	Drum Motor (Bk)	[A] Drum Drive Unit (Bk)	(Refer to page 4-254)	-
M20	Developing Sleeve Drive Motor (Y)	[B] Process Drive Unit (Y)	(Refer to page 4-276)	-
M21	Drum Motor (Y)	[B] Process Drive Unit (Y)	(Refer to page 4-257)	-
M22	Developing Sleeve Drive Motor (M)	[B] Process Drive Unit (M)	(Refer to page 4-276)	-
M23	Drum Motor (M)	[B] Process Drive Unit (M)	(Refer to page 4-257)	-
M24	Developing Sleeve Drive Motor (C)	[B] Process Drive Unit (C)	(Refer to page 4-276)	-
M25	Drum Motor (C)	[B] Process Drive Unit (C)	(Refer to page 4-257)	-
M30	Drum Cleaning and Waste Toner Feed Drive Motor	[A] Drum Drive Unit (Bk)	(Refer to page 4-261)	-
M36	Pre-registration Multi-purpose Tray Drive Motor	[F] Multi Pickup Drive Unit	-	-
M39	Cassette Vertical Path Motor	[C] Vertical Path Drive Unit	-	-
M40	Right Deck Vertical Path Motor	[C] Vertical Path Drive Unit	-	-
M41	Left Deck Vertical Path Motor	[C] Vertical Path Drive Unit	-	-
M42	Left Deck Pickup Motor	[E] Deck Drive Unit	-	-
M43	Right Deck Pickup Motor	[E] Deck Drive Unit	-	-
M44	Cassette 3 Pickup Motor	[D] Cassette Drive Unit	-	-
M45	Cassette 4 Pickup Motor	[D] Caseette Drive Unit	-	-

T-4-22

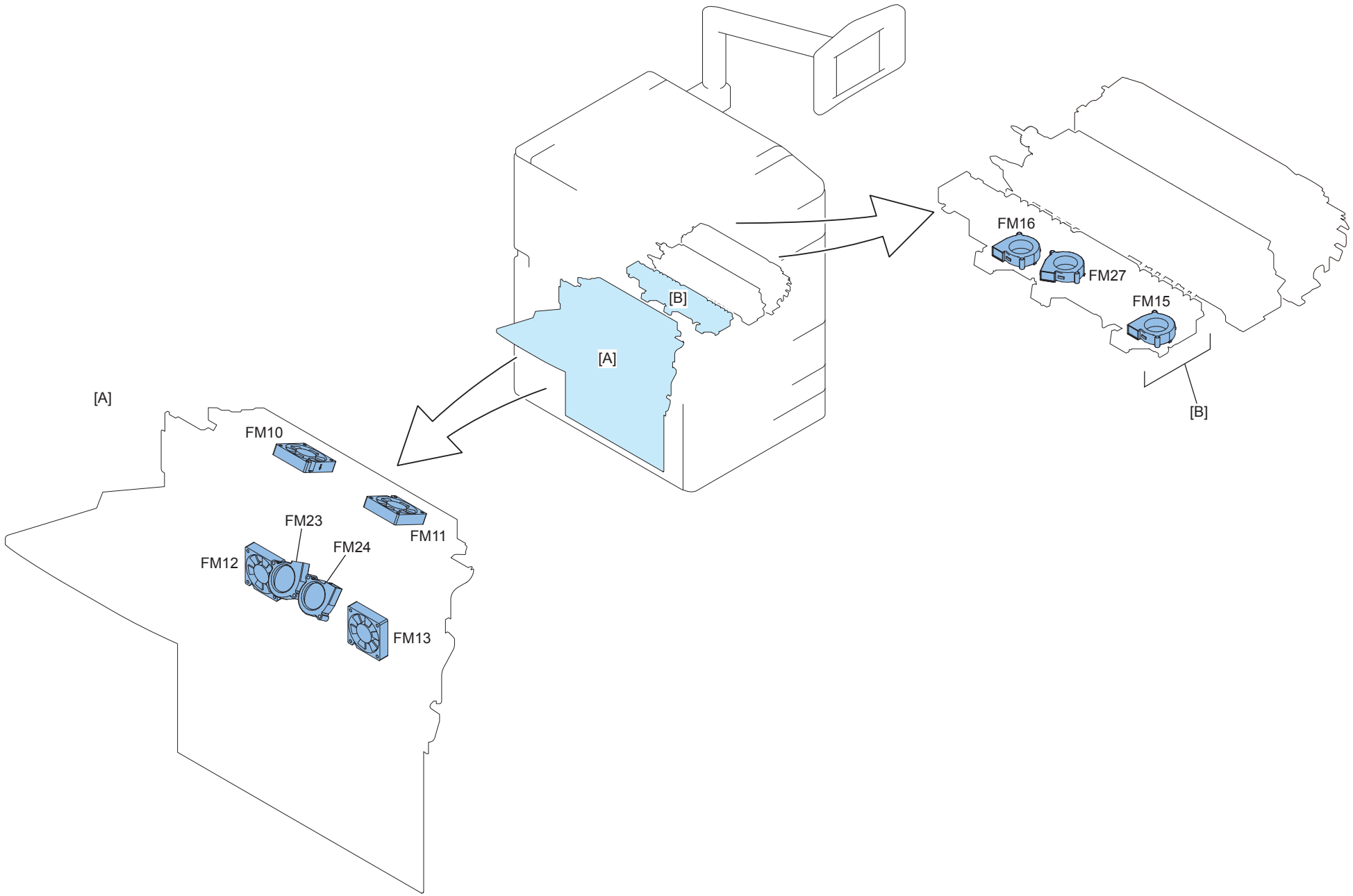
List of Fan



F-4-20

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
FM1	Pre-fixing Feed Attraction Fan	Product Configuration	(Refer to page 4-113)	-
FM2	Primary Charging Suction Fan	Product Configuration	-	-
FM3	Primary Charging Exhaust Fan	Product Configuration	(Refer to page 4-261)	-
FM4	Developing and Pre-transfer Charging Fan	Product Configuration	(Refer to page 4-113)	-
FM5	Color Cleaning Fan	Product Configuration	(Refer to page 4-113)	-
FM6	Fixing Heat Fan	Product Configuration	(Refer to page 4-114)	-
FM7	IH Power Supply Fan	Product Configuration	(Refer to page 4-117)	-
FM8	Power Supply Fan 1	Product Configuration	(Refer to page 4-113)	-
FM9	Power Supply Fan 2	Product Configuration	(Refer to page 4-113)	-
FM18	Hopper Cooling Fan	Product Configuration	(Refer to page 4-113)	-
FM19	Controller Cooling Fan 1	Product Configuration	(Refer to page 4-104)	-
FM20	Controller Cooling Fan 2	Product Configuration	-	-
FM22	Hopper Cooling Suction Fan	Product Configuration	-	-

T-4-23

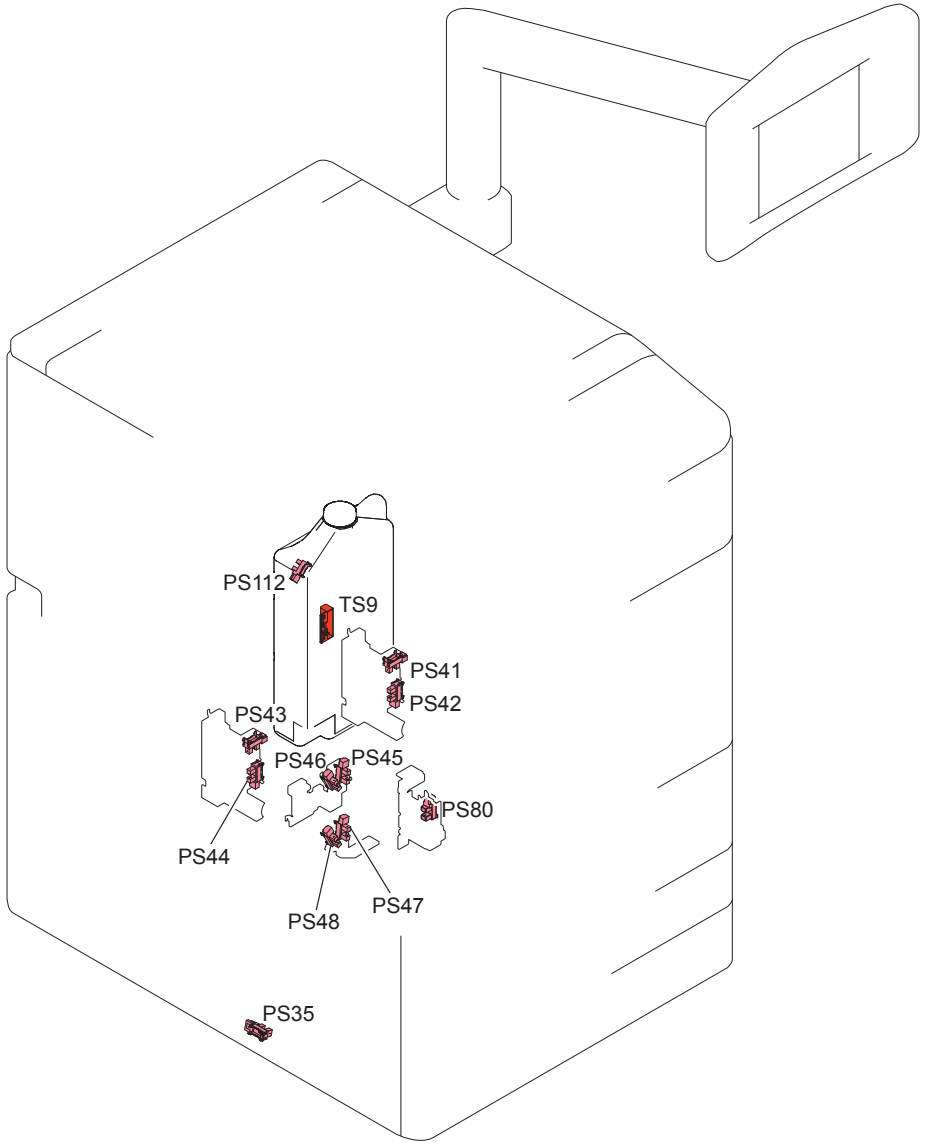


F-4-21

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
FM10	Delivery Heat Fan 1	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
FM11	Delivery Heat Fan 2	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
FM12	Delivery Heat Fan 3	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
FM13	Delivery Heat Fan 4	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
FM23	Anti-adhesion Fan 1	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
FM24	Anti-adhesion Fan 2	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
FM15	Pressure Roller Cooling Fan (Front)	[B] Pre-Fixing Paper Feed Unit	(Refer to page 4-332)	-
FM16	Pressure Roller Cooling Fan (Rear)	[B] Pre-Fixing Paper Feed Unit	(Refer to page 4-332)	-
FM27	Pre-fixing Feed Cooling Fan	[B] Pre-Fixing Paper Feed Unit	(Refer to page 4-332)	-

T-4-24

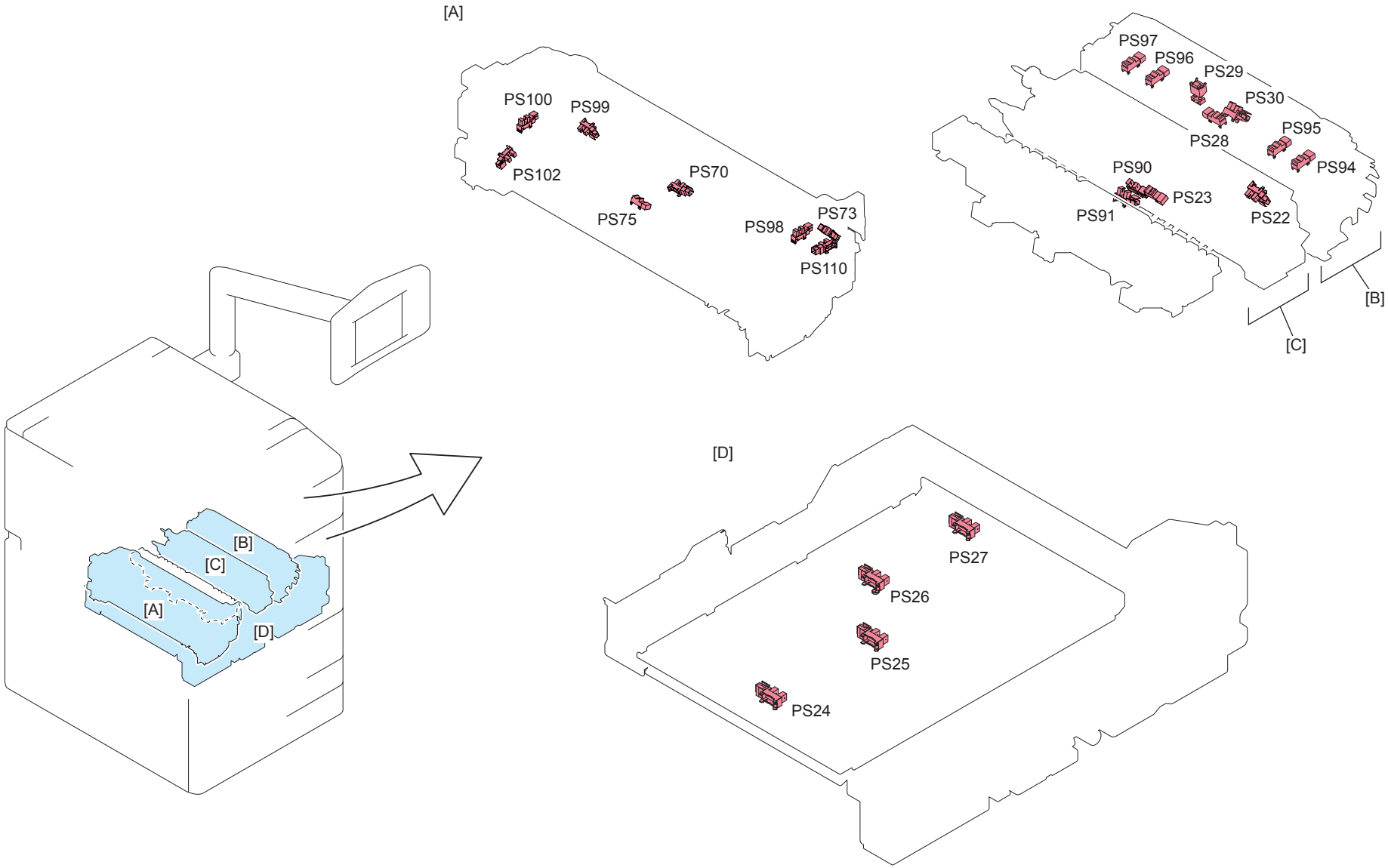
List of Sensor



F-4-22

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
PS35	Reverse Vertical Path Sensor 3	Product Configuration	-	-
PS41	Right Deck Paper Level Sensor 1	Product Configuration	-	-
PS42	Right Deck Paper Level Sensor 2	Product Configuration	-	-
PS43	Left Deck Paper Level Sensor 1	Product Configuration	-	-
PS44	Left Deck Paper Level Sensor 2	Product Configuration	-	-
PS45	Cassette 3 Paper Level Sensor 1	Product Configuration	-	-
PS46	Cassette 3 Paper Level Sensor 2	Product Configuration	-	-
PS47	Cassette 4 Paper Level Sensor 1	Product Configuration	-	-
PS48	Cassette 4 Paper Level Sensor 2	Product Configuration	-	-
PS80	Front Cover Sensor	Product Configuration	-	-
PS112	Waste Toner Battele Set Sensor	Product Configuration	-	-
TS9	Waste Toner Full Sensor	Product Configuration	(Refer to page 4-118)	-

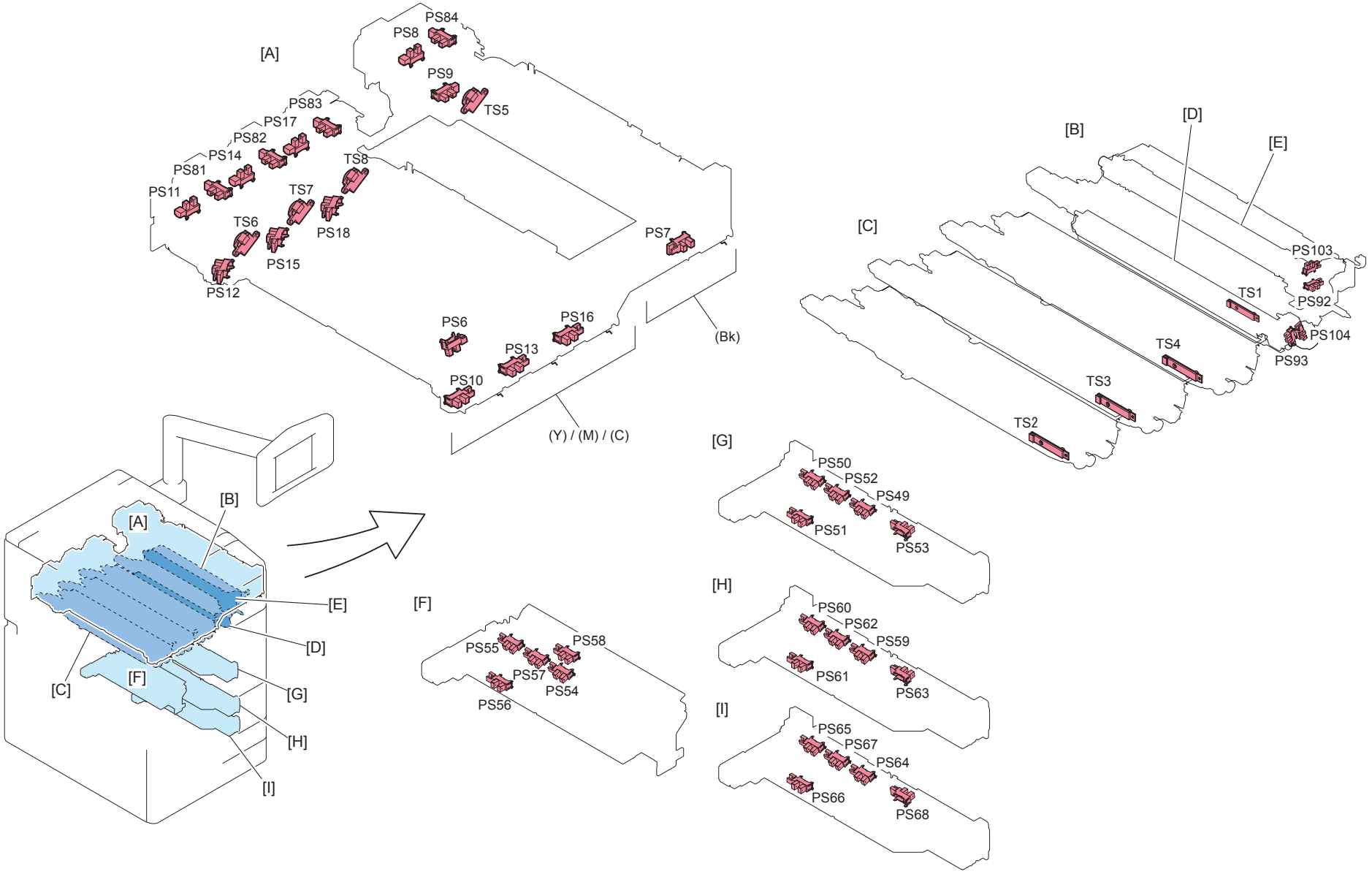
T-4-25


[A]
PS100
PS99
PS102
PS70
PS75
PS73
PS98
PS110
PS97
PS96
PS29
PS30
PS28
PS95
PS94
PS90
PS23
PS91
PS22
[B]
[C]
[B]
[C]
[A]
[D]
[D]
PS27
PS26
PS25
PS24

F-4-23

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
PS70	Fixing Inlet Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS73	Fixing Pressure Release Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS75	Fixing Inner Delivery Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS98	Core HP Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS99	Fixing Uunifiform Roller HP Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS100	Reciprocation HP Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS102	Web Level Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS110	Half Pressure Position Sensor	[A] Fixing Unit	(Refer to page 4-285)	-
PS22	Secondary Transfer Roller Detachment HP Sensor	[C] Secondary Transfer Unit	(Refer to page 4-168)	-
PS23	Post-secondary Transfer Sensor	[C] Secondary Transfer Unit	(Refer to page 4-168)	-
PS28	Registration Sensor	[B] Registration Unit	(Refer to page 4-334)	-
PS29	Transparency Sensor	[B] Registration Unit	(Refer to page 4-334)	-
PS30	Vertical Path Merging Sensor	[B] Registration Unit	(Refer to page 4-334)	-
PS90	Loop Sensor 1	[C] Secondary Transfer Unit	(Refer to page 4-168)	-
PS91	Loop Sensor 2	[C] Secondary Transfer Unit	(Refer to page 4-168)	-
PS94	Original Size Sensor 1	[B] Registration Unit	(Refer to page 4-334)	-
PS95	Original Size Sensor 2	[B] Registration Unit	(Refer to page 4-334)	-
PS96	Original Size Sensor 3	[B] Registration Unit	(Refer to page 4-334)	-
PS97	Original Size Sensor 4	[B] Registration Unit	(Refer to page 4-334)	-
PS24	Duplex Sensor 1	[D] Fixing Feed Unit	(Refer to page 4-285)	-
PS25	Duplex Sensor 2	[D] Fixing Feed Unit	(Refer to page 4-310)	-
PS26	Duplex Sensor 3	[D] Fixing Feed Unit	(Refer to page 4-168)	-
PS27	Duplex Sensor 4	[D] Fixing Feed Unit	(Refer to page 4-334)	-

T-4-26

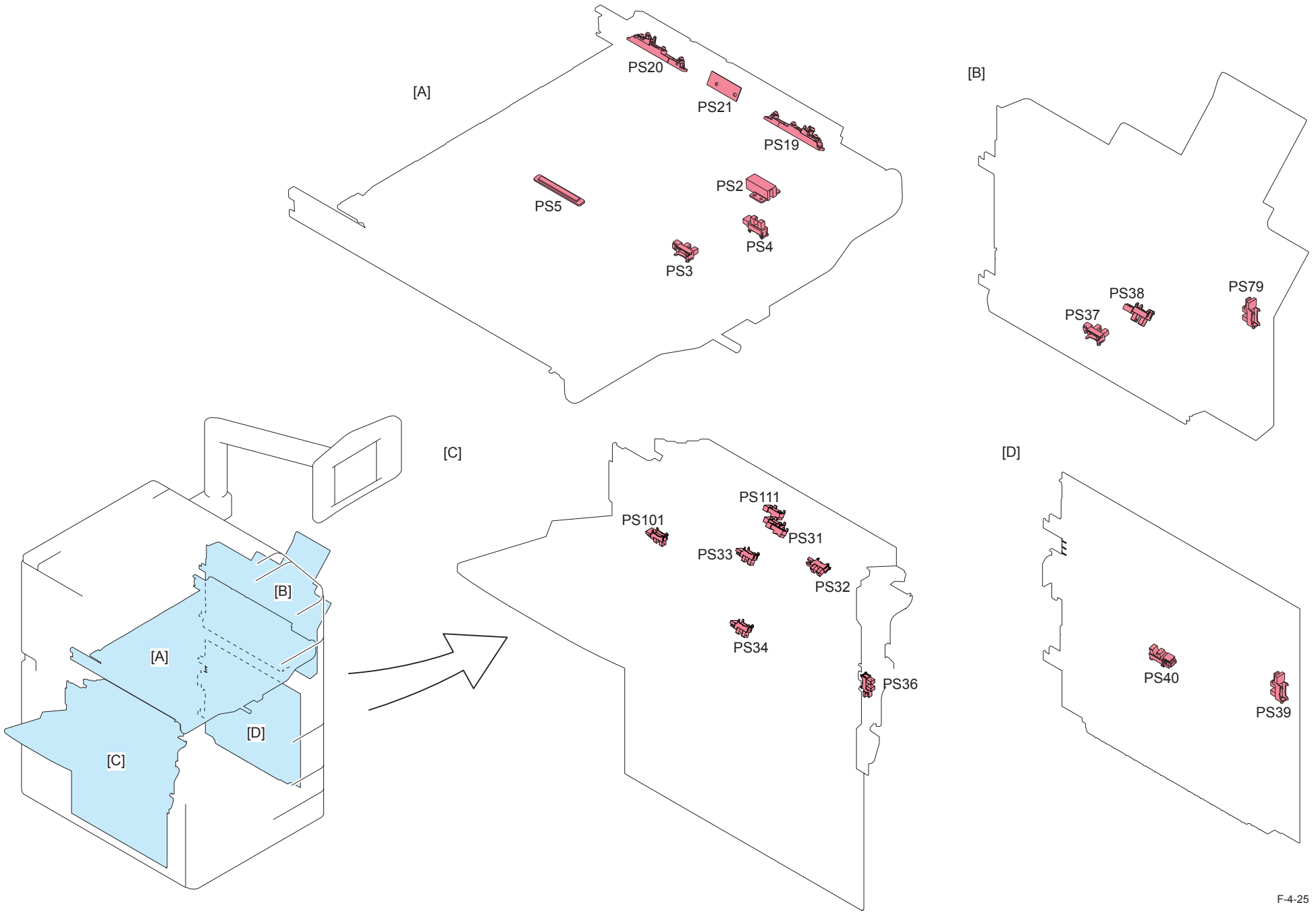

[A]
PS84
PS8
PS9
TS5
PS83
PS17
PS82
PS14
PS81
PS11
TS8
TS7
TS6
PS18
PS15
PS12
PS7
PS6
PS16
PS13
PS10
(Bk)
(Y) / (M) / (C)
[B]
[D]
[E]
[C]
PS103
PS92
TS1
PS104
PS93
TS4
TS3
TS2
[B]
[A]
[E]
[D]
[C]
[F]
[G]
[H]
[I]
[F]
PS55
PS58
PS57
PS54
PS56
[G]
PS50
PS52
PS49
PS51
PS53
[H]
PS60
PS62
PS59
PS61
PS63
[I]
PS65
PS67
PS64
PS66
PS68

F-4-24

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
PS6	Toner Supply Cover Sensor	[A] Hopper Unit (Y)	(Refer to page 4-267)	-
PS7	Toner Container Insertion Inlet Cover Sensor (Bk)	[A] Hopper Unit (Bk)	(Refer to page 4-261)	-
PS8	Toner Container Reciprocation HP Sensor (Bk)	[A] Hopper Unit (Bk)	(Refer to page 4-261)	-
PS9	Toner Feed Screw Rotation Sensor (Bk)	[A] Hopper Unit (Bk)	(Refer to page 4-261)	-
PS10	Toner Container Insertion Inlet Cover Sensor (Y)	[A] Hopper Unit (Y)	(Refer to page 4-267)	-
PS11	Toner Container Reciprocation HP Sensor (Y)	[A] Hopper Unit (Y)	(Refer to page 4-267)	-
PS12	Toner Feed Screw Rotation Sensor (Y)	[A] Hopper Unit (Y)	(Refer to page 4-267)	-
PS13	Toner Container Insertion Inlet Cover Sensor (M)	[A] Hopper Unit (M)	(Refer to page 4-267)	-
PS14	Toner Container Reciprocation HP Sensor (M)	[A] Hopper Unit (M)	(Refer to page 4-267)	-
PS15	Toner Feed Screw Rotation Sensor (M)	[A] Hopper Unit (M)	(Refer to page 4-267)	-
PS16	Toner Container Insertion Inlet Cover Sensor (C)	[A] Hopper Unit (C)	(Refer to page 4-267)	-
PS17	Toner Container Reciprocation HP Sensor (C)	[A] Hopper Unit (C)	(Refer to page 4-267)	-
PS18	Toner Feed Screw Rotation Sensor (C)	[A] Hopper Unit (C)	(Refer to page 4-267)	-
PS81	Toner Container Phase Sensor (Y)	[A] Hopper Unit (Y)	(Refer to page 4-267)	-
PS82	Toner Container Phase Sensor (M)	[A] Hopper Unit (M)	(Refer to page 4-267)	-
PS83	Toner Container Phase Sensor (C)	[A] Hopper Unit (C)	(Refer to page 4-267)	-
PS84	Toner Container Phase Sensor (Bk)	[A] Hopper Unit (Bk)	(Refer to page 4-261)	-
TS5	Hopper Toner Level Sensor (Bk)	[A] Hopper Unit (Bk)	(Refer to page 4-261)	-
TS6	Hopper Toner Level Sensor (Y)	[A] Hopper Unit (Y)	(Refer to page 4-267)	-
TS7	Hopper Toner Level Sensor (M)	[A] Hopper Unit (M)	(Refer to page 4-267)	-
TS8	Hopper Toner Level Sensor (C)	[A] Hopper Unit (C)	(Refer to page 4-267)	-
PS92	Primary Wire HP Sensor	[E] Primary Charging Assembly	(Refer to page 4-184)	-
PS93	Pre-transfer Charging Wire HP Sensor	[D] Pre-transfer Charging Assembly	(Refer to page 4-203)	-
PS103	Primary Charging Wire Rotation Position Sensor	[E] Primary Charging Assembly	(Refer to page 4-184)	-
PS104	Pre-transfer Charging Wire Rotary Position Sensor	[D] Pre-transfer Charging Assembly	(Refer to page 4-203)	-
TS1	Toner Density Sensor (Bk)	[B] Drum Unit (Bk)	(Refer to page 4-214)	-
TS2	Toner Density Sensor (Y)	[C] Process Unit (Y)	(Refer to page 4-239)	-
TS3	Toner Density Sensor (M)	[C] Process Unit (M)	(Refer to page 4-239)	-
TS4	Toner Density Sensor (C)	[C] Process Unit (C)	(Refer to page 4-239)	-
PS49	Right Deck Pickup Sensor	[G] Right Deck Pickup Unit	(Refer to page 4-326)	-
PS50	Right Deck Upper Limit Sensor	[G] Right Deck Pickup Unit	(Refer to page 4-326)	-
PS51	Right Deck Paper Sensor	[G] Right Deck Pickup Unit	(Refer to page 4-326)	-
PS52	Right Deck Paper Height Sensor	[G] Right Deck Pickup Unit	(Refer to page 4-326)	-
PS53	Vertical Path Sensor 1	[G] Right Deck Pickup Unit	(Refer to page 4-326)	-
PS54	Left Deck Pickup Sensor	[F] Left Deck Pickup Unit	(Refer to page 4-327)	-
PS55	Left Deck Upper Limit Sensor	[F] Left Deck Pickup Unit	(Refer to page 4-327)	-
PS56	Left Deck Paper Sensor	[F] Left Deck Pickup Unit	(Refer to page 4-327)	-
PS57	Left Deck Paper Height Sensor	[F] Left Deck Pickup Unit	(Refer to page 4-327)	-
PS58	Left Deck Pullout Sensor	[F] Left Deck Pickup Unit	(Refer to page 4-327)	-
PS59	Cassette 3 Pickup Sensor	[H] Cassette 3 Pickup Unit	(Refer to page 4-326)	-
PS60	Cassette 3 Upper Limit Sensor	[H] Cassette 3 Pickup Unit	(Refer to page 4-326)	-
PS61	Cassette 3 Paper Sensor	[H] Cassette 3 Pickup Unit	(Refer to page 4-326)	-
PS62	Cassette 3 Paper Height Sensor	[H] Cassette 3 Pickup Unit	(Refer to page 4-326)	-
PS63	Vertical Path Sensor 3	[H] Cassette 3 Pickup Unit	(Refer to page 4-326)	-
PS64	Cassette 4 Pickup Sensor	[I] Cassette 4 Pickup Unit	(Refer to page 4-326)	-

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
PS65	Cassette 4 Upper Limit Sensor	[I] Cassette 4 Pickup Unit	(Refer to page 4-326)	-
PS66	Cassette 4 Paper Sensor	[I] Cassette 4 Pickup Unit	(Refer to page 4-326)	-
PS67	Cassette 4 Paper Height Sensor	[I] Cassette 4 Pickup Unit	(Refer to page 4-326)	-
PS68	Vertical Path Sensor 4	[I] Cassette 4 Pickup Unit	(Refer to page 4-326)	-

T-4-27

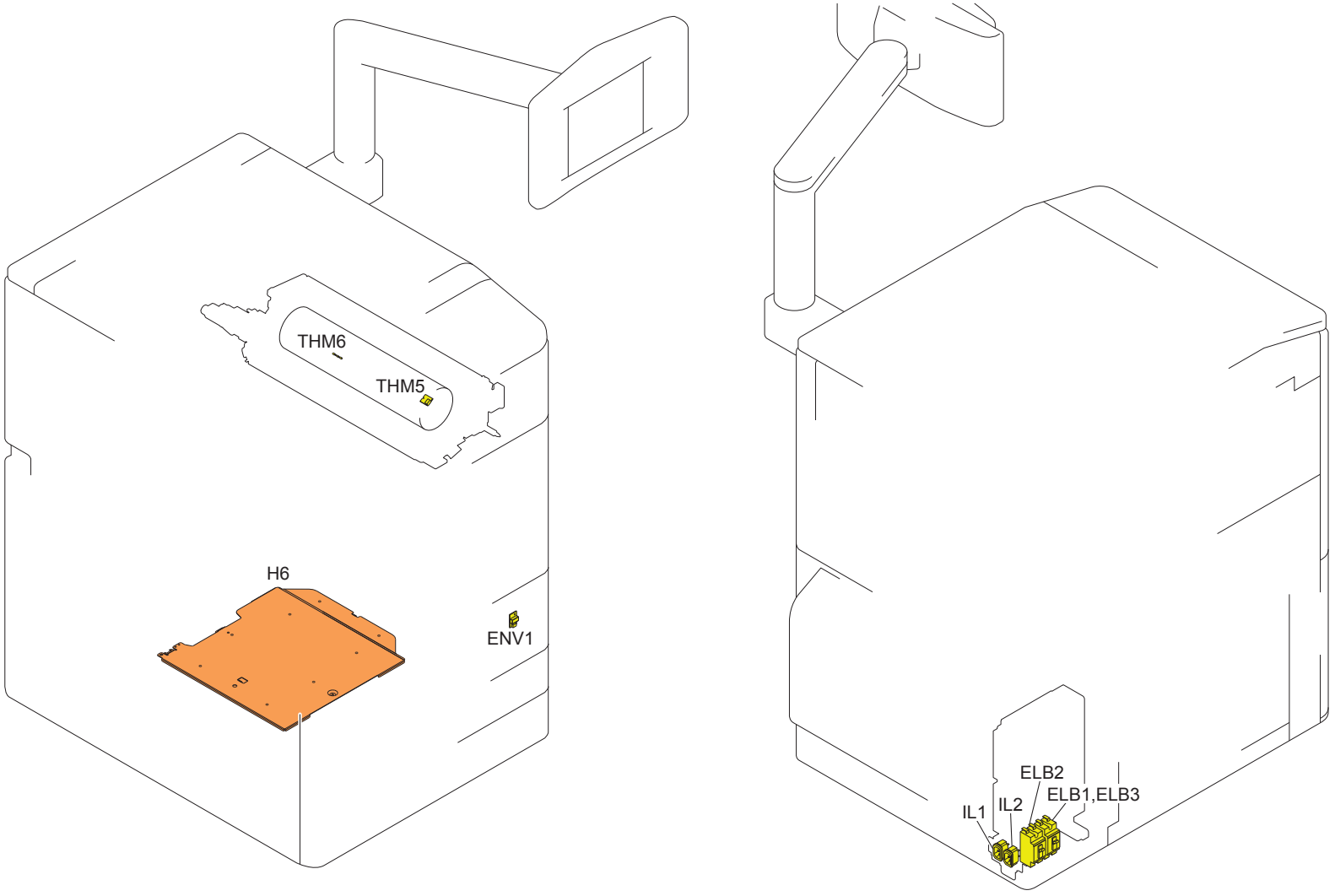

[A]
PS20
PS21
PS19
PS5
PS2
PS4
PS3
[B]
PS38
PS37
PS79
[C]
PS111
PS101
PS31
PS33
PS32
PS34
PS36
[D]
PS40
PS39
[A]
[B]
[C]
[D]

F-4-25

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
PS2	ITB Displacement Sensor	[A] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
PS3	Steering Drive HP Sensor	[A] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
PS4	Primary Transfer Roller Detachment HP Sensor	[A] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
PS5	ITB HP Sensor	[A] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
PS19	Registration Patch Sensor (Front)	[A] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
PS20	Registration Patch Sensor (Rear)	[A] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
PS21	Patch Sensor	[A] ITB Unit	(Refer to page 4-136)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
PS37	Multi-purpose Tray Paper Sensor	[B] Multi-purpose Tray Pickup Unit	(Refer to page 4-325)	-
PS38	Multi-purpose Tray Last Paper Sensor	[B] Multi-purpose Tray Pickup Unit	(Refer to page 4-325)	-
PS79	Multi-purpose Tray Cover Sensor	[B] Multi-purpose Tray Pickup Unit	(Refer to page 4-325)	-
PS31	Outer Delivery Sensor	[C] Reverse Delivery Unit	(Refer to page 4-331)	-
PS32	Reverse Sensor	[C] Reverse Delivery Unit	(Refer to page 4-331)	-
PS33	Reverse Vertical Path Sensor 1	[C] Reverse Delivery Unit	(Refer to page 4-331)	-
PS34	Reverse Vertical Path Sensor 2	[C] Reverse Delivery Unit	(Refer to page 4-331)	-
PS36	Lower Left Cover Sensor	[C] Reverse Delivery Unit	(Refer to page 4-331)	-
PS101	Reverse Roller Detachment HP Sensor	[C] Reverse Delivery Unit	(Refer to page 4-330)	-
PS111	Outer Delivery Transparency Sensor	[C] Reverse Delivery Unit	(Refer to page 4-330)	-
PS39	Lower Right Cover Sensor	[D] Vertical Path Unit	(Refer to page 4-326)	-
PS40	Vertical Path Sensor 2	[D] Vertical Path Unit	(Refer to page 4-326)	-

T-4-28

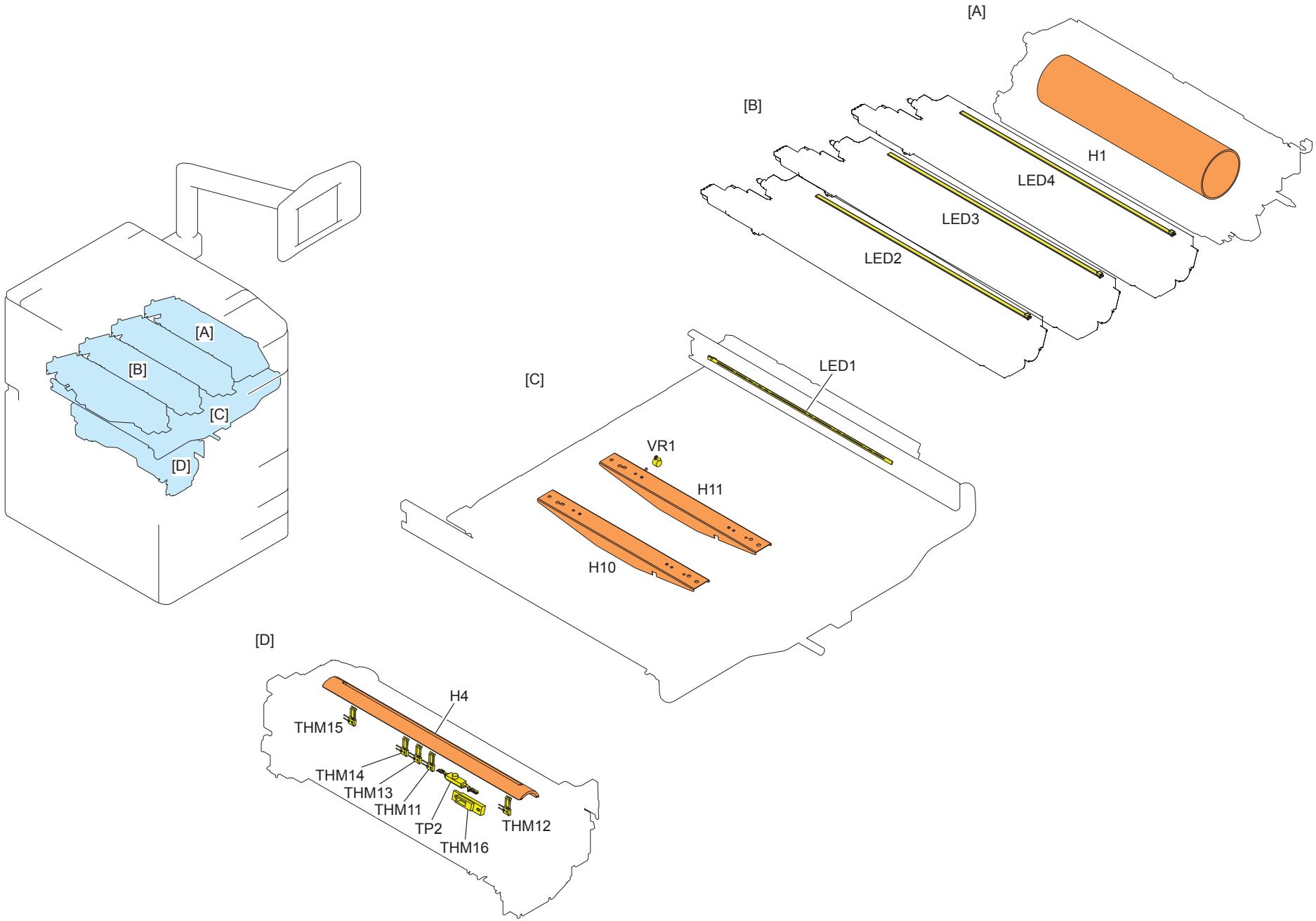
Lamp / Heater, others



F-4-26

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
H6	Cassette Heater	Product Configuration	-	-
ELB1	Leakage Breaker 1 (100V)	Product Configuration	(Refer to page 4-114)	-
ELB2	Leakage Breaker 2 (120V)	Product Configuration	(Refer to page 4-114)	-
ELB3	Leakage Breaker 3 (200V)	Product Configuration	(Refer to page 4-114)	-
IL1	Inlet	Product Configuration	(Refer to page 4-114)	-
IL2	Inlet	Product Configuration	(Refer to page 4-114)	-
ENV1	Environment Sensor	Product Configuration	-	-
THM5	Drum Thermopile	Drum Unit (Bk)	(Refer to page 4-175)	-
THM6	Drum Thermistor	Drum Unit (Bk)	(Refer to page 4-181)	-

T-4-29

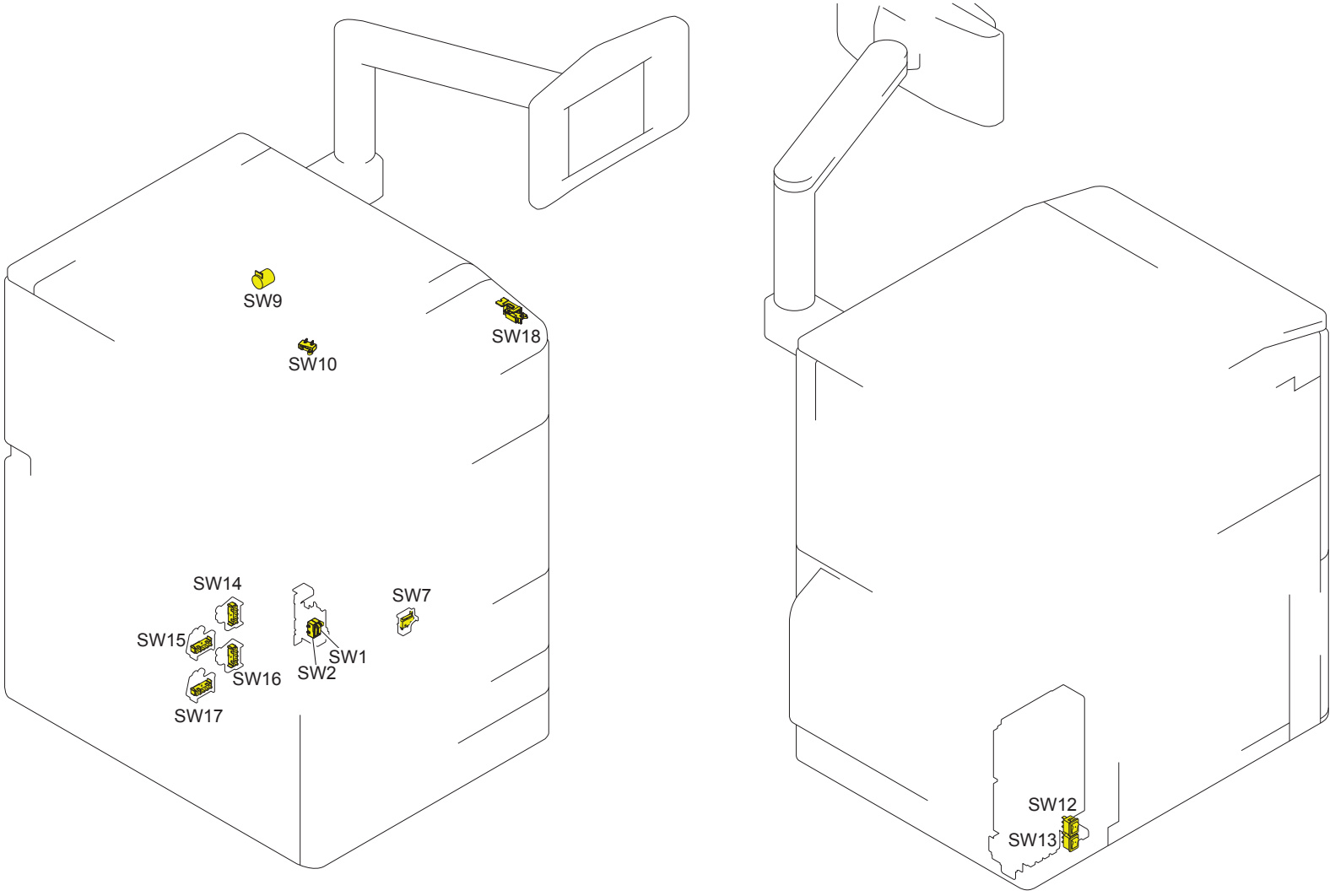

[A]
[B]
H1
LED4
LED3
LED2
[A]
[B]
[C]
[D]
[C]
LED1
VR1
H11
H10
[D]
H4
THM15
THM14
THM13
THM11
TP2
THM16
THM12

F-4-27

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
H1	Drum Heater (Bk)	[A] Drum Unit (Bk)	(Refer to page 4-214)	-
LED2	Cleaning Pre-exposure LED (Y)	[B] Process Unit (Y)	(Refer to page 4-239)	-
LED3	Cleaning Pre-exposure LED (M)	[B] Process Unit (M)	(Refer to page 4-239)	-
LED4	Cleaning Pre-exposure LED (C)	[B] Process Unit (C)	(Refer to page 4-239)	-
H10	Drum Heater (Y)	[C] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
H11	Drum Heater (M)	[C] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
LED1	Cleaning Pre-exposure LED (Bk)	[C] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
VR1	ITB Unit Varistor	[C] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
THM11	Main Thermistor	[D] Fixing Unit	(Refer to page 4-285)	-
THM12	Thermistor (Front)	[D] Fixing Unit	(Refer to page 4-285)	-
THM13	Sub Thermistor 1	[D] Fixing Unit	(Refer to page 4-285)	-
THM14	Sub Thermistor 2	[D] Fixing Unit	(Refer to page 4-285)	-
THM15	Thermistor (Rear)	[D] Fixing Unit	(Refer to page 4-285)	-
THM16	Pressure RollerThermistor	[D] Fixing Unit	(Refer to page 4-285)	-
TP2	Fixing Thermal Switch	[D] Fixing Unit	(Refer to page 4-285)	-
H4	IH Coil	[D] Fixing Unit	(Refer to page 4-285)	-

T-4-30

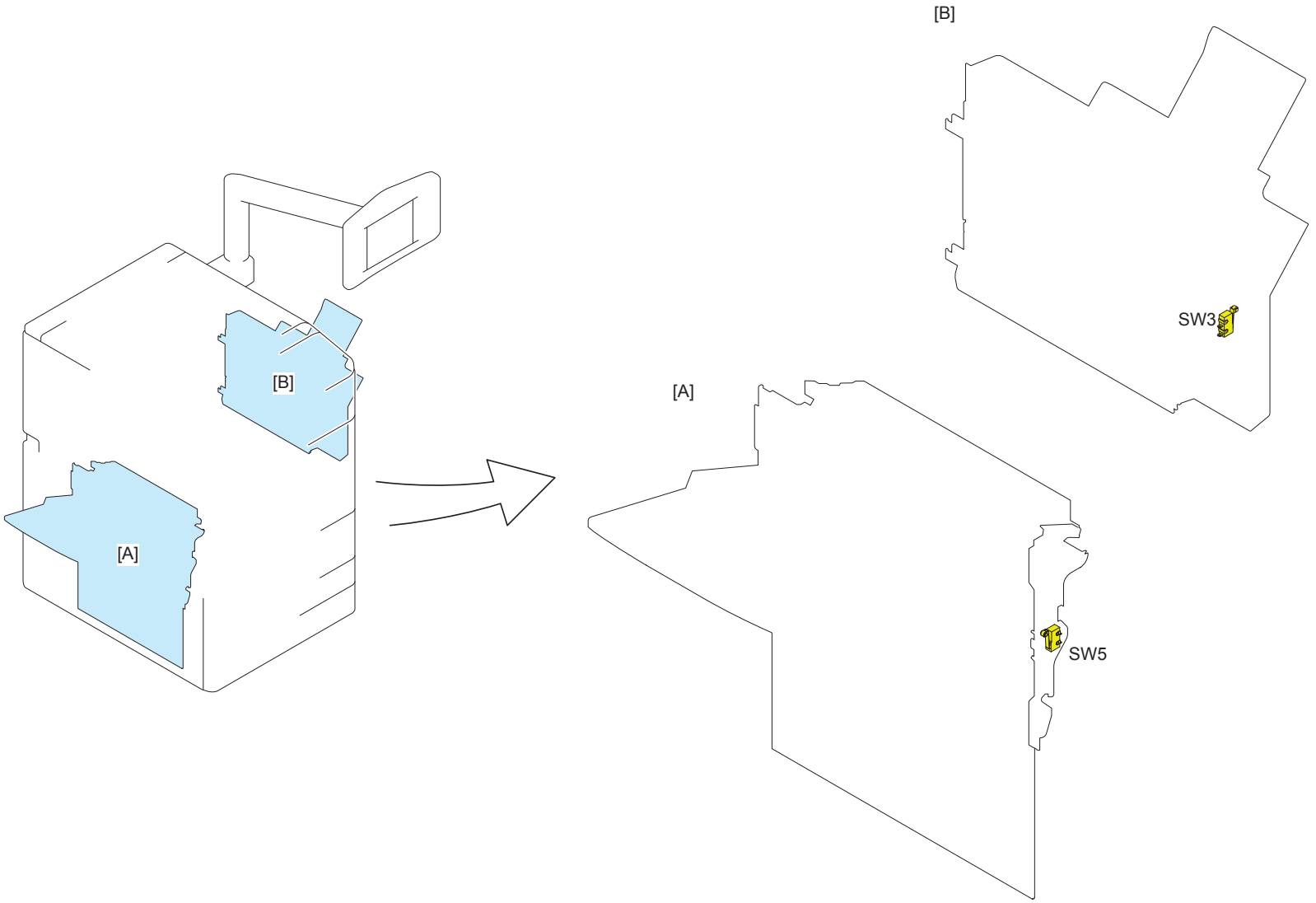
List of Switch



F-4-28

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
SW1	Front Door Switch 1	Product Configuration	-	-
SW2	Front Door Switch 2	Product Configuration	-	-
SW7	Fixing Feed Unit Switch	Product Configuration	-	-
SW9	Key Switch	Product Configuration	-	-
SW10	Waste Toner Screw Lock Detection Switch	Product Configuration	-	-
SW12	Environment Switch	Product Configuration	(Refer to page 4-114)	-
SW13	Cassette Heater Switch	Product Configuration	(Refer to page 4-114)	-
SW14	Cassette 3 Size Detection Switch 1	Product Configuration	(Refer to page 4-337)	-
SW15	Cassette 3 Size Detection Switch 2	Product Configuration	(Refer to page 4-337)	-
SW16	Cassette 4 Size Detection Switch 1	Product Configuration	(Refer to page 4-337)	-
SW17	Cassette 4 Size Detection Switch 2	Product Configuration	(Refer to page 4-337)	-
SW18	Main Switch	Product Configuration	-	-

T-4-31

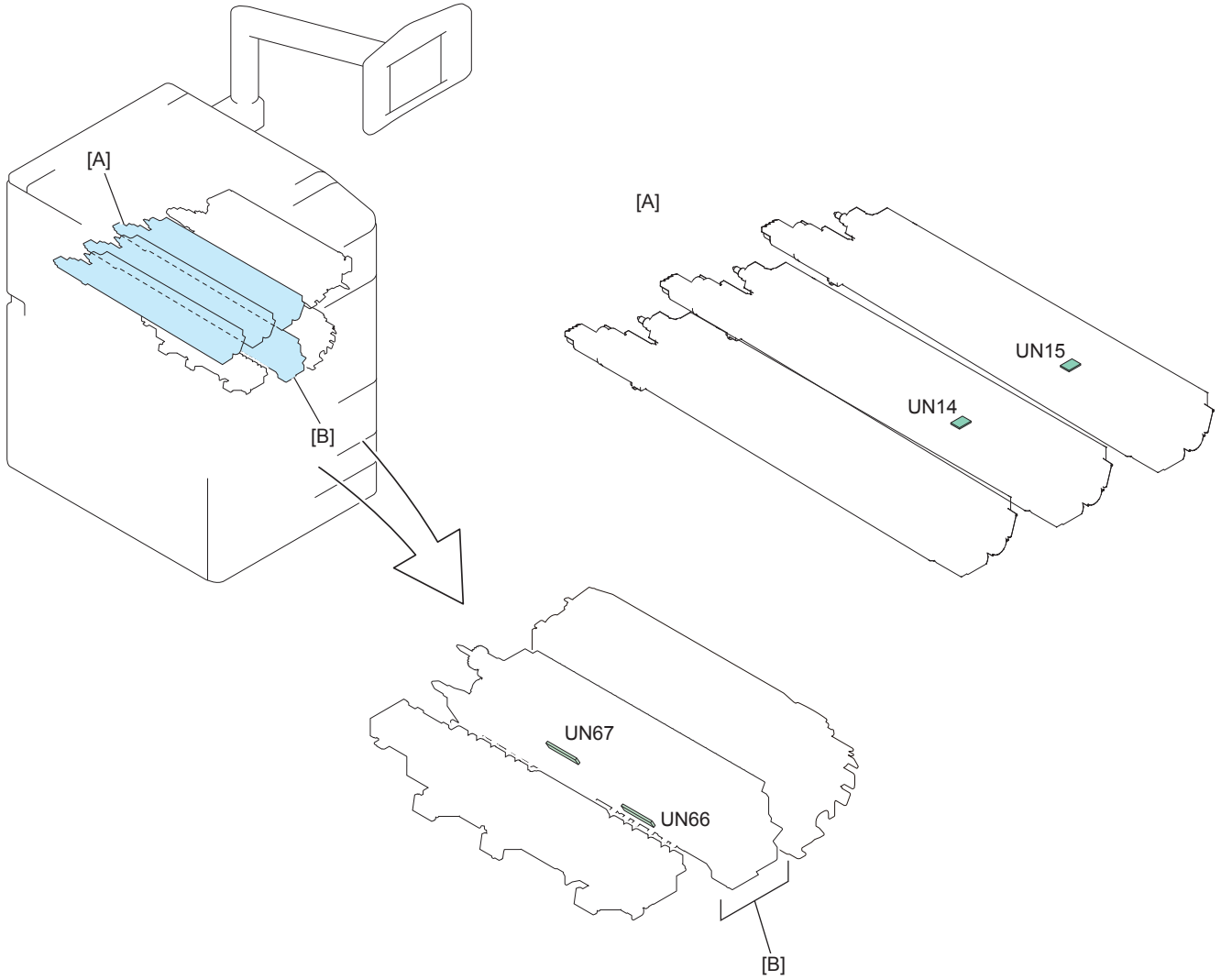


F-4-29

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
SW5	Delivery Door Switch	[A] Reverse Delivery Unit	(Refer to page 4-331)	-
SW3	Multi-purpose Tray Unit Switch	[B] Multi-purpose Tray Pickup Unit	(Refer to page 4-325)	-

T-4-32

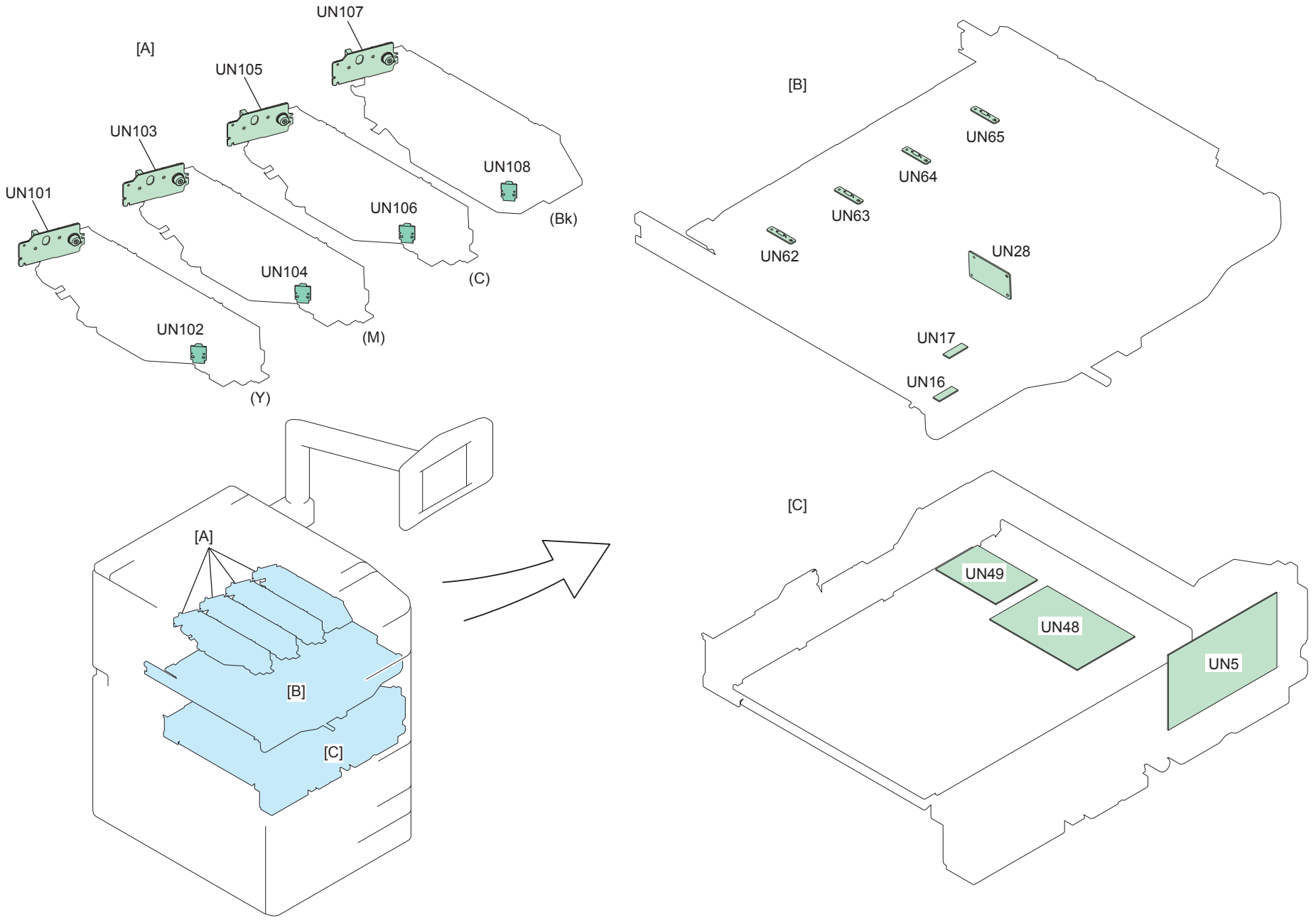
List of PCB



F-4-30

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
UN14	Developing Assembly Inner Temperature Detection PCB (Y)/(M)	[A] Process Unit (Y)/(M)/(C)	(Refer to page 4-182)	-
UN15	Developing Assembly Inner Temperature Detection PCB (C)/(Bk)	[A] Process Unit (Y)/(M)/(C)	(Refer to page 4-182)	-
UN66	Secondary Transfer High Voltage Contact Resistance	[B] Secondary Transfer Unit	(Refer to page 4-168)	-
UN67	Secondary Transfer Static Elimination High Voltage Contact Resistance	[B] Secondary Transfer Unit	(Refer to page 4-168)	-

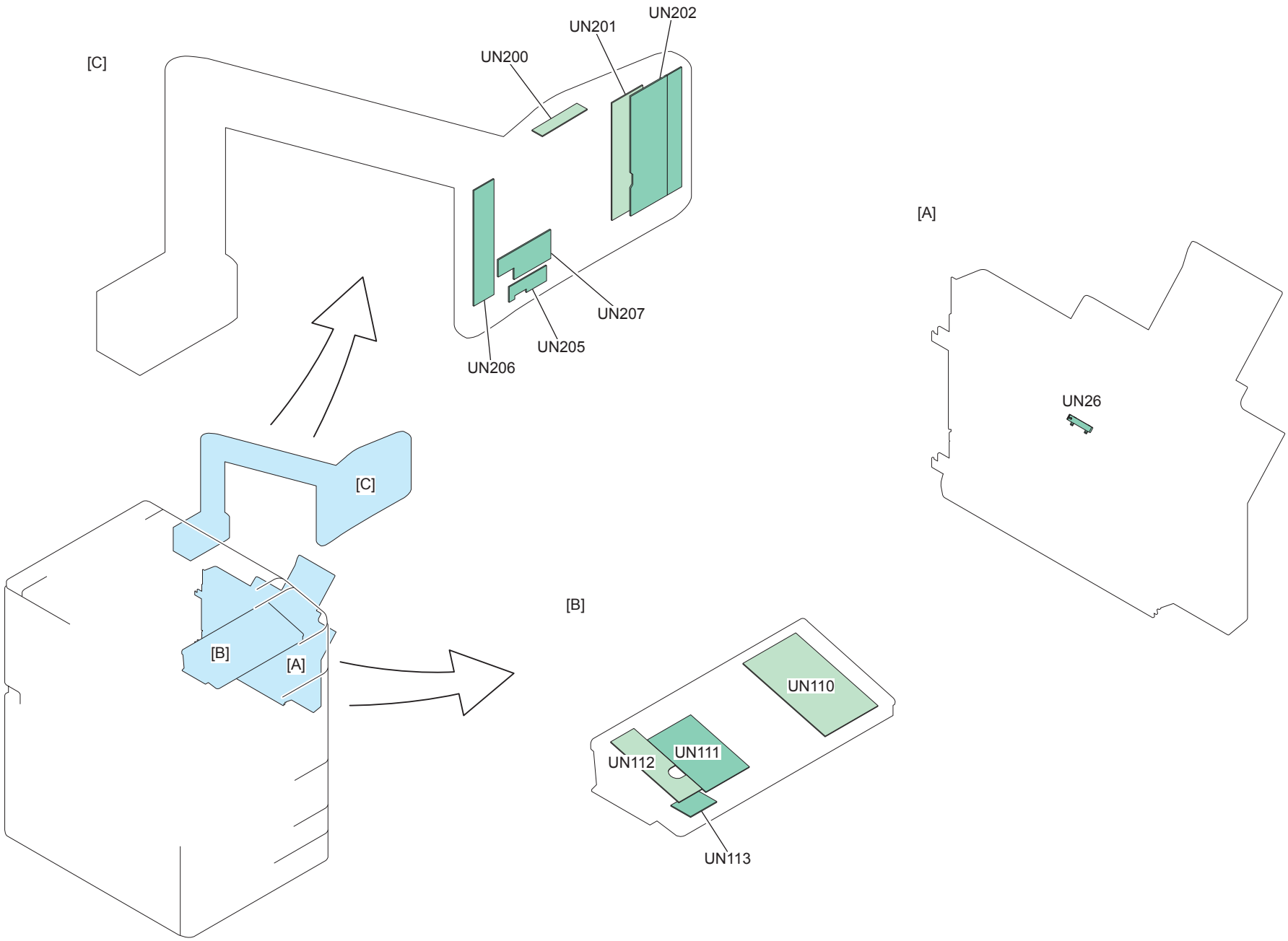
T-4-33


[A]
UN107
UN105
UN103
UN101
UN108
UN106
(Bk)
(C)
UN104
UN102
(M)
(Y)
[B]
UN65
UN64
UN63
UN62
UN28
UN17
UN16
[A]
[B]
[C]
[C]
UN49
UN48
UN5

F-4-31

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
UN101	Laser Driver PCB (Y)	[A] Laser Scanner Unit (Y)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN102	BD PCB (Y)	[A] Laser Scanner Unit (Y)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN103	Laser Driver PCB (M)	[A] Laser Scanner Unit (M)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN104	BD PCB (M)	[A] Laser Scanner Unit (M)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN105	Laser Driver PCB (C)	[A] Laser Scanner Unit (C)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN106	BD PCB (C)	[A] Laser Scanner Unit (C)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN107	Laser Driver PCB (Bk)	[A] Laser Scanner Unit (Bk)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN108	BD PCB (Bk)	[A] Laser Scanner Unit (Bk)	(Refer to page 4-127)	When Replacing the Laser Scanner Unit (Refer to page 4-130)
UN16	ITB Drive Roller Speed Detection PCB 1	[B] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
UN17	ITB Drive Roller Speed Detection PCB 2	[B] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
UN28	ITB Relay PCB	[B] ITB Unitt	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
UN62	Primary Transfer High Voltage Contact Resistance (Y)	[B] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
UN63	Primary Transfer High Voltage Contact Resistance (M)	[B] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
UN64	Primary Transfer High Voltage Contact Resistance (C)	[B] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
UN65	Primary Transfer High Voltage Contact Resistance (Bk)	[B] ITB Unit	(Refer to page 4-147)	Adjustment when Installing/Removing the ITB Unit (Refer to page 4-133)
UN5	Fixing Feed Driver PCB	[C] Fixing Feed Unit	(Refer to page 4-124)	-
UN48	Secondary Transfer High Voltage PCB	[C] Fixing Feed Unit	(Refer to page 4-122)	-
UN49	Post-secondary Transfer Static Elimination High Voltage PCB	[C] Fixing Feed Unit	(Refer to page 4-123)	-

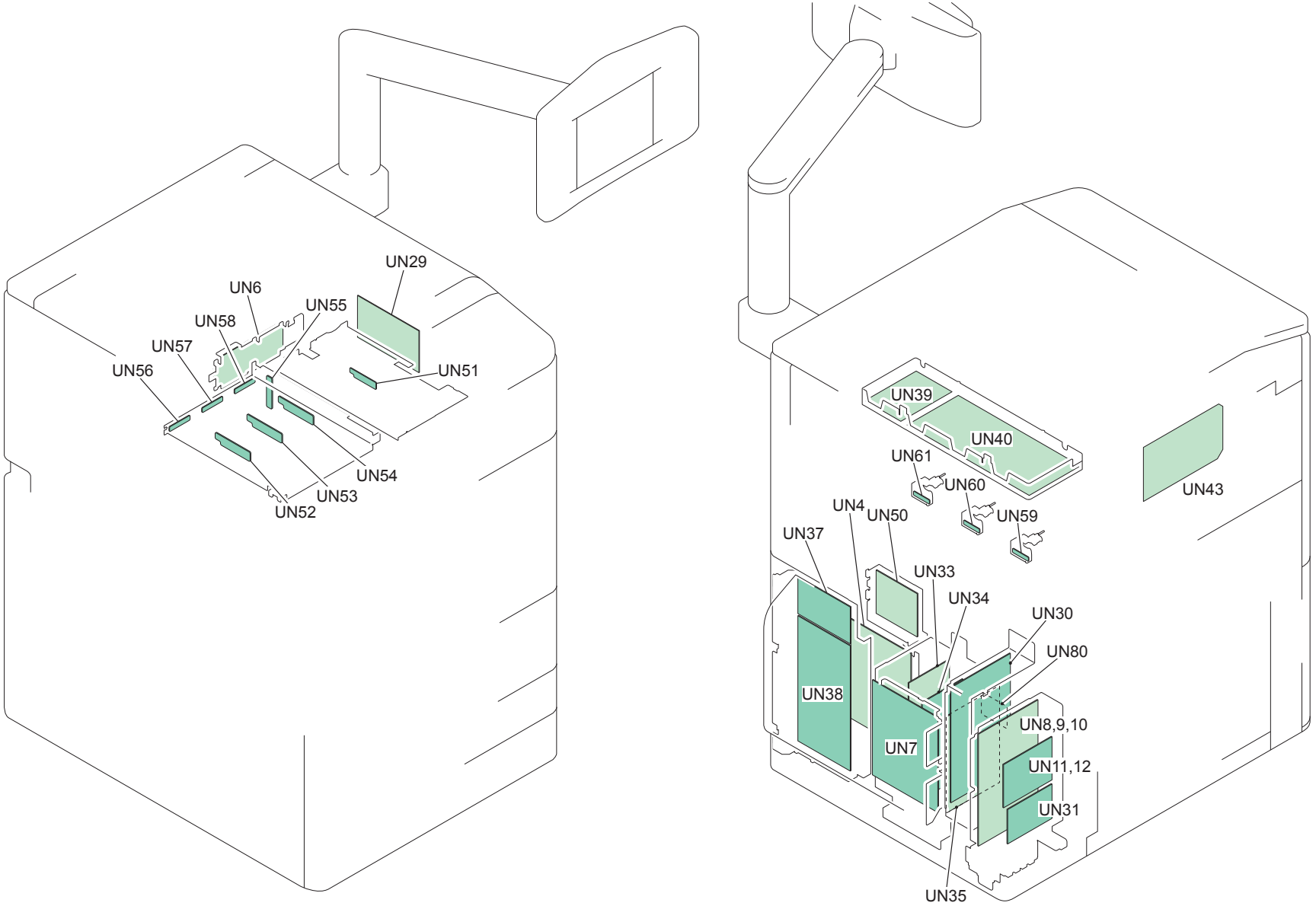
T-4-34


[C]
UN200
UN201
UN202
UN207
UN205
UN206
[C]
[B]
[A]
[B]
UN110
UN111
UN112
UN113
[A]
UN26

F-4-32

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
UN26	Multi-purpose Tray Paper Width Detection PCB	[A] Multi-purpose Tray Pickup Unit	(Refer to page 4-325)	-
UN110	Ten Key PCB	[B] Flat Control Panel Unit	(Refer to page 4-95)	-
UN111	CPU PCB	[B] Flat Control Panel Unit	(Refer to page 4-95)	-
UN112	Sub Key PCB	[B] Flat Control Panel Unit	(Refer to page 4-95)	-
UN113	Volume PCB	[B] Flat Control Panel Unit	(Refer to page 4-95)	-
UN200	TALLY PCB	[C] Upright Control Panel Unit	(Refer to page 4-100)	-
UN201	CPU PCB	[C] Upright Control Panel Unit	(Refer to page 4-100)	-
UN202	Ten Key PCB	[C] Upright Control Panel Unit	(Refer to page 4-100)	-
UN205	Volume PCB	[C] Upright Control Panel Unit	(Refer to page 4-100)	-
UN206	Sub Key PCB	[C] Upright Control Panel Unit	(Refer to page 4-100)	-
UN207	LED Driver PCB	[C] Upright Control Panel Unit	(Refer to page 4-100)	-

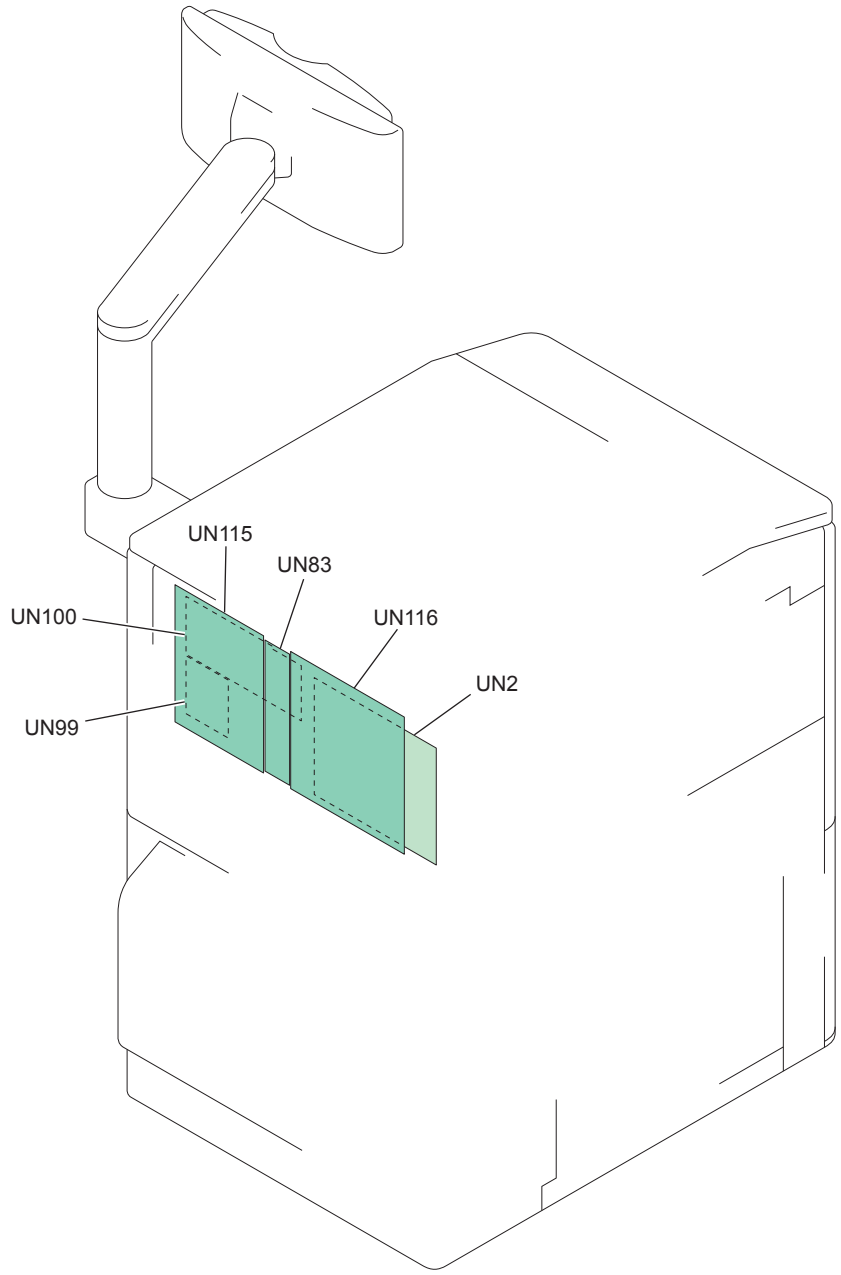
T-4-35


UN29
UN6
UN55
UN58
UN57
UN56
UN51
UN54
UN53
UN52
UN39
UN40
UN61
UN60
UN59
UN43
UN4
UN50
UN37
UN33
UN34
UN30
UN80
UN38
UN8,9,10
UN7
UN11,12
UN31
UN35

F-4-33

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
UN6	Drum ITB Driver PCB	Product Configuration	(Refer to page 4-111)	-
UN29	Potential Control PCB	Product Configuration	-	-
UN51	Developing Toner Collection High Voltage PCB (Bk)	Product Configuration	-	-
UN52	Developing Toner Collection High Voltage PCB (Y)	Product Configuration	-	-
UN53	Developing Toner Collection High Voltage PCB (M)	Product Configuration	-	-
UN54	Developing Toner Collection High Voltage PCB (C)	Product Configuration	-	-
UN55	Developing Toner Collection High Voltage Contact Resistance (Bk)	Product Configuration	-	-
UN56	Developing Toner Collection High Voltage Contact Resistance (Y)	Product Configuration	-	-
UN57	Developing Toner Collection High Voltage Contact Resistance (M)	Product Configuration	-	-
UN58	Developing Toner Collection High Voltage Contact Resistance (C)	Product Configuration	-	-
UN4	Pickup Feed Driver PCB	Product Configuration	(Refer to page 4-118)	-
UN7	Relay PCB	Product Configuration	(Refer to page 4-113)	-
UN8	AC Driver PCB (100V)	Product Configuration	(Refer to page 4-114)	-
UN9	AC Driver PCB (120V)	Product Configuration	(Refer to page 4-114)	-
UN10	AC Driver PCB (200V)	Product Configuration	(Refer to page 4-114)	-
UN11	Drum Heater Driver PCB (100V)	Product Configuration	(Refer to page 4-114)	-
UN12	Drum Heater Driver PCB (200V)	Product Configuration	(Refer to page 4-114)	-
UN30	IH Power Supply PCB	Product Configuration	(Refer to page 4-117)	-
UN31	All-night Power Supply PCB	Product Configuration	(Refer to page 4-114)	-
UN33	DC Power Supply PCB (12V)	Product Configuration	(Refer to page 4-113)	-
UN34	DC Power Supply PCB (24VA)	Product Configuration	(Refer to page 4-113)	-
UN35	DC Power Supply PCB (24V)	Product Configuration	(Refer to page 4-113)	-
UN37	Primary Charging High Voltage PCB (Bk)	Product Configuration	(Refer to page 4-118)	-
UN38	Primary Charging High Voltage PCB (Color)	Product Configuration	(Refer to page 4-118)	-
UN50	Pre-primary Transfer Charging High Voltage PCB (Bk)	Product Configuration	-	-
UN80	ECO-ID PCB	Product Configuration	(Refer to page 4-117)	-
UN39	Developing High Voltage PCB (Bk)	Product Configuration	(Refer to page 4-112)	-
UN40	Developing High Voltage PCB (CL)	Product Configuration	(Refer to page 4-112)	-
UN59	Primary Charging High Voltage Contact Resistance (Y)	Product Configuration	-	-
UN60	Primary Charging High Voltage Contact Resistance (M)	Product Configuration	-	-
UN61	Primary Charging High Voltage Contact Resistance (C)	Product Configuration	-	-
UN43	Pre-transfer PCB	Product Configuration	-	-

T-4-36



F-4-34

No.	Name	Main Unit	Reference	Adjustment during parts replacemen
UN2	DC Controller PCB	Product Configuration	(Refer to page 4-109)	-
UN83	Riser PCB	Product Configuration	-	-
UN100	Laser Interface PCB	Product Configuration	-	-
UN115	Main Controller PCB 1	Product Configuration	(Refer to page 4-104)	-
UN116	Main Controller PCB 2	Product Configuration	(Refer to page 4-106)	-
UN99	Laser Power Supply Relay PCB	Product Configuration	-	-

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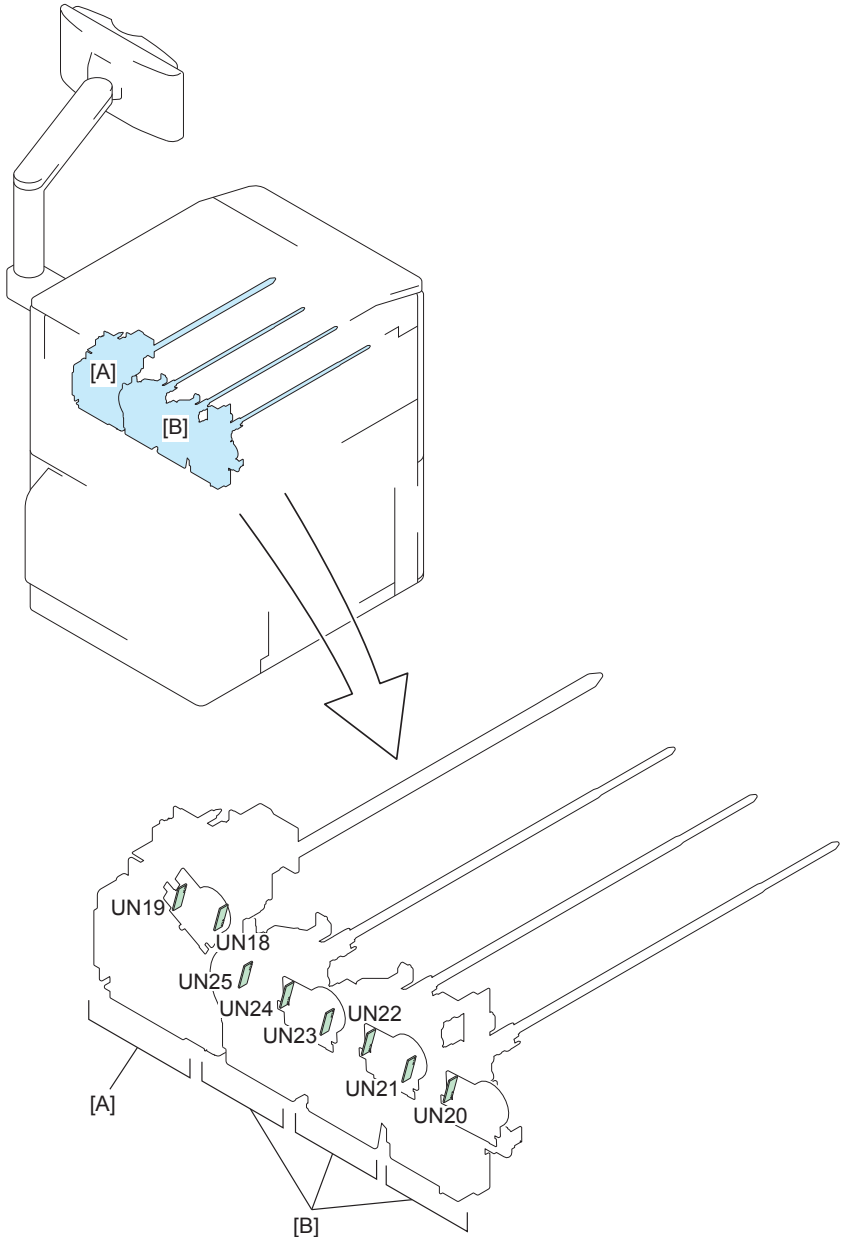

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No.	Name	Main Unit	Reference	Adjustment during parts replacemen
UN18	Drum Speed Detection PCB (Bk) 1	[A] Drum Drive Unit (Bk)	(Refer to page 4-254)	-
UN19	Drum Speed Detection PCB (Bk) 2	[A] Drum Drive Unit (Bk)	(Refer to page 4-254)	-
UN20	Drum Speed Detection PCB (Y) 1	[B] Process Unit (Y)	(Refer to page 4-257)	-
UN21	Drum Speed Detection PCB (Y) 2	[B] Process Unit (Y)	(Refer to page 4-257)	-
UN22	Drum Speed Detection PCB (M) 1	[B] Process Unit (M)	(Refer to page 4-257)	-
UN23	Drum Speed Detection PCB (M)2	[B] Process Unit (M)	(Refer to page 4-257)	-
UN24	Drum Speed Detection PCB (C) 1	[B] Process Unit (C)	(Refer to page 4-257)	-
UN25	Drum Speed Detection PCB (C) 2	[B] Process Unit (C)	(Refer to page 4-257)	-

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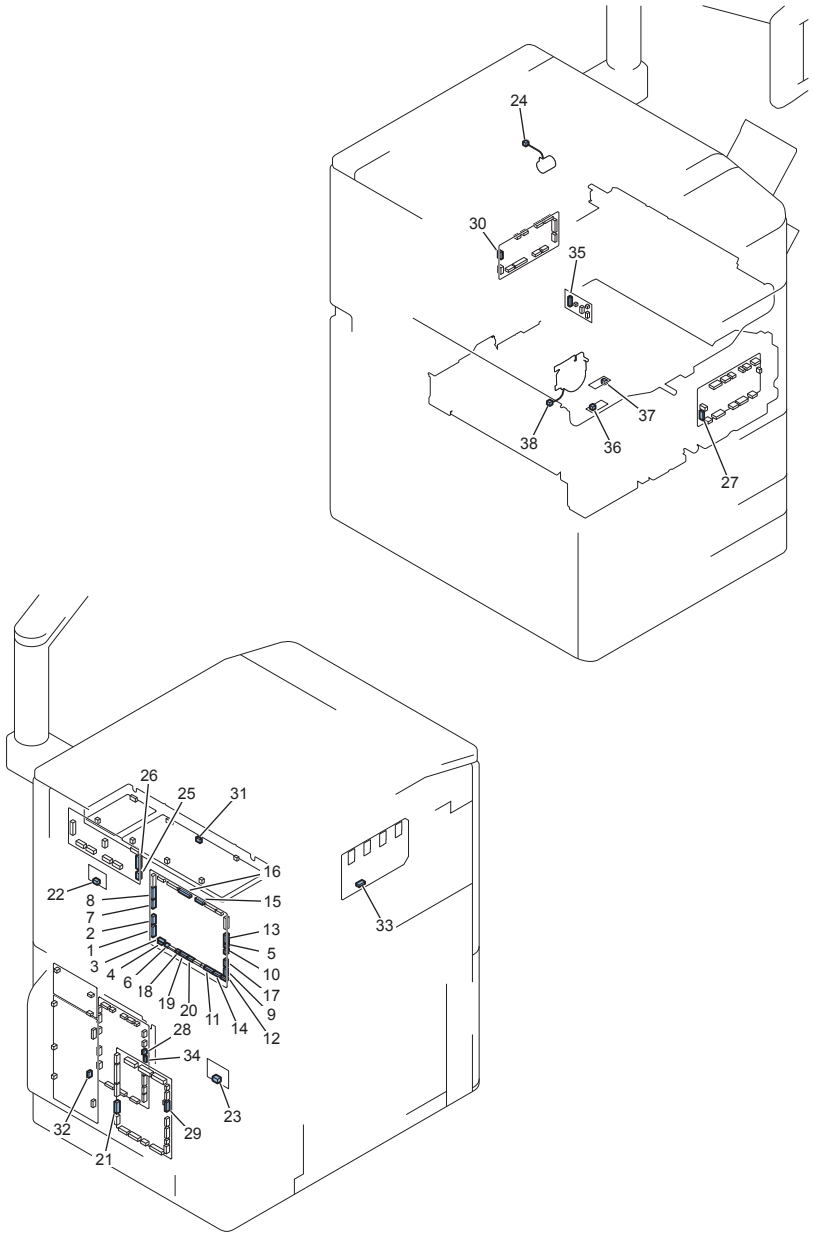
List of Connectors



F-4-36

KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1200	UN2	DC Controller PCB				21	J1817	UN7	Relay PCB	
2	J1201	UN2	DC Controller PCB				22	J5600	UN99	Laser Power Supply Relay PCB	
3	J1210	UN2	DC Controller PCB	J9002				-	-	RS232C I/F	
4	J1211	UN2	DC Controller PCB	J9005				-	-	-	
5	J1212	UN2	DC Controller PCB				23	J9007	UN80	ECO-ID PCB	
6	J1214	UN2	DC Controller PCB				24	J9006	SW9	Key Switch	
7	J1220	UN2	DC Controller PCB				25	J5501	UN100	Laser Interface PCB	
8	J1221	UN2	DC Controller PCB				26	J5502	UN100	Laser Interface PCB	
9	J1222	UN2	DC Controller PCB	J8023			27	J1511	UN5	Fixing Feed Driver PCB	
10	J1223	UN2	DC Controller PCB				28	J1400	UN4	Pickup Feed Driver PCB	
11	J1224	UN2	DC Controller PCB				29	J1805	UN7	Relay PCB	
12	J1225	UN2	DC Controller PCB				30	J1901	UN6	Drum ITB Driver PCB	
13	J1226	UN2	DC Controller PCB	J8223				-	-	Buffer Driver	
13	J1226	UN2	DC Controller PCB	J8227				-	-	To finisher	
14	J1227	UN2	DC Controller PCB	J3030			31	J3045	UN40	Developing High Voltage PCB (CL)	
14	J1227	UN2	DC Controller PCB				32	J3051	UN38	Primary Charging High Voltage PCB (Color)	
15	J1228	UN2	DC Controller PCB				33	J3570	UN43	Primary Transfer PCB	
16	J1230	UN2	DC Controller PCB	J8240				-	-	Multi Deck	
17	J1231	UN2	DC Controller PCB				34	J1401	UN4	Pickup Feed Driver PCB	
18	J1240	UN2	DC Controller PCB	J8010	J8050		35	J2700	UN28	ITB Relay PCB	
19	J1241	UN2	DC Controller PCB	J8010	J8050		35	J2700	UN28	ITB Relay PCB	
20	J1242	UN2	DC Controller PCB	J8011	J8050	J8047	36	J7318	UN16	ITB Drive Roller Speed Detection PCB 1	
20	J1242	UN2	DC Controller PCB	J8011	J8050	J8047	37	J7319	UN17	ITB Drive Roller Speed Detection PCB 2	
20	J1242	UN2	DC Controller PCB	J8011	J8050		38	J7518	M3	ITB Drive Motor	

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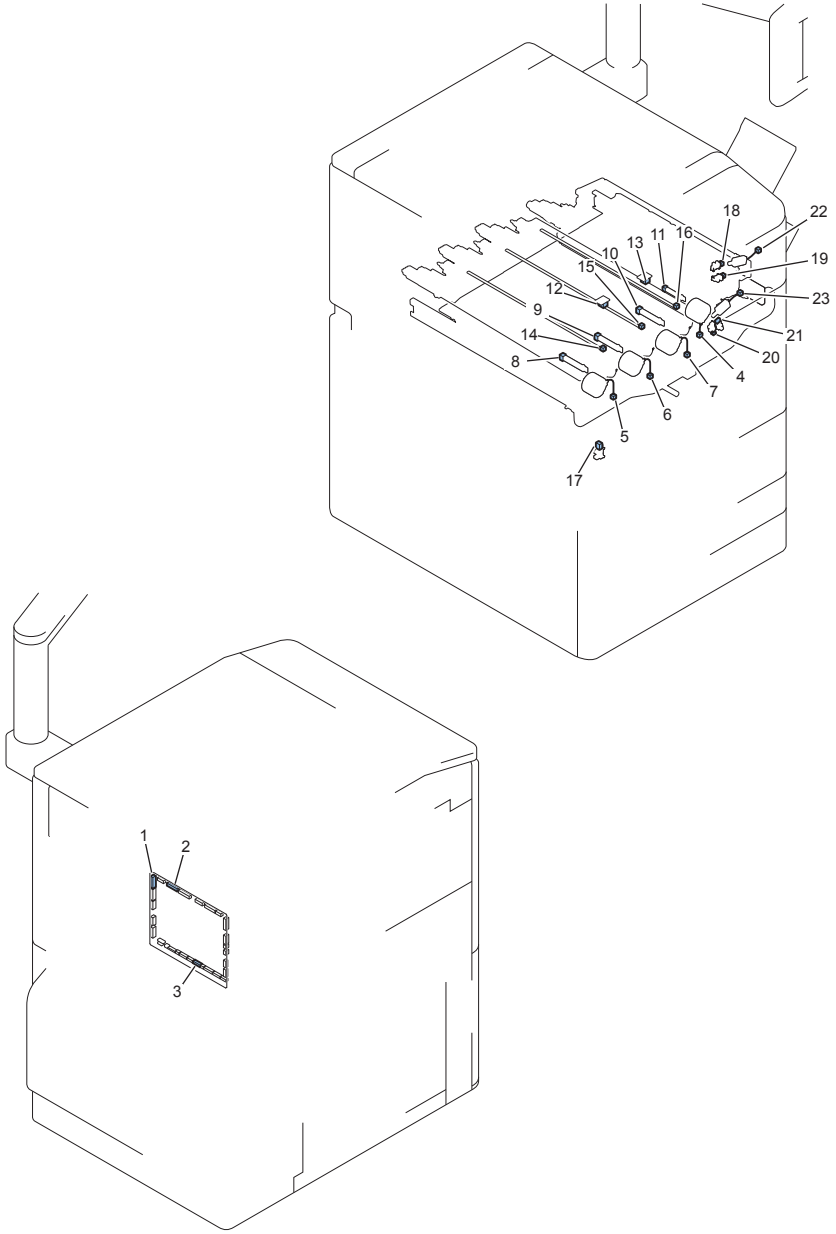

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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1243	UN2	DC Controller PCB	J8038	J3031		4	J7152	M29	Developing Stirring Motor (Bk)	
1	J1243	UN2	DC Controller PCB	J8038	J3031		5	J7156	M28	Developing Stirring Motor (M)	
1	J1243	UN2	DC Controller PCB	J8038	J3031		6	J7157	M27	Developing Stirring Motor (C)	
1	J1243	UN2	DC Controller PCB	J8038	J3031		7	J7158	M26	Developing Stirring Motor (Y)	
2	J1244	UN2	DC Controller PCB	J8085	J8087	J8028	8	J7133	TS2	Toner Density Sensor (Y)	
2	J1244	UN2	DC Controller PCB	J8085	J8088	J8029	9	J7134	TS3	Toner Density Sensor (M)	
2	J1244	UN2	DC Controller PCB	J8086	J8089	J8030	10	J7135	TS4	Toner Density Sensor (C)	
2	J1244	UN2	DC Controller PCB	J8080	J8117	J8015	11	J7146	TS1	Toner Density Sensor (Bk)	
2	J1244	UN2	DC Controller PCB	J8093			12	J7533	UN14	Developing Assembly Inner Temperature Detection PCB (Y)/(M)	
2	J1244	UN2	DC Controller PCB	J8093			13	J7534	UN15	Developing Assembly Inner Temperature Detection PCB (C)/(Bk)	
2	J1244	UN2	DC Controller PCB	J8085	J8087	J7130	14	J7547	LED2	Cleaning Pre-exposure LED (Y)	
2	J1244	UN2	DC Controller PCB	J8085	J8088	J7131	15	J7548	LED3	Cleaning Pre-exposure LED (M)	
2	J1244	UN2	DC Controller PCB	J8086	J8089	J7132	16	J7549	LED4	Cleaning Pre-exposure LED (C)	
2	J1244	UN2	DC Controller PCB				17	J8094	PS80	Front Cover Sensor	
3	J1245	UN2	DC Controller PCB	J8002	J80009	J80011	18	J10021	PS92	Primary Charging Wire HP Sensor	
3	J1245	UN2	DC Controller PCB	J8002	J80009	J80011	19	J10022	PS103	Primary Charging Wire Rotary Position Sensor	
3	J1245	UN2	DC Controller PCB	J8002	J80009	J80010	20	J10023	PS93	Pre-transfer Charging Wire HP Sensor	
3	J1245	UN2	DC Controller PCB	J8002	J80009	J80010	21	J10024	PS104	Pre-transfer Charging Wire Rotary Position Sensor	
3	J1245	UN2	DC Controller PCB	J8002	J8009		22	J7147	M1	Primary Charging Wire Cleaning Motor	
3	J1245	UN2	DC Controller PCB	J8002	J8009		23	J7148	M2	Pre-transfer Charging Wire Cleaning Motor	

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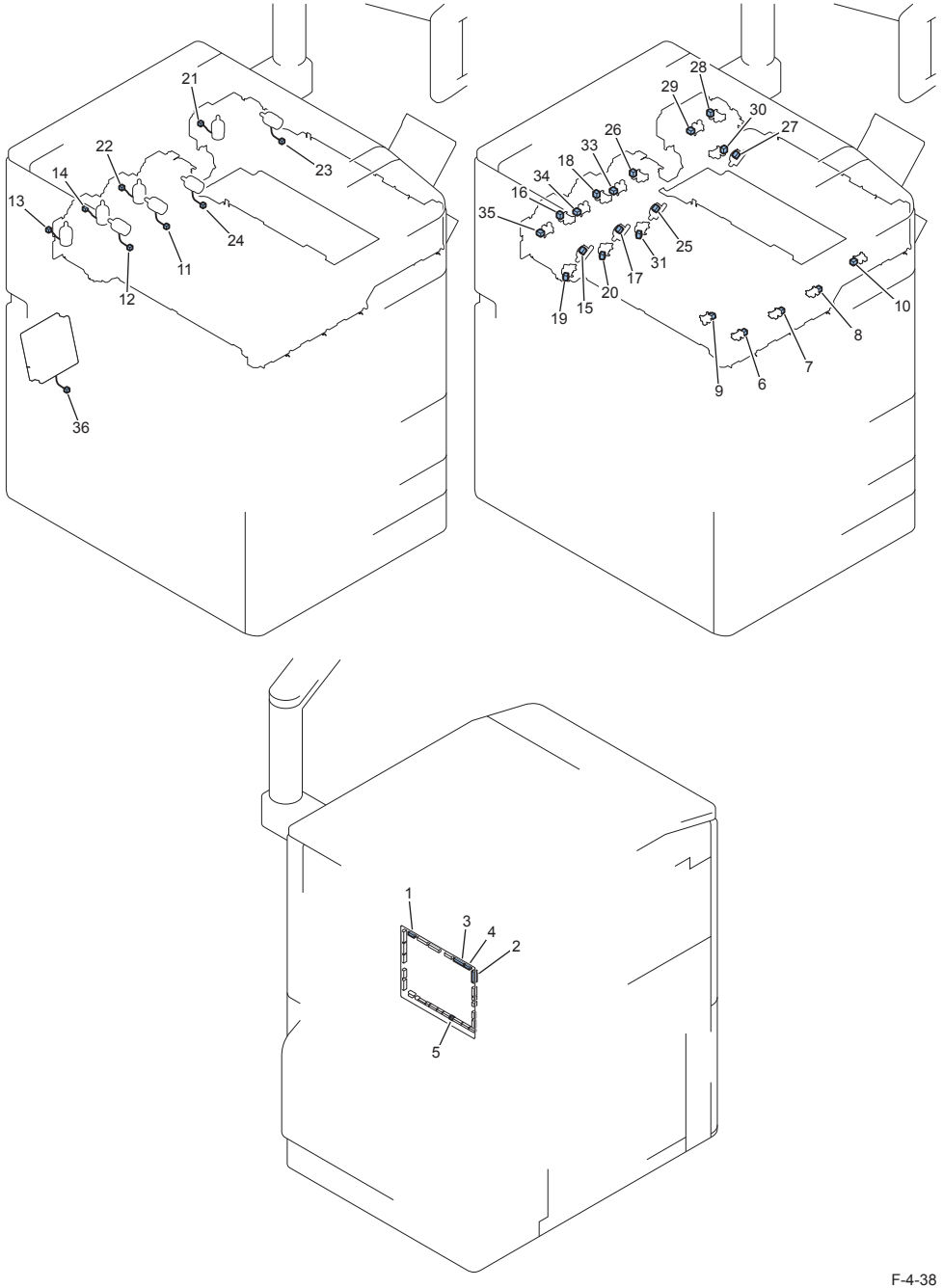
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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1246	UN2	DC Controller PCB				6	J7122	PS10	Toner Container Insertion Inlet Cover Sensor (Y)	
1	J1246	UN2	DC Controller PCB				7	J7125	PS13	Toner Container Insertion Inlet Cover Sensor (M)	
1	J1246	UN2	DC Controller PCB				8	J7128	PS16	Toner Container Insertion Inlet Cover Sensor (C)	
1	J1246	UN2	DC Controller PCB				9	J7137	PS6	Toner Supply Cover Sensor	
1	J1246	UN2	DC Controller PCB				10	J7138	PS7	Toner Container Insertion Inlet Cover Sensor (Bk)	
2	J1247	UN2	DC Controller PCB	J8107	J7105		11	J10031	M12	Hopper and Stirring Supply Motor (M)	
2	J1247	UN2	DC Controller PCB	J8106	J7104		12	J7100	M9	Hopper and Stirring Supply Motor (Y)	
2	J1247	UN2	DC Controller PCB	J8106	J7100		13	J7104	M10	Toner Container Drive Motor (Y)	
2	J1247	UN2	DC Controller PCB	J8107	J7101		14	J7105	M13	Toner Container Drive Motor (M)	
2	J1247	UN2	DC Controller PCB	J8106			15	J7121	TS6	Hopper Toner Level Sensor (Y)	
2	J1247	UN2	DC Controller PCB	J8106			16	J7123	PS81	Toner Container Phase Sensor (Y)	
2	J1247	UN2	DC Controller PCB	J8107			17	J7124	TS7	Hopper Toner Level Sensor (M)	
2	J1247	UN2	DC Controller PCB	J8107			18	J7126	PS82	Toner Container Phase Sensor (M)	
2	J1247	UN2	DC Controller PCB	J8106			19	J7418	PS12	Toner Feed Screw Rotation Sensor (Y)	
2	J1247	UN2	DC Controller PCB	J8107			20	J7419	PS15	Toner Feed Screw Rotation Sensor (M)	
3	J1248	UN2	DC Controller PCB	J8040	J7103		21	J10025	M7	Toner Container Drive Motor (Bk)	
3	J1248	UN2	DC Controller PCB	J8108	J7102		22	J10026	M16	Toner Container Drive Motor (C)	
3	J1248	UN2	DC Controller PCB	J8040	J7107		23	J10028	M6	Hopper and Stirring Supply Motor (Bk)	
3	J1248	UN2	DC Controller PCB	J8108	J7106		24	J10033	M15	Hopper and Stirring Supply Motor (C)	
3	J1248	UN2	DC Controller PCB	J8108			25	J7127	TS8	Hopper Toner Level Sensor (C)	
3	J1248	UN2	DC Controller PCB	J8108			26	J7129	PS83	Toner Container Phase Sensor (C)	
3	J1248	UN2	DC Controller PCB	J8040			27	J7136	TS5	Hopper Toner Level Sensor (Bk)	
3	J1248	UN2	DC Controller PCB	J8040			28	J7139	PS84	Toner Container Phase Sensor (Bk)	
3	J1248	UN2	DC Controller PCB	J8040	J7135		29	J71750	PS8	Toner Container Reciprocation HP Sensor (Bk)	
3	J1248	UN2	DC Controller PCB	J8040			30	J7417	PS9	Toner Feed Screw Rotation Sensor (Bk)	
3	J1248	UN2	DC Controller PCB	J8108			31	J7420	PS18	Toner Feed Screw Rotation Sensor (C)	
4	J1249	UN2	DC Controller PCB				32	J7111	FM3	Primary Charging Exhaust Fan	
4	J1249	UN2	DC Controller PCB	J7197			33	J71970	PS17	Toner Container Reciprocation HP Sensor (C)	
4	J1249	UN2	DC Controller PCB	J7198			34	J71980	PS14	Toner Container Reciprocation HP Sensor (M)	
4	J1249	UN2	DC Controller PCB	J7199			35	J71990	PS11	Toner Container Reciprocation HP Sensor (Y)	
5	J1251	UN2	DC Controller PCB				36	J7520	FM6	Fixing Heat Fan	

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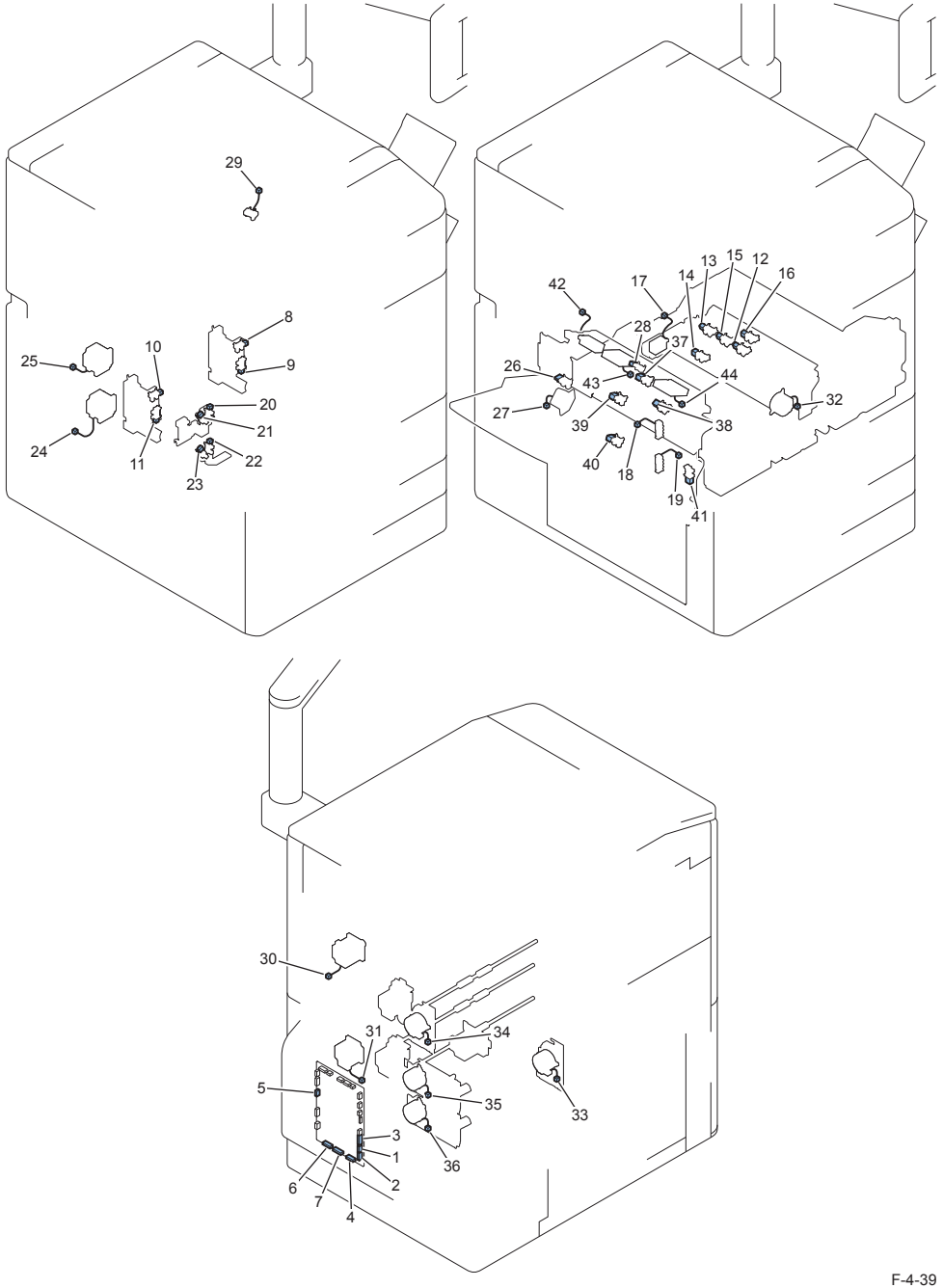
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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1402	UN4	Pickup Feed Driver PCB	J8144			8	J7033	PS41	Right Deck Paper Level Sensor 1	
1	J1402	UN4	Pickup Feed Driver PCB	J8144			9	J7034	PS42	Right Deck Paper Level Sensor 2	
1	J1402	UN4	Pickup Feed Driver PCB	J8146			10	J7035	PS43	Left Deck Paper Level Sensor 1	
1	J1402	UN4	Pickup Feed Driver PCB	J8146			11	J7036	PS44	Left Deck Paper Level Sensor 2	
2	J1403	UN4	Pickup Feed Driver PCB	J8063			12	J7060	PS54	Left Deck Pickup Sensor	
2	J1403	UN4	Pickup Feed Driver PCB	J8063			13	J7061	PS55	Left Deck Upper Limit Sensor	
2	J1403	UN4	Pickup Feed Driver PCB	J8063			14	J7062	PS56	Left Deck Paper Sensor	
2	J1403	UN4	Pickup Feed Driver PCB	J8063			15	J7063	PS57	Left Deck Paper Height Sensor	
2	J1403	UN4	Pickup Feed Driver PCB	J8063			16	J7064	PS58	Left Deck Pullout Sensor	
2	J1403	UN4	Pickup Feed Driver PCB	J8063			17	J7065	SL6	Left Deck Pickup Solenoid	
3	J1404	UN4	Pickup Feed Driver PCB	J8141			18	J7019	SW14	Cassette 3 Size Detection Switch 1	
3	J1404	UN4	Pickup Feed Driver PCB	J8043			19	J7021	SW16	Cassette 4 Size Detection Switch 1	
3	J1404	UN4	Pickup Feed Driver PCB	J8141			20	J7038	PS45	Cassette 3 Paper Level Sensor 1	
3	J1404	UN4	Pickup Feed Driver PCB	J8141			21	J7039	PS46	Cassette 3 Paper Level Sensor 2	
3	J1404	UN4	Pickup Feed Driver PCB	J8043			22	J7040	PS47	Cassette 4 Paper Level Sensor 1	
3	J1404	UN4	Pickup Feed Driver PCB	J8043			23	J7041	PS48	Cassette 4 Paper Level Sensor 2	
4	J1405	UN4	Pickup Feed Driver PCB	J8062	J7000		24	J7000	M38	Reverse Motor	
4	J1405	UN4	Pickup Feed Driver PCB	J8062	J7002		25	J7002	M37	Delivery Motor	
4	J1405	UN4	Pickup Feed Driver PCB	J8062			26	J7008	PS101	Reverse Roller HP Sensor	
4	J1405	UN4	Pickup Feed Driver PCB	J8062			27	J7030	M54	Reverse Detachment Motor	
4	J1405	UN4	Pickup Feed Driver PCB	J8062	J8036		28	J7540	PS111	Outer Delivery OHP Sensor	
5	J1406	UN4	Pickup Feed Driver PCB				29	J8116	SW10	Waste Toner Screw Lock Detection Switch	
5	J1406	UN4	Pickup Feed Driver PCB	J7001			30	J7001	M36	Pre-registration Multi-purpose Tray Drive Motor	
5	J1406	UN4	Pickup Feed Driver PCB	J7527			31	J7527	M39	Cassette Vertical Path Motor	
6	J1407	UN4	Pickup Feed Driver PCB				32	J7003	M31	Secondary Transfer Roller Detachment Motor	
6	J1407	UN4	Pickup Feed Driver PCB				33	J7004	M42	Left Deck Pickup Motor	
6	J1407	UN4	Pickup Feed Driver PCB				34	J7005	M43	Right Deck Pickup Motor	
6	J1407	UN4	Pickup Feed Driver PCB				35	J7006	M44	Cassette 3 Pickup Motor	
6	J1407	UN4	Pickup Feed Driver PCB				36	J7007	M45	Cassette 4 Pickup Motor	
7	J1408	UN4	Pickup Feed Driver PCB	J8060	J8113		37	J7023	PS31	Outer Delivery Sensor	
7	J1408	UN4	Pickup Feed Driver PCB	J8060	J8105		38	J7024	PS32	Reverse Sensor	
7	J1408	UN4	Pickup Feed Driver PCB	J8060	J8105		39	J7025	PS33	Reverse Vertical Path Sensor 1	
7	J1408	UN4	Pickup Feed Driver PCB	J8060			40	J7026	PS34	Reverse Vertical Path Sensor 2	
7	J1408	UN4	Pickup Feed Driver PCB	J8060			41	J7028	PS36	Lower Left Cover Sensor	
7	J1408	UN4	Pickup Feed Driver PCB	J8060	J8113		42	J7029	SL2	Delivery Flapper Solenoid	
7	J1408	UN4	Pickup Feed Driver PCB	J8060	J8113	J8114	43	J7161	FM10	Delivery Heat Fan 1	
7	J1408	UN4	Pickup Feed Driver PCB	J8060	J8113	J8114	44	J7541	FM11	Delivery Heat Fan 2	

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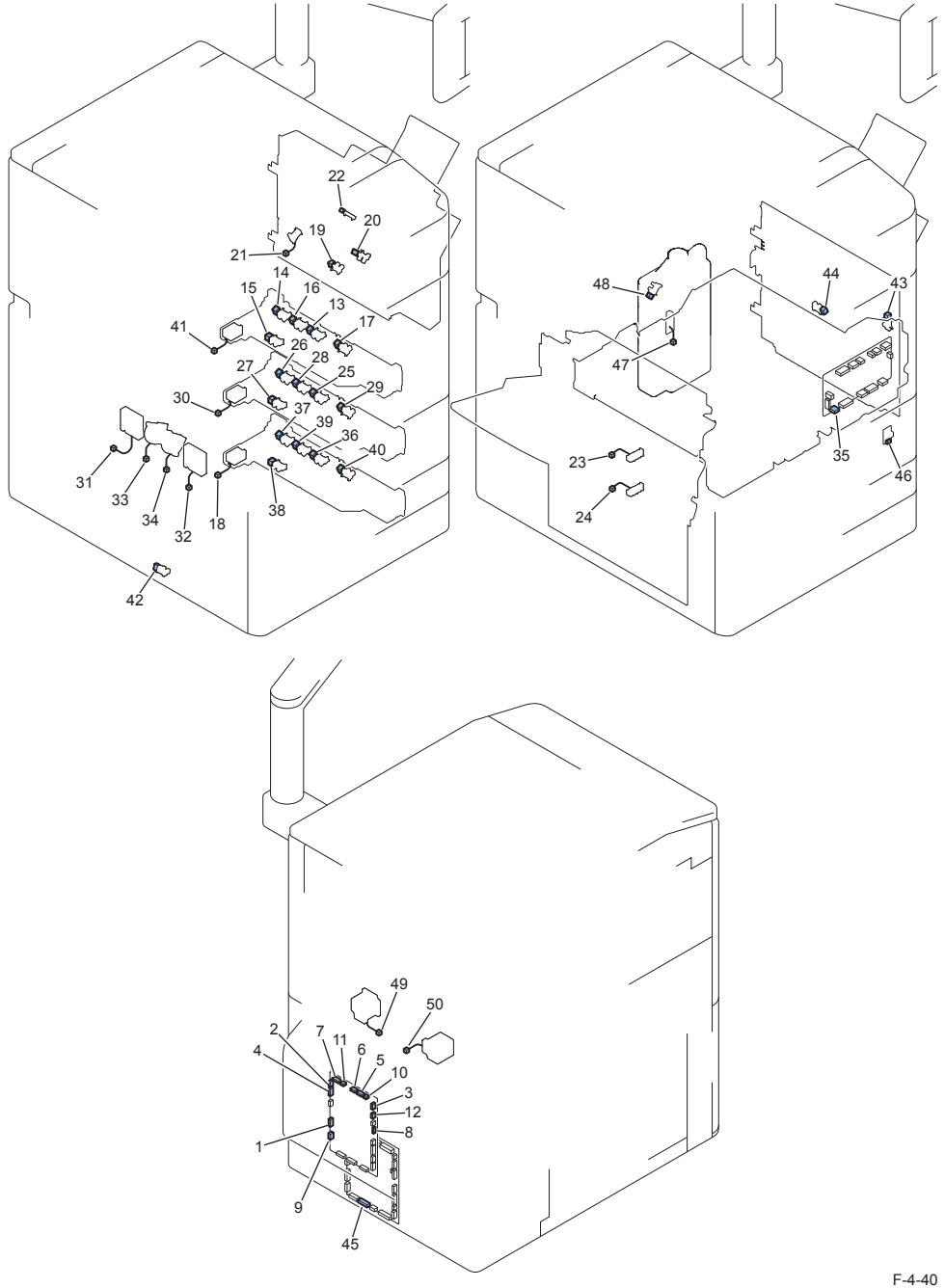
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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1409	UN4	Pickup Feed Driver PCB	J2633			13	J7054	PS49	Right Deck Pickup Sensor	
1	J1409	UN4	Pickup Feed Driver PCB	J2633			14	J7055	PS50	Right Deck Upper Limit Sensor	
1	J1409	UN4	Pickup Feed Driver PCB	J2633			15	J7056	PS51	Right Deck Paper Sensor	
1	J1409	UN4	Pickup Feed Driver PCB	J2633			16	J7057	PS52	Right Deck Paper Height Sensor	
1	J1409	UN4	Pickup Feed Driver PCB	J2633			17	J7058	PS53	Vertical Path Sensor 1	
1	J1409	UN4	Pickup Feed Driver PCB	J2633			18	J7059	SL5	Right Deck Pickup Solenoid	
2	J1410	UN4	Pickup Feed Driver PCB	J8059			19	J7015	PS37	Multi-purpose Tray Paper Sensor	
2	J1410	UN4	Pickup Feed Driver PCB	J8059	J8110		20	J7016	PS38	Multi-purpose Tray Last Paper Sensor	
2	J1410	UN4	Pickup Feed Driver PCB	J8059			21	J7017	SL4	Multi-purpose Tray Pickup Solenoid	
2	J1410	UN4	Pickup Feed Driver PCB	J8059	J8110		22	J7018	UN26	Multi-purpose Tray Paper Width Detection PCB	
3	J1411	UN4	Pickup Feed Driver PCB	J8055			23	J7020	SW15	Cassette 3 Size Detection Switch 2	
3	J1411	UN4	Pickup Feed Driver PCB	J8055			24	J7022	SW17	Cassette 4 Size Detection Switch 2	
4	J1412	UN4	Pickup Feed Driver PCB	J2635			25	J7042	PS59	Cassette 3 Pickup Sensor	
4	J1412	UN4	Pickup Feed Driver PCB	J2635			26	J7043	PS60	Cassette 3 Upper Limit Sensor	
4	J1412	UN4	Pickup Feed Driver PCB	J2635			27	J7044	PS61	Cassette 3 Paper Sensor	
4	J1412	UN4	Pickup Feed Driver PCB	J2635			28	J7045	PS62	Cassette 3 Paper Height Sensor	
4	J1412	UN4	Pickup Feed Driver PCB	J2635			29	J7046	PS63	Vertical Path Sensor 3	
4	J1412	UN4	Pickup Feed Driver PCB	J2635			30	J7047	SL7	Cassette 3 Pickup Solenoid	
5	J1414	UN4	Pickup Feed Driver PCB	J8104			31	J7542	FM12	Delivery Heat Fan 3	
5	J1414	UN4	Pickup Feed Driver PCB	J8104			32	J7543	FM13	Delivery Heat Fan 4	
5	J1414	UN4	Pickup Feed Driver PCB	J8104	J8244		33	J7545	FM23	Anti-adhesion Fan 1	
5	J1414	UN4	Pickup Feed Driver PCB	J8104	J8244		34	J7546	FM24	Anti-adhesion Fan 2	
6	J1415	UN4	Pickup Feed Driver PCB	J8023			35	J1510	UN5	Fixing Feed Driver PCB	
7	J1416	UN4	Pickup Feed Driver PCB	J2636			36	J7048	PS64	Cassette 4 Pickup Sensor	
7	J1416	UN4	Pickup Feed Driver PCB	J2636			37	J7049	PS65	Cassette 4 Upper Limit Sensor	
7	J1416	UN4	Pickup Feed Driver PCB	J2636			38	J7050	PS66	Cassette 4 Paper Sensor	
7	J1416	UN4	Pickup Feed Driver PCB	J2636			39	J7051	PS67	Cassette 4 Paper Height Sensor	
7	J1416	UN4	Pickup Feed Driver PCB	J2636			40	J7052	PS68	Vertical Path Sensor 4	
7	J1416	UN4	Pickup Feed Driver PCB	J2636			41	J7053	SL8	Cassette 4 Pickup Solenoid	
8	J1417	UN4	Pickup Feed Driver PCB	J8090	J8068		42	J7027	PS35	Reverse Vertical Path Sensor 3	
8	J1417	UN4	Pickup Feed Driver PCB	J8061			43	J7031	PS39	Lower Right Cover Sensor	
8	J1417	UN4	Pickup Feed Driver PCB	J8061	J8075		44	J7037	PS40	Vertical Path Sensor 2	
9	J1450	UN4	Pickup Feed Driver PCB				45	J1821	UN7	Relay PCB	
10	J1460	UN4	Pickup Feed Driver PCB	J8000			46	J7108	ENV1	Environment Sensor	
11	J1470	UN4	Pickup Feed Driver PCB	J898			47	J8981	TS9	Waste Toner Full Sensor	
11	J1470	UN4	Pickup Feed Driver PCB	J899			48	J8980	PS112	Waste Toner Battele Set Sensor	
12	J1499	UN4	Pickup Feed Driver PCB	J7525			49	J7525	M40	Right Deck Vertical Path Motor	
12	J1499	UN4	Pickup Feed Driver PCB	J7526			50	J7526	M41	Left Deck Vertical Path Motor	

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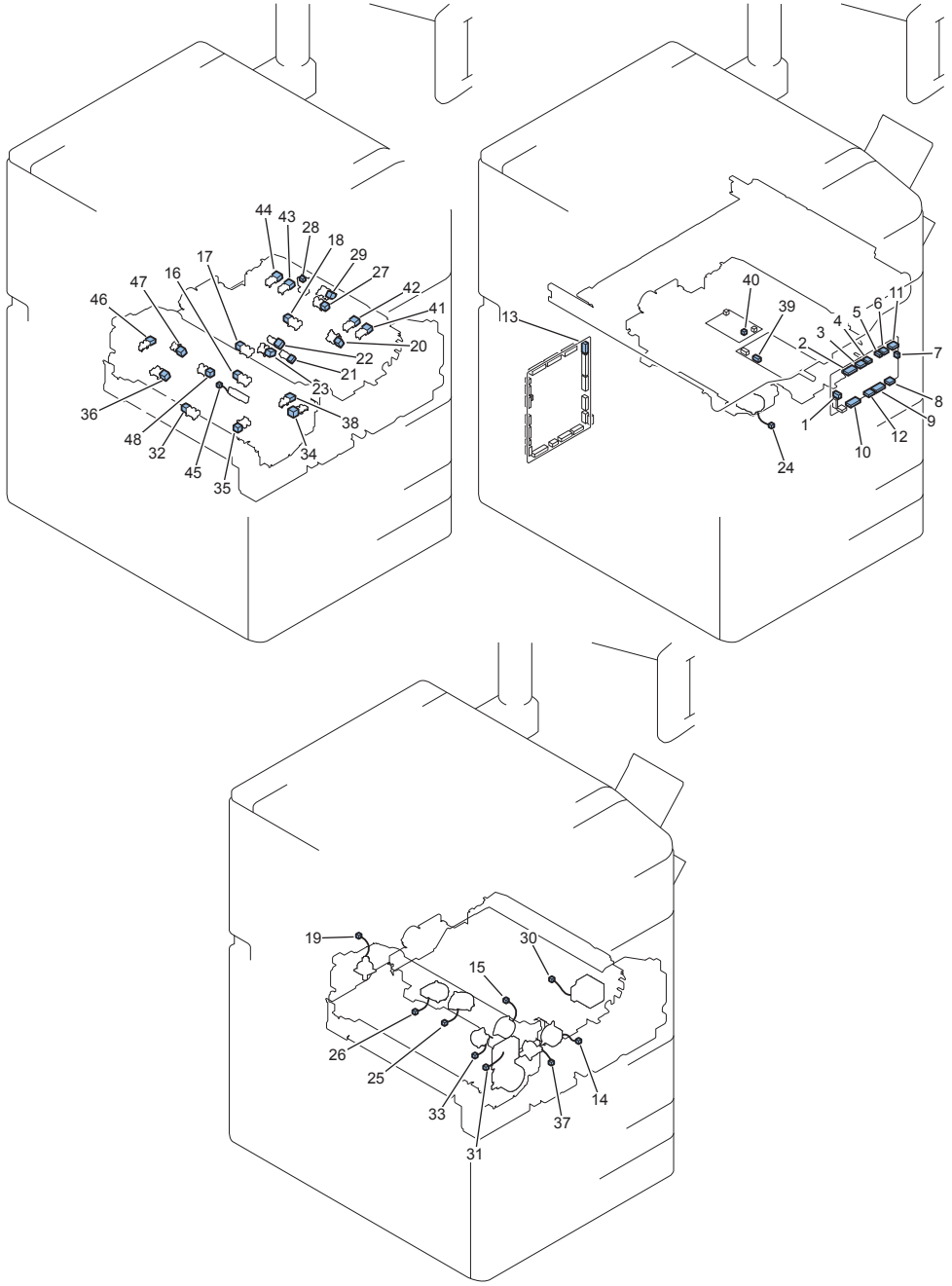
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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1500	UN5	Fixing Feed Driver PCB	J8098	J8023		13	J1816	UN7	Relay PCB	
2	J1501	UN5	Fixing Feed Driver PCB				14	J7200	M32	Duplex Left Motor	
2	J1501	UN5	Fixing Feed Driver PCB	J8142			15	J7201	M35	Pre-fixing Feed Motor	
2	J1501	UN5	Fixing Feed Driver PCB				16	J7208	PS25	Duplex Sensor 2	
2	J1501	UN5	Fixing Feed Driver PCB				17	J7209	PS26	Duplex Sensor 3	
2	J1501	UN5	Fixing Feed Driver PCB				18	J7210	PS27	Duplex Sensor 4	
2	J1501	UN5	Fixing Feed Driver PCB	J7202			19	J17205	M57	Reciprocation Motor	
3	J1502	UN5	Fixing Feed Driver PCB	J8102			20	J7214	PS22	Secondary Transfer Roller Detachment HP Sensor	
3	J1502	UN5	Fixing Feed Driver PCB	J8102			21	J7215	PS23	Post-secondary Transfer Sensor	
3	J1502	UN5	Fixing Feed Driver PCB	J8102			22	J17224	PS90	Loop Sensor 1	
3	J1502	UN5	Fixing Feed Driver PCB	J8102			23	J17225	PS91	Loop Sensor 2	
4	J1503	UN5	Fixing Feed Driver PCB	J8037			24	J7230	FM15	Pressure Roller Cooling Fan (Front)	
4	J1503	UN5	Fixing Feed Driver PCB	J8037			25	J7236	FM27	Pre-fixing Feed Cooling Fan	
5	J1504	UN5	Fixing Feed Driver PCB	J8033			26	J7235	FM16	Pressure Roller Cooling Fan (Rear)	
6	J1505	UN5	Fixing Feed Driver PCB	J8091			27	J7211	PS28	Registration Sensor	
6	J1505	UN5	Fixing Feed Driver PCB				28	J7212	PS29	Transparency Sensor	
6	J1505	UN5	Fixing Feed Driver PCB	J8092			29	J7213	PS30	Vertical Path Merging Sensor	
7	J1506	UN5	Fixing Feed Driver PCB				30	J7203	M34	Registration Motor	
8	J1507	UN5	Fixing Feed Driver PCB				31	J7217	M48	Fixing Motor	
9	J1508	UN5	Fixing Feed Driver PCB				32	J8101	PS24	Duplex Sensor 1	
9	J1508	UN5	Fixing Feed Driver PCB	J18138			33	J17206	M56	Core Shutter Motor	
9	J1508	UN5	Fixing Feed Driver PCB	J18004			34	J17218	PS98	Core HP Sensor	
9	J1508	UN5	Fixing Feed Driver PCB	J18004			35	J17220	PS73	Fixing Pressure Release Sensor	
9	J1508	UN5	Fixing Feed Driver PCB	J18138			36	J17229	PS75	Fixing Inner Delivery Sensor	
9	J1508	UN5	Fixing Feed Driver PCB	J18004			37	J18007	M55	Web Motor	
9	J1508	UN5	Fixing Feed Driver PCB	J18004			38	J18033	PS110	Half Pressure Position Sensor	
10	J1509	UN5	Fixing Feed Driver PCB				39	J3062	UN48	Secondary Transfer High Voltage PCB	
10	J1509	UN5	Fixing Feed Driver PCB				40	J3540	UN49	Post-secondary Transfer Static Elimination High Voltage PCB	
11	J1512	UN5	Fixing Feed Driver PCB				41	J18	PS94	Original Size Sensor 1	
11	J1512	UN5	Fixing Feed Driver PCB				42	J19	PS95	Original Size Sensor 2	
11	J1512	UN5	Fixing Feed Driver PCB				43	J20	PS96	Original Size Sensor 3	
11	J1512	UN5	Fixing Feed Driver PCB				44	J21	PS97	Original Size Sensor 4	
12	J1513	UN5	Fixing Feed Driver PCB	J18006			45	J8039	THM16	Pressure Roller Thermistor	
12	J1513	UN5	Fixing Feed Driver PCB	J18006			46	J10011	PS100	Reciprocation HP Sensor	
12	J1513	UN5	Fixing Feed Driver PCB	J18006			47	J17219	PS99	Fixing Uunifiform Roller HP Sensor	
12	J1513	UN5	Fixing Feed Driver PCB	J18006			48	J17223	PS70	Fixing Inlet Sensor	

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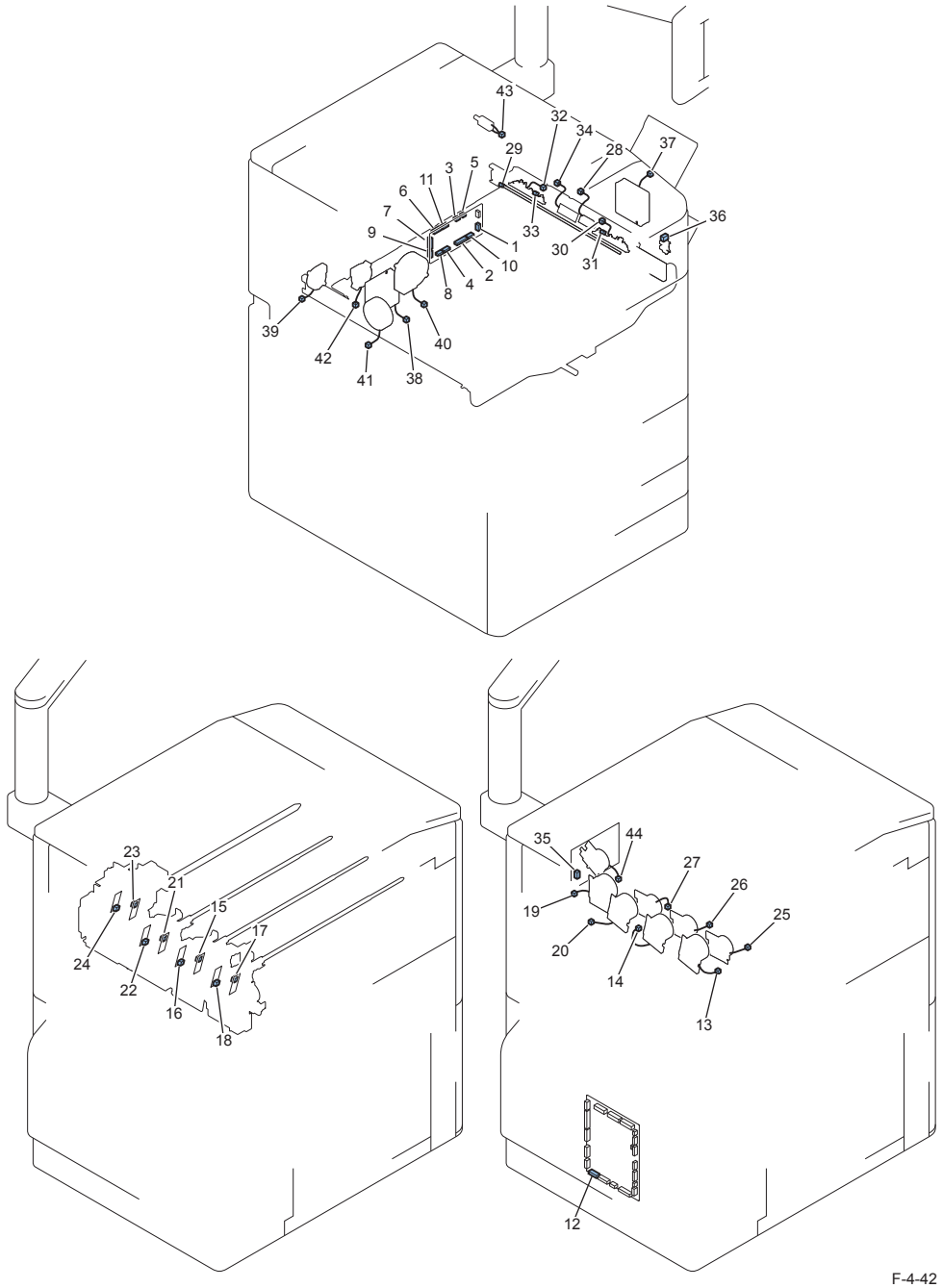
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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1900	UN6	Drum ITB Driver PCB				12	J1815	UN7	Relay PCB	
2	J1902	UN6	Drum ITB Driver PCB	J8019			13	J7300	M21	Drum Motor (Y)	
2	J1902	UN6	Drum ITB Driver PCB	J8020			14	J7302	M23	Drum Motor (M)	
2	J1902	UN6	Drum ITB Driver PCB	J8020			15	J7314	UN22	Drum Speed Detection PCB (M) 1	
2	J1902	UN6	Drum ITB Driver PCB	J8020			16	J7315	UN23	Drum Speed Detection PCB (M)2	
2	J1902	UN6	Drum ITB Driver PCB	J8019			17	J7316	UN20	Drum Speed Detection PCB (Y) 1	
2	J1902	UN6	Drum ITB Driver PCB	J8019			18	J7317	UN21	Drum Speed Detection PCB (Y) 2	
3	J1903	UN6	Drum ITB Driver PCB				19	J7306	M19	Drum Motor (Bk)	
4	J1904	UN6	Drum ITB Driver PCB	J8021			20	J7304	M25	Drum Motor (C)	
4	J1904	UN6	Drum ITB Driver PCB	J8021			21	J7312	UN24	Drum Speed Detection PCB (C) 1	
4	J1904	UN6	Drum ITB Driver PCB	J8021			22	J7313	UN25	Drum Speed Detection PCB (C) 2	
5	J1905	UN6	Drum ITB Driver PCB				23	J7310	UN18	Drum Speed Detection PCB (Bk) 1	
5	J1905	UN6	Drum ITB Driver PCB				24	J7311	UN19	Drum Speed Detection PCB (Bk) 2	
6	J1906	UN6	Drum ITB Driver PCB	J8034			25	J7535	M20	Developing Sleeve Drive Motor (Y)	
6	J1906	UN6	Drum ITB Driver PCB	J8034			26	J7536	M22	Developing Sleeve Drive Motor (M)	
6	J1906	UN6	Drum ITB Driver PCB	J8034			27	J7537	M24	Developing Sleeve Drive Motor (C)	
7	J1907	UN6	Drum ITB Driver PCB	J8035			28	J7140	SL1	Registration Patch Shutter Solenoid	
7	J1907	UN6	Drum ITB Driver PCB	J8035			29	J7142	LED1	Cleaning Pre-exposure LED (Bk)	
7	J1907	UN6	Drum ITB Driver PCB	J8035	J7408		30	J7408	PS19	Registration Patch Sensor (Front)	
7	J1907	UN6	Drum ITB Driver PCB	J8035			31	J7409	PS19	Registration Patch Sensor (Front)	
7	J1907	UN6	Drum ITB Driver PCB	J8035	J7410		32	J7410	PS20	Registration Patch Sensor (Rear)	
7	J1907	UN6	Drum ITB Driver PCB	J8035			33	J7411	PS20	Registration Patch Sensor (Rear)	
7	J1907	UN6	Drum ITB Driver PCB	J8035			34	J7412	PS21	Patch Sensor	
8	J1908	UN6	Drum ITB Driver PCB				35	J3530	UN29	Potential Control PCB	
8	J1908	UN6	Drum ITB Driver PCB	J8017	J8133		36	J7032	PS79	Multi-purpose Tray Cover Sensor	
8	J1908	UN6	Drum ITB Driver PCB	J8017			37	J7109	FM2	Primary Charging Suction Fan	
9	J1909	UN6	Drum ITB Driver PCB	J8176	J7515			-	-	To Paper Deck	
10	J1910	UN6	Drum ITB Driver PCB				38	J7112	FM5	Color Cleaning Fan	
10	J1910	UN6	Drum ITB Driver PCB				39	J7116	FM18	Hopper Cooling Fan	
10	J1910	UN6	Drum ITB Driver PCB				40	J7149	FM4	Developing and Pre-transfer Charging Fan	
10	J1910	UN6	Drum ITB Driver PCB	J7159			41	J7160	FM1	Pre-fixing Feed Attraction Fan	
10	J1910	UN6	Drum ITB Driver PCB				42	J7231	FM22	Hopper Cooling Suction Fan	
11	J1914	UN6	Drum ITB Driver PCB				43	J7538	M18	Developing Sleeve Drive Motor (Bk)	
11	J1914	UN6	Drum ITB Driver PCB				44	J7539	M30	Drum Cleaning and Waste Toner Feed Drive Motor	

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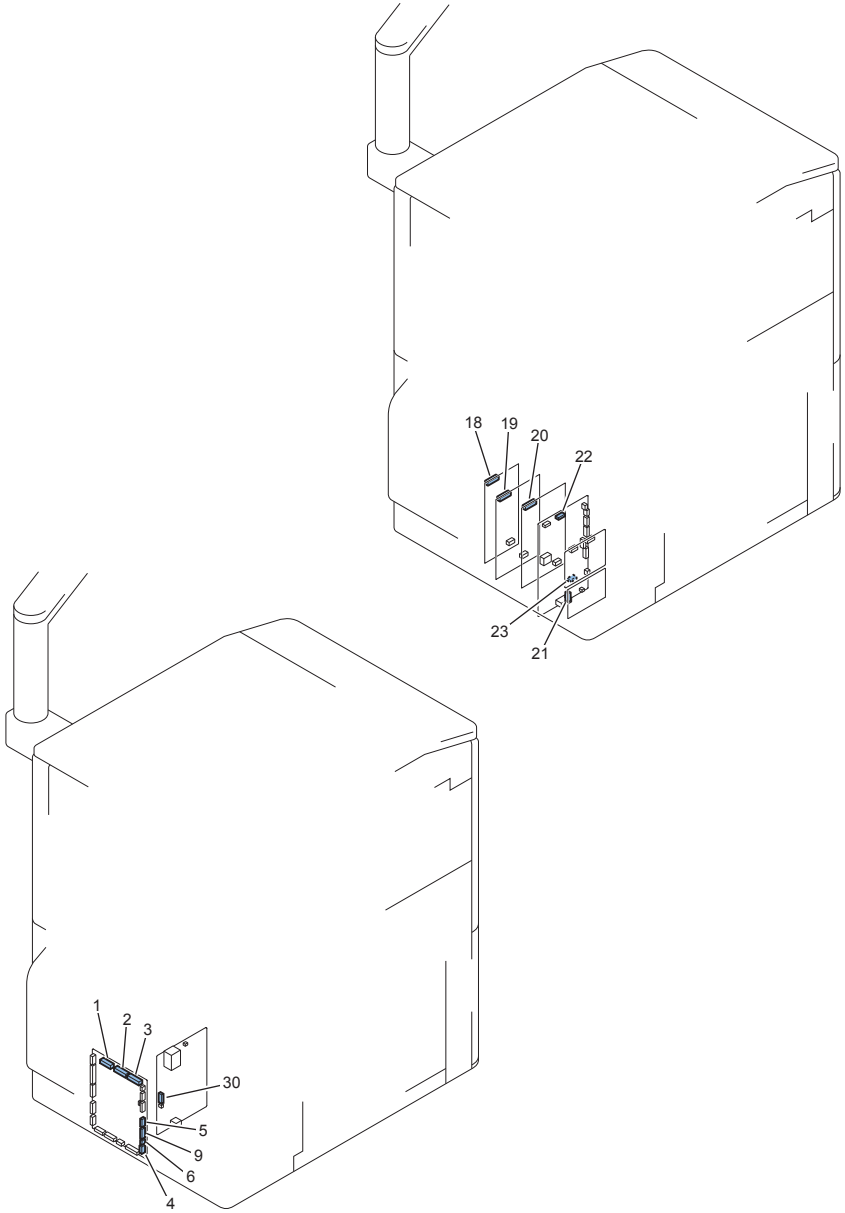

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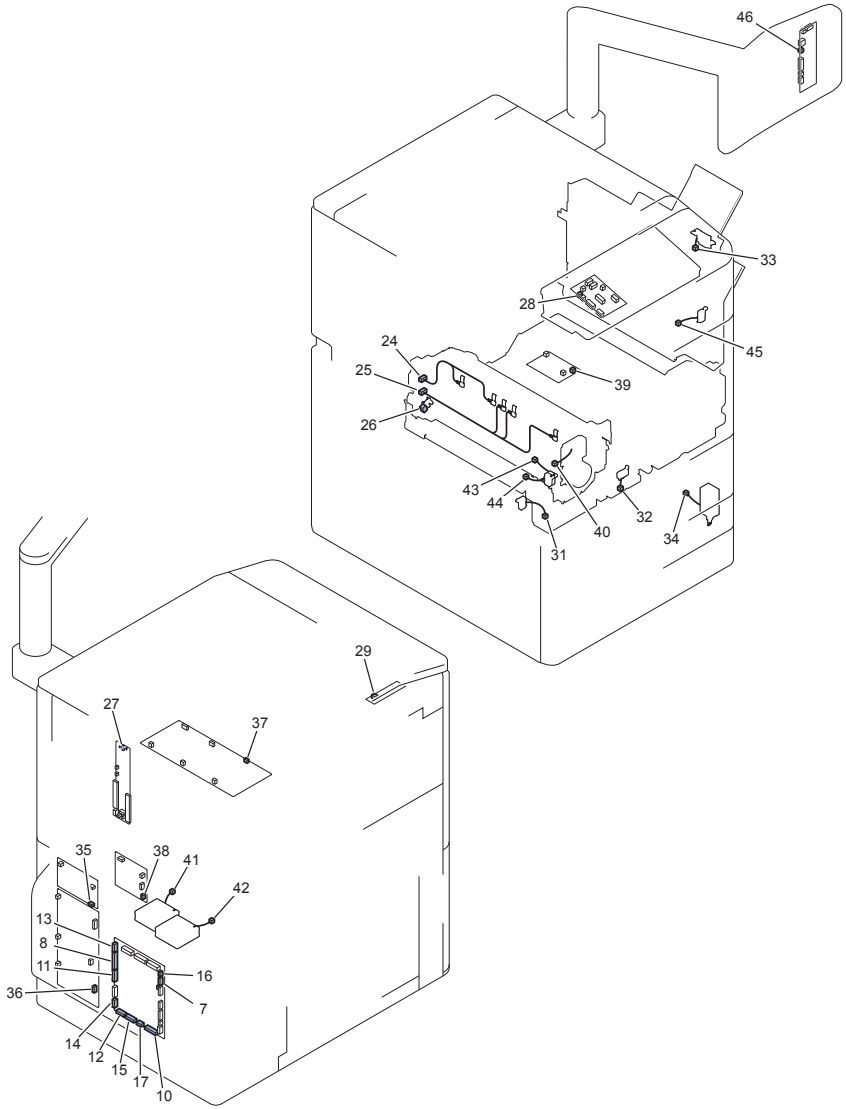
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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J1801	UN7	Relay PCB				18	J201	UN33	DC Power Supply PCB (12V)	
2	J1802	UN7	Relay PCB				19	J202A	UN34	DC Power Supply PCB (24VA)	
3	J1803	UN7	Relay PCB				20	J202B	UN35	DC Power Supply PCB (24V)	
4	J1804	UN7	Relay PCB				21	J691	UN31	All-night Power Supply PCB	
5	J1807	UN7	Relay PCB				22	J811	UN8	AC Driver PCB	100V
5	J1807	UN7	Relay PCB				22	J811	UN9	AC Driver PCB	120V
5	J1807	UN7	Relay PCB				22	J811	UN10	AC Driver PCB	200V
6	J1809	UN7	Relay PCB				23	J2202	UN11	Drum Heater Driver PCB	100/120V
6	J1809	UN7	Relay PCB				23	J2202	UN12	Drum Heater Driver PCB	200V
7	J1810	UN7	Relay PCB	J8170	J8001		24	J7404	THM11	Main Thermistor	
7	J1810	UN7	Relay PCB	J8170	J8001		24	J7404	THM12	Front Thermistor	
7	J1810	UN7	Relay PCB	J8170	J8001		25	J8003	THM13	Sub Thermistor 1	
7	J1810	UN7	Relay PCB	J8170	J8001		25	J8003	THM14	Sub Thermistor 2	
7	J1810	UN7	Relay PCB	J8170	J8001		25	J8003	THM15	Rear Thermistor	
7	J1810	UN7	Relay PCB	J8170	J8001	J7499	26	J180330	PS102	Web Level Sensor	
8	J1811	UN7	Relay PCB				27	J104	UN83	Riser PCB	
8	J1811	UN7	Relay PCB	J1821	J8103	J8082	28	J1002	UN111	CPU PCB	[B] Flat Control Panel Unit
8	J1811	UN7	Relay PCB	J1821	J8103	J8082	46	J1001	UN201	CPU PCB	[A] Upright Control Panel Unit
8	J1811	UN7	Relay PCB	J1821			29	J9001	-	USB Device Port	
9	J1812	UN7	Relay PCB	J8005			30	J501	UN30	IH Power Supply PCB	
10	J1813	UN7	Relay PCB	J8122	J8001	J8025		-	TP2	Fixing Thermal Switch	
10	J1813	UN7	Relay PCB	J8238			31	J8237	SW5	Delivery Door Switch	
10	J1813	UN7	Relay PCB	J8165			32	J8057	SW7	Fixing Feed Unit Switch	
10	J1813	UN7	Relay PCB	J8165			33	J1012	SW18	Main Switch	
10	J1813	UN7	Relay PCB	J8024			34	J18230	SL9	Remote Shutdown Solenoid	
11	J1814	UN7	Relay PCB				35	J3011	UN37	Primary Charging High Voltage PCB (Bk)	
11	J1814	UN7	Relay PCB				36	J3021	UN38	Primary Charging High Voltage PCB (Color)	
11	J1814	UN7	Relay PCB	J8207			37	J3041	UN40	Developing High Voltage PCB (CL)	
11	J1814	UN7	Relay PCB	J8205			38	J3545	UN50	Pre-primary Transfer Charging High Voltage PCB (Bk)	
12	J1815	UN7	Relay PCB	J8184	J7515			-	-	To Paper Deck	
13	J1816	UN7	Relay PCB	J8023	J8099		39	J3541	UN49	Post-secondary Transfer Static Elimination High Voltage PCB	
13	J1816	UN7	Relay PCB	J8023	J8099		40	J7612	M48	Fixing Motor	
14	J1819	UN7	Relay PCB	J8239				-	-	To Color Image Reader	
15	J1821	UN7	Relay PCB	J8229				-	-	Buffer Driver	
16	J1830	UN7	Relay PCB				41	J7400	FM9	Power Supply Fan 2	
16	J1830	UN7	Relay PCB				42	J7401	FM8	Power Supply Fan 1	
17	J1850	UN7	Relay PCB	J8235			43	J8236	SW1	Front Door Switch 1	
17	J1850	UN7	Relay PCB	J8235			44	J8236	SW2	Front Door Switch 2	
17	J1850	UN7	Relay PCB	J8234			45	J8056	SW3	Multi-purpose Tray Unit Switch	

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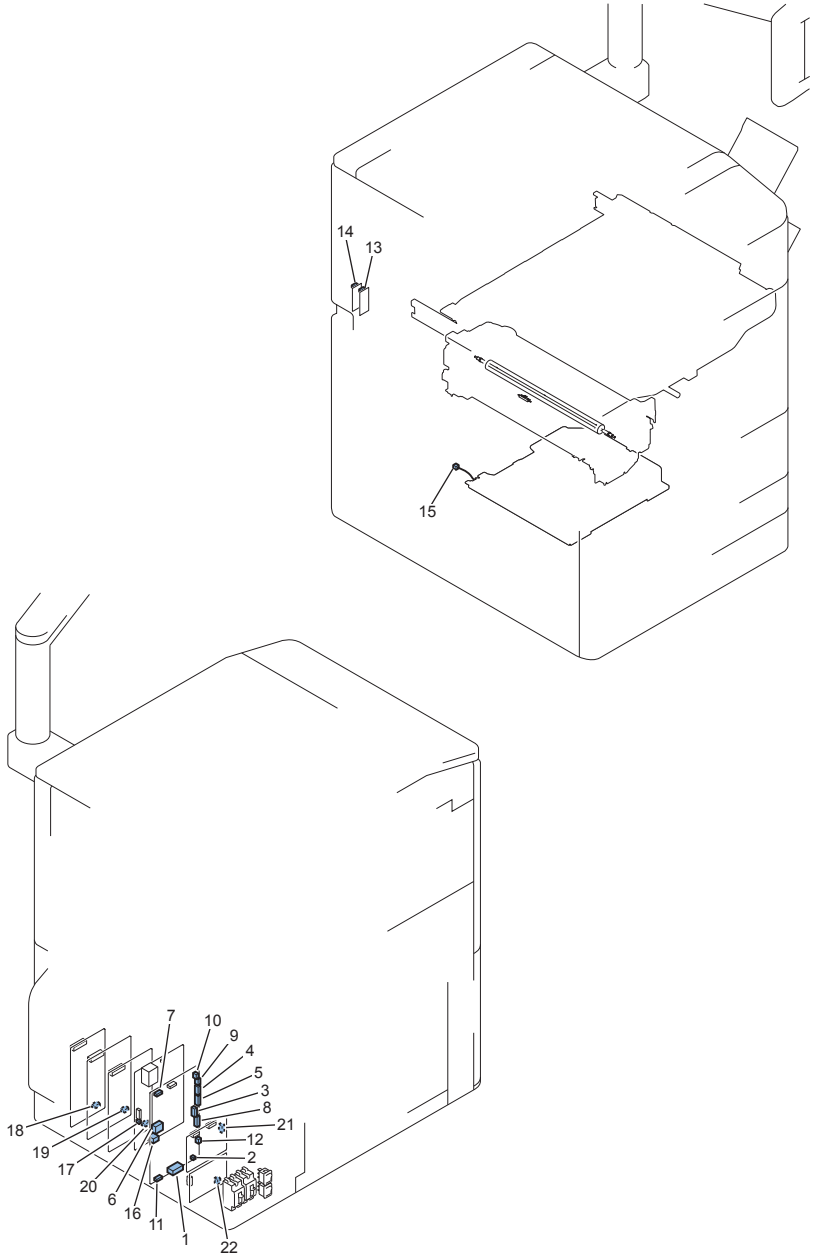

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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J801	UN8	AC Driver PCB					-	ELB1	Leakage Breaker 1	100V
2	J803	UN8	AC Driver PCB	J8083	J8084		13	J7	-	Modular PCB (1 line)	100V
2	J803	UN8	AC Driver PCB	J8083	J8084		14	J601	-	Modular PCB (2 line)	100V
3	J805	UN8	AC Driver PCB					-	SW12	Environment Switch	100V
3	J805	UN8	AC Driver PCB					-	SW13	Cassette Heater Switch	100V
4	J806	UN8	AC Driver PCB	J8126			15	J8130	H6	Cassette Heater	100V
5	J808	UN8	AC Driver PCB	J8079	J8081			-	-	To Deck Heater	100V
5	J808	UN8	AC Driver PCB	J8109	J8233			-	-	To Color Image Reader	100V
6	J809	UN8	AC Driver PCB				16	J500	UN30	IH Power Supply PCB	100V
7	J812	UN8	AC Driver PCB	J8120			17	J503	UN30	IH Power Supply PCB	100V
7	J812	UN8	AC Driver PCB	J8123	J8228			-	-	To finisher	100V
8	J813	UN8	AC Driver PCB	J8129	J8190		18	J101A	UN33	DC Power Supply PCB (12V)	100V
8	J813	UN8	AC Driver PCB	J8129	J8191		19	J102A	UN34	DC Power Supply PCB (24VA)	100V
8	J813	UN8	AC Driver PCB	J8129	J8192		20	J102B	UN35	DC Power Supply PCB (24V)	100V
9	J814	UN8	AC Driver PCB				21	J2200	UN11	Drum Heater Driver PCB	100V
10	J815	UN8	AC Driver PCB				21	J2200	UN11	Drum Heater Driver PCB	100V
11	J816	UN8	AC Driver PCB					-	ELB1	Leakage Breaker 1	100V ONLY
12	J820	UN8	AC Driver PCB				22	J681	UN31	All-night Power Supply PCB	100V
1	J801	UN9	AC Driver PCB					-	ELB2	Leakage Breaker 2	120V
2	J803	UN9	AC Driver PCB	J8083	J8084		13	J7	-	Modular PCB (1 line)	120V
2	J803	UN9	AC Driver PCB	J8083	J8084		14	J601	-	Modular PCB (2 line)	120V
3	J805	UN9	AC Driver PCB					-	SW12	Environment Switch	120V
3	J805	UN9	AC Driver PCB					-	SW13	Cassette Heater Switch	120V
4	J806	UN9	AC Driver PCB	J8126			15	J8130	H6	Cassette Heater	120V
5	J808	UN9	AC Driver PCB	J8079	J8081			-	-	To Deck Heater	120V
5	J808	UN9	AC Driver PCB	J8109	J8233			-	-	To Color Image Reader	120V
6	J809	UN9	AC Driver PCB				16	J500	UN30	IH Power Supply PCB	120V
7	J812	UN9	AC Driver PCB	J8120			17	J503	UN30	IH Power Supply PCB	120V
7	J812	UN9	AC Driver PCB	J8123	J8228			-	-	To finisher	120V
8	J813	UN9	AC Driver PCB	J8129	J8190		18	J101A	UN33	DC Power Supply PCB (12V)	120V
8	J813	UN9	AC Driver PCB	J8129	J8191		19	J102A	UN34	DC Power Supply PCB (24VA)	120V
8	J813	UN9	AC Driver PCB	J8129	J8192		20	J102B	UN35	DC Power Supply PCB (24V)	120V
9	J814	UN9	AC Driver PCB				21	J2200	UN11	Drum Heater Driver PCB	120V
10	J815	UN9	AC Driver PCB				21	J2200	UN11	Drum Heater Driver PCB	120V
12	J820	UN9	AC Driver PCB				22	J681	UN31	All-night Power Supply PCB	120V
1	J801	UN10	AC Driver PCB					-	ELB3	Leakage Breaker 3	200V
2	J803	UN10	AC Driver PCB	J8083	J8084		13	J7	-	Modular PCB (1 line)	200V
2	J803	UN10	AC Driver PCB	J8083	J8084		14	J601	-	Modular PCB (2 line)	200V
3	J805	UN10	AC Driver PCB					-	SW12	Environment Switch	200V
3	J805	UN10	AC Driver PCB					-	SW13	Cassette Heater Switch	200V
4	J806	UN10	AC Driver PCB	J8126			15	J8130	H6	Cassette Heater	200V
5	J808	UN10	AC Driver PCB	J8079	J8081			-	-	To Deck Heater	200V
5	J808	UN10	AC Driver PCB	J8109	J8233			-	-	To Color Image Reader	200V
6	J809	UN10	AC Driver PCB				16	J500	UN30	IH Power Supply PCB	200V
7	J812	UN10	AC Driver PCB	J8120			17	J503	UN30	IH Power Supply PCB	200V

KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
7	J812	UN10	AC Driver PCB	J8123	J8228			-	-	To finisher	200V
8	J813	UN10	AC Driver PCB	J8129	J8190		18	J101A	UN33	DC Power Supply PCB (12V)	200V
8	J813	UN10	AC Driver PCB	J8129	J8191		19	J102A	UN34	DC Power Supply PCB (24VA)	200V
8	J813	UN10	AC Driver PCB	J8129	J8192		20	J102B	UN35	DC Power Supply PCB (24V)	200V
9	J814	UN10	AC Driver PCB				21	J2200	UN12	Drum Heater Driver PCB	200V
10	J815	UN10	AC Driver PCB				21	J2200	UN12	Drum Heater Driver PCB	200V
12	J820	UN10	AC Driver PCB				22	J681	UN31	All-night Power Supply PCB	200V

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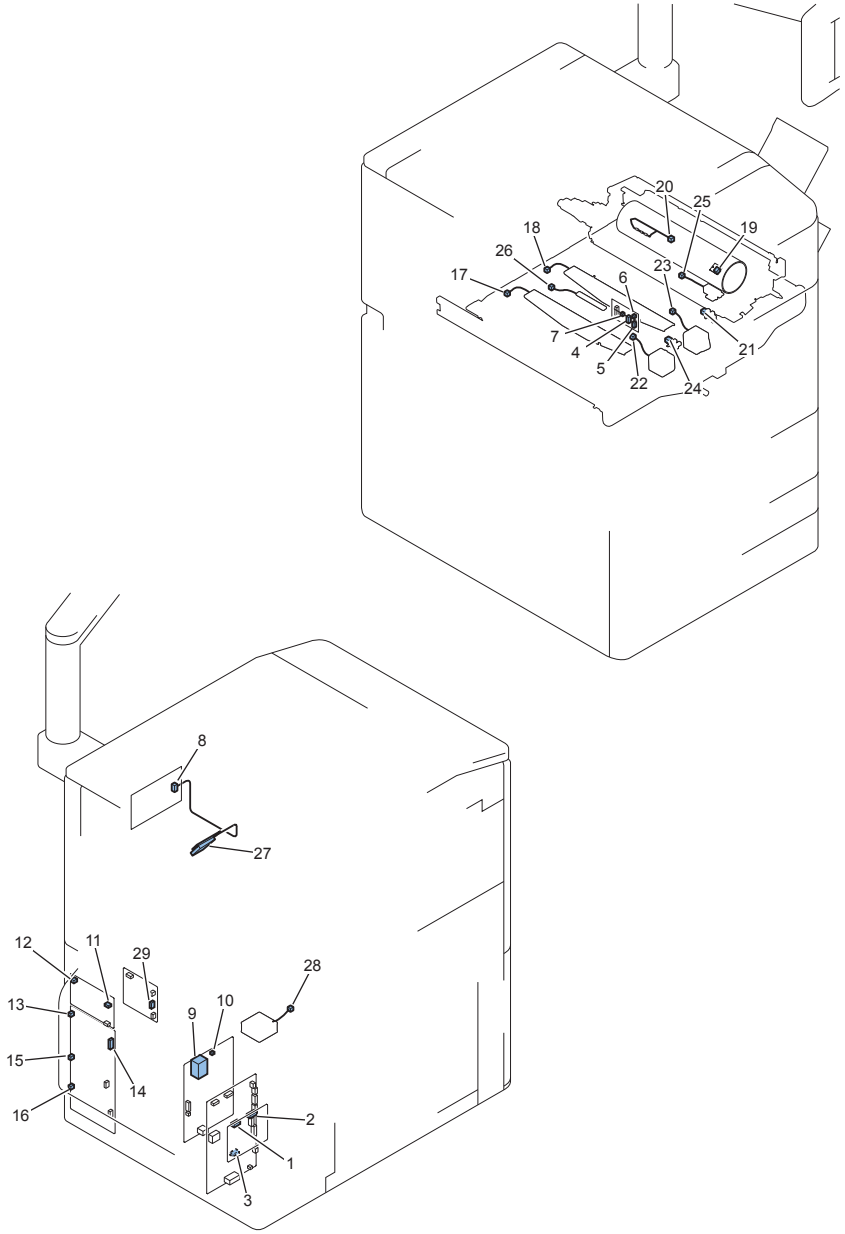

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KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J2201	UN11	Drum Heater Driver PCB	J8111				-	H1	Drum Heater (Bk)	100/120V
1	J2201	UN12	Drum Heater Driver PCB	J8111				-	H1	Drum Heater (Bk)	200V
2	J2204	UN11	Drum Heater Driver PCB	J8189	J8050		17	J8051	H10	Drum Heater (Y)	100/120V
2	J2204	UN12	Drum Heater Driver PCB	J8189	J8050		17	J8051	H10	Drum Heater (Y)	200V
2	J2204	UN11	Drum Heater Driver PCB	J8189	J8050		18	J8052	H11	Drum Heater (M)	100/120V
2	J2204	UN12	Drum Heater Driver PCB	J8189	J8050		18	J8052	H11	Drum Heater (M)	200V
3	J2202	UN11	Drum Heater Driver PCB	J8018	J8058		19	J7519	THM5	Drum Thermopile	100/120V
3	J2202	UN12	Drum Heater Driver PCB	J8018	J8058		19	J7519	THM5	Drum Thermopile	200V
3	J2202	UN11	Drum Heater Driver PCB	J8018	J8058		20	J8032	THM6	Drum Thermistor	100/120V
3	J2202	UN12	Drum Heater Driver PCB	J8018	J8058		20	J8032	THM6	Drum Thermistor	200V
3	J2202	UN11	Drum Heater Driver PCB	J8018	J80110	J8050		-	-	-	100/120V
3	J2202	UN12	Drum Heater Driver PCB	J8018	J80110	J8050		-	-	-	200V
4	J2701	UN28	ITB Relay PCB				21	J7113	PS4	Primary Transfer Roller Detachment HP Sensor	
4	J2701	UN28	ITB Relay PCB	J7114			22	J7114	M5	Primary Transfer Roller Detachment Motor	
4	J2701	UN28	ITB Relay PCB	J8044			23	J7414	M4	Steering Drive Motor	
4	J2701	UN28	ITB Relay PCB	J8045			24	J7416	PS3	Steering Drive HP Sensor	
5	J2702	UN28	ITB Relay PCB				25	J7415	PS2	ITB Displacement Sensor	
6	J2703	UN28	ITB Relay PCB					-	-	-	
7	J2704	UN28	ITB Relay PCB	J8046			26	J7528	PS5	ITB HP Sensor	
8	J3531	UN29	Potential Control PCB				27	J8073	-	Potential Sensor	
9	J510	UN30	IH Power Supply PCB	J8026				-	H4	IH Coil	
9	J510	UN30	IH Power Supply PCB	J8027				-	H4	IH Coil	
10	J521	UN30	IH Power Supply PCB				28	J7403	FM7	IH Power Supply Fan	
11	J3010	UN37	Primary Charging High Voltage PCB (Bk)				14	J3050	UN38	Primary Charging High Voltage PCB (Color)	
12	J3012	UN37	Primary Charging High Voltage PCB (Bk)					-	-	-	
13	J3022	UN38	Primary Charging High Voltage PCB (Color)					-	UN59	Primary Charging High Voltage Contact Resistance (Y)	
14	J3050	UN38	Primary Charging High Voltage PCB (Color)				29	J3544	UN50	Pre-primary Transfer Charging High Voltage PCB (Bk)	
15	J3322	UN38	Primary Charging High Voltage PCB (Color)					-	UN60	Primary Charging High Voltage Contact Resistance (M)	
16	J3522	UN38	Primary Charging High Voltage PCB (Color)					-	UN61	Primary Charging High Voltage Contact Resistance (C)	

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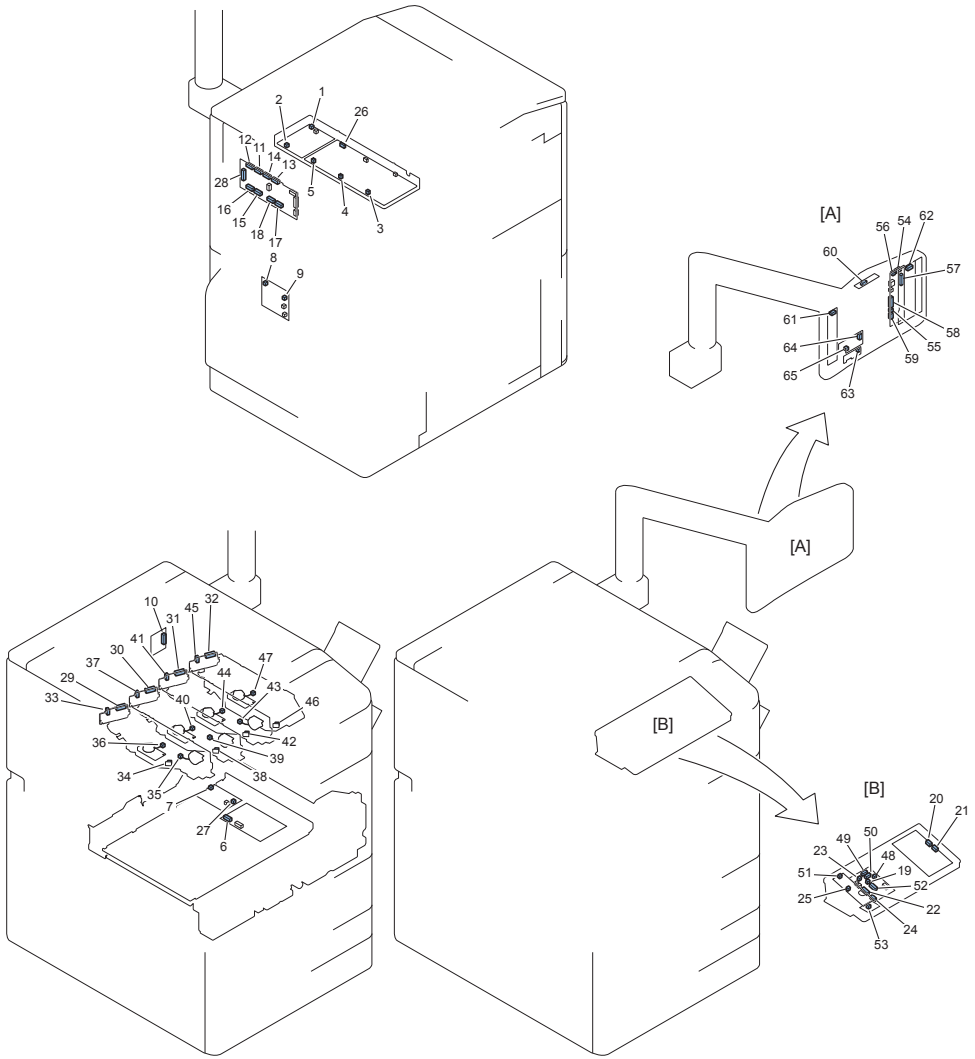

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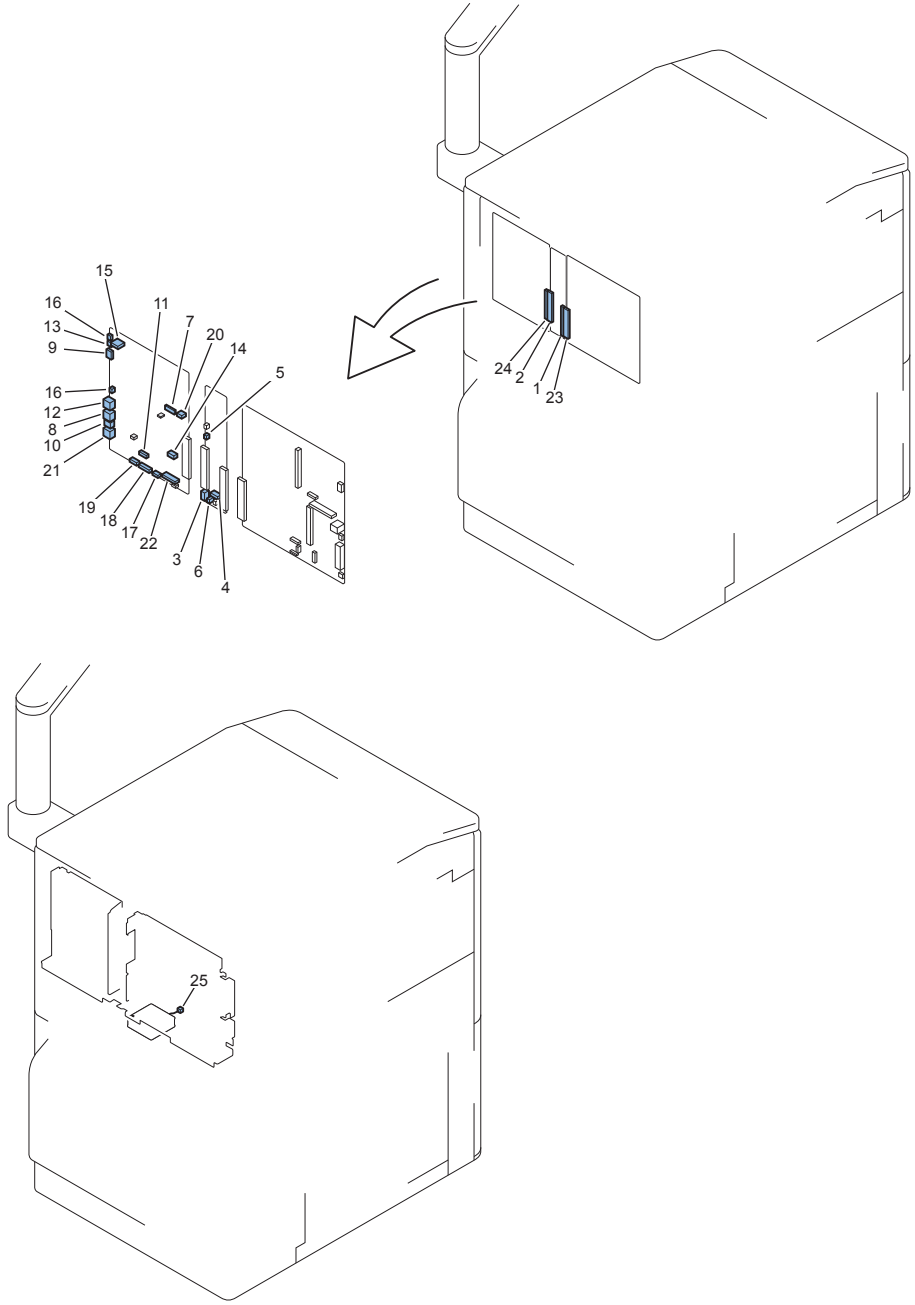
KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J3040	UN39	Developing High Voltage PCB (Bk)				26	J3046	UN40	Developing High Voltage PCB (CL)	
2	J3044	UN39	Developing High Voltage PCB (Bk)					-	UN55	Developing Toner Collection High Voltage Contact Resistance (Bk)	
3	J3042	UN40	Developing High Voltage PCB (CL)	J8135				-	UN56	Developing Toner Collection High Voltage Contact Resistance (Y)	
4	J3342	UN40	Developing High Voltage PCB (CL)	J8136				-	UN57	Developing Toner Collection High Voltage Contact Resistance (M)	
5	J3542	UN40	Developing High Voltage PCB (CL)	J8137				-	UN58	Developing Toner Collection High Voltage Contact Resistance (C)	
	-	UN48	Secondary Transfer High Voltage PCB	J8042				-	UN66	Secondary Transfer High Voltage Contact Resistance	
6	J3061	UN48	Secondary Transfer High Voltage PCB				27	J3541	UN49	Post-secondary Transfer Static Elimination High Voltage PCB	
7	J35420	UN49	Post-secondary Transfer Static Elimination High Voltage PCB	J8042				-	UN67	Secondary Transfer Static Elimination High Voltage Contact Resistance	
8	J35470	UN50	Pre-primary Transfer Charging High Voltage PCB (Bk)	J3547				-	-	Post-charging transformer	
9	J35480	UN50	Pre-primary Transfer Charging High Voltage PCB (Bk)					-	-	Post-charging transformer	
	-	UN51	Developing Toner Collection High Voltage PCB (Bk)	J8134				-	UN55	Developing Toner Collection High Voltage Contact Resistance (Bk)	
	-	UN52	Developing Toner Collection High Voltage PCB (Y)					-	UN56	Developing Toner Collection High Voltage Contact Resistance (Y)	
	-	UN53	Developing Toner Collection High Voltage PCB (M)					-	UN57	Developing Toner Collection High Voltage Contact Resistance (M)	
	-	UN54	Developing Toner Collection High Voltage PCB (C)					-	UN58	Developing Toner Collection High Voltage Contact Resistance (C)	
10	J5601	UN99	Laser Power Supply Relay PCB				28	J5500	UN100	Laser Interface PCB	
11	J5505	UN100	Laser Interface PCB				29	J5100Y	UN101	Laser Driver PCB (Y)	
12	J5506	UN100	Laser Interface PCB				30	J5100M	UN103	Laser Driver PCB (M)	
13	J5507	UN100	Laser Interface PCB				31	J5100C	UN105	Laser Driver PCB (C)	
14	J5508	UN100	Laser Interface PCB				32	J5100K	UN107	Laser Driver PCB (Bk)	
15	J5509	UN100	Laser Interface PCB				33	J5101Y	UN101	Laser Driver PCB (Y)	
15	J5509	UN100	Laser Interface PCB	J8070			34	J7530Y	UN102	BD PCB (Y)	
15	J5509	UN100	Laser Interface PCB	J8070			35	J7531Y	M84	Skew Correction Motor (Y)	
15	J5509	UN100	Laser Interface PCB	J8070			36	J7532Y	M80	Laser Scanner Motor (Y)	
16	J5510	UN100	Laser Interface PCB				37	J5101M	UN103	Laser Driver PCB (M)	
16	J5510	UN100	Laser Interface PCB	J8076			38	J7530M	UN104	BD PCB (M)	
16	J5510	UN100	Laser Interface PCB	J8076			39	J7531M	M85	Skew Correction Motor (M)	
16	J5510	UN100	Laser Interface PCB	J8076			40	J7532M	M81	Laser Scanner Motor (M)	
17	J5511	UN100	Laser Interface PCB				41	J5101C	UN105	Laser Driver PCB (C)	
17	J5511	UN100	Laser Interface PCB	J8064			42	J7530C	UN106	BD PCB (C)	
17	J5511	UN100	Laser Interface PCB	J8064			43	J7531C	M86	Skew Correction Motor (C)	
17	J5511	UN100	Laser Interface PCB	J8064			44	J7532C	M82	Laser Scanner Motor (C)	
18	J5512	UN100	Laser Interface PCB				45	J5101K	UN107	Laser Driver PCB (Bk)	
18	J5512	UN100	Laser Interface PCB	J8066			46	J7530K	UN108	BD PCB (Bk)	

KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
18	J5512	UN100	Laser Interface PCB	J8066			47	J7532K	M83	Laser Scanner Motor (Bk)	
19	J2	UN109	LCD				48	J1006	UN111	CPU PCB	[B] Flat Control Panel Unit
20	J3001	UN110	Ten Key PCB				49	J1009	UN111	CPU PCB	[B] Flat Control Panel Unit
21	J3002	UN110	Ten Key PCB				50	J1008	UN111	CPU PCB	[B] Flat Control Panel Unit
22	J1003	UN111	CPU PCB				51	J4001	UN112	Ten Key PCB	[B] Flat Control Panel Unit
23	J1005	UN111	CPU PCB					-	-	Transparent touch panel	[B] Flat Control Panel Unit
24	J1007	UN111	CPU PCB				52	J1	-	LCD	[B] Flat Control Panel Unit
25	J4002	UN112	Sub Key PCB				53	J5001	UN113	Volume PCB	[B] Flat Control Panel Unit
54	UN201	J1002	CPU PCB				60	J1	UN200	TALLY PCB	[A] Upright Control Panel Unit
54	UN201	J1002	CPU PCB				61	J1	UN206	Sub Key PCB	[A] Upright Control Panel Unit
55	UN201	J1003	CPU PCB					-	-	Transparent touch panel	[A] Upright Control Panel Unit
56	UN201	J1004	CPU PCB					-	-	-	[A] Upright Control Panel Unit
57	UN201	J1005	CPU PCB				62	J1	UN202	Ten Key PCB	[A] Upright Control Panel Unit
58	UN201	J1007	CPU PCB					J1	-	LCD	[A] Upright Control Panel Unit
59	UN201	J1008	CPU PCB				63	J1	UN205	Volume PCB	[A] Upright Control Panel Unit
59	UN201	J1008	CPU PCB				64	J501	UN207	LED Driver PCB	[A] Upright Control Panel Unit
	-	-	LCD				65	J502	UN207	LED Driver PCB	[A] Upright Control Panel Unit

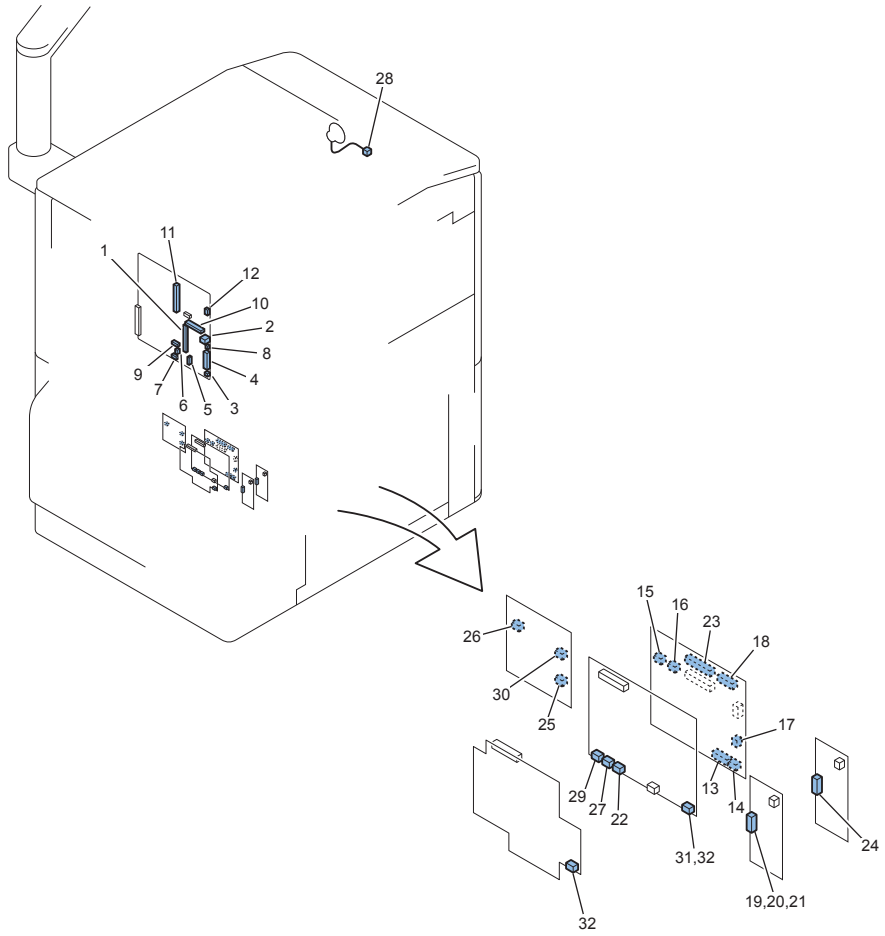
T-4-49



F-4-48

KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J101	UN83	Riser PCB				23	J14	UN116	Main Controller PCB 2	
2	J103	UN83	Riser PCB				24	J17	UN115	Main Controller PCB 1	
3	J105	UN83	Riser PCB					-	HDD0	Standard HDD	
3	J105	UN83	Riser PCB					-	HDD1	Removable HDD	
4	J107	UN83	Riser PCB					-	HDD0	Standard HDD	
4	J107	UN83	Riser PCB					-	HDD1	Removable HDD	
5	J108	UN83	Riser PCB				25	J7544	FM20	Controller Cooling Fan 2	
6	J111	UN83	Riser PCB					-	-	-	
7	J2	UN115	Main Controller PCB 1					-	-	-	
8	J3	UN115	Main Controller PCB 1					-	-	-	
9	J4	UN115	Main Controller PCB 1					-	-	CPU	
10	J5	UN115	Main Controller PCB 1					-	-	USB(H)	
11	J6	UN115	Main Controller PCB 1					-	-	DEVICE PORT HUB	OPTION
12	J7	UN115	Main Controller PCB 1					-	-	ETHERNET	
13	J8	UN115	Main Controller PCB 1					-	-	TOPAZ	
14	J11	UN115	Main Controller PCB 1					-	-	SATA FLASH	
15	J13	UN115	Main Controller PCB 1					-	-	VOICE GUIDANCE	OPTION B
15	J13	UN115	Main Controller PCB 1					-	-	VOICE OPERATION	OPTION A
16	J15	UN115	Main Controller PCB 1					-	FM19	Controller Cooling Fan 1	
16	J15	UN115	Main Controller PCB 1					-	-	DEBUG SERIAL1	
17	J19	UN115	Main Controller PCB 1					-	-	CPLD WR	
18	J20	UN115	Main Controller PCB 1					-	-	CARD READER IF KIT	OPTION A
18	J20	UN115	Main Controller PCB 1					-	-	RS-CONV	OPTION B
18	J20	UN115	Main Controller PCB 1					-	-	COIN VENDER	OPTION C
19	J21	UN115	Main Controller PCB 1					-	-	CC-VI I/F CABLE	OPTION
20	J22	UN115	Main Controller PCB 1					-	-	POSTPONE I/F	
21	J40	UN115	Main Controller PCB 1					-	-	USB(H)	
22	J1025	UN115	Main Controller PCB 1					-	-	YON-RISER	OPTION

T-4-50


28
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F-4-49

KeyNo.	Jack No.	Symbol	Name	Relay Connector			KeyNo.	Jack No.	Symbol	Name	REMARKS
1	J13	UN116	Main Controller PCB 2					-	-	DDR2 DIMM (512MB)	OPTION
2	J15	UN116	Main Controller PCB 2					-	-	USB(D)	
3	J16	UN116	Main Controller PCB 2				22	J403	-	G3 FAX Control PCB	
4	J17	UN116	Main Controller PCB 2				23	J8	-	G3 FAX PCB	
5	J18	UN116	Main Controller PCB 2					-	-	FRAM COUNTER	
6	J20	UN116	Main Controller PCB 2					-	-	JTAG	
7	J21	UN116	Main Controller PCB 2					-	-	ICE	
8	J23	UN116	Main Controller PCB 2					-	-	DEBUG SERIAL	
9	J24	UN116	Main Controller PCB 2					-	-	DEBUSSY-A	
10	J1000	UN116	Main Controller PCB 2					-	-	MINERVA	OPTION
11	J1010	UN116	Main Controller PCB 2					-	-	GIOVANNI-A	
11	J1010	UN116	Main Controller PCB 2					-	-	EFI CONTROLLER	OPTION
12	J3003	UN116	Main Controller PCB 2					-	-	Reader Controller PCB	
13	J103	-	G3 FAX PCB				24	J4	-	Modular PCB (1 line)	
14	J104	-	G3 FAX PCB				25	J303	-	Pseudo CI PCB	
15	J105	-	G3 FAX PCB				26	J301	-	Pseudo CI PCB	
16	J106	-	G3 FAX PCB				27	J208	-	G3 FAX Control PCB	
17	J107	-	G3 FAX PCB	J8132			28	J2121	SP1	Speaker	
18	J109	-	G3 FAX PCB				29	J205	-	G3 FAX Control PCB	
18	J109	-	G3 FAX PCB				30	J302	-	Pseudo CI PCB	
19	J204	-	G3 FAX Control PCB				31	J604	-	Modular PCB (2 line)	
20	J802	-	G3 FAX Control PCB				32	J504	-	Modular PCB (4 line)	
21	J804	-	G3 FAX Control PCB				32	J504	-	Modular PCB (4 line)	
	-	-	Modular PCB (1 line)					-	-	HANDSET-G2	

T-4-51

Main Controller System

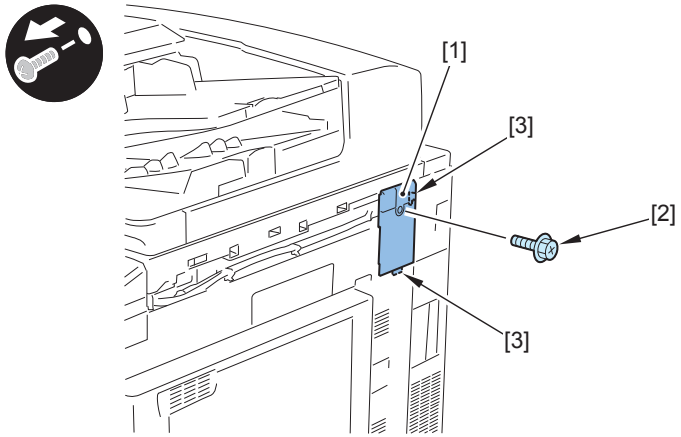
Removing the Flat Control Panel

Preparation (Copier Model)

1) Open the Front Cover.
2) Remove the Upper Front Cover(Refer to page 4-339).
3) Close the Front Cover.
4) Remove the Upper Right Cover 1 (Refer to page 4-341).
5) Close the Multi-purpose Tray Cover.
6) Remove the Toner Container Replacement Unit Inner Cover (Refer to page 4-339).

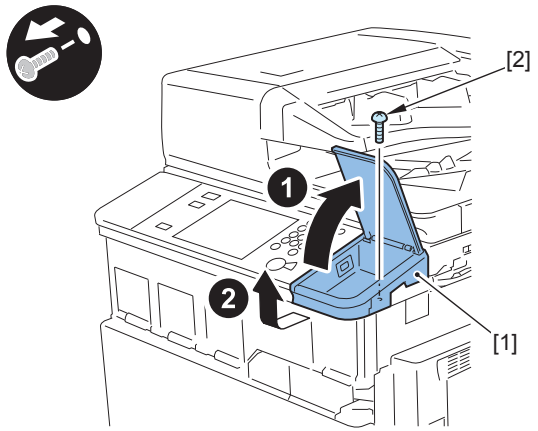
Procedure (Copier Model)

1) Remove the Upper Right Cover 2 [1].
- 1 Screw [2]
- 2 Protrusions [3]



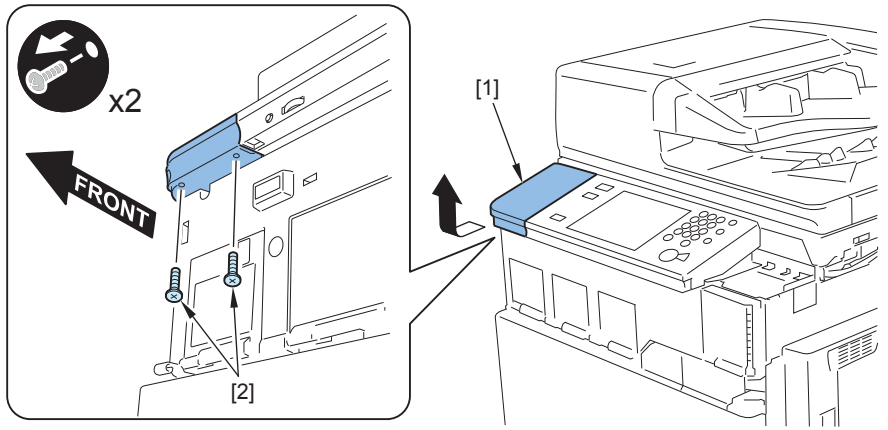
F-4-50

2) Remove the Control Panel Right Cover [1].
- 1 Screw [2]



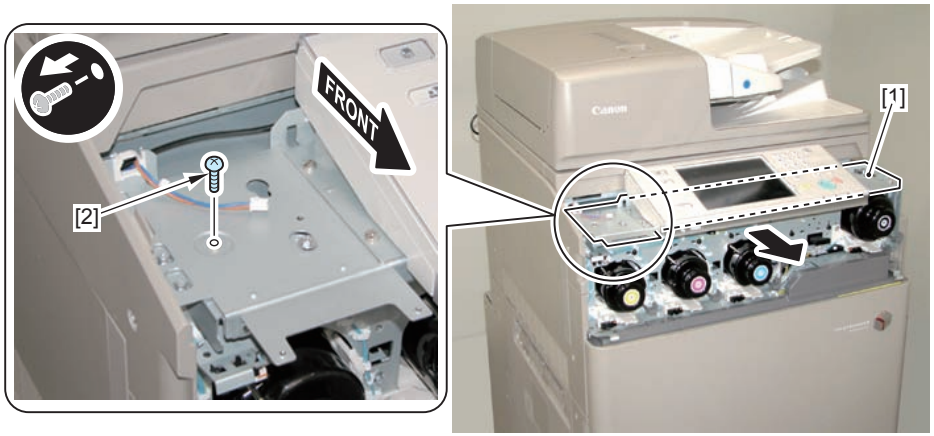
F-4-51

3) Remove the Control Panel Left Cover [1].
- 2 Screws [2]



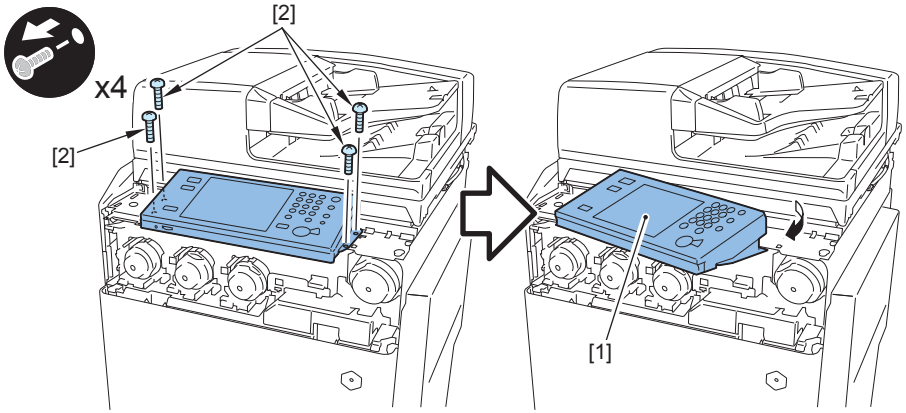
F-4-52

4) Move the Control Panel Plate [1].
- 1 Screw [2]



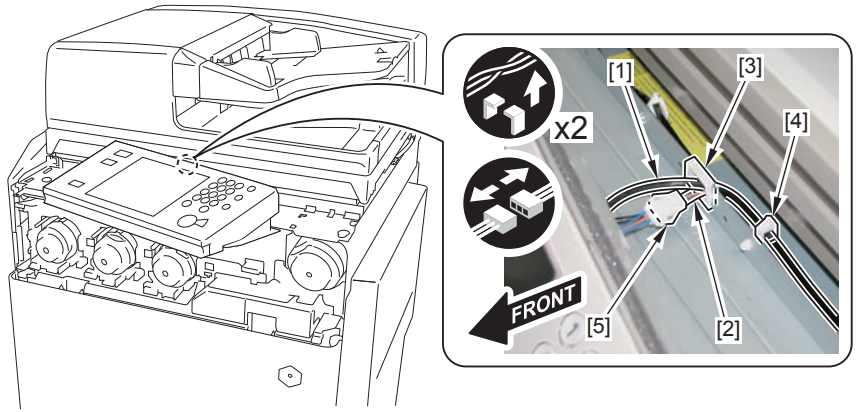
F-4-53

5) Remove the 4 screws [2] securing the Flat Control Panel [1], and move the Flat Control Panel aside. (The removed screws will be used when installing the Upper Front Cover (Middle).)



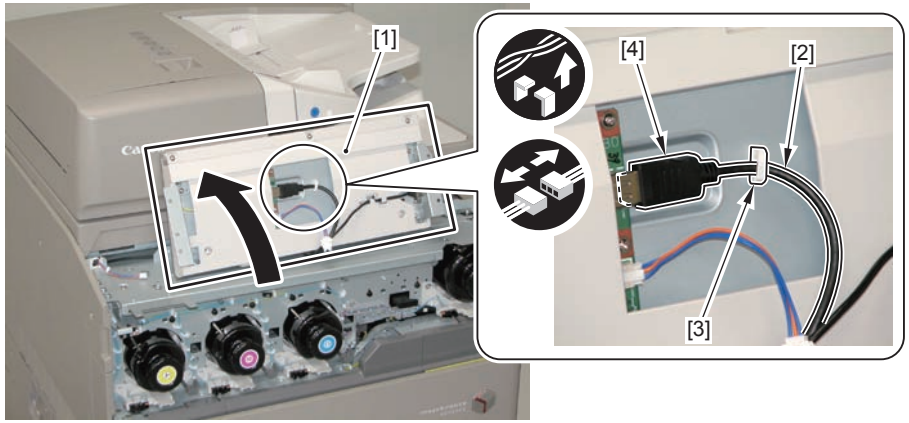
F-4-54

6) Free the Control Panel Cable [1] and the Power Supply Cable [2] from the Edge Saddle [3] and the Wire Saddle [4], and disconnect the connector [5] of the Power Supply Cable.



F-4-55

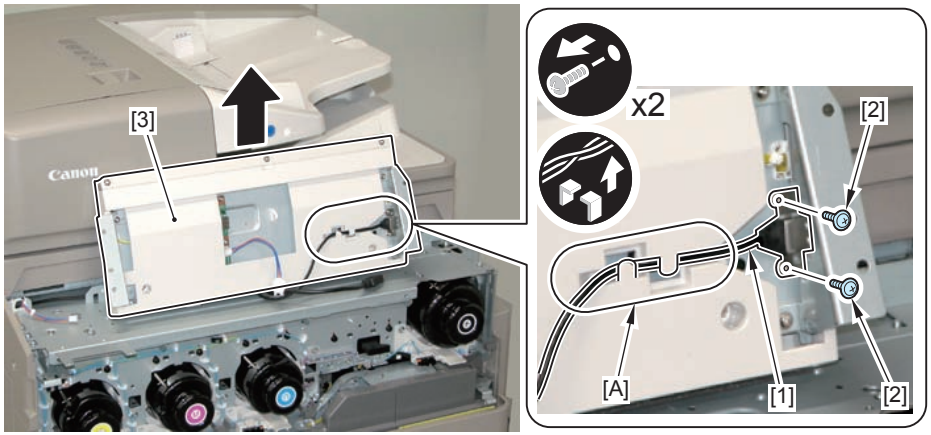
7) Lift up the Flat Control Panel [1] in the direction of the arrow, and disconnect the Control Panel Cable [2].
- 1 Wire Saddle [3]
- 1 Connector [4]



F-4-56

8) Disconnect the USB Cable [1].
- 2 Screws [2]

9) Free the cable from the USB Cable Guide [A], and remove the Flat Control Panel [3].



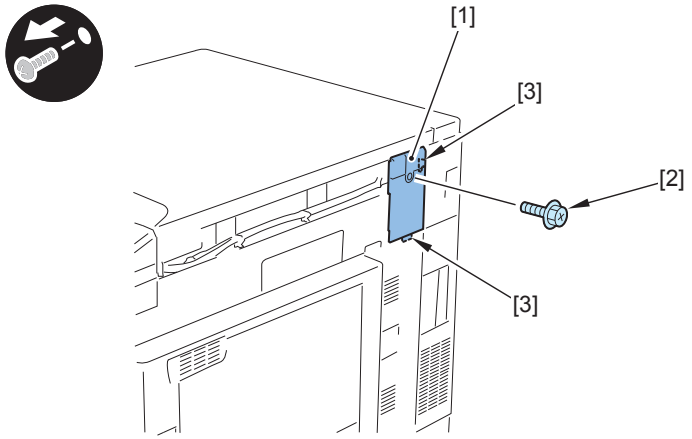
F-4-57

Preparation (Printer Model)

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Close the Multi-purpose Tray Cover.
3) Remove the Box Right Cover (Refer to page 4-342).
4) Remove the Box Upper Cover (Refer to page 4-343).

Procedure (Printer Model)

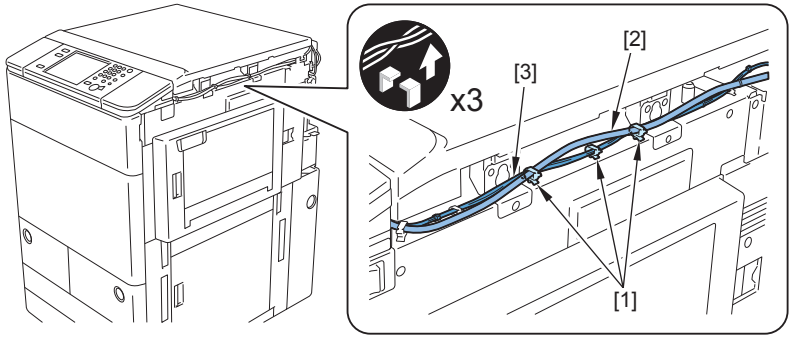
1) Remove the Upper Right Cover 2 [1].
- 1 Screw [2]
- 2 Protrusions [3]



F-4-58

2) Free the Control Panel Cable [2] and the Power Supply Cable [3] from the 3 Wire Saddles [1].

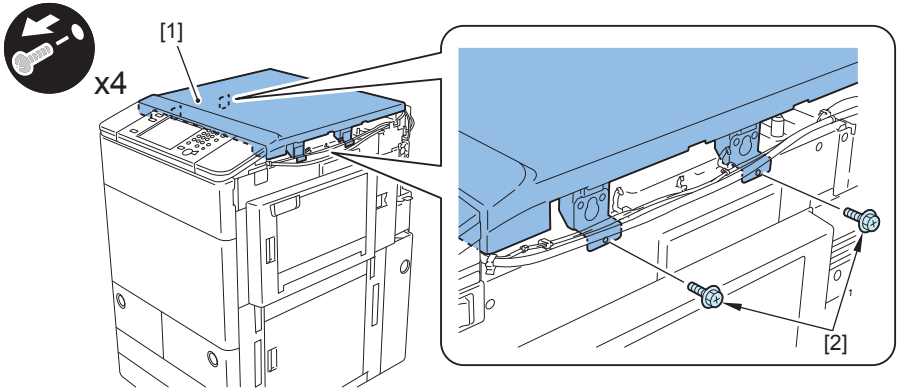
NOTE:
This step is for allowing extra cable to make it easier to remove the Printer Cover.



F-4-59

3) Remove the Printer Cover [1].

- 4 Screws [2]

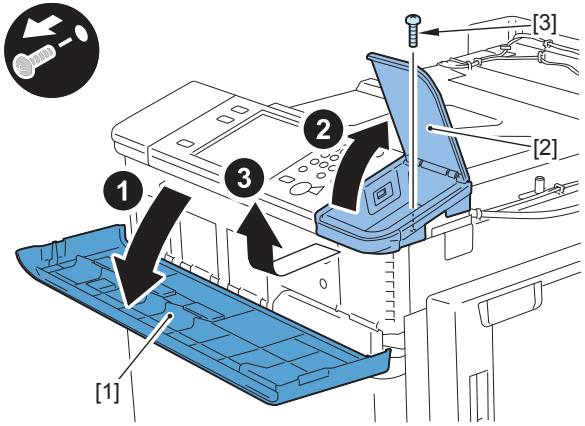


F-4-60

4) Open the Upper Front Cover [1].

5) Remove the Control Panel Right Cover [2].

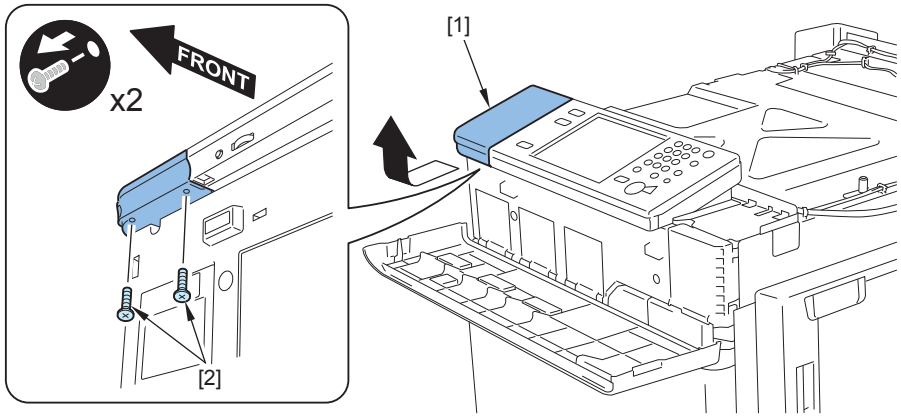
- 1 Screw [3]



F-4-61

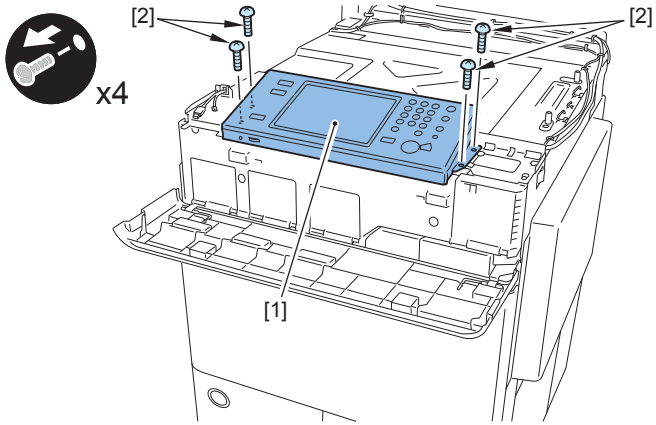
6) Remove the Control Panel Left Cover [1].

- 2 Screws [2]



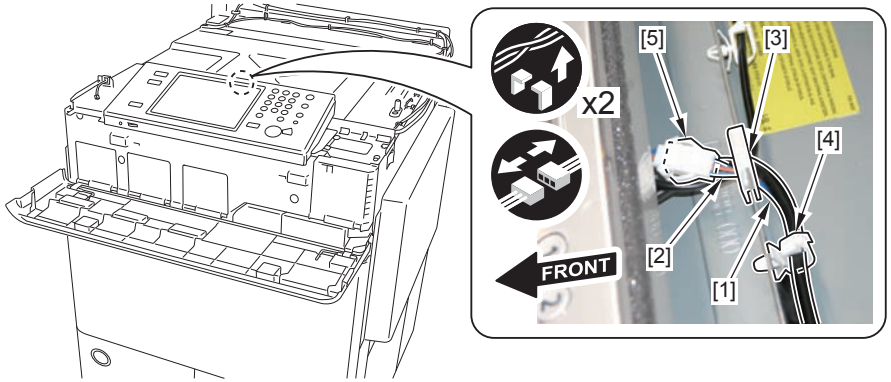
F-4-62

7) Remove the 4 screws [2] of the Flat Control Panel [1].



F-4-63

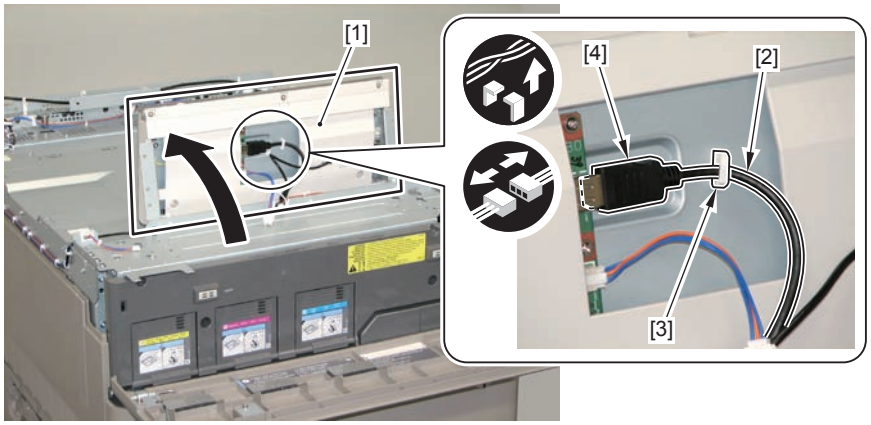
8) Free the Control Panel Cable [1] and the Power Supply Cable [2] from the Edge Saddle [3] and the Wire Saddle [4], and disconnect the connector [5].



F-4-64

9) Lift up the Flat Control Panel [1] in the direction of the arrow, and disconnect the Control Panel Cable [2].

- 1 Wire Saddle [3]
- 1 Connector [4]

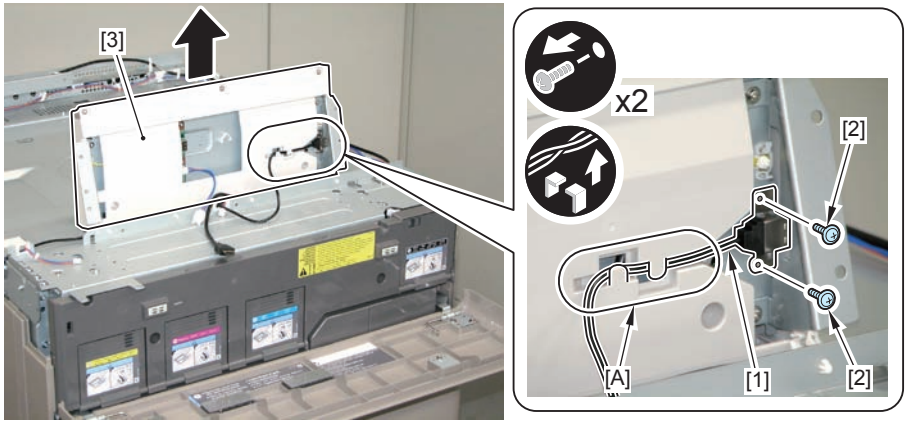


F-4-65

10) Disconnect the USB Cable [1].

- 2 Screws [2]

11) Free the cable from the USB Cable Guide [A], and remove the Flat Control Panel [3].



F-4-66

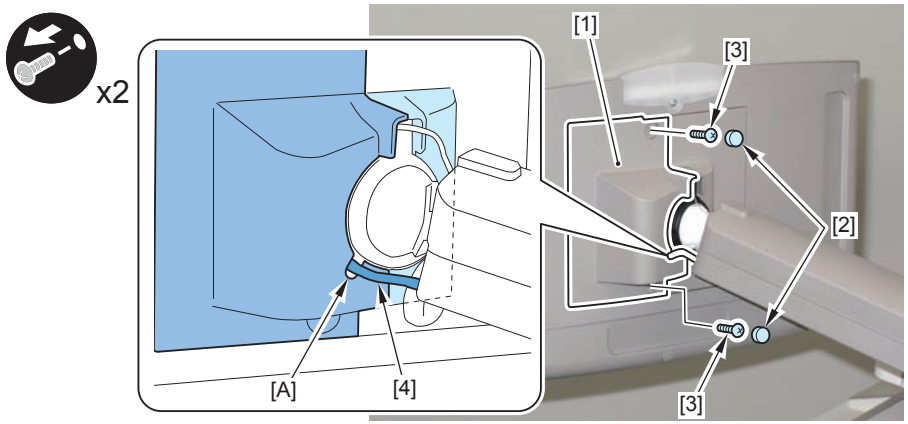
Removing the Upright Control Panel

Procedure

1) Remove the Joint Cover R [1].
- 2 Rubber Caps [2]
- 2 Screws (P Tightening; M3x8) [3]

CAUTION:

When assembling, be sure to pass the Power Supply Cable [4] through the groove [A] of the Joint Cover R.

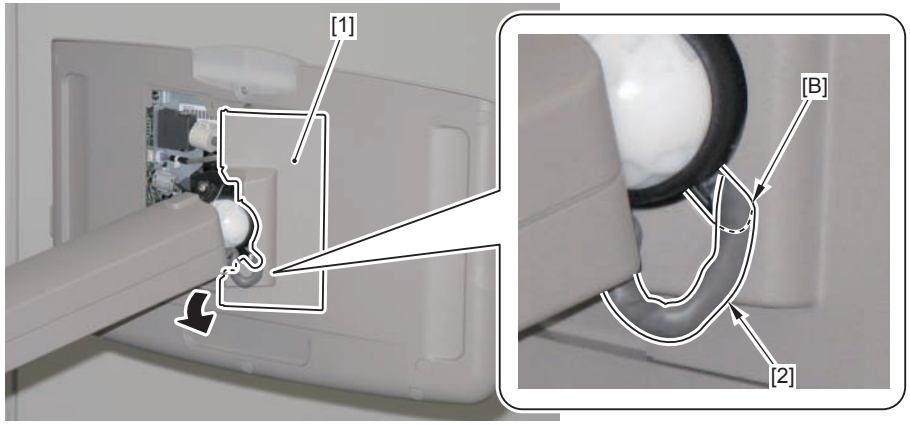


F-4-67

2) Remove the Joint Cover L [1].

CAUTION:

When assembling, be sure to pass the Control Panel Cable [2] through the groove [B] of the Joint Cover L.

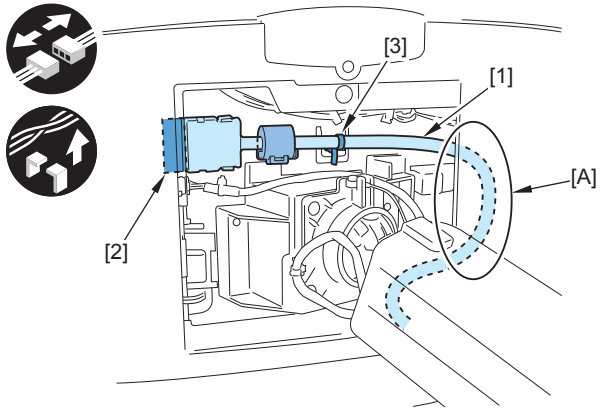


F-4-68

3) Disconnect the Control Panel Cable [1].
- 1 Connector [2]
- 1 Reuse Band [3]

CAUTION:

When assembling, pay attention to the following points.
- Do not route the Control Panel Cable clockwise.
- After the cable has been secured, cut off the excess length of the Reuse Band.
- Be sure to store the slack [A] of the Control Panel Cable inside the cover.

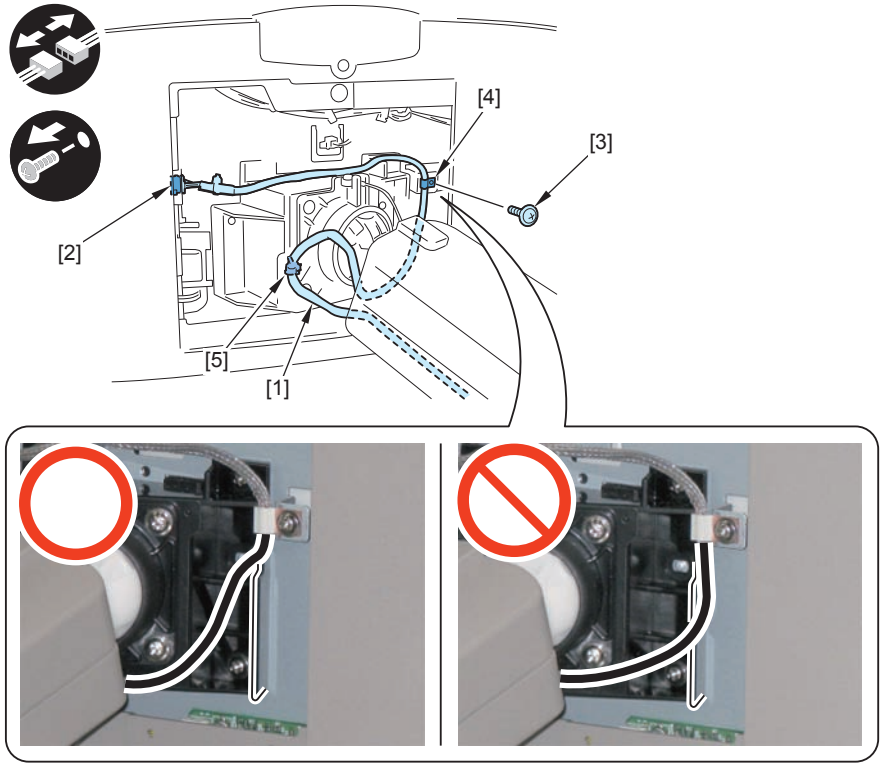


F-4-69

4) Disconnect the Power Supply Cable [1].
- 1 Connector [2]
- 1 Screw (TP; M4x8) [3]
- 1 Cable Clamp [4]
- 1 Reuse Band [5]

CAUTION:

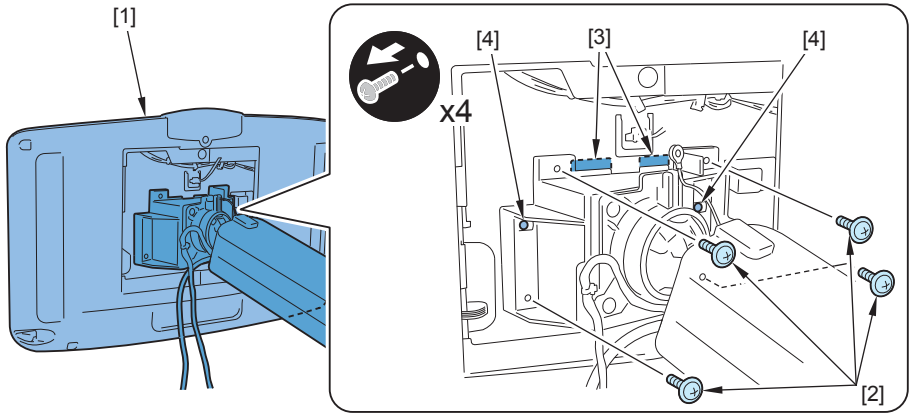
When installing, pay attention to the following points.
- Do not route the Power Supply Cable clockwise.
- When routing the Power Supply Cable, put the cable below the Cable Clamp inside the black guide.



F-4-70

5) Remove the Upright Control Panel [1].
- 4 Screws (TP; M4x8) [2]
- 2 Protrusions [3]
- 2 Bosses [4]

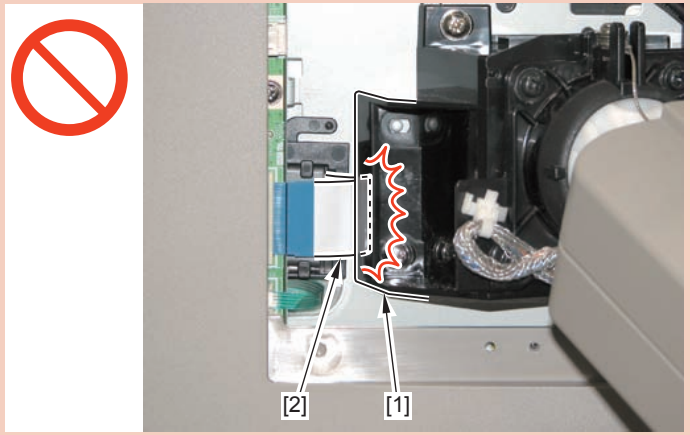
NOTE:
When installing, be sure to tighten the screws from the upper part.



F-4-71

CAUTION:

When installing, be sure that the Flexible Cable [2] is not trapped by the Panel Base [1].



F-4-72

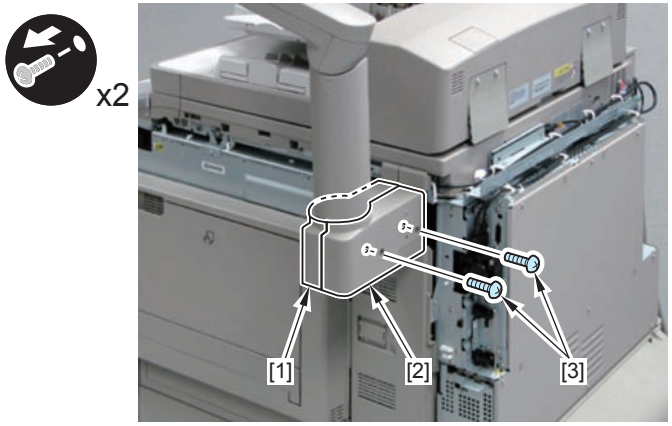
Removing the Upright Control Panel Arm Unit

Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Close the Multi-purpose Tray Cover.
3) Remove the Box Right Cover (Refer to page 4-342).
4) Remove the Box Upper Cover (Refer to page 4-343).

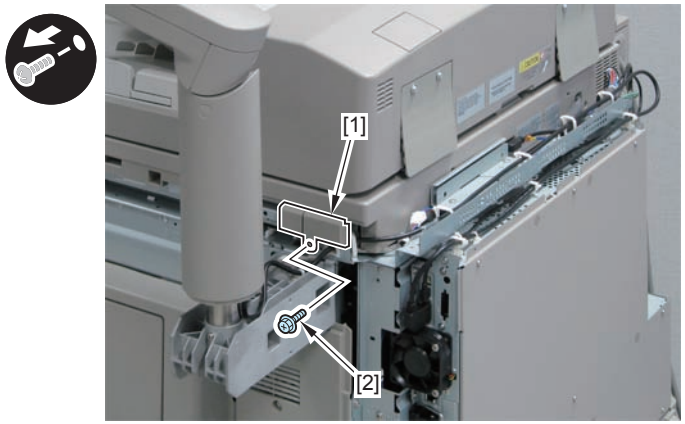
Procedure

1) Remove the Base Cover (Front) [1] and the Base Cover (Rear) [2].
- 2 Screws (P Tightening; M3x8) [3]



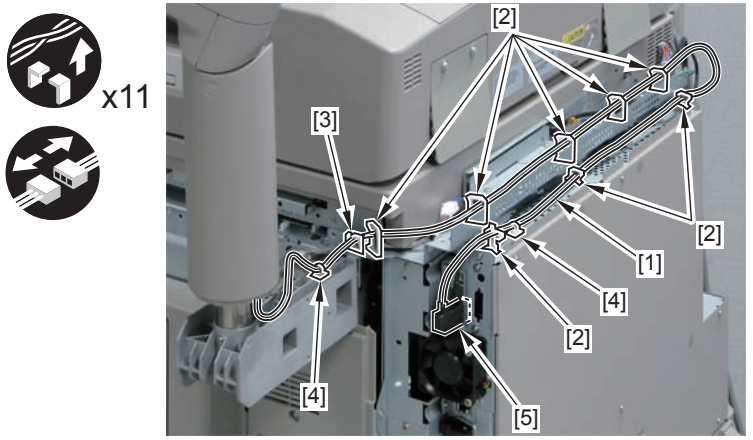
F-4-73

2) Remove the Upper Right Cover 2 [1].
- 1 Screw [2]



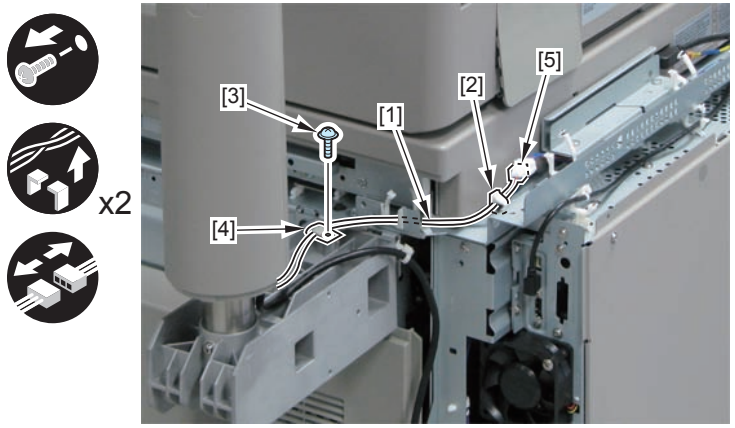
F-4-74

3) Disconnect the Control Panel Cable [1].
- 8 Wire Saddles [2]
- 1 Edge Saddle [3]
- 2 Reuse Bands [4]
- 1 Connector [5]



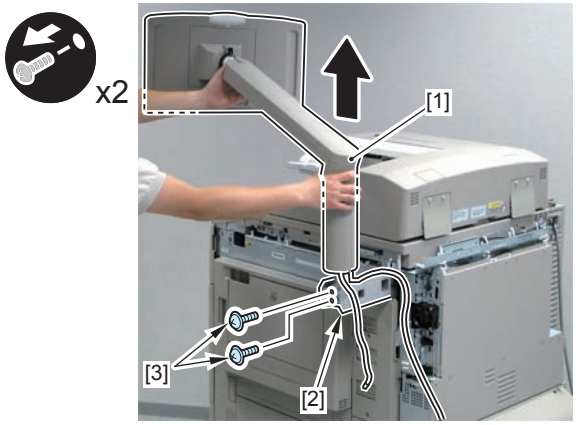
F-4-75

4) Disconnect the Power Supply Cable [1].
- 1 Wire Saddle [2]
- 1 Screw [3]
- 1 Cable Clamp [4]
- 1 Connector [5]



F-4-76

5) Remove the Upright Arm [1] from the Frame Base [2].
- 2 Screws [3]

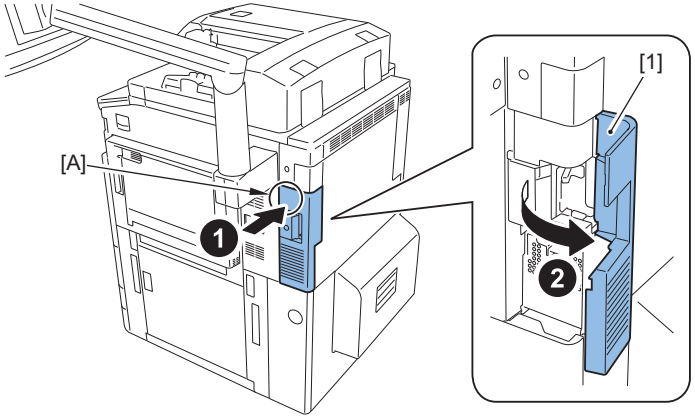


F-4-77

Removing the HDD

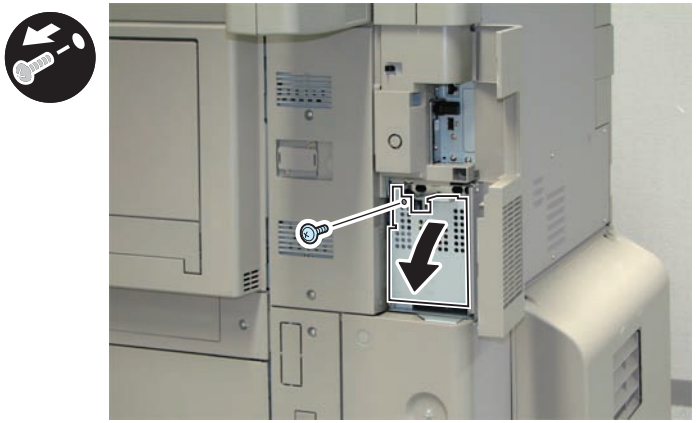
Procedure

1) Push the [A] part to open the HDD Cover.



F-4-78

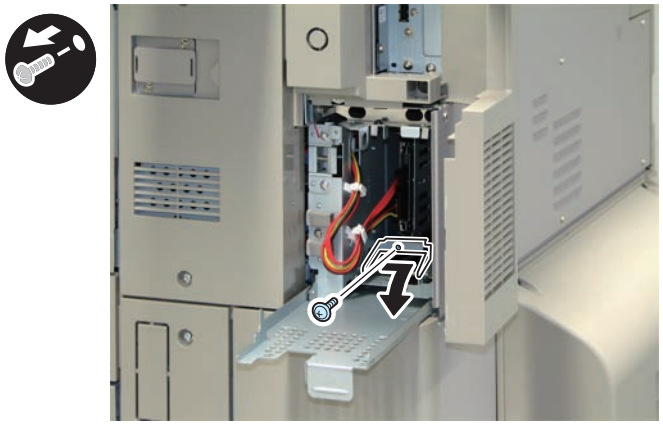
2) Open the HDD Cap.
- 1 Screw



F-4-79

3) Turn the HDD Fixation Plate toward the front.

- 1 Screw



F-4-80

4) Remove the HDD.

- 2 Connectors

F-4-81

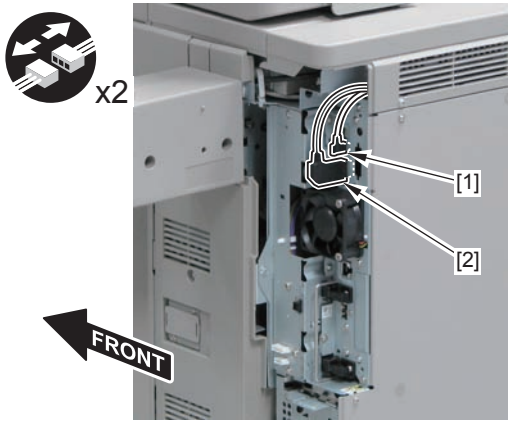
Removing the Main Controller PCB 1

Preparation

1) Remove the Box Right Cover (Refer to page 4-342).

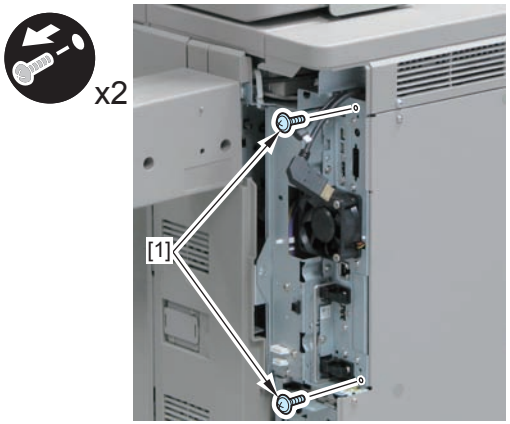
Disassembling Procedure

1) Disconnect the USB Cable [1] and the Control Panel Cable [2].



F-4-82

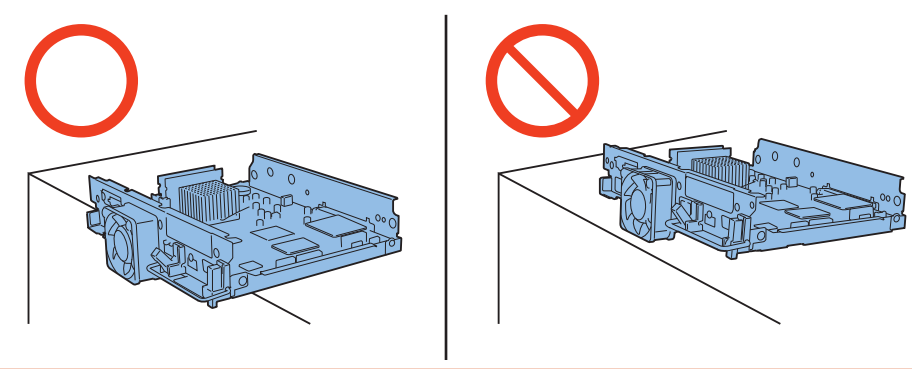
2) Remove the 2 screws [1].



F-4-83

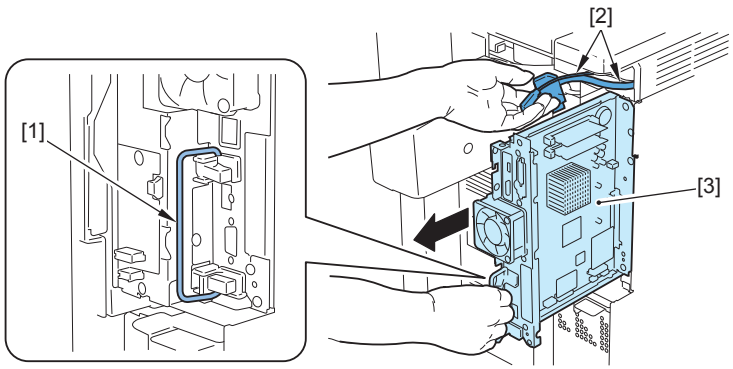
CAUTION:

When replacing the Boards installed on the Main Controller PCB 1, remove Main Controller PCB 1 and place it on a flat surface for the work.



F-4-84

3) Remove the Main Controller PCB 1 [3] while holding the grip [1] and keeping the harness [2] away from the PCB.



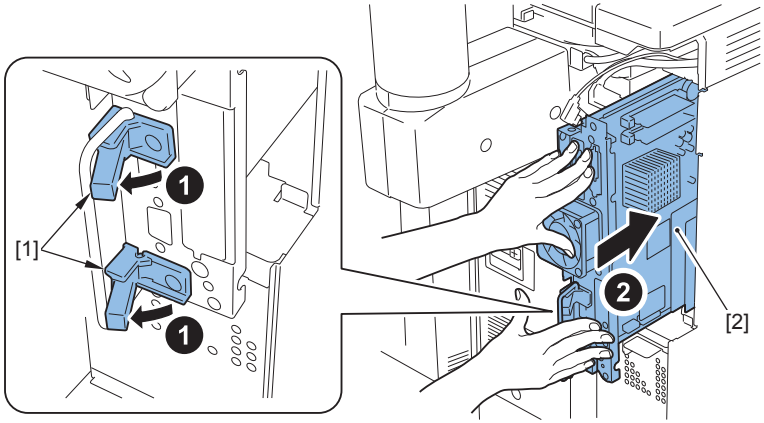
F-4-85

Assembling Procedure

CAUTION:

- When replacing the PCB, transfer any optional PCBs installed on the old Main Controller PCB 1 to the new PCB.
- When assembling, install the Main Controller PCB 1 while paying attention not to trap the cables.

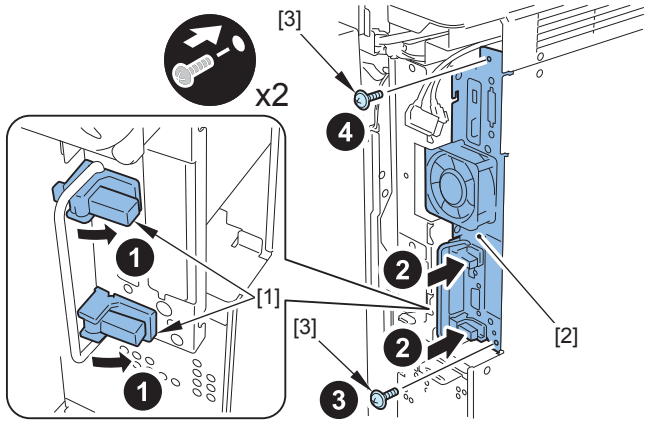
1) Release the 2 Lock Levers [1] in the direction of the arrows, and uniformly push in the Main Controller PCB 1 [2] with both hands until it stops.



F-4-86

2) Turn over the 2 Lock Levers [1], and push in and secure the Main Controller PCB 1 [2].

- 2 Screws [3] (Removed in step 2. Install the lower one first and then the upper one.)



F-4-87

CAUTION:

Be sure to perform the work in the order from (1) to (4) in the figure because the Inner Connector of the Main Controller PCB 1 may not be connected.

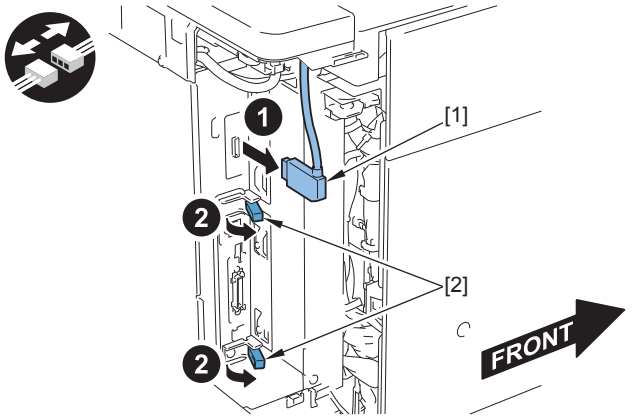
Removing the Main Controller PCB 2

Preparation

1) Remove the Box Left Cover (Refer to page 4-343).

Disassembling Procedure

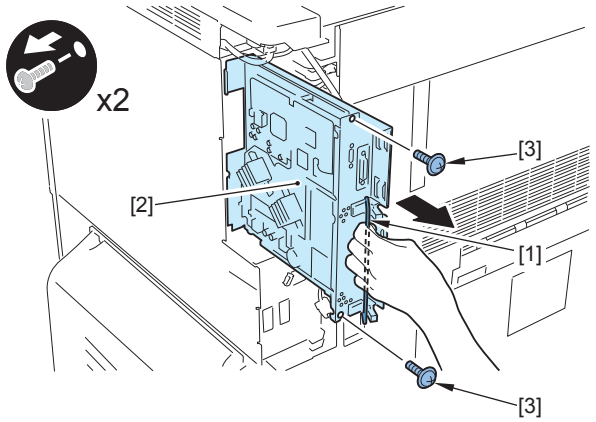
1) Disconnect the Reader Communication Cable [1], and release the 2 Lock Levers [2].



F-4-88

2) Remove the Main Controller PCB 2 [2] while holding the grip [1].

- 2 Screws [3]



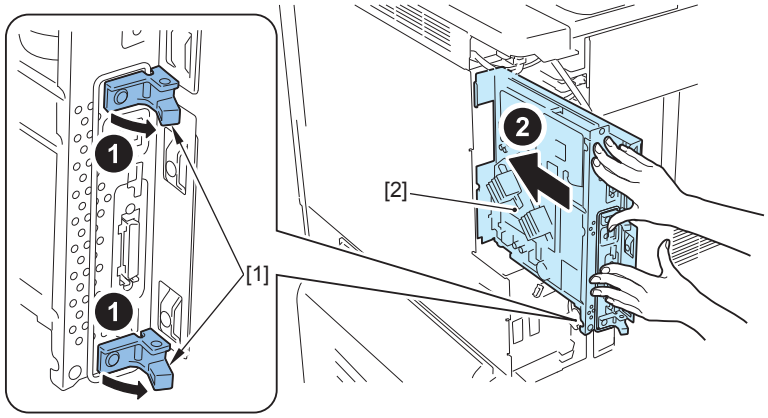
F-4-89

Assembling Procedure

CAUTION:

- When replacing the PCB, transfer any optional PCBs installed on the old Main Controller PCB 2 to the new PCB.
- When assembling, install the Main Controller PCB 2 while paying attention not to trap the cables.

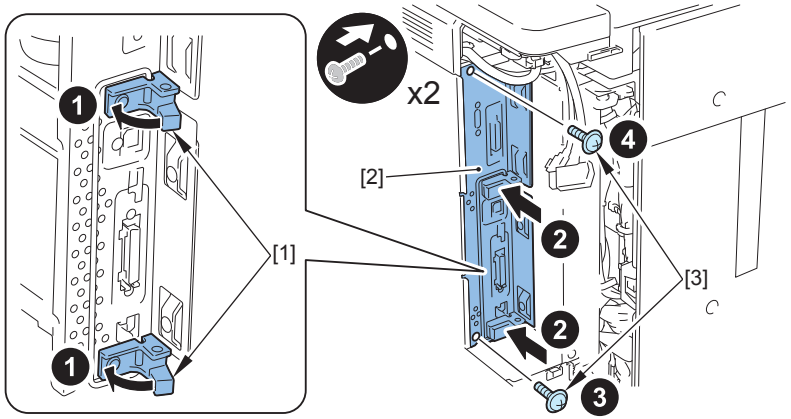
1) Release the 2 Lock Levers [1] in the direction of the arrows, and uniformly push in the Main Controller PCB 2 [2] with both hands until it stops.



F-4-90

2) Turn over the 2 Lock Levers [1], and push in and secure the Main Controller PCB 2 [2].

- 2 Screws [3] (Removed in step 2. Install the lower one first and then the upper one.)



F-4-91

CAUTION:

Be sure to perform the work in the order from (1) to (4) in the figure because the connector of the Main Controller PCB 2 may not be connected.

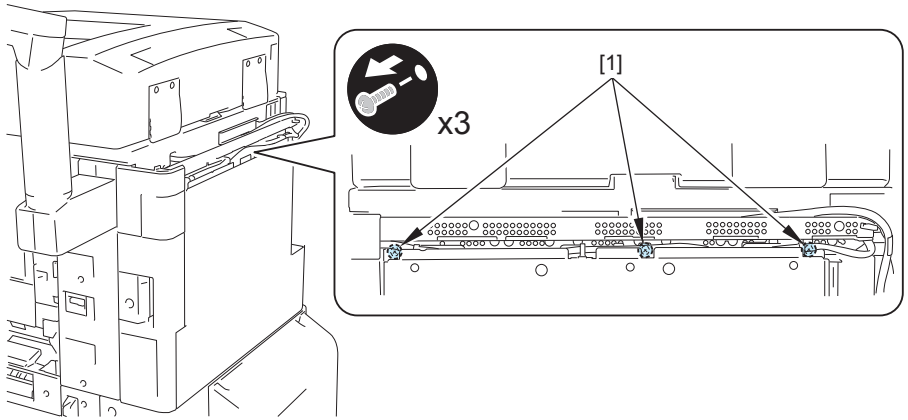
Open the Controller Box

Preparation

1) Remove the Box Left Cover (Refer to page 4-343).
2) Remove the Box Upper Cover (Refer to page 4-343).

Procedure

1) Remove the 3 screws [1] from the Controller Box Unit.

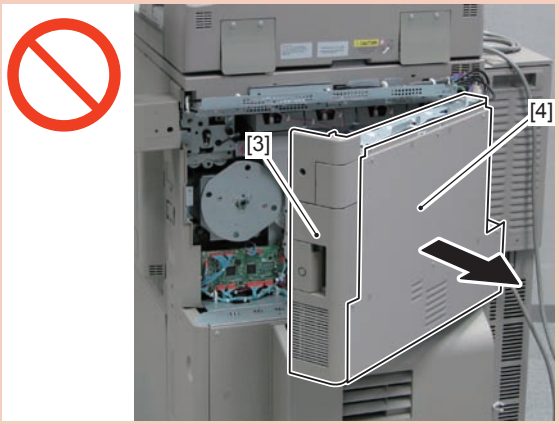


F-4-92

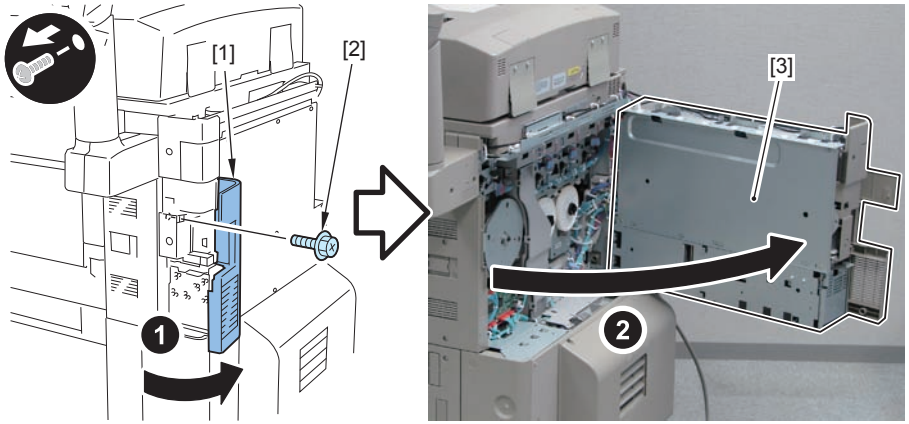
2) Open the HDD Cover [1], remove the screw [2], and open the Controller Box Unit [3].

CAUTION:

Do not install/remove the Controller Cover [4] while the Controller Box Unit [3] is open.



F-4-93



F-4-94

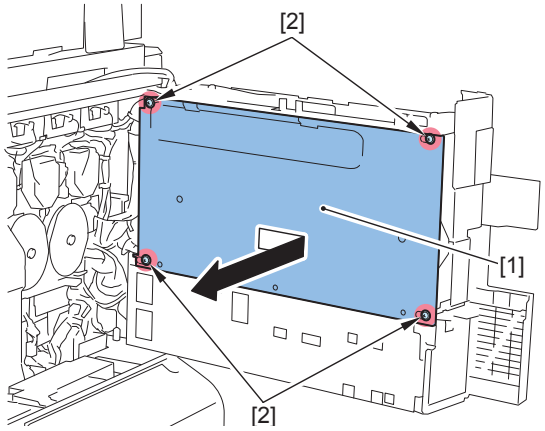
Removing the DC Controller PCB

Preparation

1) Remove the Box Left Cover (Refer to page 4-343).
2) Remove the Box Upper Cover (Refer to page 4-343).
3) Open the Controller Box (Refer to page 4-108).

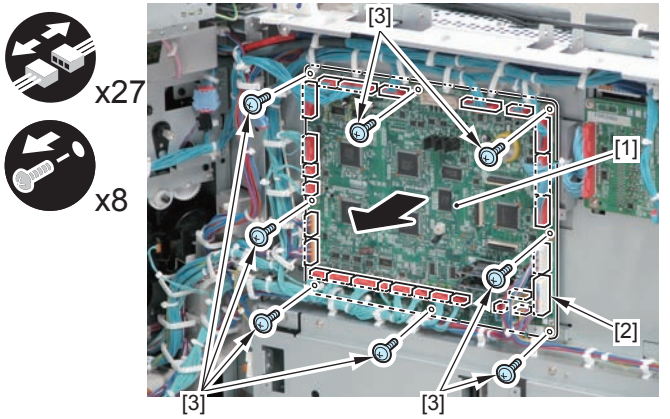
Procedure

1) Remove the DC Controller Cover [1].
- 4 Screws [2] (to loosen)



F-4-95

2) Remove the DC Controller PCB [1].
- 27 Connectors [2]
- 8 Screws [3]



F-4-96

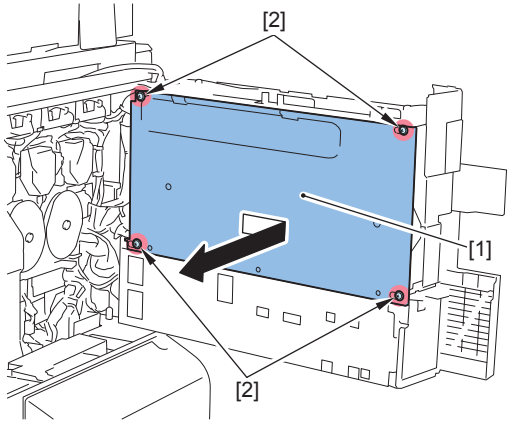
Removing the Laser Interface PCB

Preparation

1) Remove the Box Left Cover (Refer to page 4-343).
2) Remove the Box Upper Cover (Refer to page 4-343).
3) Open the Controller Box (Refer to page 4-108).

Procedure

1) Remove the DC Controller Cover [1].
- 4 Screws [2] (to loosen)

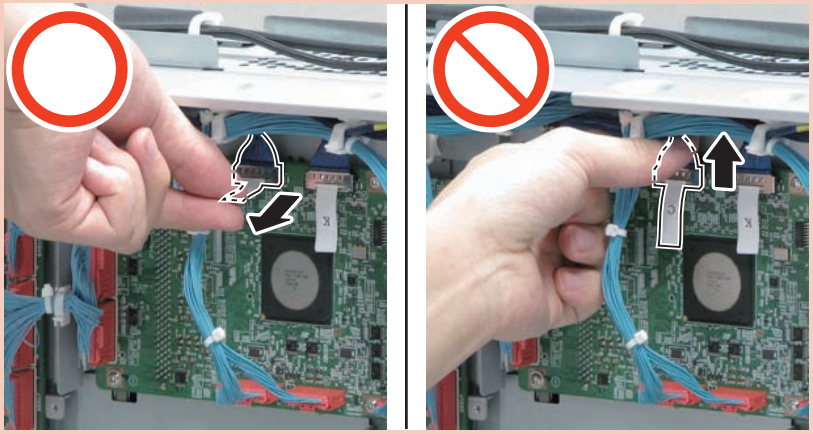


F-4-97

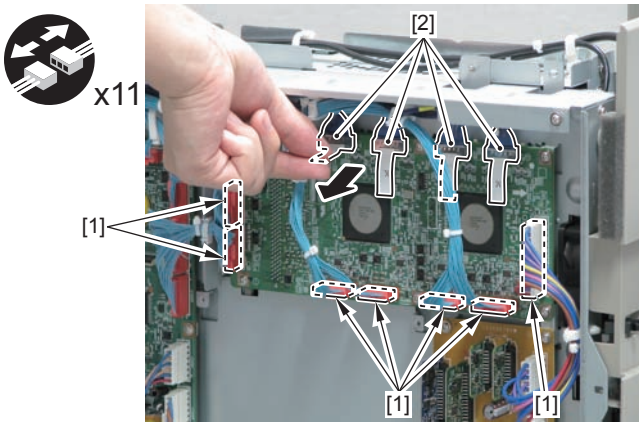
2) Disconnect the 7 connectors [1], and disconnect the 4 Small Gauge Coaxial Cable Connectors [2] by pulling the tag horizontally.

CAUTION:

The Small Gauge Coaxial Cable Connectors cannot be pulled out upward. They need to be pulled out toward the front.

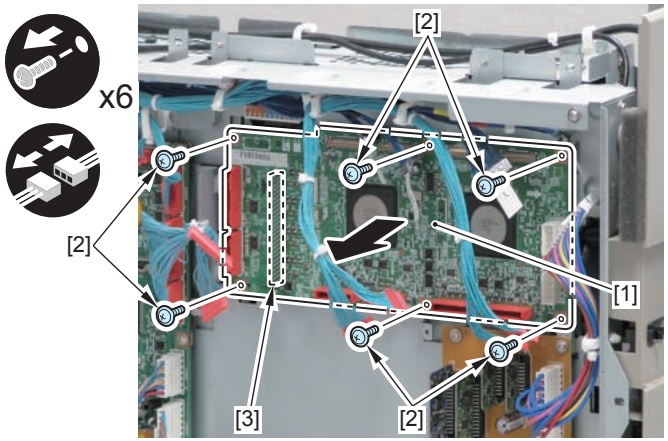


F-4-98



F-4-99

3) Remove the Laser Interface PCB [1].
- 6 Screws [2]
- 1 Connector [3]



F-4-100

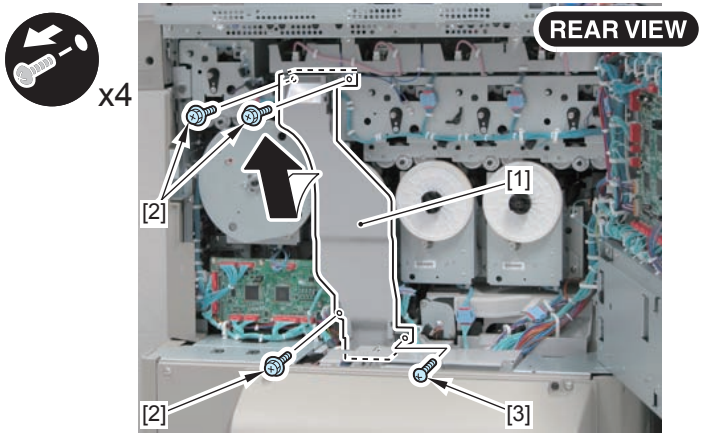
Removing the Drum ITB Driver PCB

Preparation

1) Remove the Box Left Cover (Refer to page 4-343).
2) Remove the Box Upper Cover (Refer to page 4-343).
3) Open the Controller Box (Refer to page 4-108).

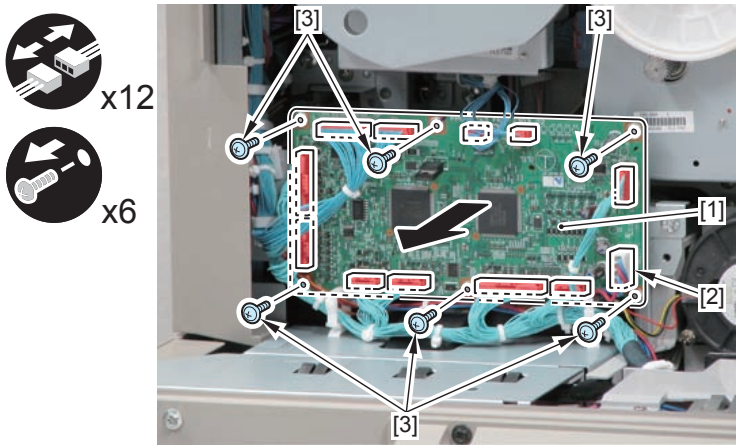
Procedure

1) Remove the Duct [1].
- 3 Screws (RS) [2]
- 1 Screw (P Tightening) [3]



F-4-101

2) Remove the Drum ITB Driver PCB [1].
- 12 Connectors [2]
- 6 Screws [3]



F-4-102

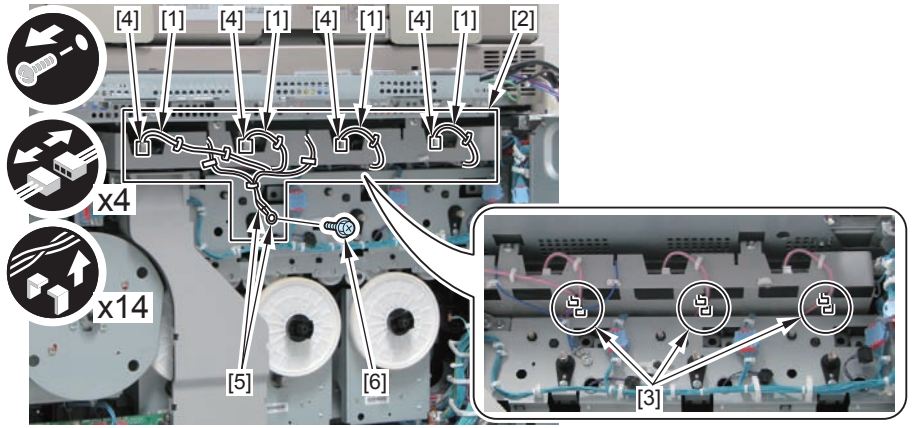
Removing the Developing High Voltage PCB Unit

Preparation

1) Remove the Box Left Cover (Refer to page 4-343).
2) Remove the Box Upper Cover (Refer to page 4-343).
3) Open the Controller Box (Refer to page 4-108).

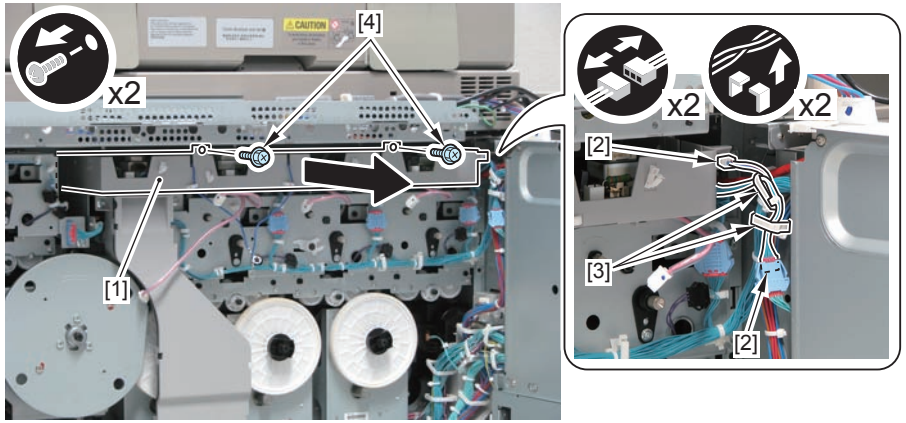
Procedure

1) Free the 4 harnesses [1].
- 5 Wire Saddles [2]
- 6 Harness Guides [3]
- 4 Connectors [4]
- 2 Grounding Wires [5]
- 1 Screw [6]



F-4-103

2) Remove the Developing High Voltage PCB Unit [1].
- 2 Connectors [2]
- 2 Wire Saddles [3]
- 2 Screws [4]



F-4-104

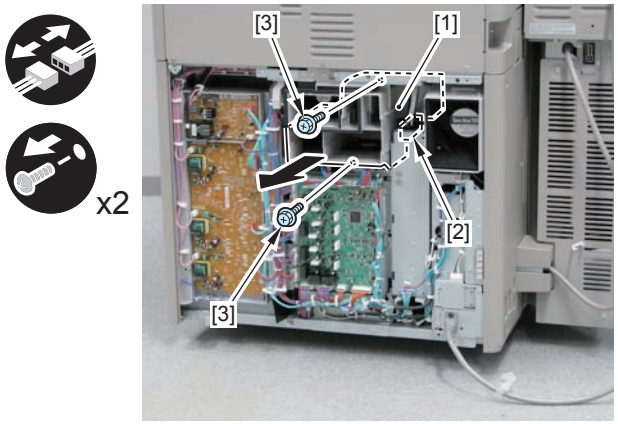
Removing the Main Power Supply Box

Preparation

1) Remove the Lower Rear Cover (Refer to page 4-346).

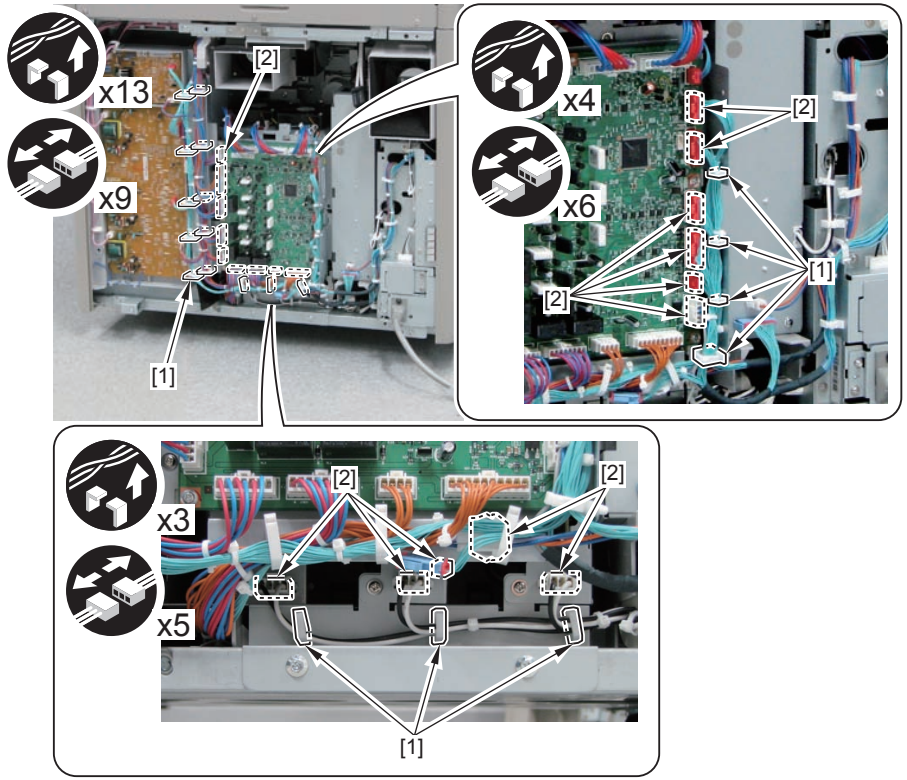
Procedure

1) Remove the Fan Duct [1].
- 1 Connector [2]
- 2 Screws [3]



F-4-105

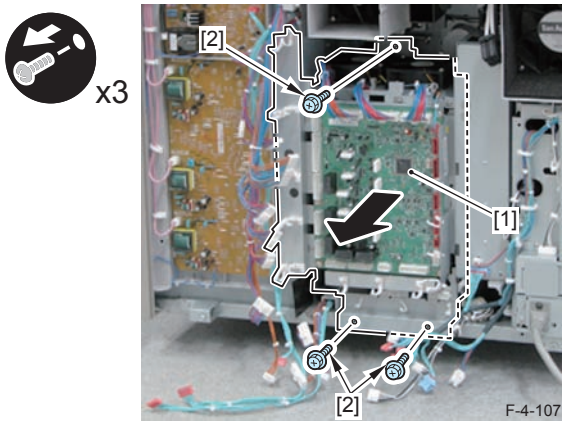
2) Open the 20 Wire Saddles [1], and disconnect the 20 connectors [2] of the Relay PCB Unit.



F-4-106

3) Remove the Main Power Supply Box [1].

- 3 Screws [2]



F-4-107

Removing the AC Driver Box

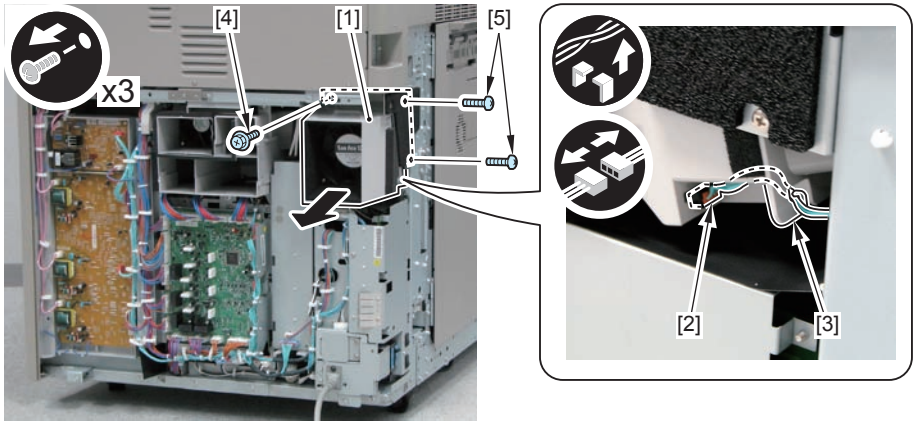
Preparation

1) Remove the Lower Rear Cover (Refer to page 4-346).
2) Remove the Lower Left Cover 3 (Refer to page 4-345).

Procedure

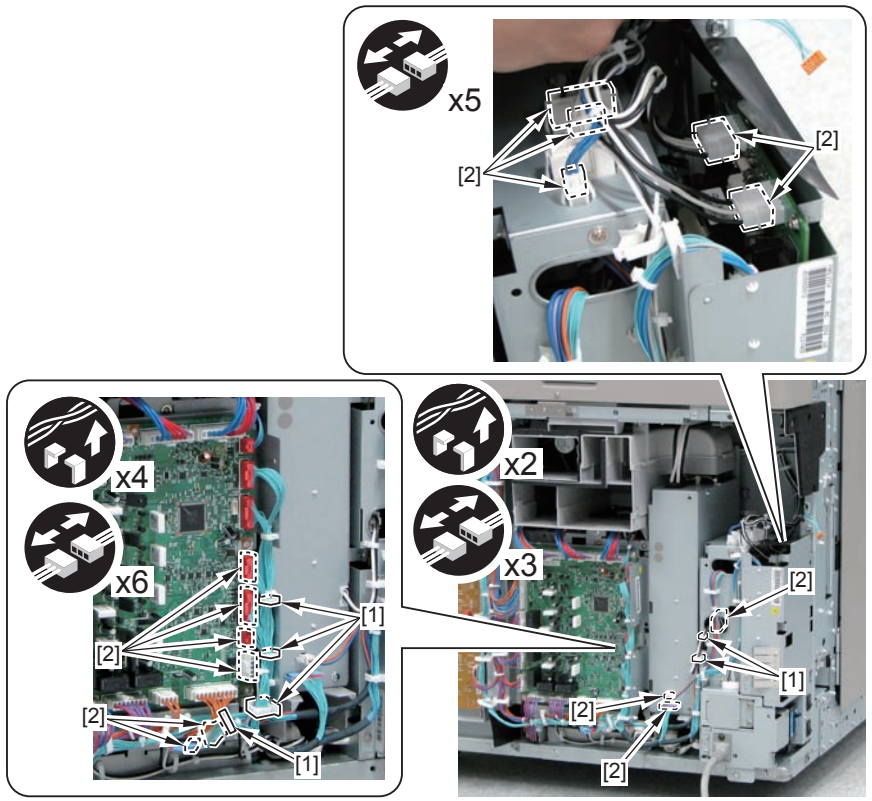
1) Remove the Fixing Heat Fan Unit [1].

- 1 Connector [2]
- 1 Guide [3]
- 1 Screw (black, RS) [4]
- 2 Screws (P Tightening) [5]



F-4-108

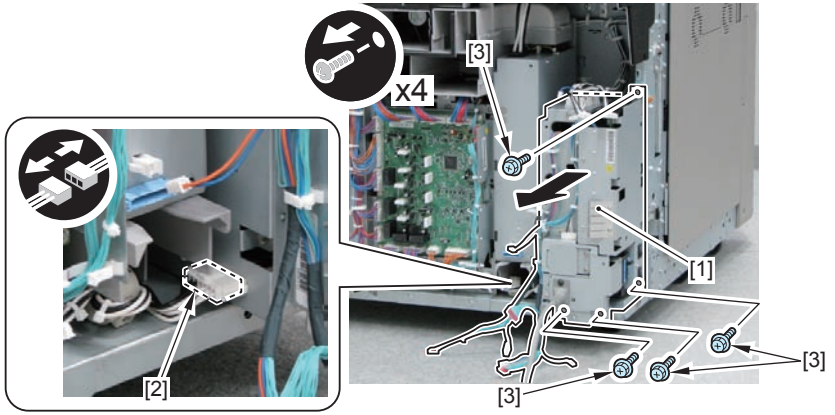
2) Open the 6 Wire Saddles [1], and disconnect the 14 connectors [2].



F-4-109

3) Remove the AC Driver Box [1].

- 1 Connector [2]
- 4 Screws [3]

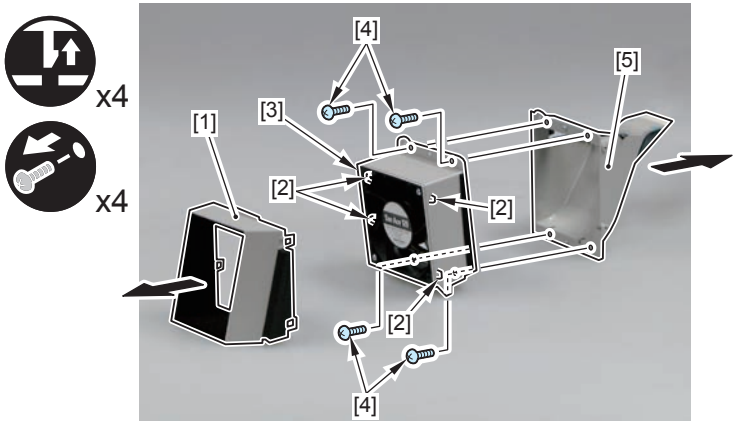


F-4-110

Installing the Fixing Heat Fan Unit

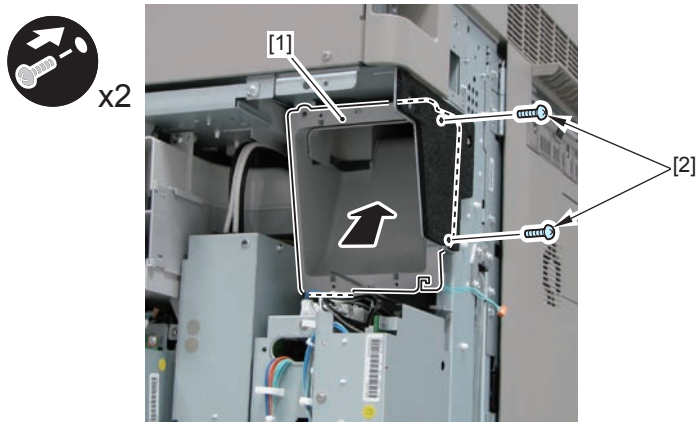
NOTE:
The following procedure shows the procedure for installing the Fixing Heat Fan Unit to the host machine.

1) Disassemble the Fixing Heat Fan Unit.
- 1 Fan Duct 1 [1]
- 4 Claws [2]
- 1 Fixing Heat Fan [3]
- 4 Screws [4]
- 1 Fan Duct 2 [5]



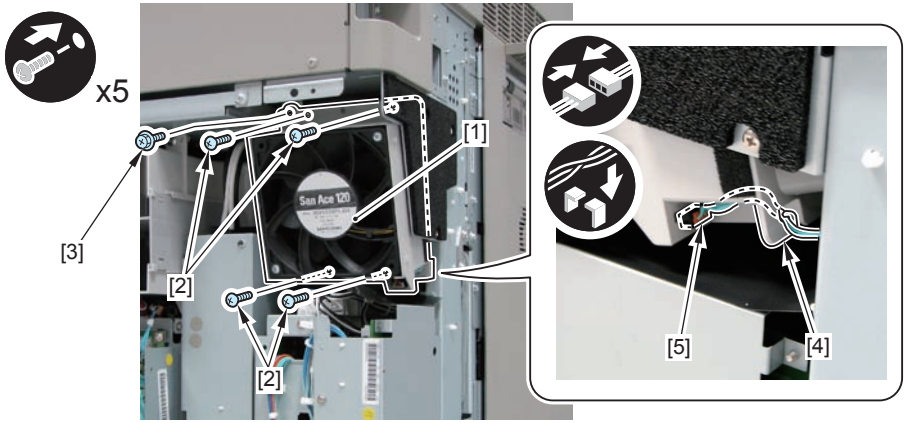
F-4-111

2) Install the Fan Duct 2 [1] to the host machine.
- 2 Screws [2]



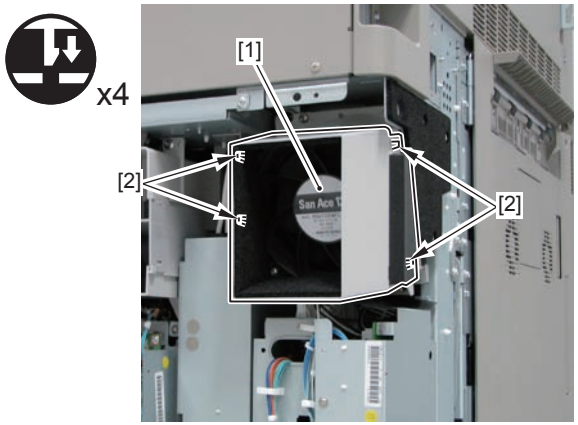
F-4-112

3) Install the Fixing Heat Fan [1].
- 4 Screws (TP) [2]
- 1 Screw (black, RS) [3]
- 1 Harness Guide [4]
- 1 Connector [5]



F-4-113

4) Install the Fan Duct 1 [1].
- 4 Claws [2]



F-4-114

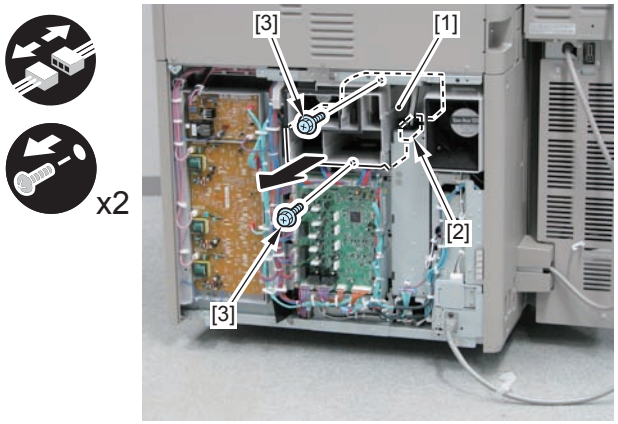
Removing the IH Power Supply PCB Box

Preparation

1) Remove the Lower Rear Cover (Refer to page 4-346).

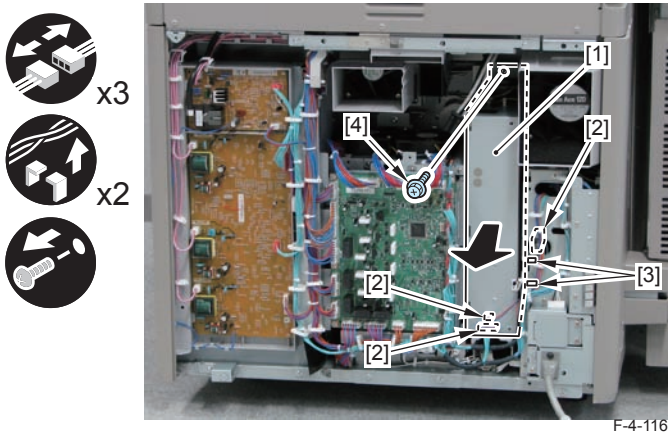
Procedure

1) Remove the Fan Duct [1].
- 1 Connector [2]
- 2 Screws [3]



F-4-115

2) Remove the IH Power Supply PCB Box [1].
- 3 Connectors [2]
- 2 Wire Saddles [3]
- 1 Screw [4]



F-4-116

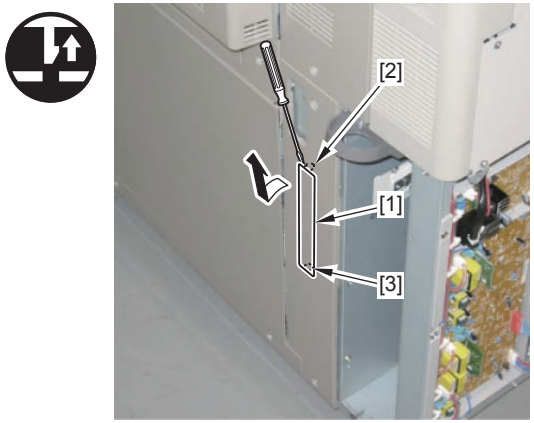
Removing the Primary Charging High Voltage PCB Box

Preparation

1) Remove the Lower Rear Cover (Refer to page 4-346).
2) Remove the Waste Toner Container (Refer to page 4-277).

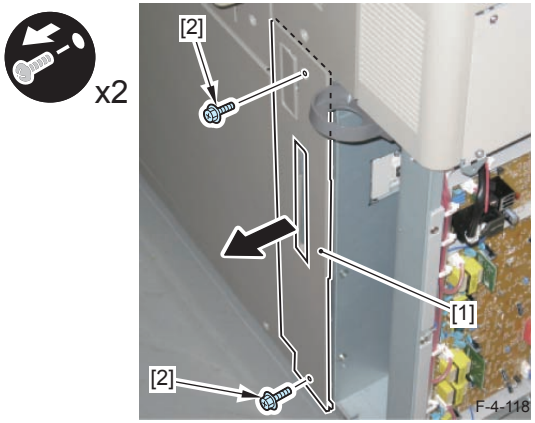
Procedure

1) Remove the Handle Cover [1].
- 1 Claw [2]
- 1 Hook [3]



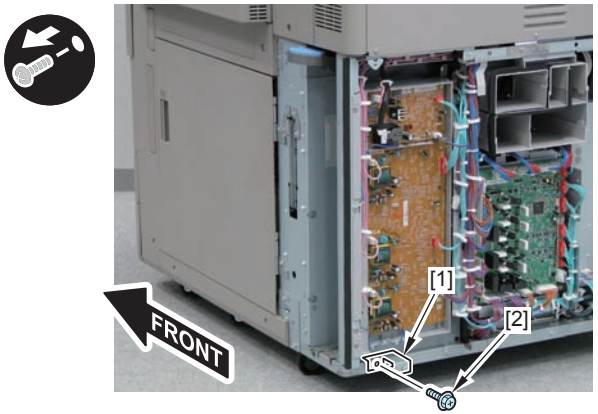
F-4-117

2) Remove the Lower Right Cover 3 [1].
- 2 Screws [2]



F-4-118

3) Remove the Fixation Plate [1].
- 1 Screw [2]

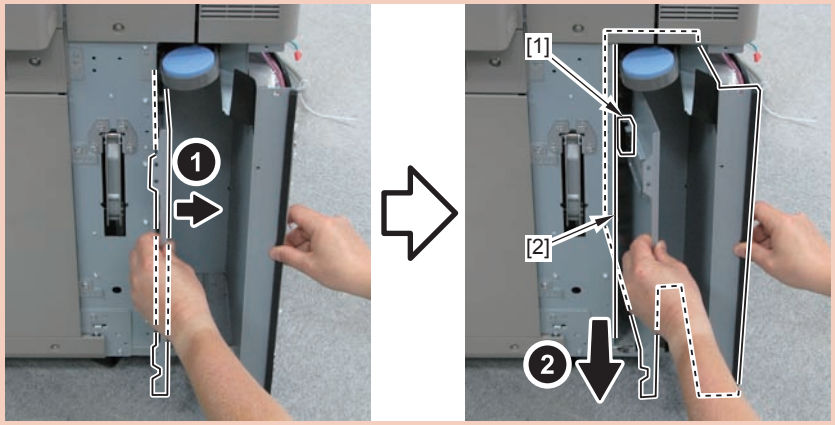


F-4-119

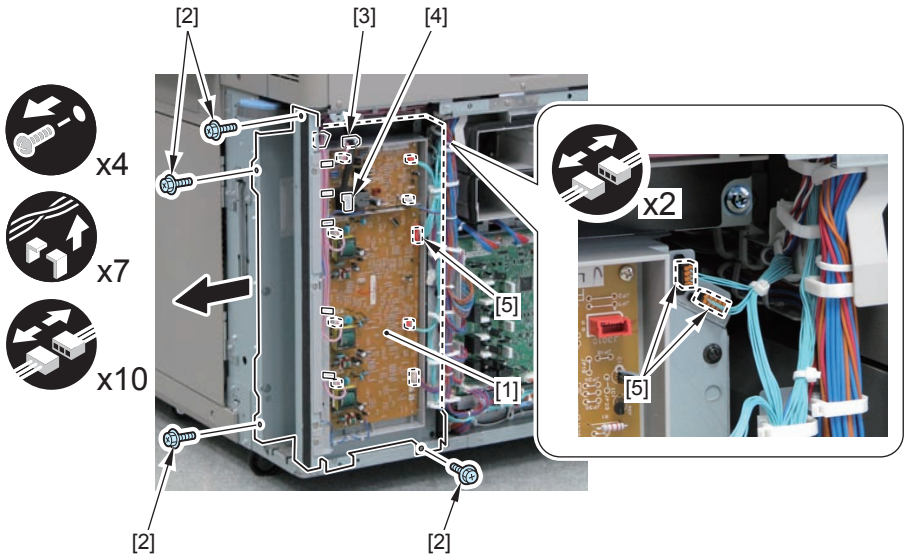
4) Remove the Primary Charging High Voltage PCB Box [1].
- 4 Screws [2]
- 7 Wire Saddles [3]
- 1 Fasten Terminal [4]
- 11 Connectors [5]

CAUTION:

During disassembly/assembly work, be careful not to hit the Waste Toner Full Sensor [1] against the plate [2].



F-4-120



F-4-121

Removing the Pre-transfer Charging High Voltage PCB Unit

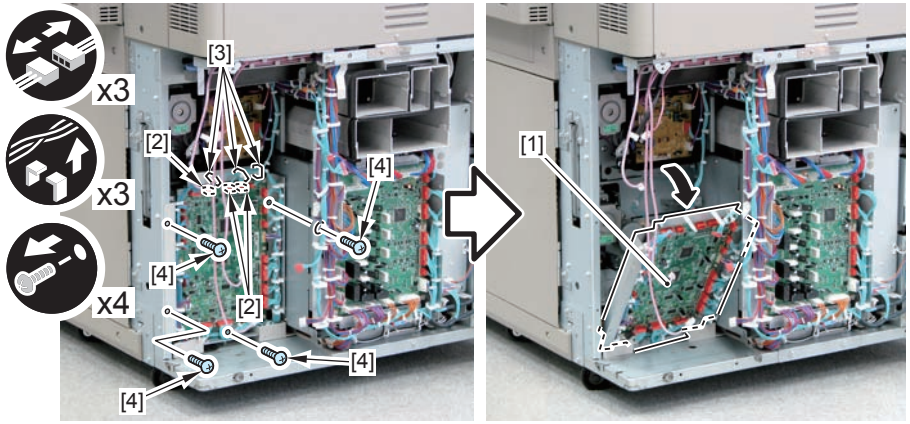
Preparation

1) Remove the Lower Rear Cover (Refer to page 4-346).
2) Remove the Waste Toner Container (Refer to page 4-277).
3) Remove the Primary Charging High Voltage PCB Box (Refer to page 4-118).

Procedure

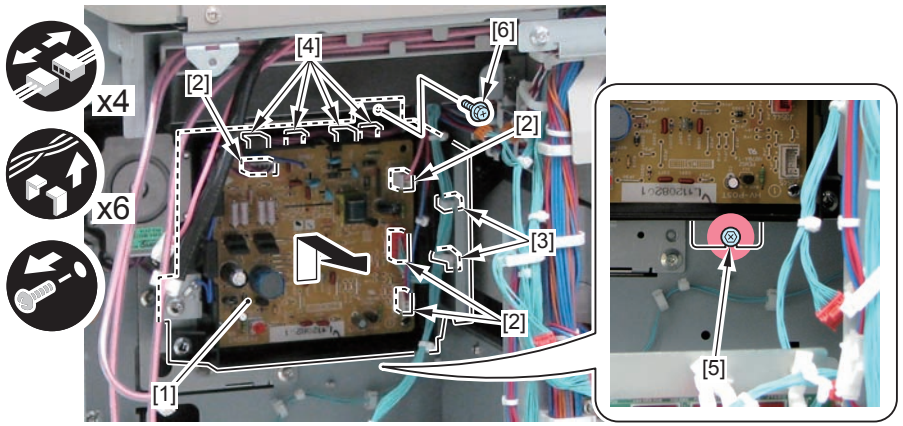
1) Shift the Pickup Feed Driver PCB Unit [1].

- 3 Connectors [2]
- 3 Wire Saddles [3]
- 4 Screws [4]



F-4-122

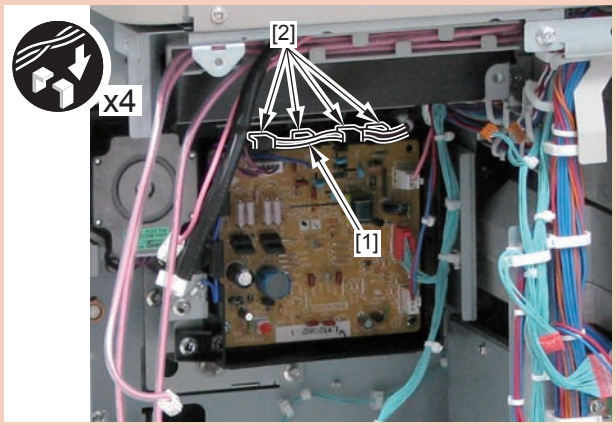
2) Remove the Pre-transfer Charging High Voltage PCB Unit [1].
- 4 Connectors [2]
- 2 Wire Saddles [3]
- 4 Harness Guides [4]
- 1 Screw [5] (to loosen)
- 1 Screw [6]



F-4-123

CAUTION:

When assembling, be sure to secure the harness [1] with the 4 Harness Guides [2] inside the PCB.



F-4-124

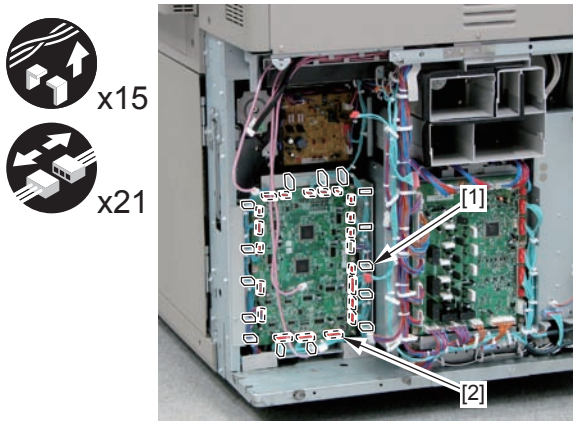
Removing the Pickup Feed Driver PCB Unit

Preparation

1) Remove the Lower Rear Cover (Refer to page 4-346).
2) Remove the Waste Toner Container (Refer to page 4-277).
3) Remove the Primary Charging High Voltage PCB Box (Refer to page 4-118).

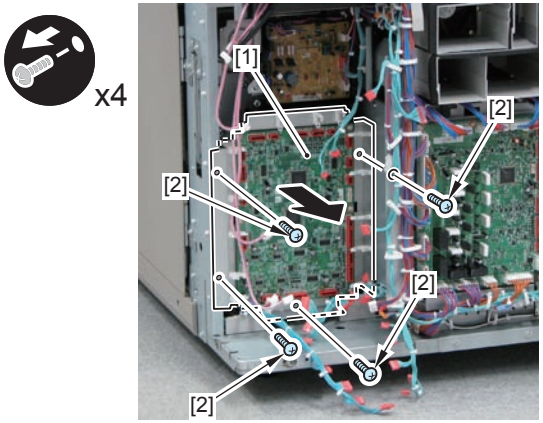
Procedure

1) Open the 15 Wire Saddles [1] and disconnect the 21 connectors [2].



F-4-125

2) Remove the Pickup Feed Driver PCB Unit [1].
- 4 Screws [2]



F-4-126

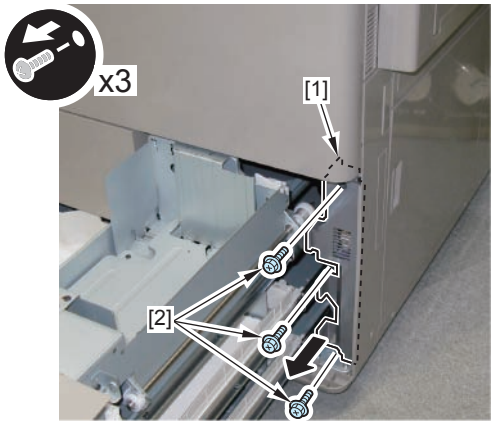
Removing the Environment Sensor

Preparation

1) Pull out the Cassette 3, the Cassette 4 and the Right Deck.

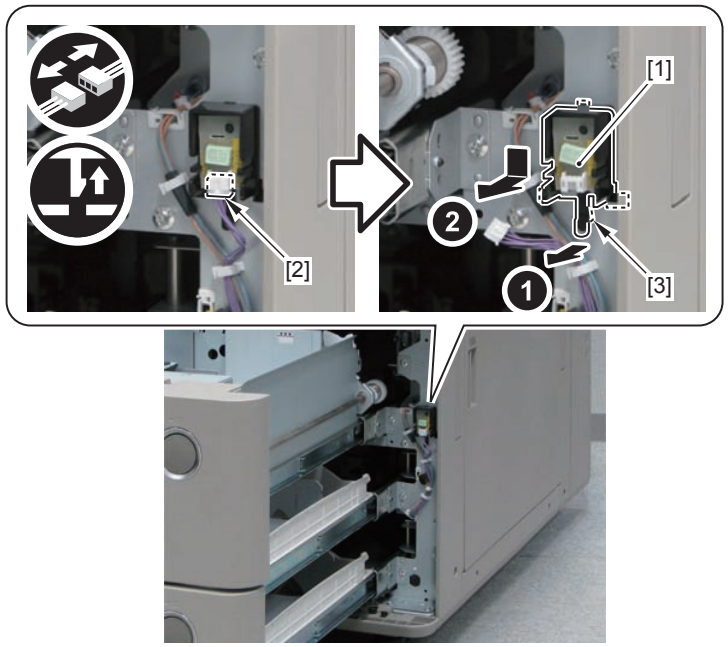
Procedure

1) Remove the Sensor Cover [1].
- 3 Screws [2]



F-4-127

2) Remove the Environment Sensor [1].
- 1 Connector [2]
- 1 Claw [3]



F-4-128

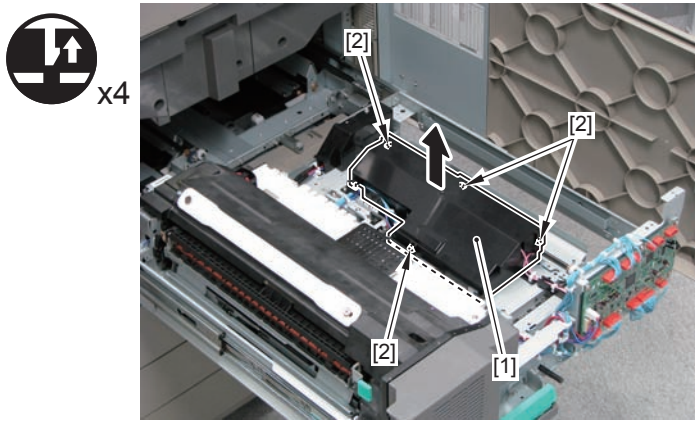
Removing the Secondary Transfer High Voltage PCB

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).
4) Remove the Registration Unit (Refer to page 4-334).

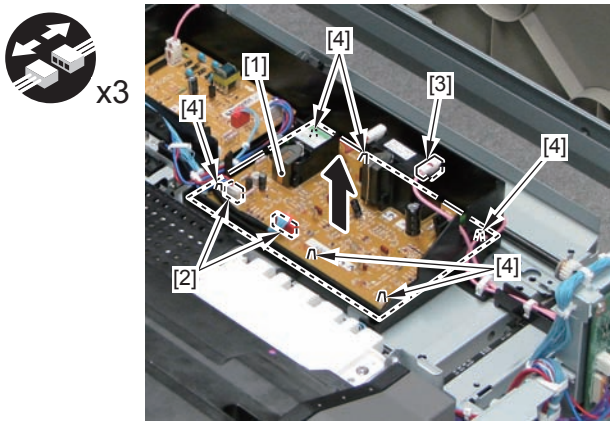
Procedure

1) Remove the Secondary Transfer High Voltage PCB Cover [1].
- 4 Claws [2]



F-4-129

2) Remove the Secondary Transfer High Voltage PCB [1].
- 2 Connectors [2]
- 1 Fasten Terminal [3]
- 6 PCB Spacers [4]



F-4-130

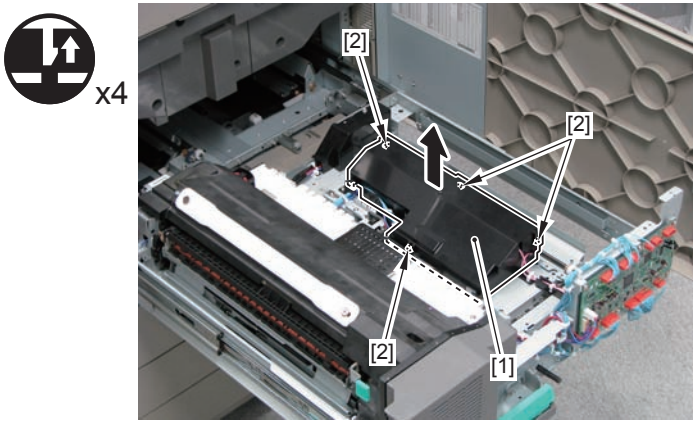
Removing the Post-secondary Transfer Static Elimination High Voltage PCB

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).
4) Remove the Registration Unit (Refer to page 4-334).

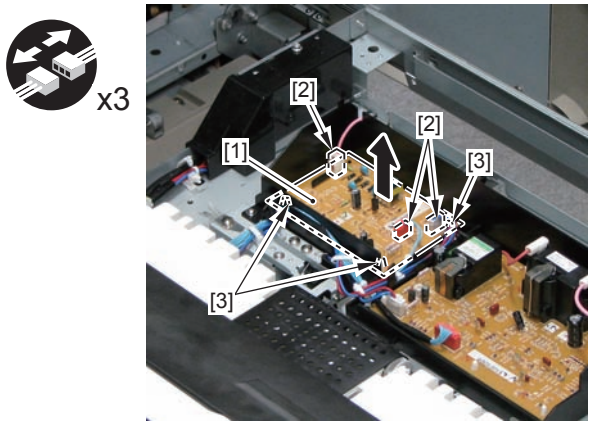
Procedure

1) Remove the Secondary Transfer High Voltage PCB Cover [1].
- 4 Claws [2]



F-4-131

2) Remove the Post-secondary Transfer Static Elimination High Voltage PCB [1].
- 3 Connectors [2]
- 3 PCB Spacers [3]



F-4-132

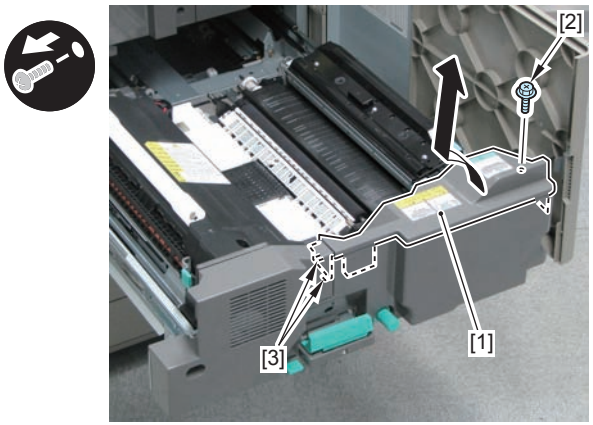
Removing the Fixing Feed Driver PCB

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).

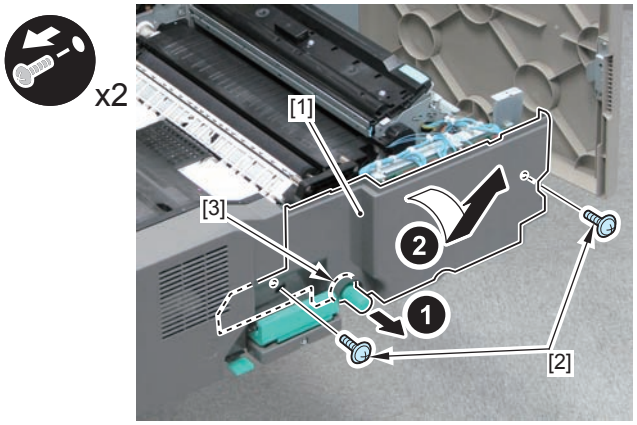
Procedure

1) Remove the Fixing Feed Right Upper Inner Cover [1].
- 1 Screw [2]
- 2 Hooks [3]



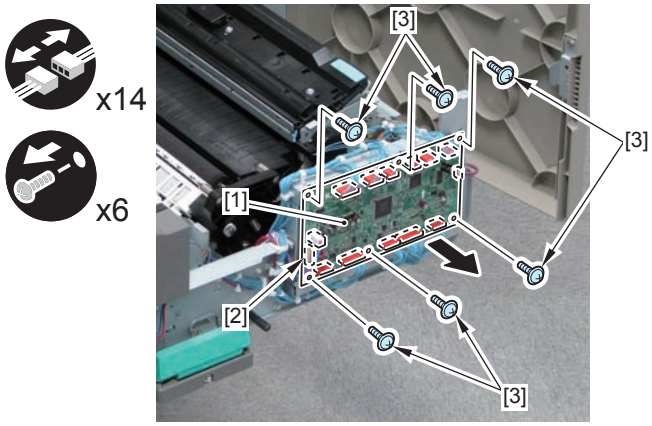
F-4-133

2) Remove the Fixing Feed Right Lower Inner Cover [1].
- 2 Screws [2]
- 1 Knob [3]



F-4-134

3) Remove the Fixing Feed Driver PCB [1].
- 14 Connectors [2]
- 6 Screws [3]



F-4-135

Removing the Primary Transfer PCB

Preparation

CAUTION:

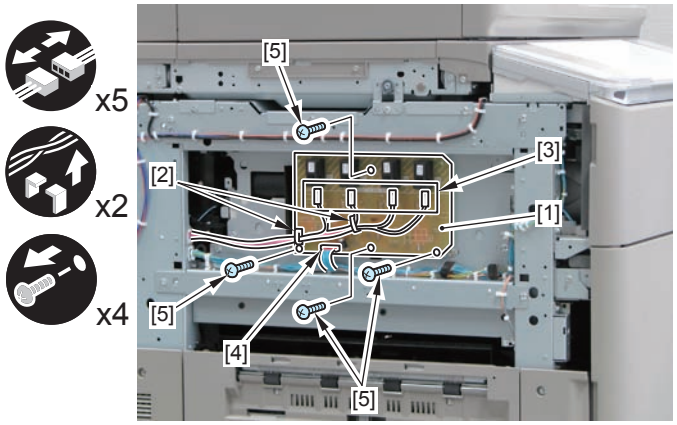
When delivery system options are installed, be sure to disconnect them from the host machine.

1) Remove the Upper Left Cover (Refer to page 4-344).
2) Remove the Left Middle Cover (Refer to page 4-345).

Procedure

1) Remove the Primary Transfer PCB [1].

- 2 Wire Saddles [2]
- 4 Terminals [3]
- 1 Connector [4]
- 4 Screws [5]



F-4-136

Laser Exposure System

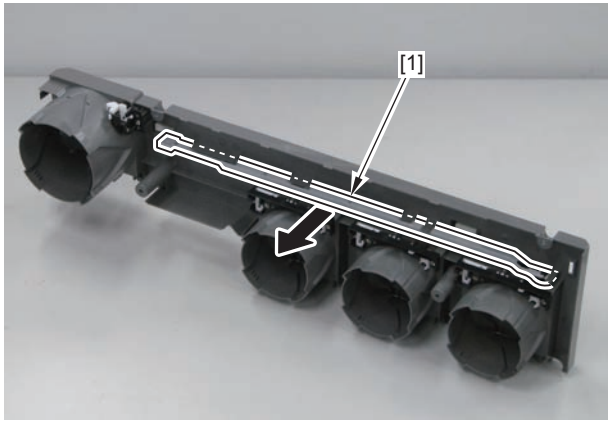
Cleaning the Dustproof Glass

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Remove the Toner Container Replacement Unit Inner Cover (Refer to page 4-339).

Procedure

1) Remove the Dustproof Glass cleaning tool [1] from the backside of the Toner Container Replacement Unit Inner Cover.

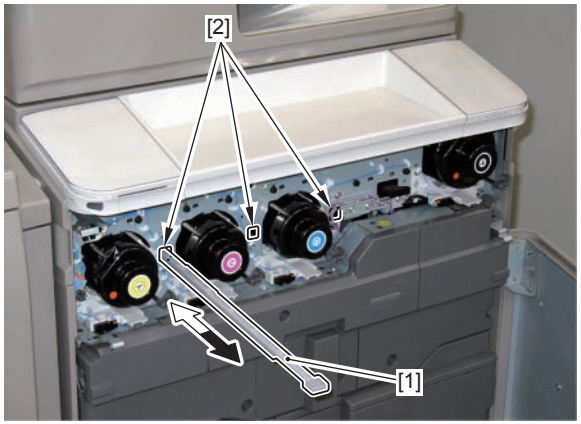


F-4-137

2) Insert the Dustproof Glass cleaning tool [1] into a cleaning hole [2] and clean the Dustproof Glass on the top side.

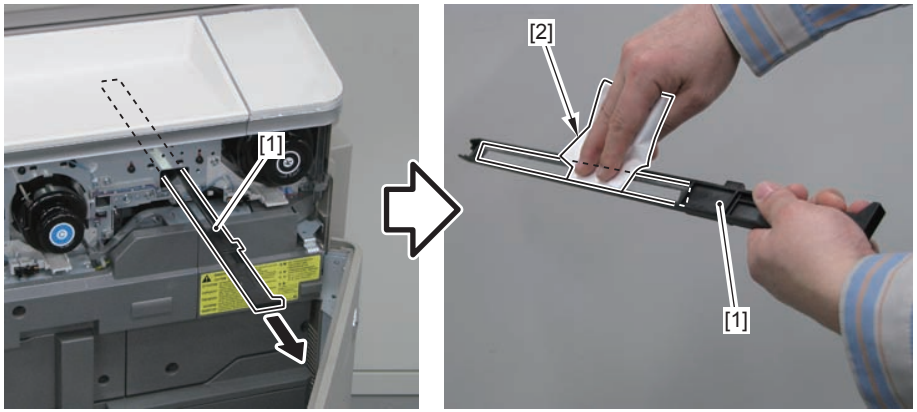
CAUTION:

- Push the Dustproof Glass cleaning tool until it stops, and then pull it out.
- Push and pull the tool at least one time.



F-4-138

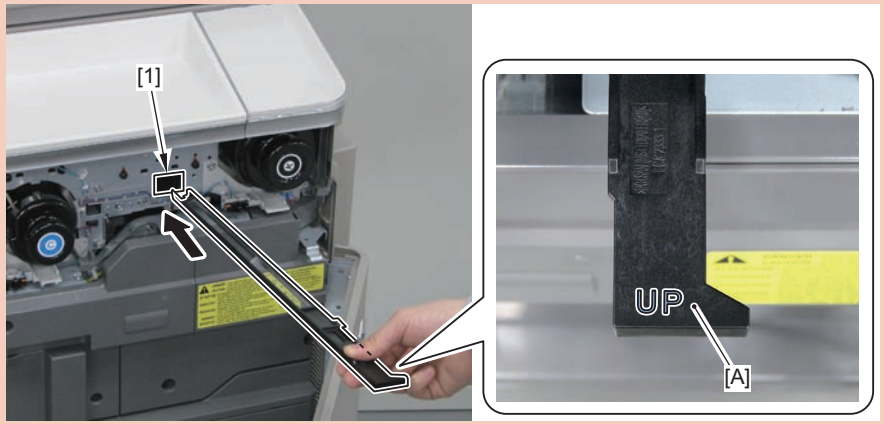
3) Pull out the Dustproof Glass [1], and clean both sides of the Dustproof Glass with lint-free paper [2] moistened with alcohol.



F-4-139

CAUTION:

When installing the Dustproof Glass, insert it into the mounting hole [1] with the mark "UP" [A] upward.



F-4-140

Removing the Laser Scanner Unit

Preparation

CAUTION:

When the delivery system options are installed, be sure to disconnect them from the host machine.

1) Remove the Box Right Cover (Refer to page 4-342).
2) Remove the Box Left Cover (Refer to page 4-343).
3) Remove the Box Upper Cover (Refer to page 4-343).
4) Remove the Upper Right Cover 1 (Refer to page 4-341).
5) Close the Multi-purpose Tray Cover .
6) Remove the Upper Left Cover (Refer to page 4-344).

NOTE:
Be sure to refer to the correct step according to the following instruction since the step differs between the copier model and the printer model.

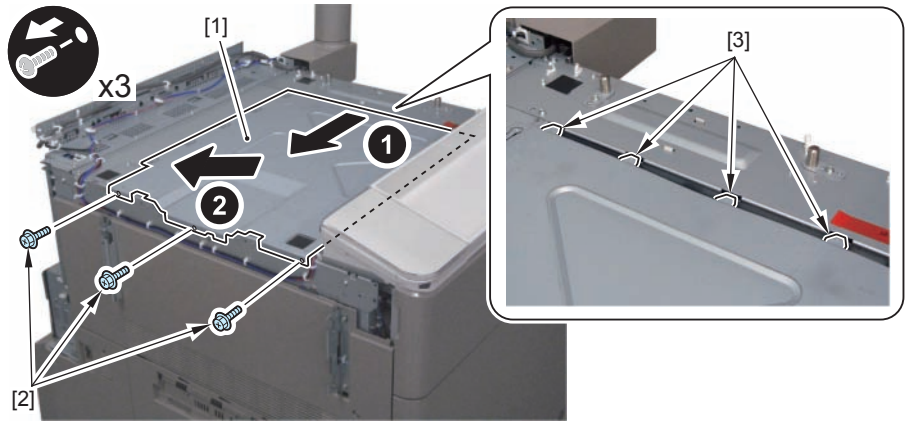
- For copier model, refer to step 7-1.
- For printer model, refer to step 7-2.

7-1) Removing the DADF Unit + Reader Unit (for copier model) (Refer to page 4-352).
7-2) Removing the Printer Upper Cover (for printer model) (Refer to page 4-358).

Procedure

NOTE:
This procedure shows the steps to be taken in the case of Laser Scanner Unit (Y). Disassemble and assemble the Laser Scanner Units (M), (C), and (Bk) in the same way.

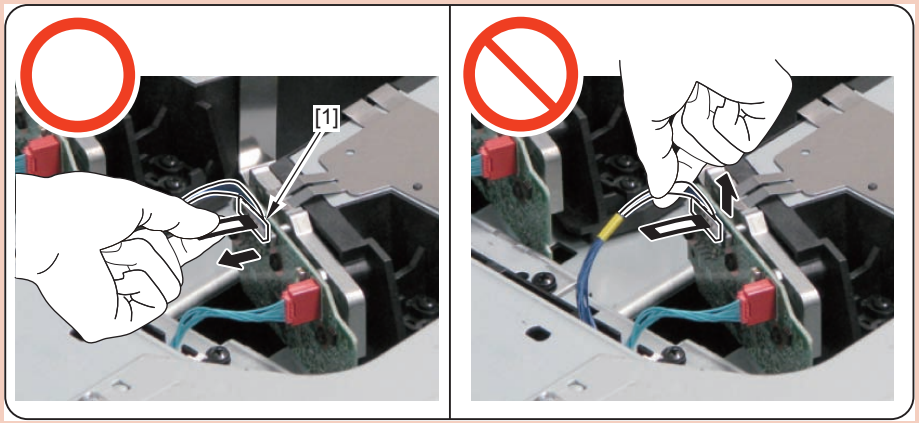
1) Remove the Top Plate Cover [1].
- 3 Screws [2]
- 4 Protrusions [3]



F-4-141

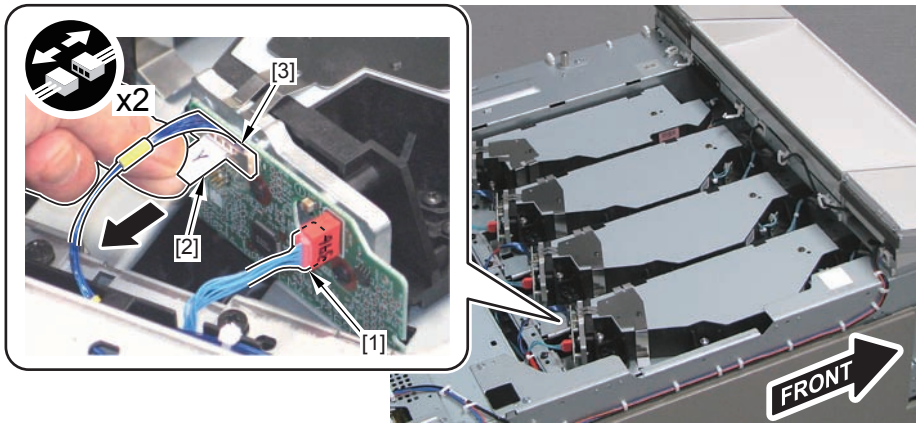
CAUTION:

The Small Gauge Coaxial Cable Connector [1] cannot be pulled out upward (in the direction toward the harness). Do not pull it upward or the cable will be broken.



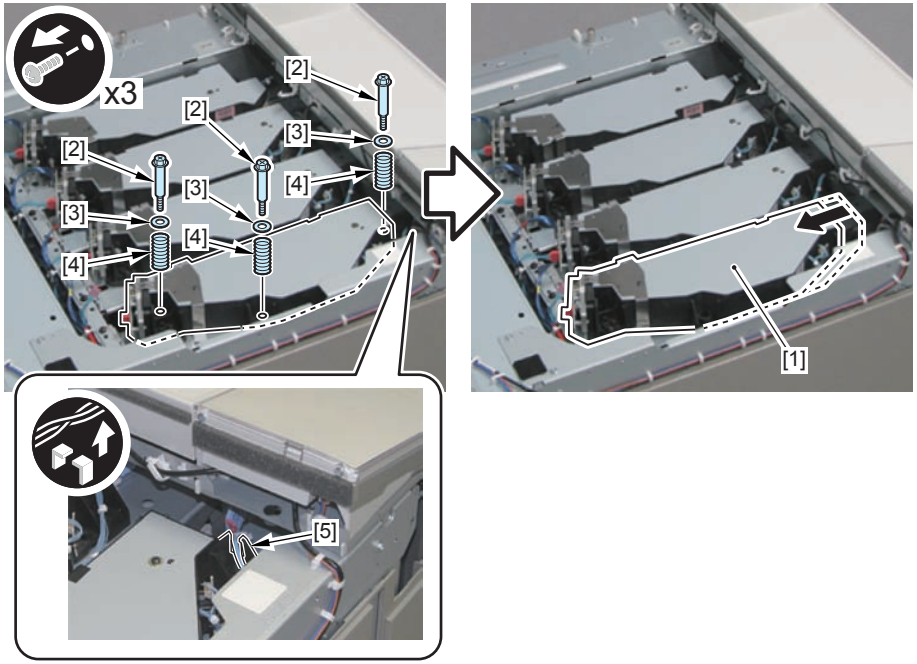
F-4-142

2) Pull the connector [1] and the tag [2] horizontally to disconnect the Small Gauge Coaxial Cable Connector [3].



F-4-143

3) Move the Laser Scanner Unit [1].
- 3 Stepped Screws [2]
- 3 Washers [3]
- 3 Springs [4]
- 1 Guide [5]

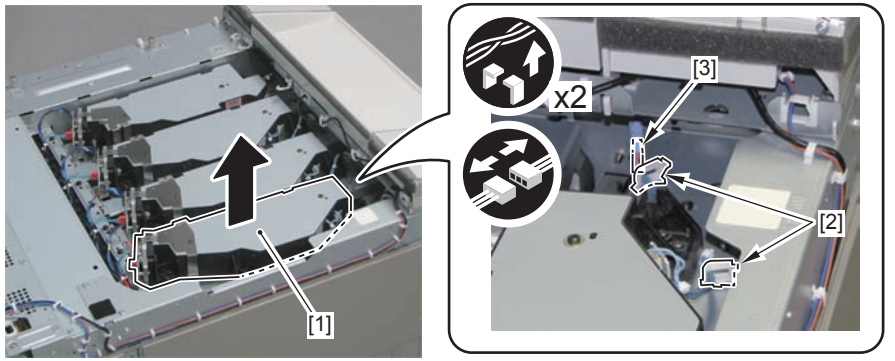


F-4-144

NOTE:
The number of Wire Saddles differ depending on the Laser Scanner Units (Y), (M), (C), and (Bk). Follow the instruction shown below.

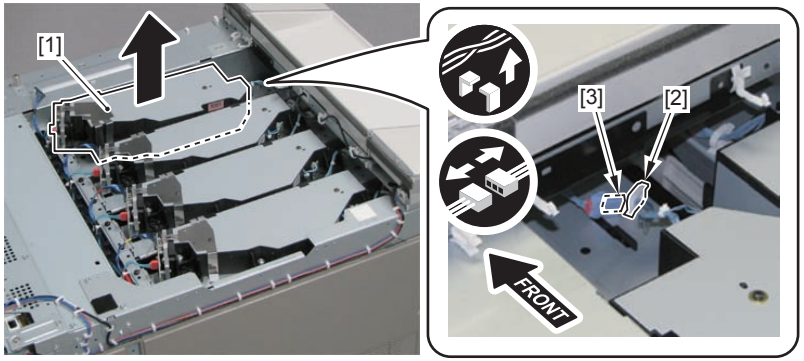
- In the cases of Laser Scanner Units (Y), (M), and (C), refer to step 4-1.
- In the case of Laser Scanner Unit (Bk), refer to step 4-2.

4-1) Remove the Laser Scanner Unit (Y)/(M)/(C) [1].
- 2 Wire Saddles [2]
- 1 Connector [3]



F-4-145

4-2) Remove the Laser Scanner Unit (Bk) [1].
- 1 Wire Saddle [2]
- 1 Connector [3]



F-4-146

When Replacing the Laser Scanner Unit

Preparation

1) Remove the Buffer Path Unit (Refer to page 4-361).
2) Remove the DADF Unit and the Reader Unit (Refer to page 4-352).
3) Remove the Laser Scanner Unit (Refer to page 4-127).

Procedure

Before removing the Laser Scanner Unit

1) Adjust the initial position of the Skew Correction Motor.
(COPIER > FUNCTION > LASER > LD-ADJ-Y/M/C)

After replacing the Laser Scanner Unit

1) Execute color displacement correction.
(Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Correct Color Mismatch)

Image Formation System

Open the Process Unit Inner Cover.

Preparation

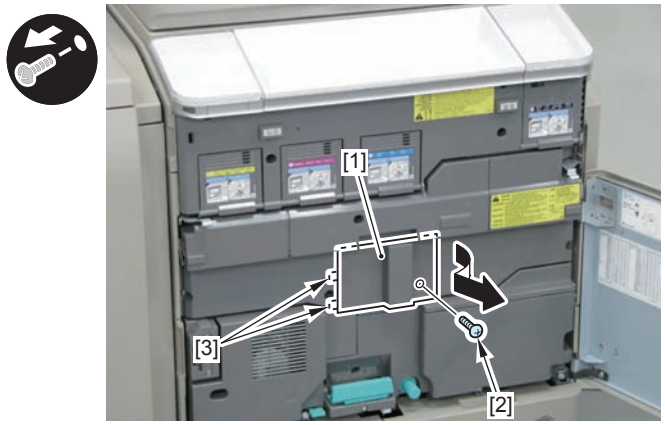
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).

Procedure

CAUTION:

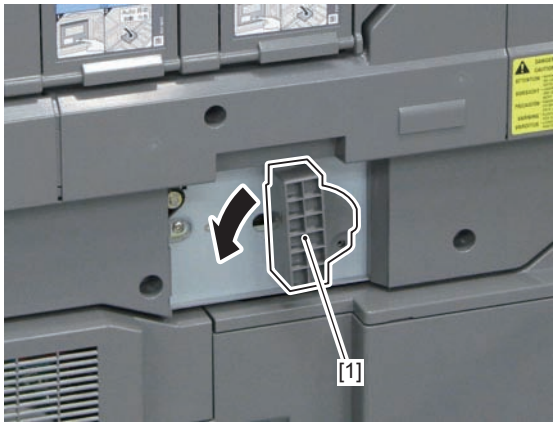
When releasing pressure of the ITB Unit, execute the Adjustment when Installing/ Removing the ITB Unit.

1) Remove the ITB Inner Middle Cover [1].
- 1 Screw [2]
- 2 Hooks [3]



F-4-147

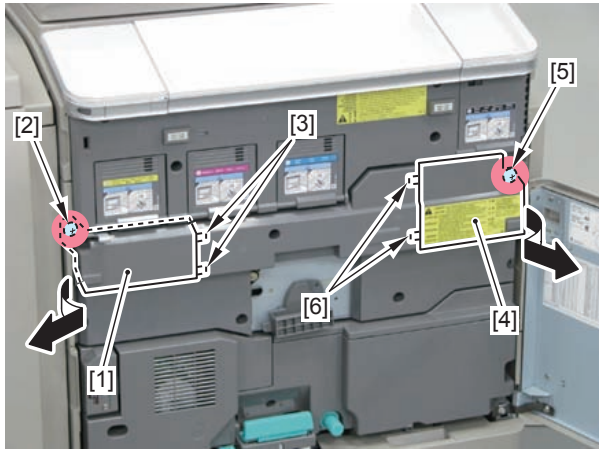
2) Turn the ITB Pressure Release Lever [1] in the direction of the arrow to release the pressure.



F-4-148

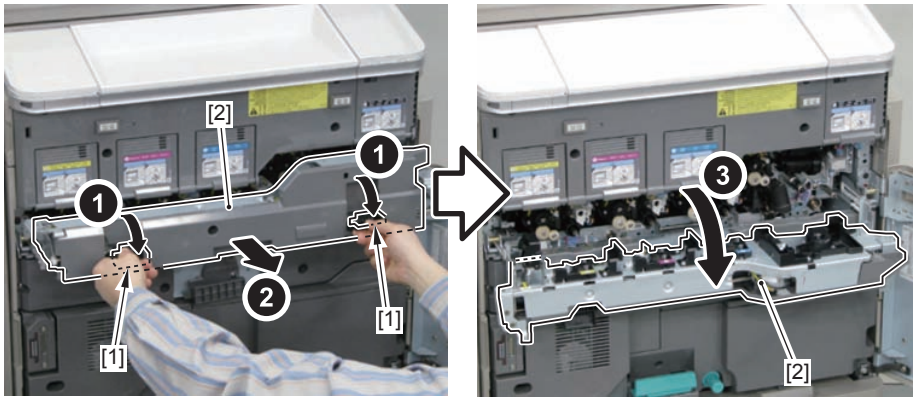
3) Remove the Front Inner Handle Left Cover [1].
- 1 Screw [2] (to loosen)
- 2 Hooks [3]

4) Remove the Front Inner Handle Right Cover [4].
- 1 Screw [5] (to loosen)
- 2 Hooks [6]



F-4-149

5) Turn the 2 handles (right and left) [1] downward, and pull out the Process Unit Inner Cover [2] until it stops and move downward to open it.

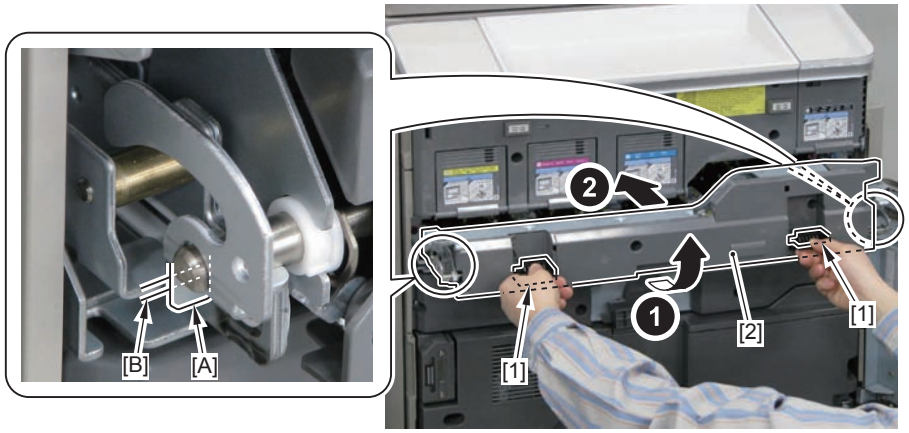


F-4-150

Closing the Process Unit Inner Cover

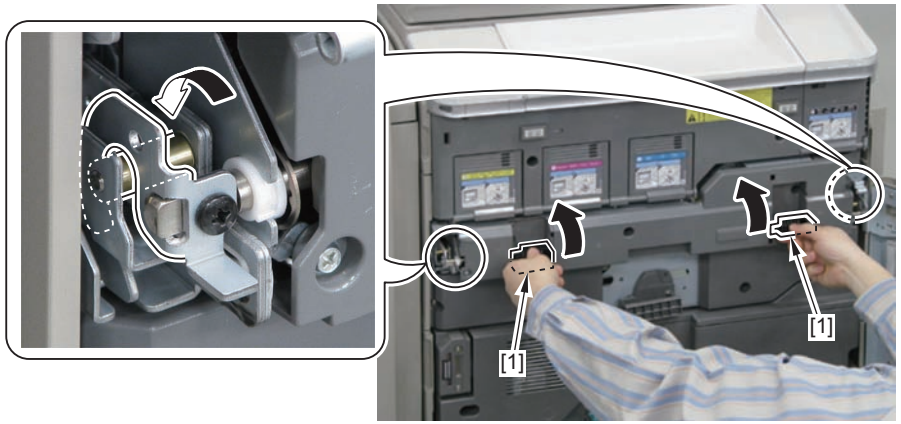
Procedure

1) Hold the 2 handles (right and left) [1] and raise the Process Unit Inner Cover [2].
2) Push the Process Unit Inner Cover [2] to the rear side, and push on the 2 Stopper Plates [A] of the right and left hooks to the 2 end faces (right and left) [B] of the Hinge Shaft Holder.



F-4-151

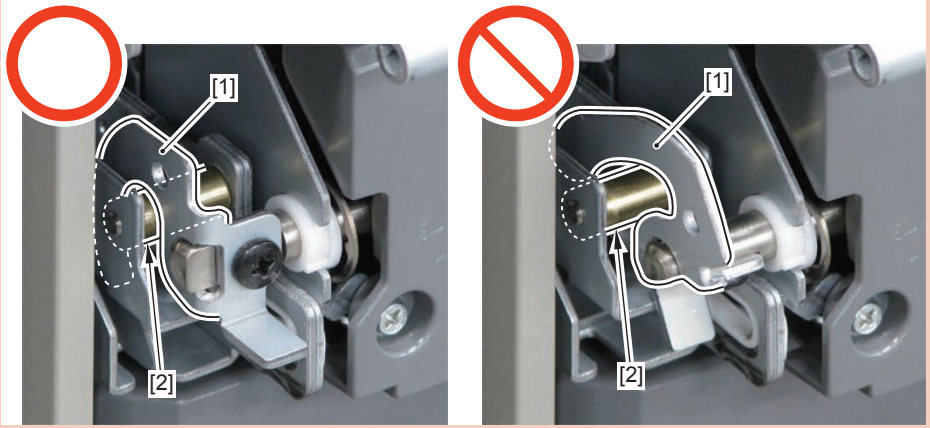
3) Raise the 2 handles (right and left) [1] at a 90-degree angle further and close the Process Unit Inner Cover.



F-4-152

CAUTION:

Be sure that the 2 hooks (right and left) [1] of the Process Unit Inner Cover are hooked and locked to the 2 Hinge Shafts [2] at the right and left sides of the host machine.



F-4-153

4) Install the Front Inner Handle Left Cover.
5) Install the Front Inner Handle Right Cover.
6) Turn the ITB Pressure Release Lever to apply pressure.

CAUTION:

When releasing pressure of the ITB Unit, execute the Adjustment when Installing/Removing the ITB Unit.

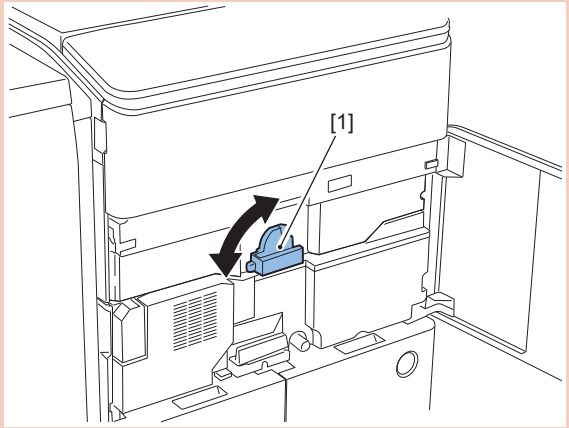
7) Install the ITB Inner Middle Cover.
8) Install the Upper Front Cover.
9) Close the Front Cover.

Adjustment when Installing/Removing the ITB Unit

Procedure

CAUTION:

If the ITB Pressure Release Lever [1] is turned to release the pressured, perform this procedure to make adjustment.



F-4-154

1) Execute the ITB edge profile/Steering Roller neutral position measurement mode.
(COPIER>FUNCTION>INSTALL>INIT-ITB)
2) From the user mode:
Execute Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Correct Color Mismatch.

Pulling out the ITB Unit

Preparation

1) Open the Front Cover.

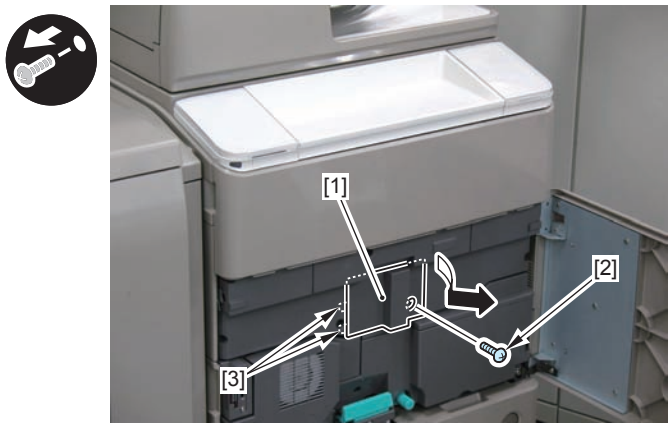
Procedure

CAUTION:

- If you have operated the ITB Pressure Release Lever to install or remove the ITB Unit, execute the adjustment when installing/removing the ITB Unit.
- Be careful not to touch the ITB with fingers or damage it. (Otherwise failure may occur in the output image.)

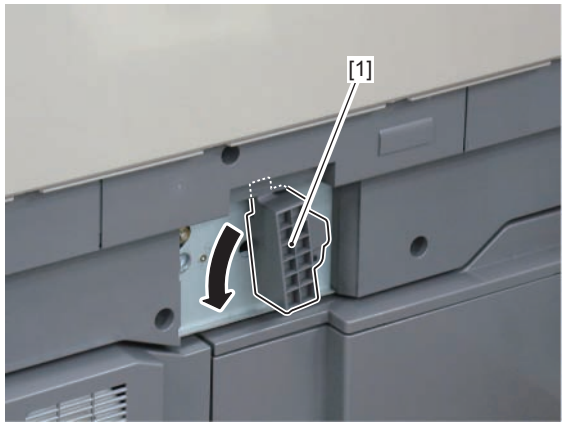
1) Remove the ITB Inner Middle Cover [1].

- 1 Screw [2]
- 2 Hooks [3]



F-4-155

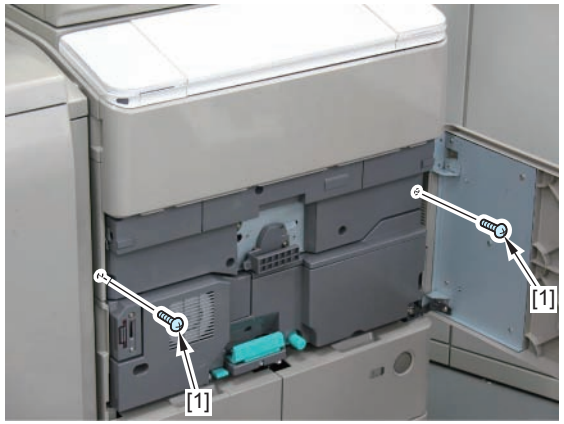
2) Turn the ITB Pressure Release Lever [1] in the direction of the arrow to release the pressure.



F-4-156

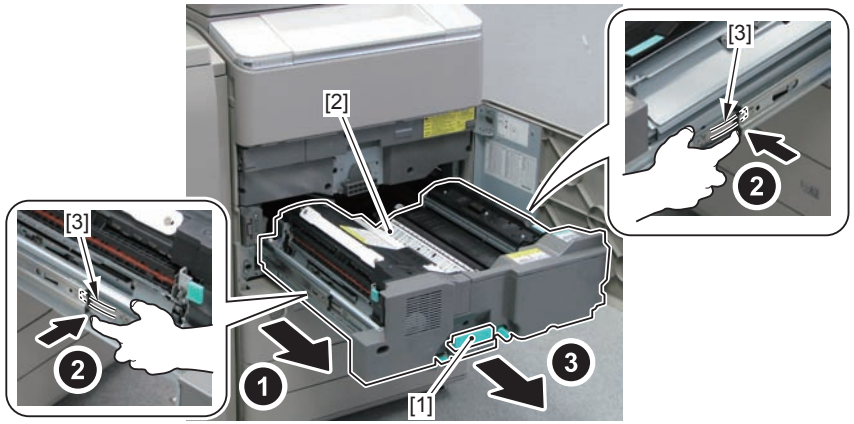
3) Remove the 2 screws [1] of the ITB Frame.

x2



F-4-157

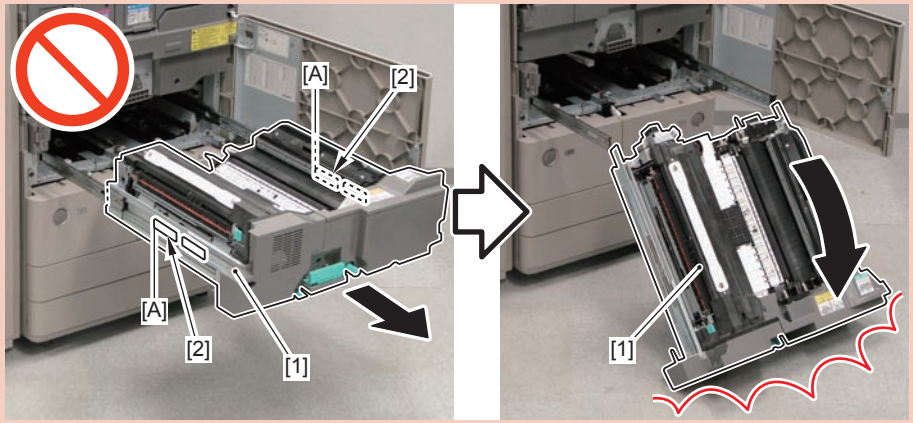
4) Hold the handle [1] to pull out the Fixing Feed Unit [2].
5) Press the 2 Release Springs [3] at both sides of the rail to release the locks, and further pull out the Fixing Feed Unit [2] until it stops.



F-4-158

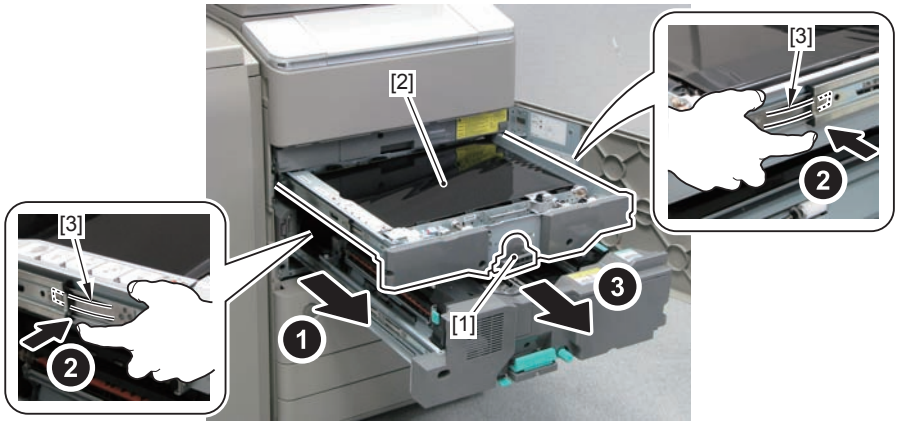
⚠ CAUTION:

When pulling out the Fixing Feed Unit [1], pulling it out beyond the rear end [A] of the Release Springs [2] on the rear side may cause falling of the Fixing Feed Unit.



F-4-159

6) Hold the handle [1] to pull out the ITB Unit [2].
7) Press the 2 Release Springs [3] at both sides of the rail to release the locks, and further pull out the ITB Unit [2] until it stops.



F-4-160

Removing the ITB Unit

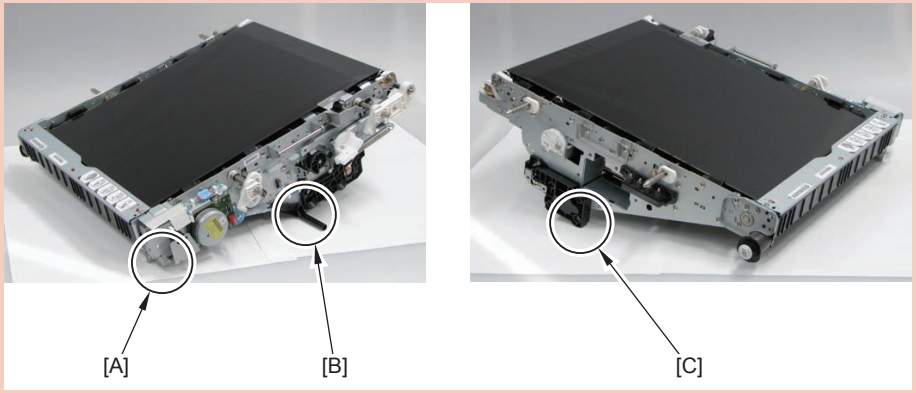
Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).

Procedure

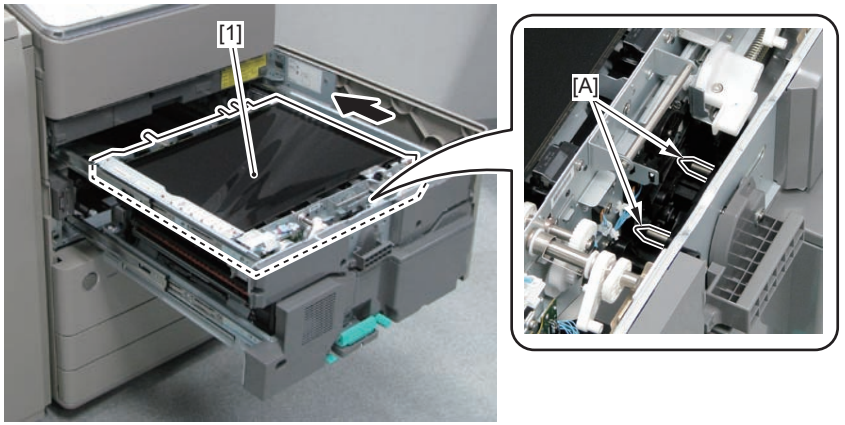
CAUTION:

- Be careful not to touch the ITB with fingers or damage it. (Otherwise failure may occur in the output image.)
- Place the ITB Unit on a sheet of paper, etc.
- Support the ITB Unit at the 3 locations: the lower left [A] of the ITB Unit Front Plate, the foot [B] of the ITB, and molded area [C] of the Secondary Transfer Inlet Upper Guide.



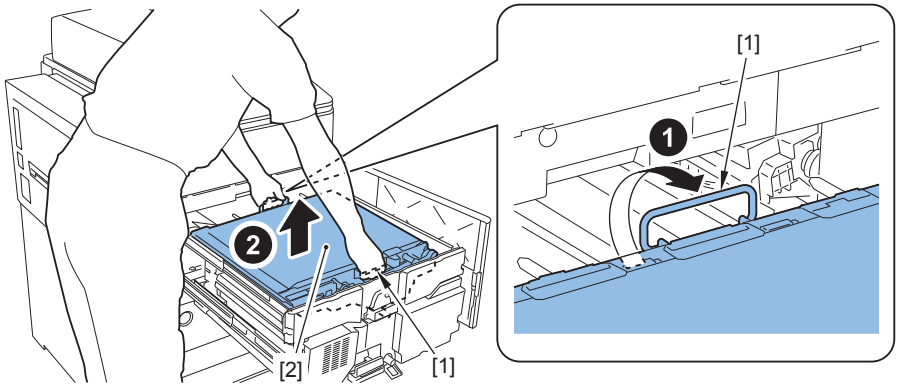
F-4-161

1) Move the ITB Unit [1] to the rear side to remove the 2 Fixation Pins [A] of the Secondary Transfer Outer Unit.



F-4-162

2) Hold the 2 handles [1] to remove the ITB Unit [2] by lifting upward.



F-4-163

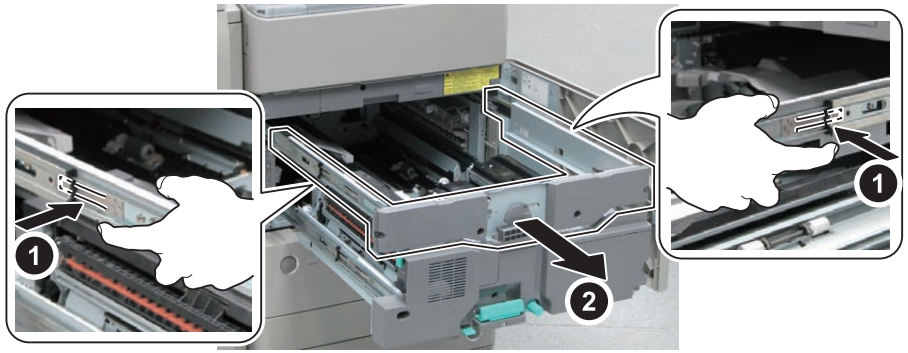
Removing the ITB Frame

Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).

Procedure

1) Press the 2 Release Springs [1] at both sides of the rail to release the locks, and pull out the ITB Frame [2].

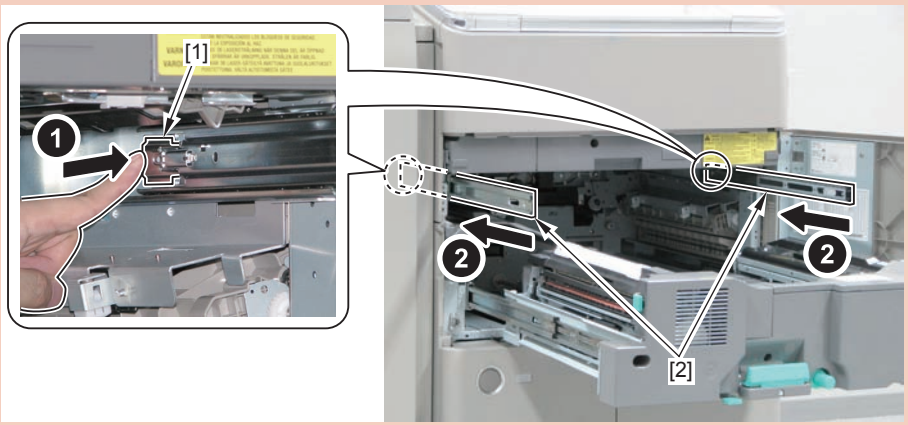


F-4-164

CAUTION:

Put the 2 rails [2] pulled out back in the host machine as needed.

- 2 Rail Lock Levers [1]

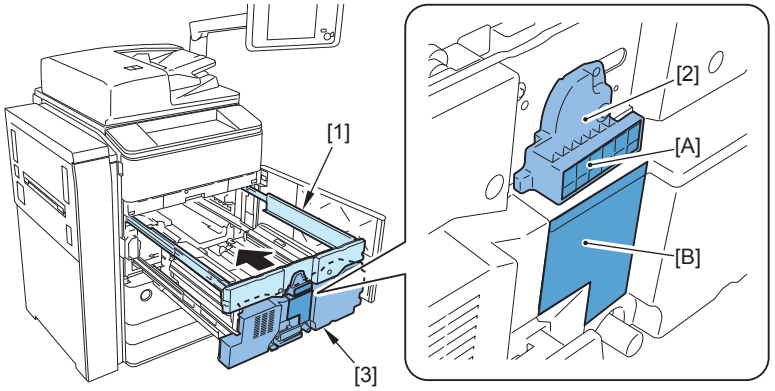


F-4-165

Installing the ITB Unit

Procedure

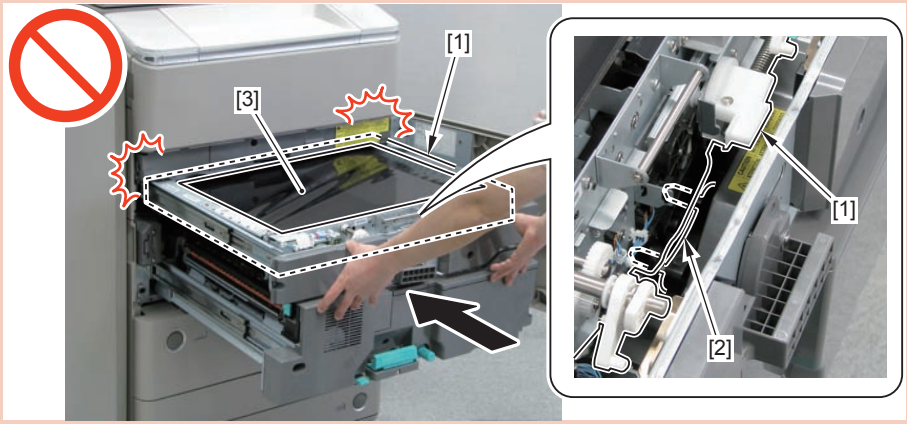
1) Push in the ITB Frame [1] and align the side [A] of the ITB Pressure Release Lever [2] with the side [B] of the cover [3] of the Fixing Feed Unit.



F-4-166

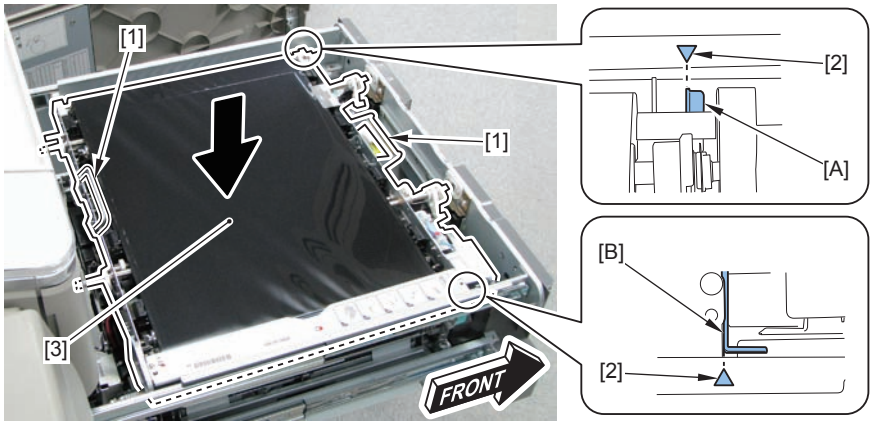
CAUTION:

If their positions are not aligned, the ITB Unit [1] may become on top of the Secondary Transfer Unit [2], and the ITB [3] may be damaged when storing the ITB Unit [1] in the host machine.



F-4-167

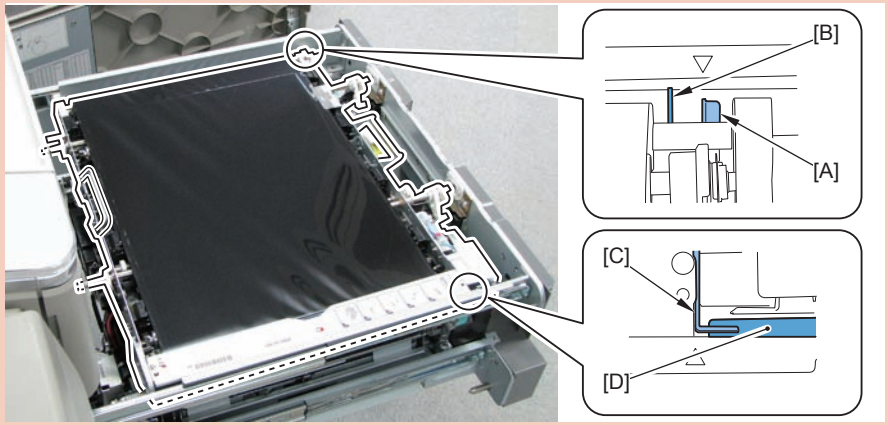
2) Hold the 2 handles [1], and align the right edge [A] and left edge [B] of the ITB Unit Front Plate with the 2 marks [2] on the ITB Frame to place the ITB Unit [3] horizontally.



F-4-168

CAUTION:

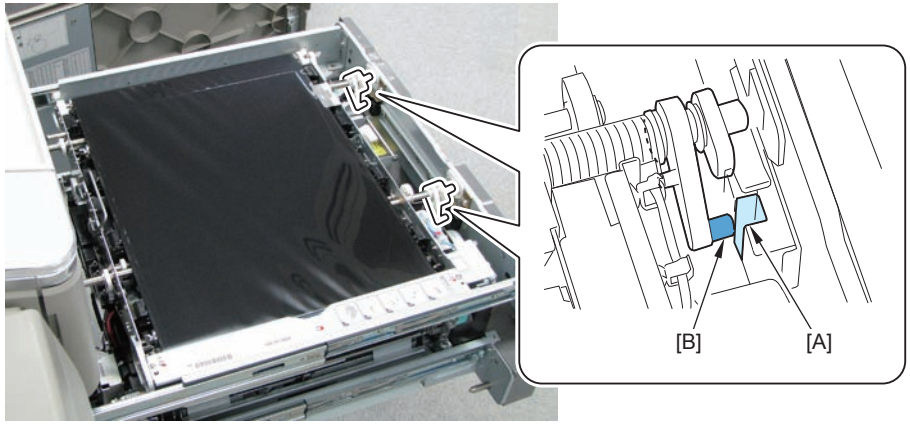
- After placing on the ITB Frame, check that the right edge [A] of the ITB Unit Front Plate is located to the right of the bended part [B] of the plate on the right side of the ITB Frame.
- Check that the bended part [C] on the left edge of the ITB Unit Front Plate is on top of the bended part [D] of the plate on the left side of the ITB Frame.



F-4-169

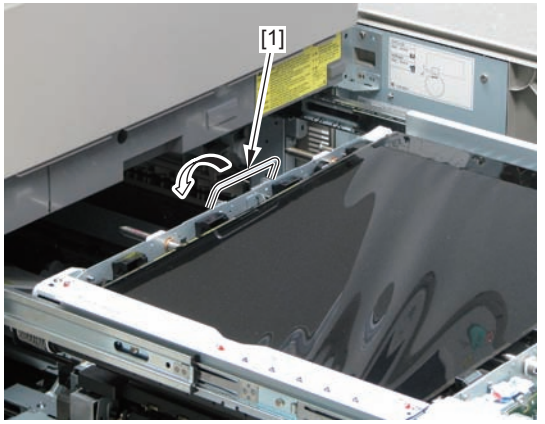
3) Check that the groove [A] of the ITB Frame and the leading edge [B] of the ITB Pressure Arm are aligned in a straight line (2 locations).

NOTE:
If the 2 leading edges [B] of the ITB Pressure Arm are not engaged with the groove [A] of the ITB Frame, the pressure will not be transmitted to the ITB Unit after putting it back.



F-4-170

4) Put the handle [1] of the ITB Unit back.



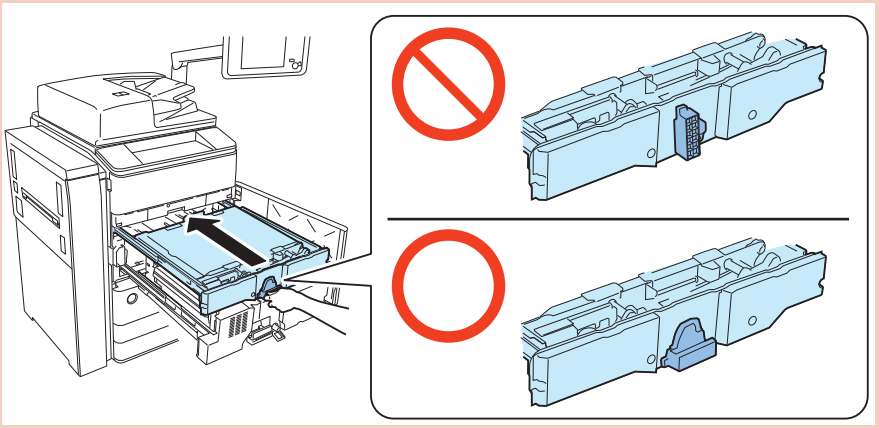
F-4-171

Storing the ITB Unit

Procedure

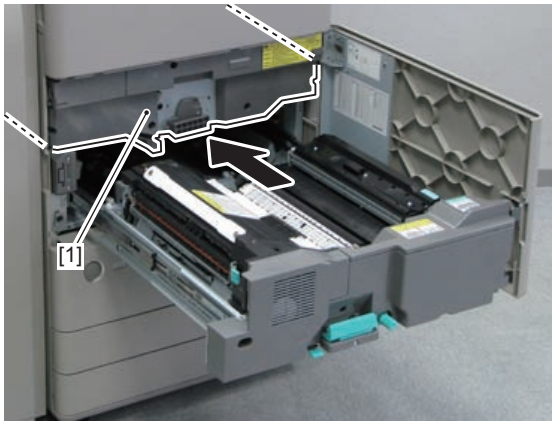
CAUTION:

- If you have operated the ITB Pressure Release Lever to install or remove the ITB Unit, execute the adjustment when Adjustment when Installing/Removing the ITB Unit.
- When putting the ITB Unit back in the host machine, be sure that the ITB Pressure Release Lever is released (horizontal) and then push in the unit.
  (If the unit is pushed in while the ITB Pressure Release Lever is in the engaged state (not horizontal), pressure will not be applied to the ITB Unit even by turning the ITB Pressure Release Lever.
  When the host machine operates in this state, the belt displacement error E075 occurs.)



F-4-172

1) Put the ITB Unit [1] back in the host machine.



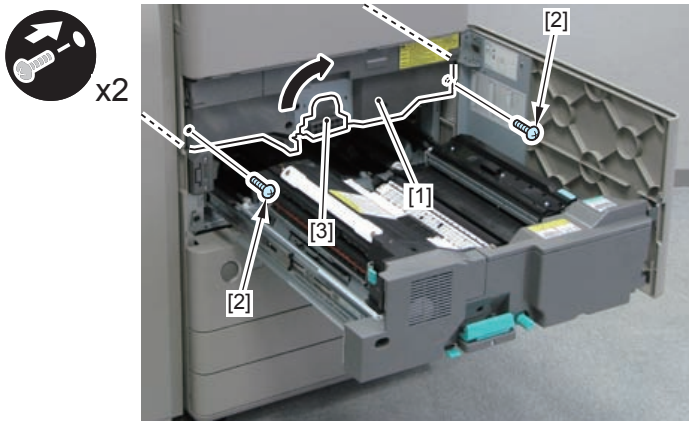
F-4-173

2) Secure the ITB Unit [1] with the 2 screws [2], and turn the ITB Pressure Release Lever [3] in the direction of the arrow to apply pressure.

CAUTION:

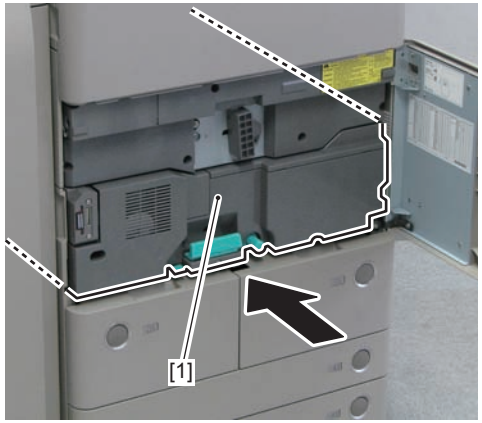
Tighten the 2 screws of the ITB Frame to secure the ITB Unit, and then turn the ITB Pressure Release Lever.

(If pressure is not applied at the proper position, the ITB Unit may be pushed up in the host machine, causing damage to the ITB.)



F-4-174

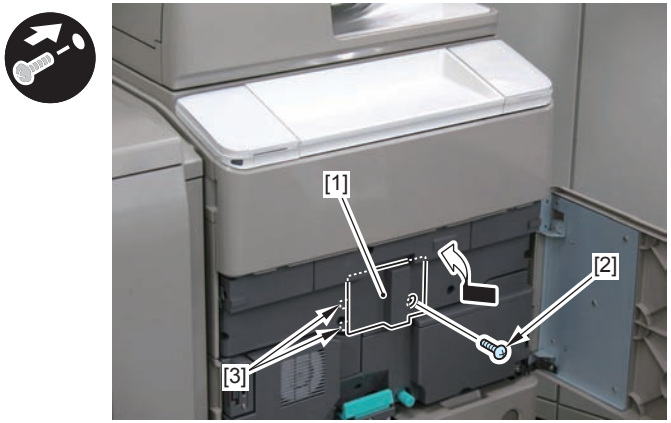
3) Put the Fixing Feed Unit [1] back in the host machine.



F-4-175

4) Install the ITB Inner Middle Cover [1].

- 1 Screw [2]
- 2 Hooks [3]



F-4-176

5) Close the Front Cover.

Removing the ITB Cleaning Blade Unit

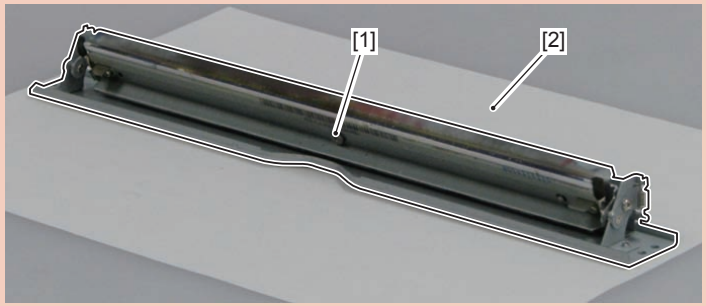
Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).

Procedure

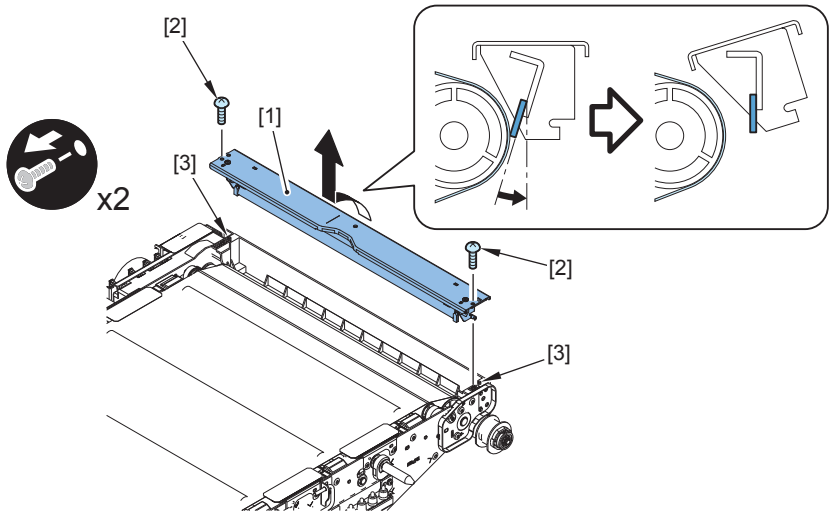
CAUTION:

- When replacing this part, execute the actions After Replacing the ITB Cleaning Blade Unit.
- Be careful not to touch the ITB with fingers or damage it. (Otherwise failure may occur in the output image.)
- Because there is toner on the ITB Cleaning Blade Unit [1], be sure to place it on a sheet of paper [2], etc.



F-4-177

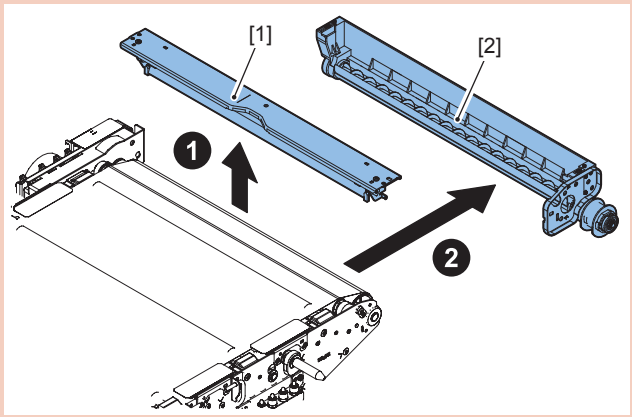
1) Remove the ITB Cleaning Blade Unit [1].
- 2 Screws [2]
- 2 Bosses [3]



F-4-180

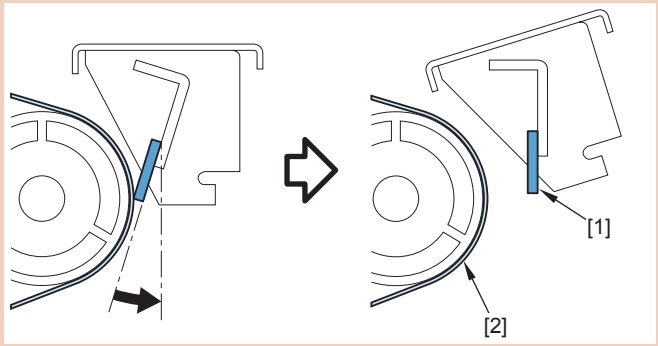
CAUTION:

- When disassembling/assembling, be sure to remove the ITB Cleaning Blade Unit [1] before removing the ITB Cleaning Unit [2] to prevent the ITB Cleaning Blade from being damaged.



F-4-178

- Be sure to tilt the ITB Cleaning Blade Unit not to contact with the ITB in order to prevent the ITB Cleaning Blade [1] and the ITB [2] from being damaged when disassembling/assembling.



F-4-179

Removing the ITB Cleaning Blade

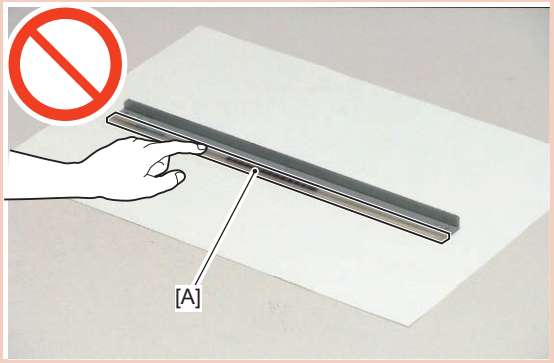
Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).

Procedure

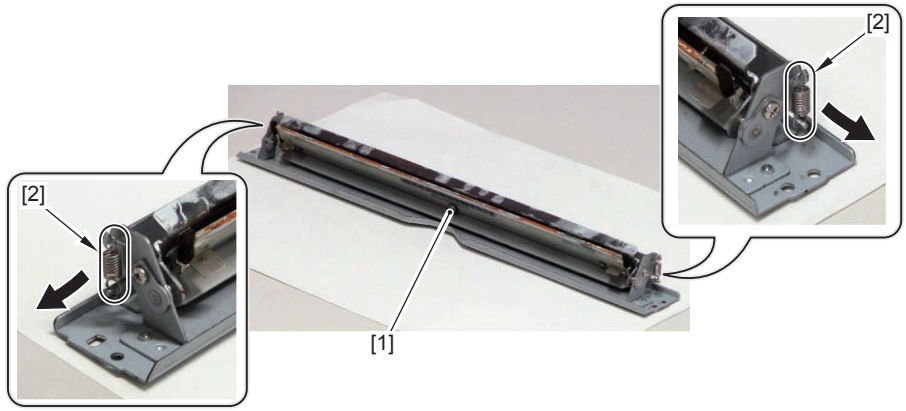
CAUTION:

Be careful not to touch the [A] part of the ITB Cleaning Blade.



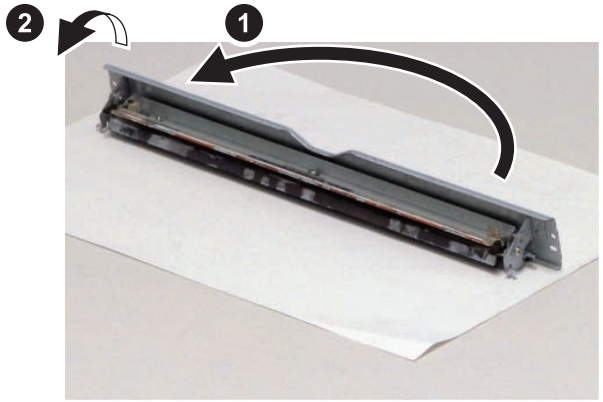
F-4-181

1) Remove the 2 springs [2] from the ITB Cleaning Blade Unit [1].



F-4-182

2) Change the direction of the ITB Cleaning Blade Unit [1].



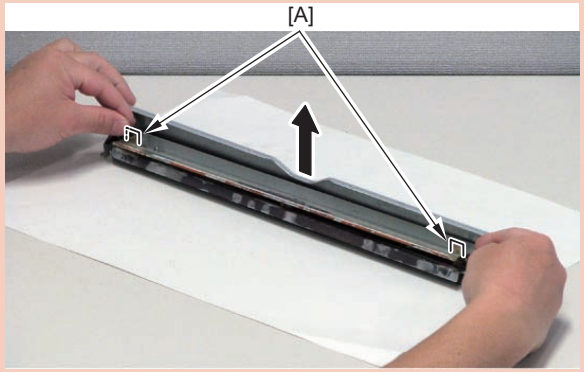
F-4-183

3) Remove the ITB Cleaning Blade [2] from the ITB Cleaning Unit [1].

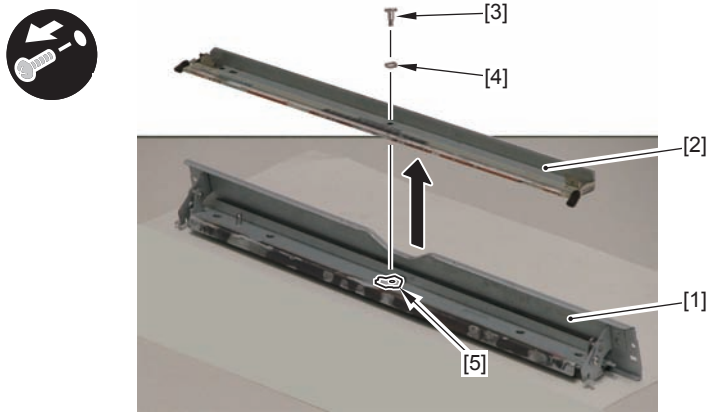
- 1 Stepped Screw [3]
- 1 Wave Washer [4]
- 1 Spacer [5]

CAUTION:

Be sure to hold the plate [A] of the Side Seal when removing the ITB Cleaning Blade.



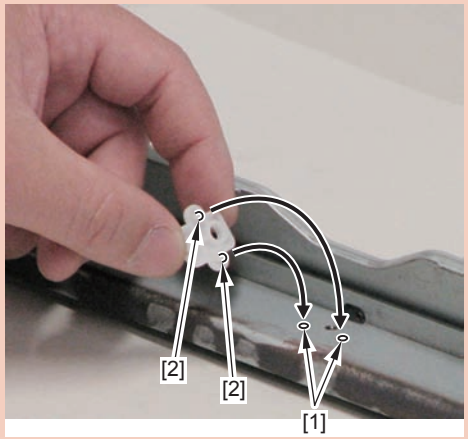
F-4-184



F-4-185

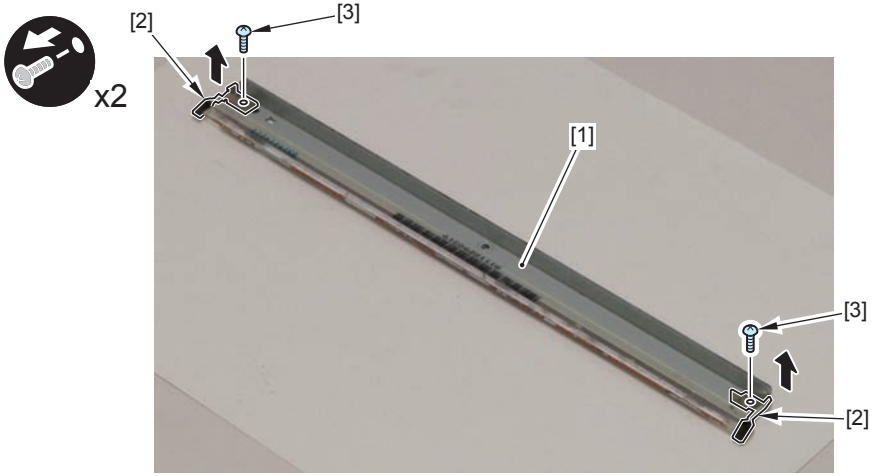
CAUTION:

At installation, be sure to align the 2 holes [1] of the IITB Cleaning Blade Unit with the 2 bosses [2] of the spacer.



F-4-186

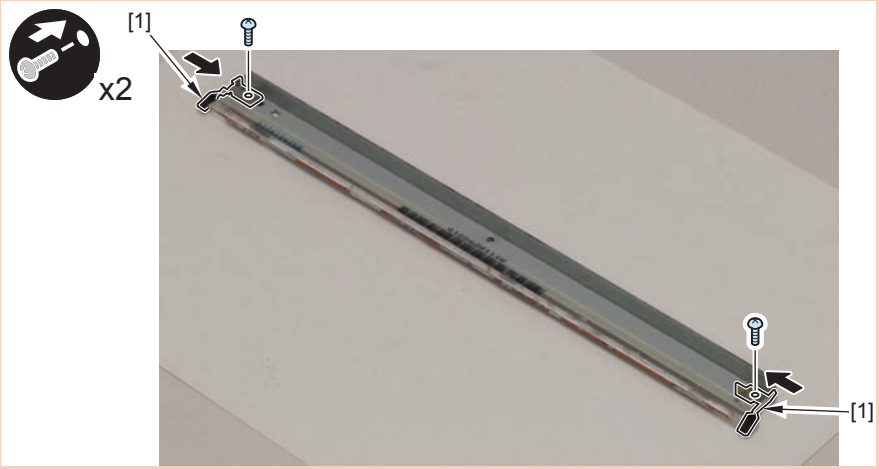
4) Remove the 2 Side Seals [2] from the ITB Cleaning Blade [1].



F-4-187

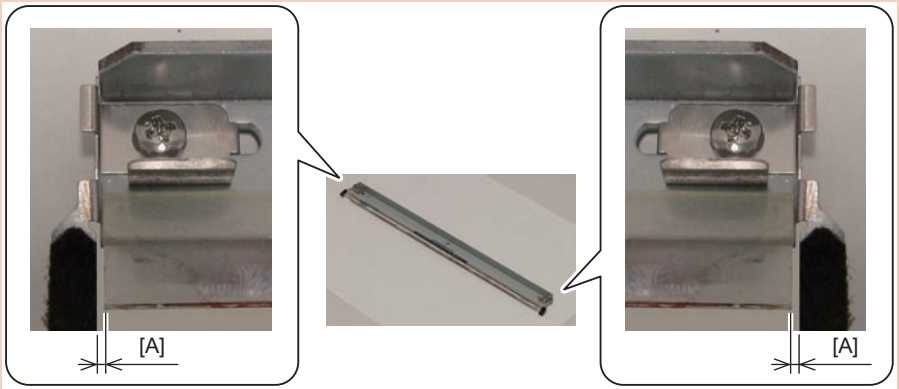
CAUTION:

- At installation, be sure to place the 2 Side Seals [1] inwards.



F-4-188

- Be sure that there is the clearance [A] between the ITB Cleaning Blade and the plate of the Side Seal.



F-4-189

After Replacing the ITB Cleaning Blade Unit

Procedure

1) After installing the ITB Cleaning Unit to the ITB Unit, apply lubricant [1] (FY9-6007-000) to the application area [A] on the ITB surface in the longitudinal direction [B] (1 reciprocation). (Execute this step without the ITB Cleaning Blade Unit being installed.)

CAUTION:

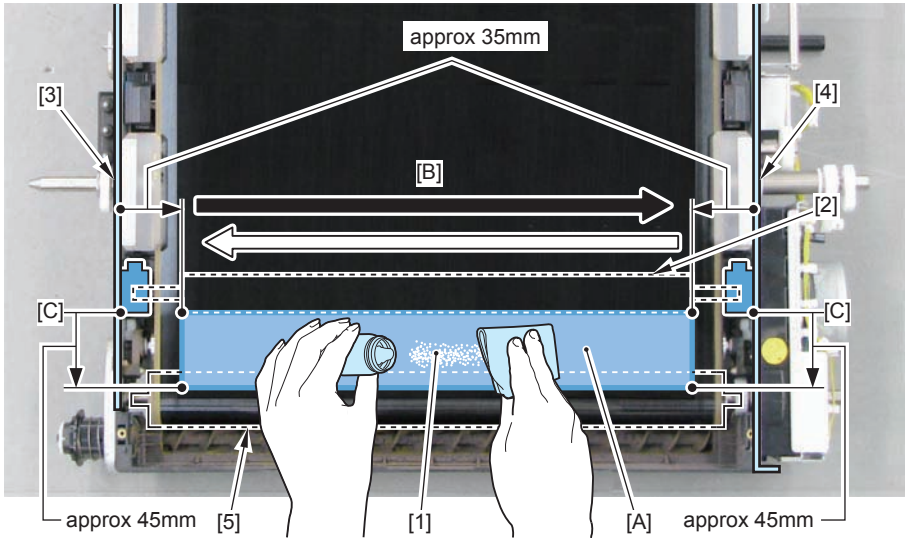
Target application area is to be the area surrounded by the application width as shown below.

- Application area
  Application width in the longitudinal direction [B] is shorter than the width of the Primary Transfer Roller (Y) [2].
  Be careful not to apply lubricant to the outside of the Primary Transfer Roller (Y) [2] width.
- Target: Between the point approx. 35 mm inside the ITB Unit Rear Plate [3] and the point approx. 35 mm inside the ITB Unit Front Plate [4].
  The application width in the belt's rotation direction is between the Primary Transfer Roller (Y) [2] and the ITB Driver Roller [5].
  Target: Between the point of the Primary Transfer Roller (Y) [2] Shaft Support (Front/Rear) Cover edge [C] and the point approx. 45 mm below the edge.

CAUTION:

Points to Note when Applying Lubricant (FY9-6007-000) [1]

- Be careful not to apply lubricant to the outside of the application width in the longitudinal direction [B].
- When lubricant [1] is applied outside the application area, be sure to wipe with lint-free paper.

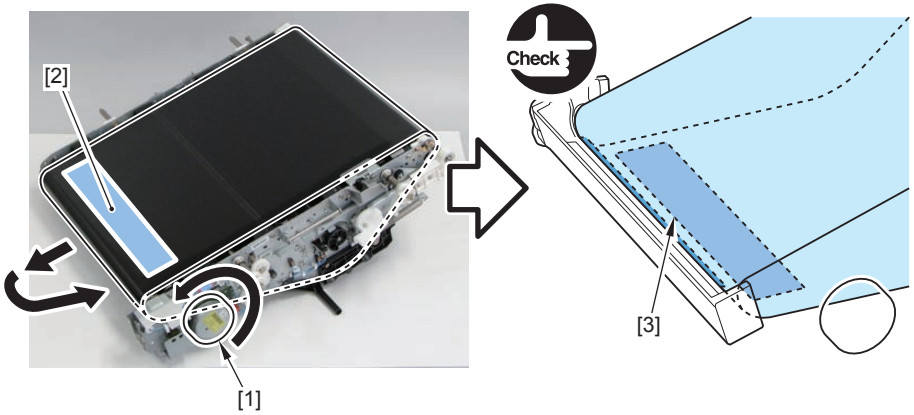


F-4-190

2) Rotate the ITB Drive Motor [1] with hand counterclockwise, and then rotate the ITB until the lubricant [2] applied to the ITB is hidden in the Scoop-up Sheet [3] of the ITB Cleaning Unit. (The applied lubricant [2] passes through the Scoop-up Sheet [3] of the ITB Cleaning Unit.)

CAUTION:

Be sure to turn the ITB Drive Motor [1] counterclockwise only and be careful not to turn it clockwise.



F-4-191

3) Install the ITB Cleaning Blade Unit to the ITB Unit.

Removing the ITB Cleaning Unit

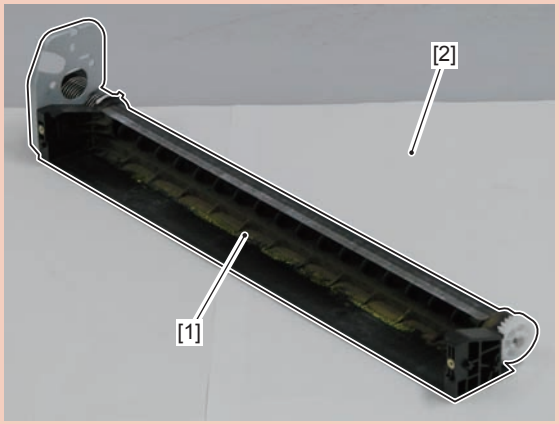
Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).

Procedure

CAUTION:

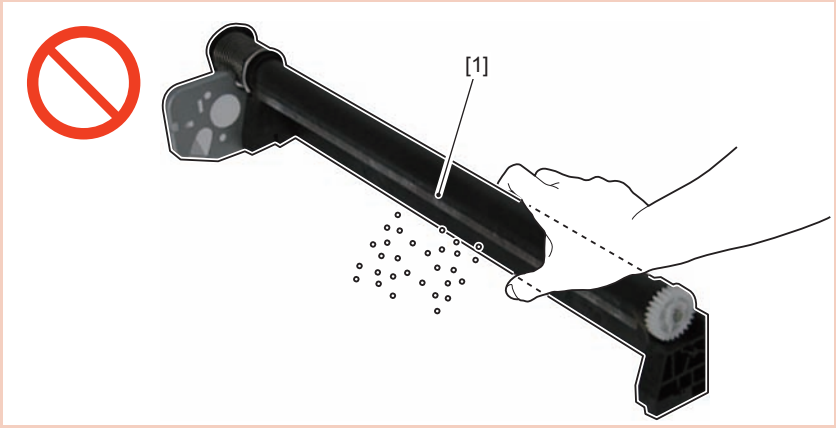
Because there is toner on the ITB Cleaning Unit [1], be sure to place it on a sheet of paper [2], etc.



F-4-192

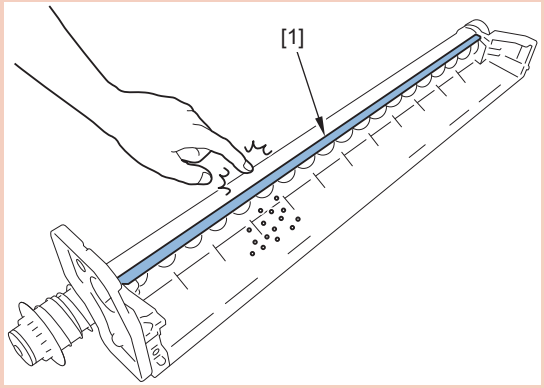
CAUTION:

- Do not turn the ITB Cleaning Unit [1] upside down to prevent toner from scattering around.



F-4-193

- When installing the ITB Cleaning Blade Unit, check that waste toner is not accumulated on the back side of the Scoop-up Sheet [1] of the ITB Cleaning Unit. If there is waste toner, gently tap the unit to drop it to the screw.

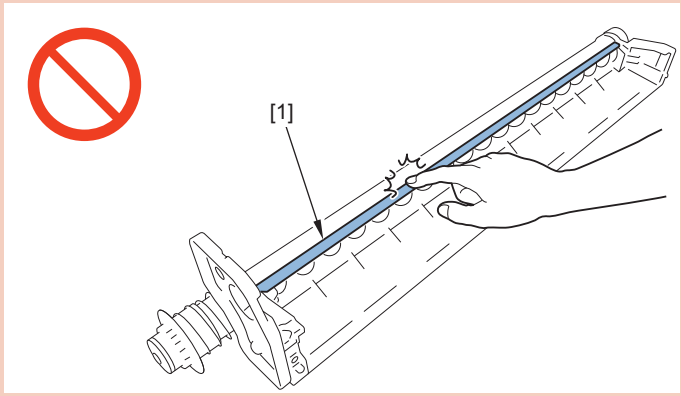


F-4-194

CAUTION:

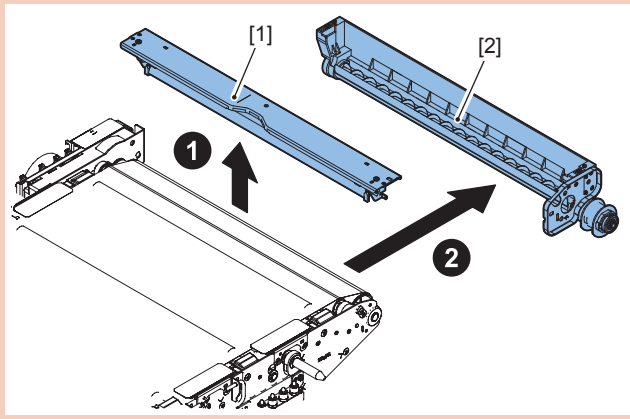
Do not touch the Scoop-up Sheet [1] directly with hand.

If there is folding line on the Scoop-up Sheet, failure may occur in the output image.



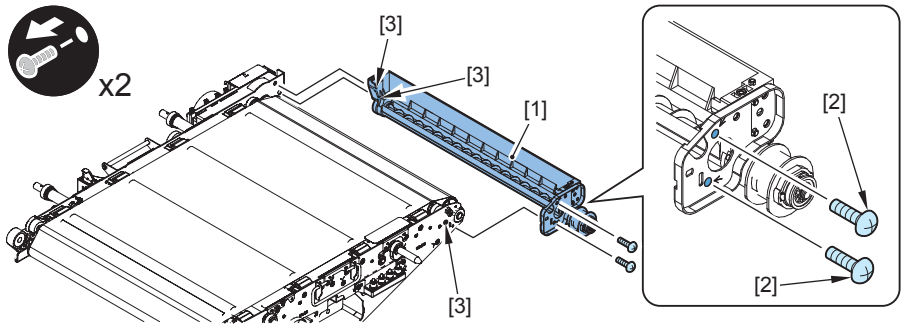
F-4-195

- When disassembling/assembling, be sure to remove the ITB Cleaning Blade Unit [1] before removing the ITB Cleaning Unit [2] to prevent the ITB Cleaning Blade from being damaged.



F-4-196

1) Remove the ITB Cleaning Unit [1].
- 2 Screws [2]
- 3 Bosses [3]



F-4-197

Removing the ITB

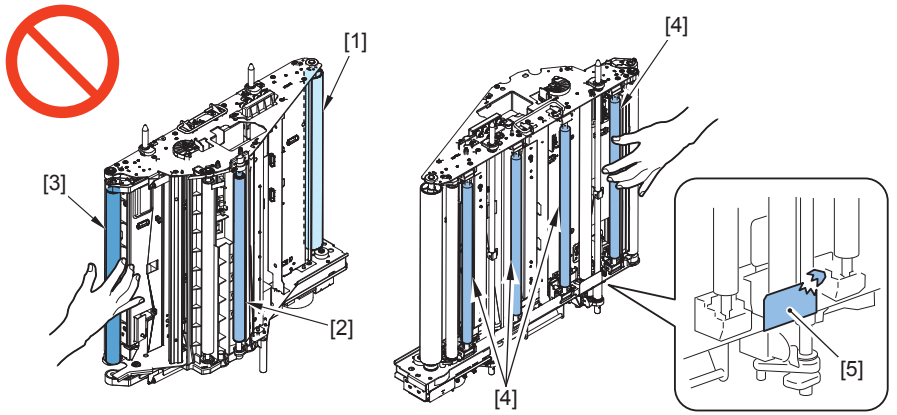
Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).
5) Remove the ITB Cleaning Unit (Refer to page 4-145).

Procedure

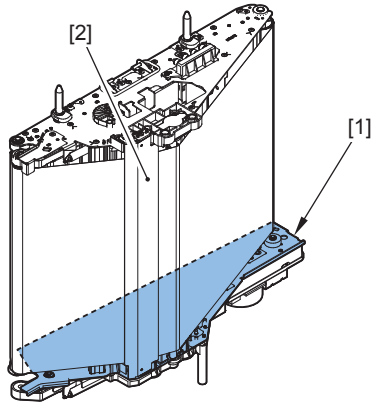
CAUTION:

- When replacing this part, execute the Cleaning when replacing the ITB.
- Be careful not to touch any part of the ITB other than the specified part with finger or damage the ITB.
  (Otherwise failure may occur in the output image.)
- Do not touch the surfaces of the ITB Drive Roller [1], Secondary Transfer Inner Roller [2], ITB Steering Roller [3], and Primary Transfer Roller (Y/M/C/Bk) [4].
  (Otherwise, it may cause image failure.)
- Be sure not to damage the ITB Retainer Sheet [5].



F-4-198

1) Turn the ITB Unit Front Plate [1] downward, and stand the ITB Unit [2] vertically.

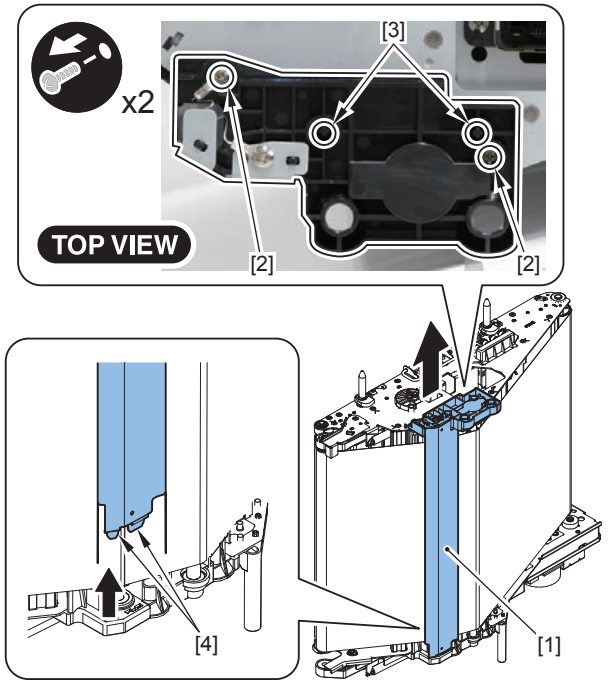


F-4-199

2) Remove the Secondary Transfer Inlet Upper Guide [1] in the direction of the arrow.

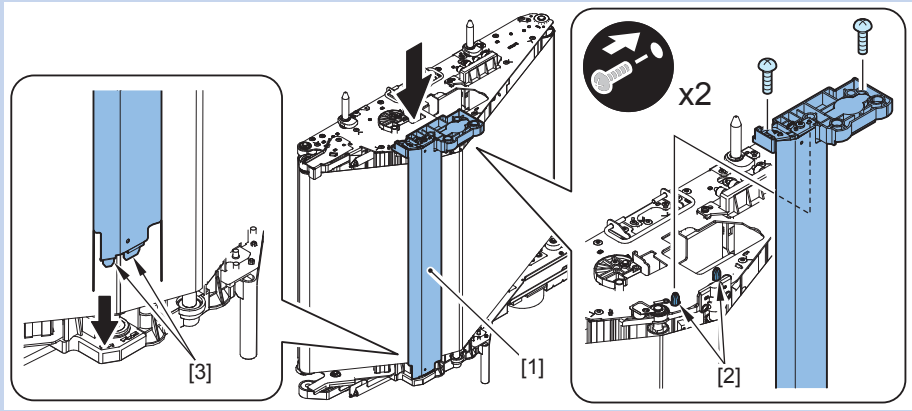
- 2 Screws [2]
- 2 Bosses [3]
- 2 Protrusions [4]

NOTE:
One of the screws [2] tightens the grounding together.



F-4-200

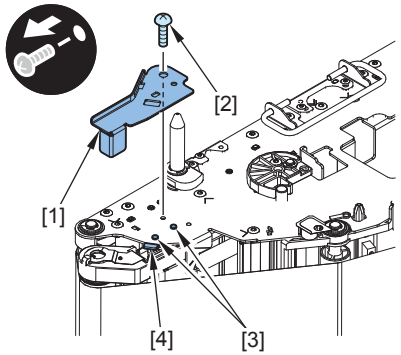
NOTE:
When installing the Secondary Transfer Inlet Upper Guide [1], align it with the 2 bosses [2], and then insert the 2 protrusions [3] of the Secondary Transfer Inlet Upper Guide in the ITB Unit to make the work easy.



F-4-201

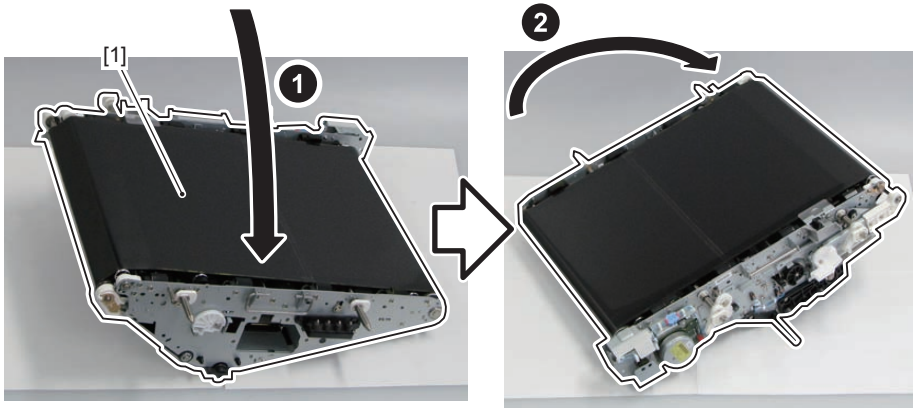
3) Remove the ITB Unit Right Rear Small Plate [1].

- 1 Screw [2]
- 2 Bosses [3]
- 1 Hook [4]



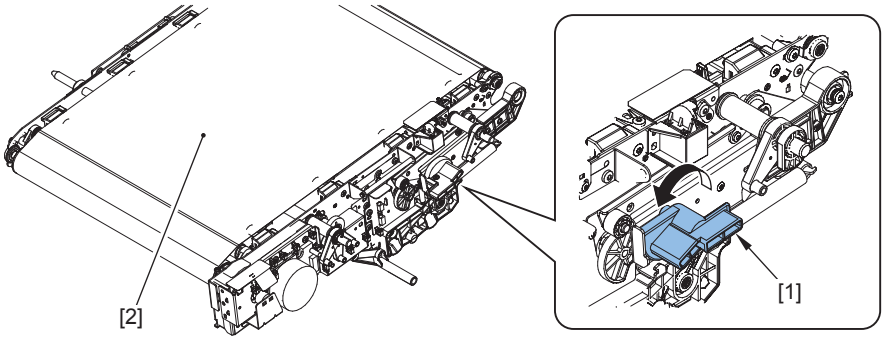
F-4-202

4) Place the ITB Unit [1] sideways to change its orientation.



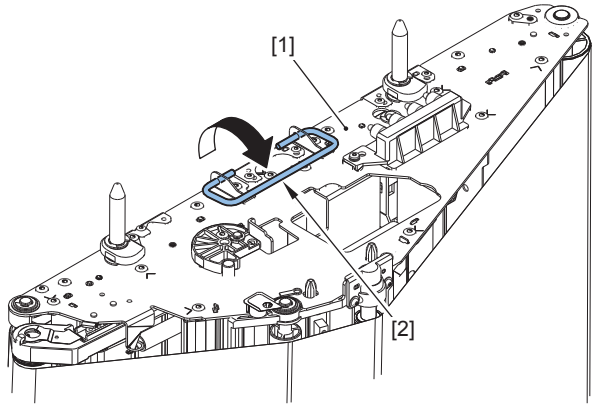
F-4-203

5) Turn the ITB Tension Lever [1] in the direction of the arrow to release the pressure applied on the ITB [2].



F-4-204

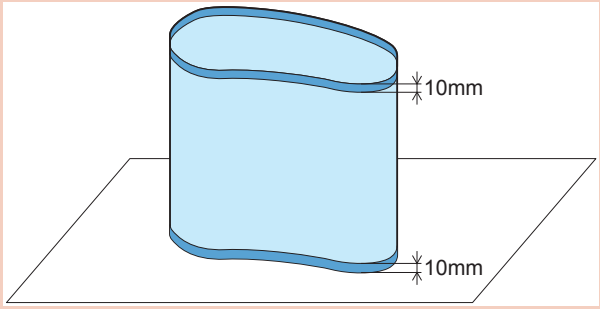
6) Place the ITB Unit [1] vertically, and turn the handle [2] toward the Rear Plate of the ITB Unit.



F-4-205

CAUTION:

- The ITB is thinner than the existing ones, so it can be easily bent.
  Be sure to handle it with care not to bend when working.
- Be sure to hold within 10mm from both edges of the ITB.
  It is for not to touch the image area of the ITB.
- Be sure to place the ITB on a sheet of paper.



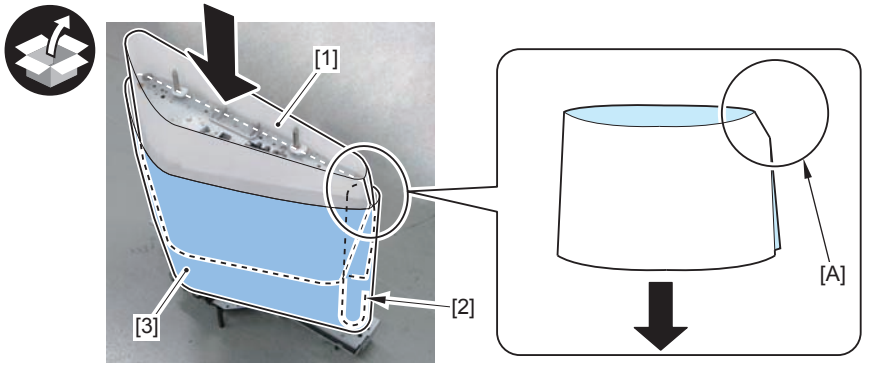
F-4-206

NOTE:

- If the ITB of the service parts is available for the purpose of replacement, use the ITB Installation Auxiliary Sheet included in the package to prevent the ITB from being damaged.
  If the ITB Installation Auxiliary Sheet is used: perform steps 7-1 through 7-3.
- If the ITB of the service parts is not available, use 2 sheets of A3 paper instead of the ITB Installation Auxiliary Sheet.
  If 2 sheets of A3 paper are used: perform steps 8-1 through 8-3.

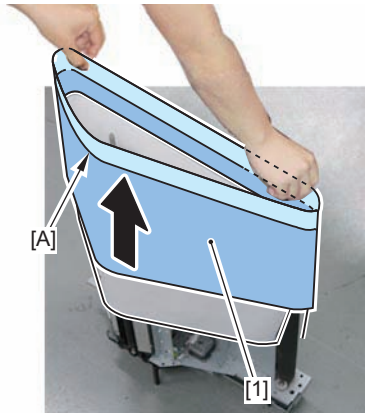
When removing the ITB using the ITB Installation Auxiliary Sheet

7-1) Insert the ITB Installation Auxiliary Sheet [1] included in the package between the ITB [3] and the ITB Unit, with the folded slant area [A] of the sheet coming on the upper side of the ITB Drive Roller [2].



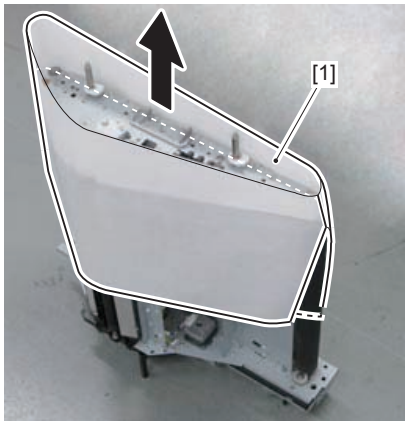
F-4-207

7-2) Hold the edge [A] of the ITB, and remove the ITB [1] while paying attention not to damage it.



F-4-208

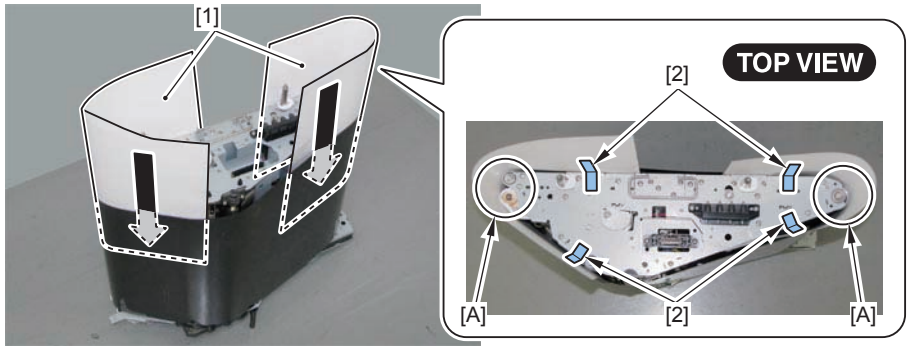
7-3) Remove the ITB Installation Auxiliary Sheet [1].



F-4-209

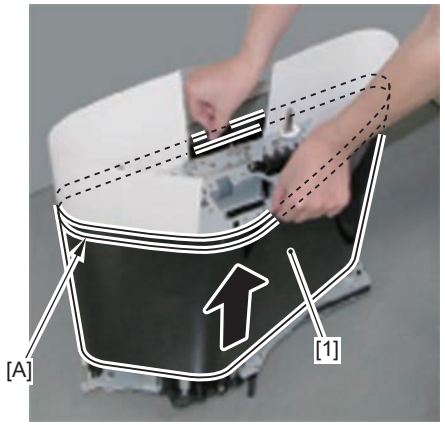
When removing the ITB using the 2 sheets of A3 paper

8-1) Insert the 2 sheets of A3 paper [1] between the ITB and the ITB Unit to wrap around the 2 ends [A] of the ITB Unit, and then use the tapes [2] to secure them to the ITB Front Plate.



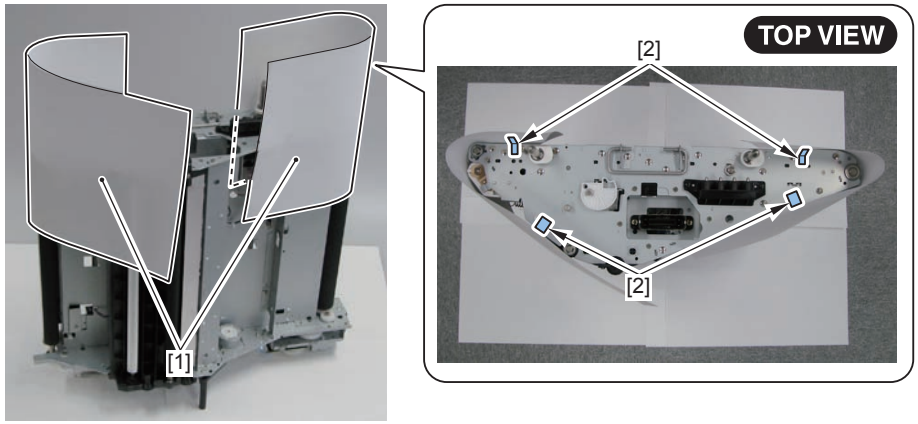
F-4-210

8-2) Hold the edge [A] of the ITB, and remove the ITB [1] while paying attention not to damage it.



F-4-211

8-3) Remove the 2 sheets of A3 paper [1] and the 4 tapes [2] from the ITB Front Plate.



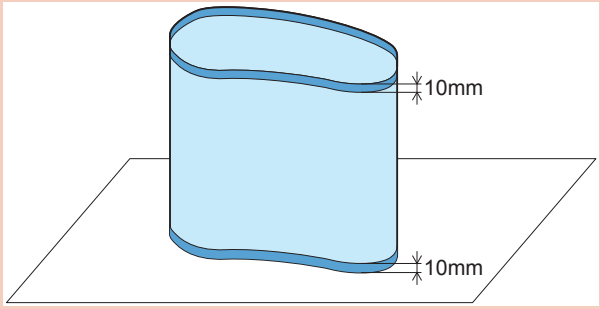
F-4-212

Installing the ITB

Procedure

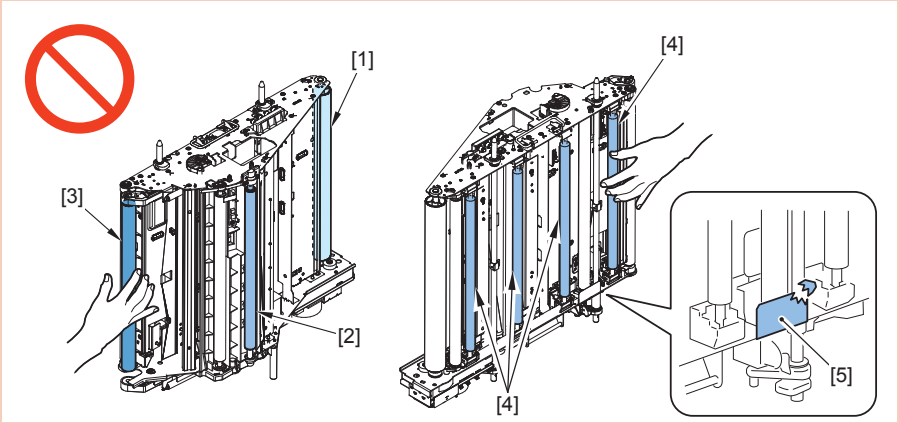
CAUTION:

- The ITB is thinner than the existing ones, so it can be easily bent. Be sure to handle it with care not to bend when working.
- Be sure to hold within 10mm from both edges of the ITB. It is for not to touch the image area of the ITB.
- Be sure to place the ITB on a sheet of paper.



F-4-213

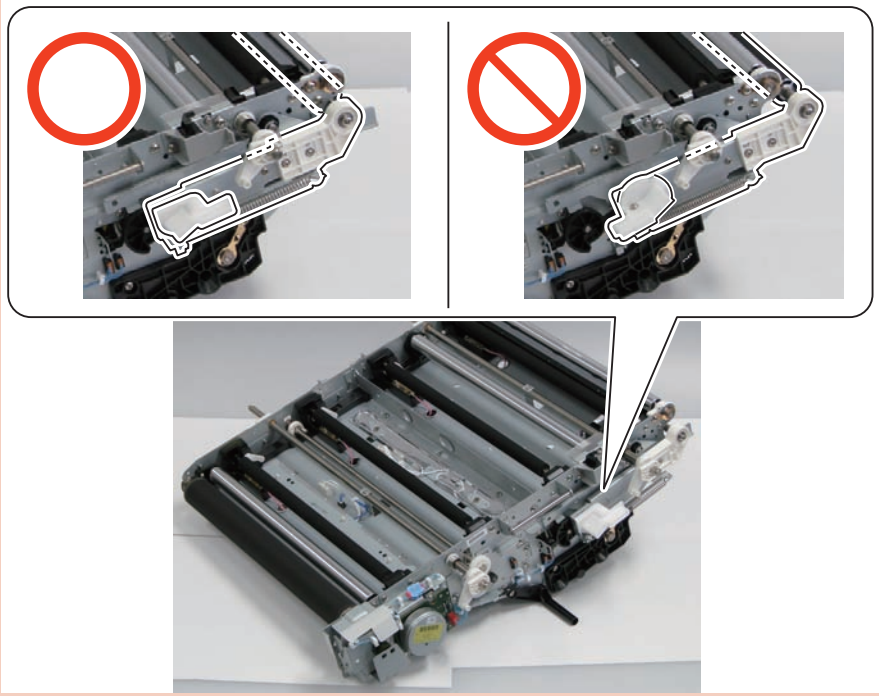
- Do not touch the surfaces of the ITB Drive Roller [1], Secondary Transfer Inner Roller [2], ITB Steering Roller [3], and Primary Transfer Roller (Y/M/C/Bk) [4]. (Otherwise, it may cause image failure.)
- Be sure not to damage the ITB Retainer Sheet [5].



F-4-214

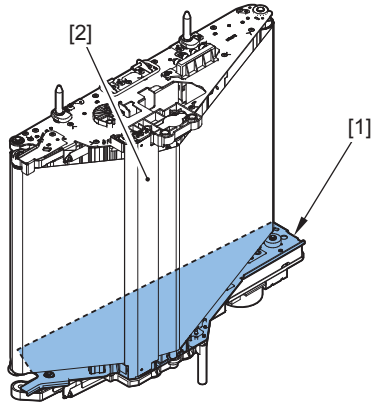
CAUTION:

When installing the ITB to the ITB Unit, be sure that the pressure applied to the ITB is released.



F-4-215

1) Turn the ITB Unit Front Plate [1] downward, and stand the ITB Unit [2].

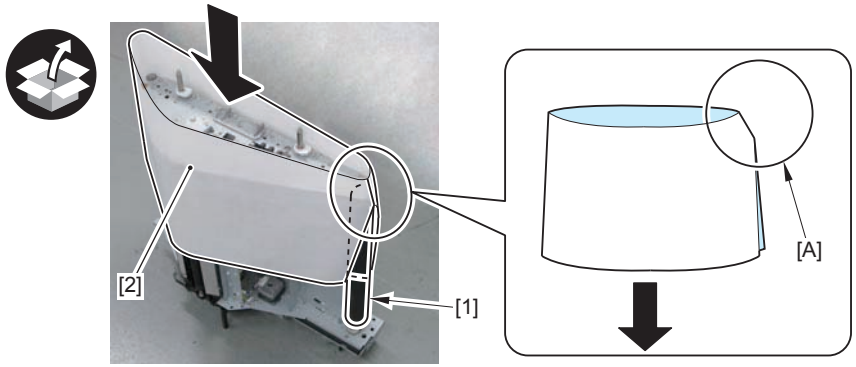


F-4-216

NOTE:
- If the ITB of the service parts is available for the purpose of replacement, use the ITB Installation Auxiliary Sheet included in the package to prevent the ITB from being damaged.
  If the ITB Installation Auxiliary Sheet is used: perform steps 2-1 through 2-3.
- If the ITB of the service parts is not available, use 2 sheets of A3 paper instead of the ITB Installation Auxiliary Sheet.
  If 2 sheets of A3 paper are used: perform steps 3-1 through 3-3.

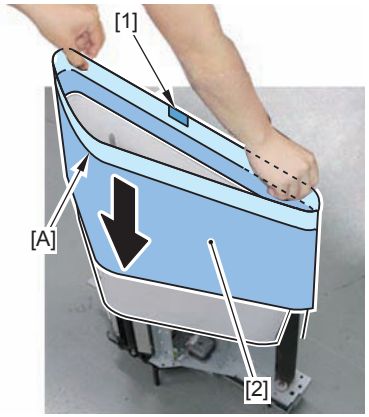
When using the ITB Installation Auxiliary Sheet

2-1) Insert the ITB Installation Auxiliary Sheet [2] included in the package with the folded slant area [A] of the sheet coming on the upper side of the ITB Drive Roller [1].



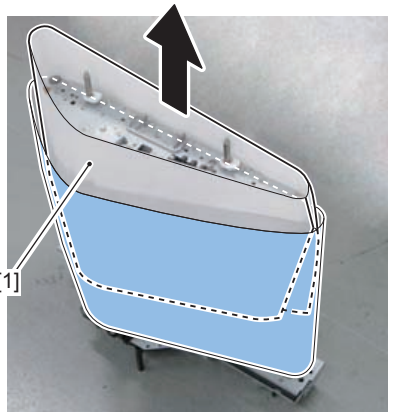
F-4-217

2-2) Hold the edge [A] of the ITB to place the white sheet [1] on top of it, and install while paying attention not to damage the ITB [2].



F-4-218

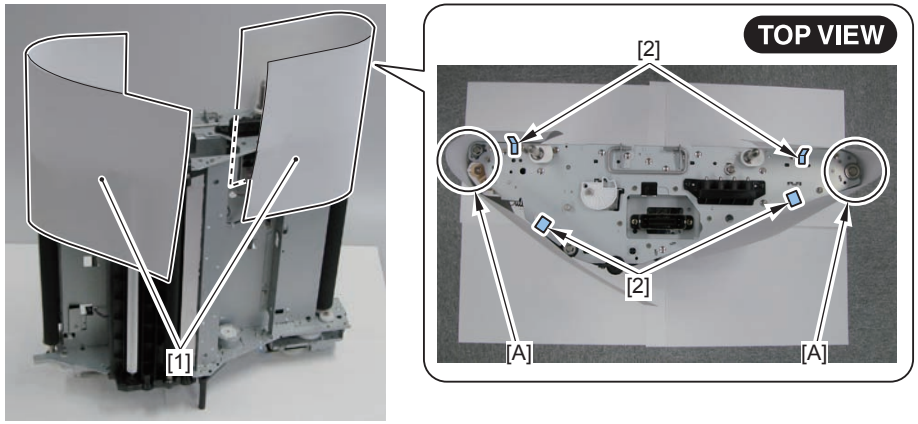
2-3) Remove the ITB Installation Auxiliary Sheet [1].



F-4-219

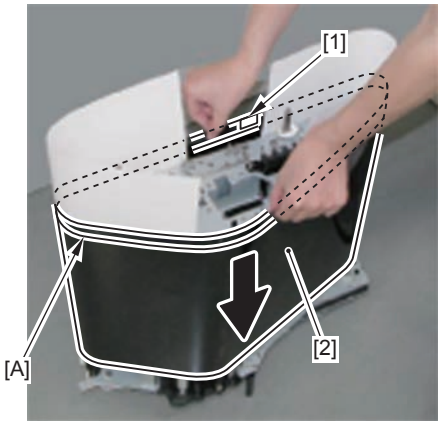
When using the 2 sheets of A3 paper

3-1) Use the 4 tapes [2] to secure the 2 sheets of A3 paper [1] to the ITB Front Plate to wrap around the 2 ends [A] of the ITB Unit.



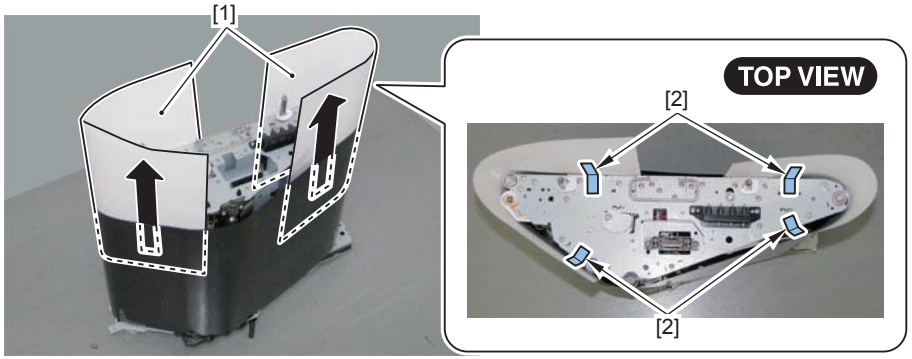
F-4-220

3-2) Hold the edge [A] of the ITB to place the white sheet [1] inside the ITB on the top, and install while paying attention not to damage the ITB [2].



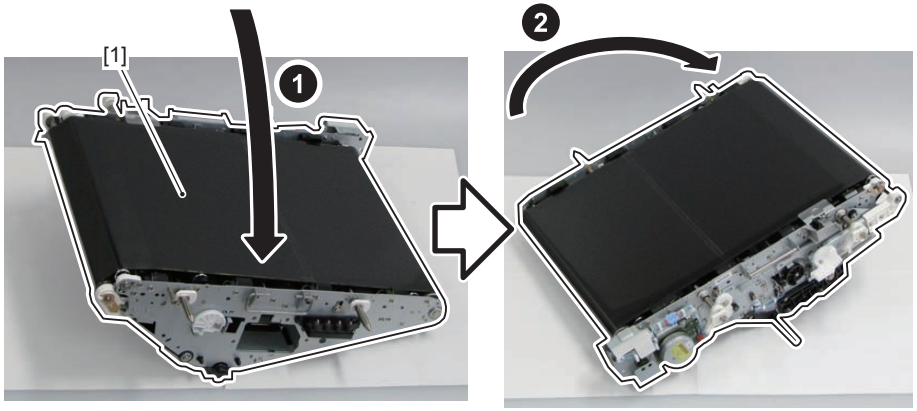
F-4-221

3-3) Remove the 2 sheets of A3 paper [1] and the tapes [2] from the ITB Front Plate.



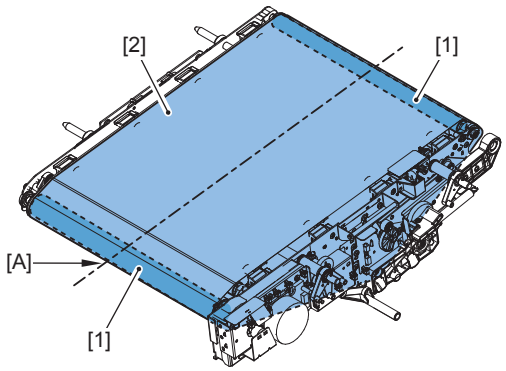
F-4-222

4) Place the ITB Unit [1] sideways to change its orientation.



F-4-223

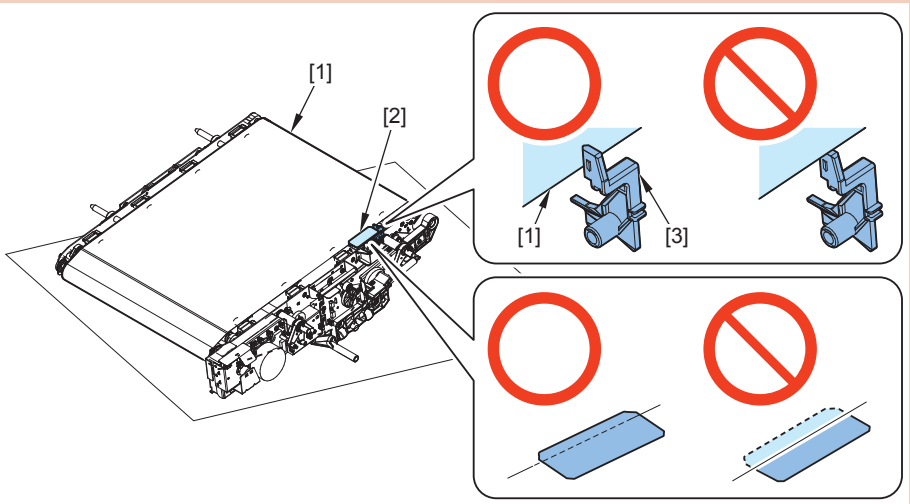
5) Align the center of the ITB [2] with the center [A] of the left and right rollers [1] of the ITB Unit.



F-4-224

CAUTION

- Install the ITB [1], and place the ITB Retainer Sheet [2] of the Front Plate on top of the ITB while paying attention not to fold it.
- Be sure to place the leading edge of the ITB Position Flag [3] on top of the ITB [1].

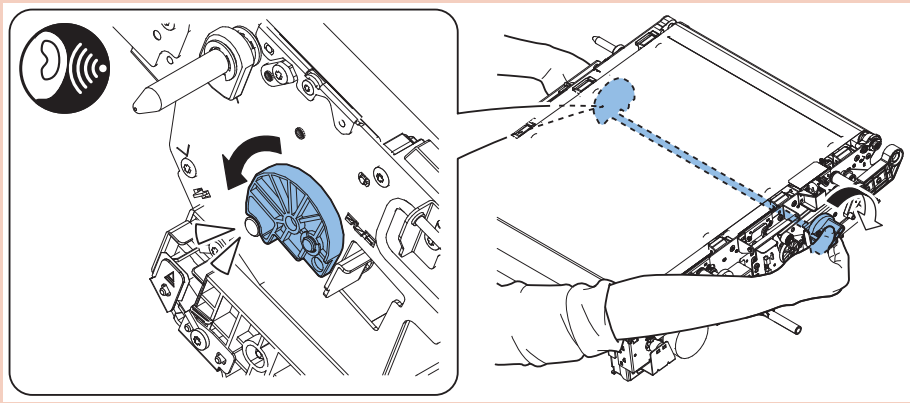


F-4-225

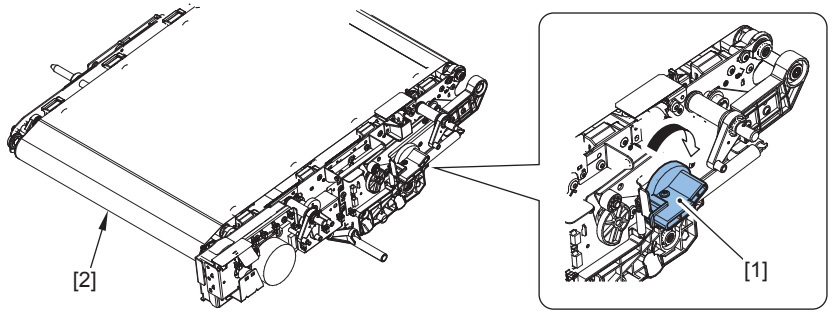
6) Turn the ITB Tension Lever [1] in the direction of the arrow to apply tension to the ITB [2].

CAUTION:

- To avoid applying tension quickly, hold the ITB Tension Lever and the Stopper Cam at the rear side with both hands and then turn them slowly.
- After applying tension to the ITB with the ITB Tension Lever, be sure to hook the Stopper Cam to the shaft at the rear side of the ITB Unit to lock it.
  At this time, be sure that a click sound is heard.



F-4-226



F-4-227

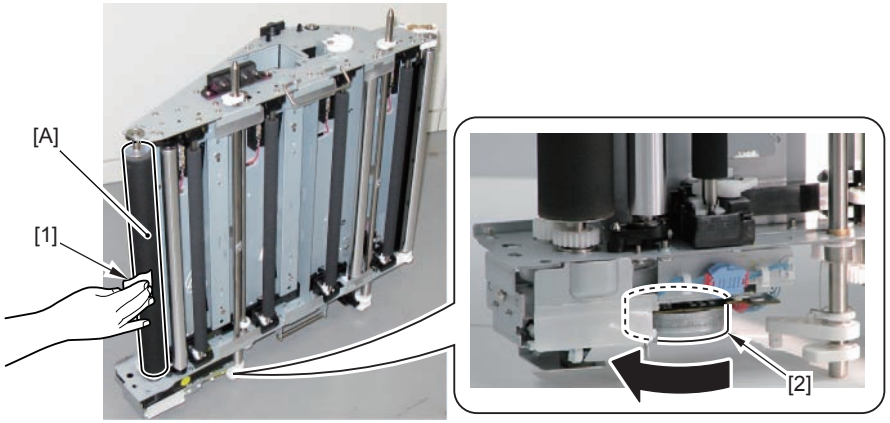
Cleaning when replacing the ITB

Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).
5) Remove the ITB Cleaning Unit (Refer to page 4-145).
6) Remove the ITB (Refer to page 4-147).

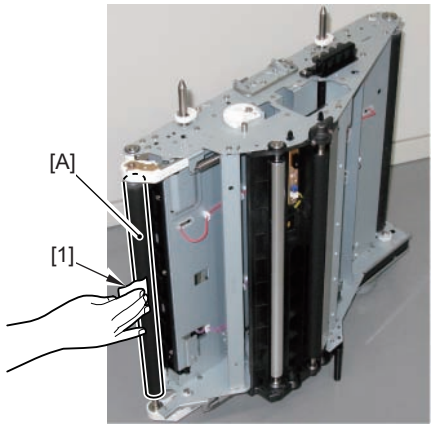
Procedure

1) While rotating the Drive Motor [2] in the direction of the arrow, clean the whole circumference [A] of the surface of the Drive Roller with lint-free paper [1] moistened with alcohol.



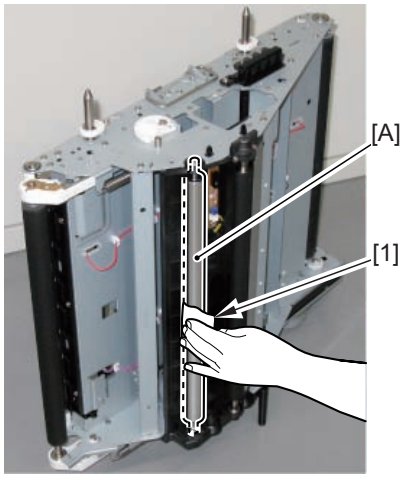
F-4-228

2) Clean the whole circumference [A] of the surface of the ITB Steering Roller with lint-free paper [1] moistened with alcohol.



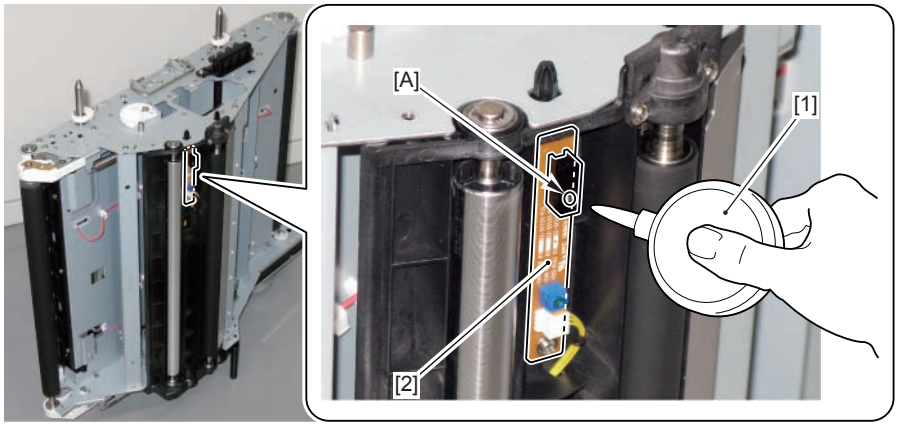
F-4-229

3) Clean the whole circumference [A] of the surface of the Pre-secondary Transfer Idler Roller with lint-free paper [1] moistened with alcohol.



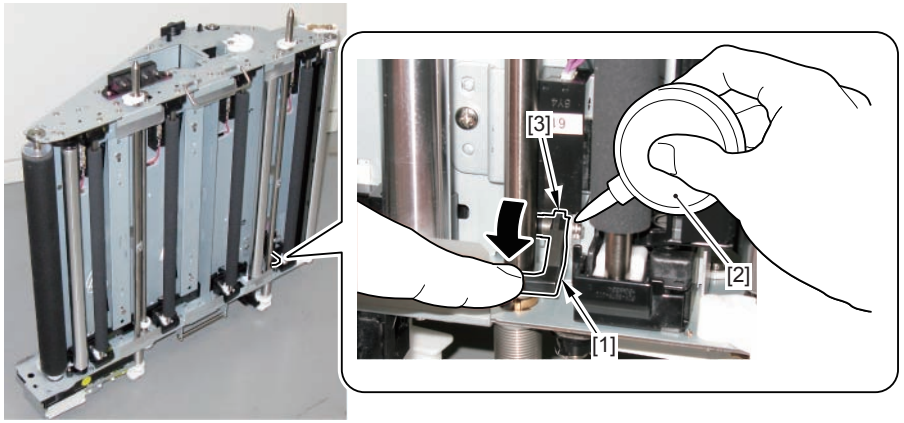
F-4-230

4) Clean the soiling adhered at the hole [A] of the HP Sensor PCB [2] with a blower [1].



F-4-231

5) While pushing down the Flag [1], clean the soiling adhered at the Edge Sensor [3] with a blower [2].



F-4-232

Removing the Primary Transfer Roller

Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).
5) Remove the ITB Cleaning Unit (Refer to page 4-145).
6) Remove the ITB (Refer to page 4-147).

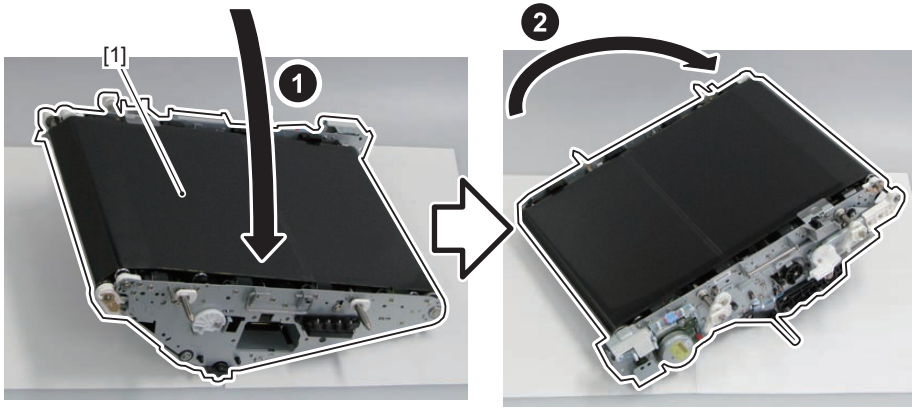
Procedure

CAUTION:

- When replacing this part, execute the actions to be taken When Replacing the Primary Transfer Roller.
- Be sure not to touch the surface of the roller when disassembling/assembling.

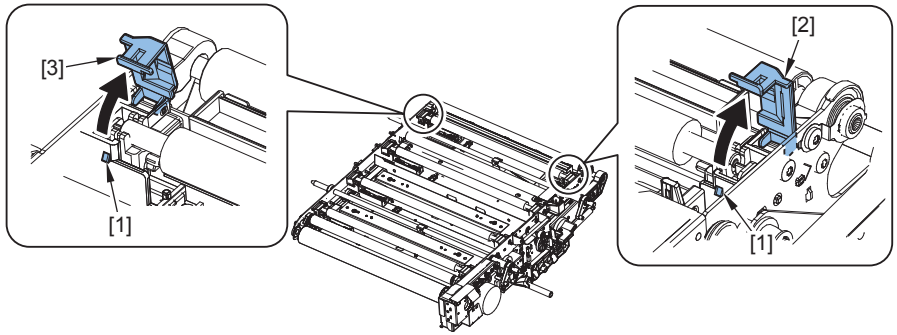
NOTE:
This procedure indicates the location of the Primary Transfer Roller (Bk).
Be sure to perform the same procedure for the Primary Transfer Roller (Y), (M), and (C).

1) Place the ITB Unit [1] sideways to change its orientation.



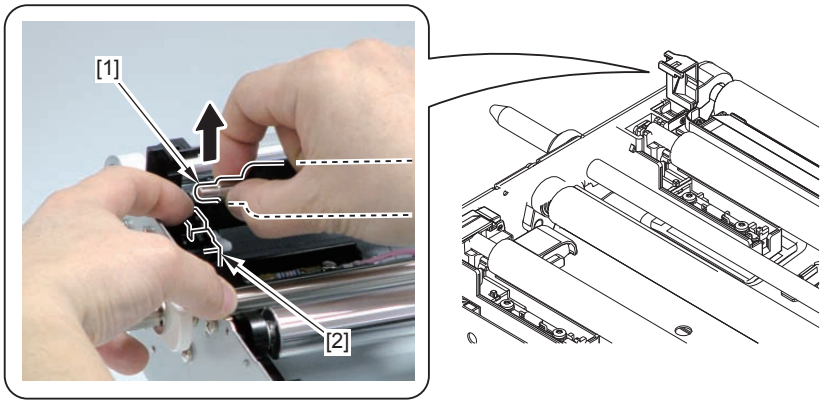
F-4-233

2) Open the Shaft Support Cover (Front) [2] and the Shaft Support Cover (Rear) [3] by releasing them from the protrusions [1].



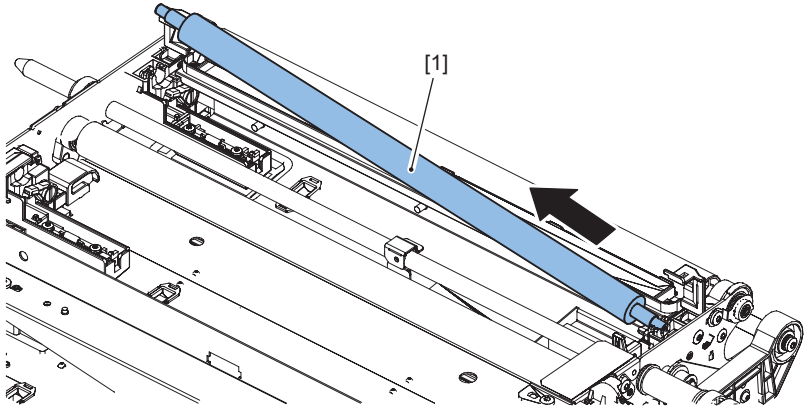
F-4-234

3) Release the rear shaft of the Primary Transfer Roller by holding the shaft [1] of the Primary Transfer Roller and pushing down the Shaft Support [2] at the rear side.



F-4-235

4) Remove the Primary Transfer Roller [1] in the direction of the arrow.

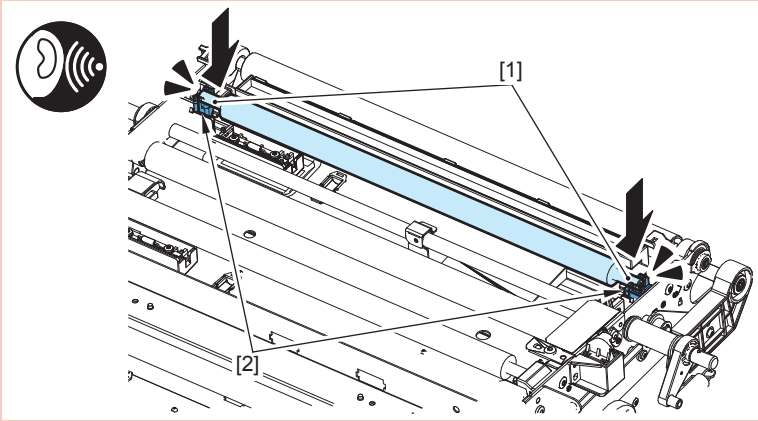


F-4-236

CAUTION:

Be sure to push the shafts [1] at front and rear sides of the Primary Transfer Roller into the Shaft Support [2] from above.

If no click sound is heard at this time, reinstall the roller.



F-4-237

When Replacing the Primary Transfer Roller

Procedure

1) Execute the primary transfer ATVC.
(COPIER > FUNCTION > MISC-P > 1ATVC-EX)

Removing the Secondary Transfer Inner Roller

Preparation

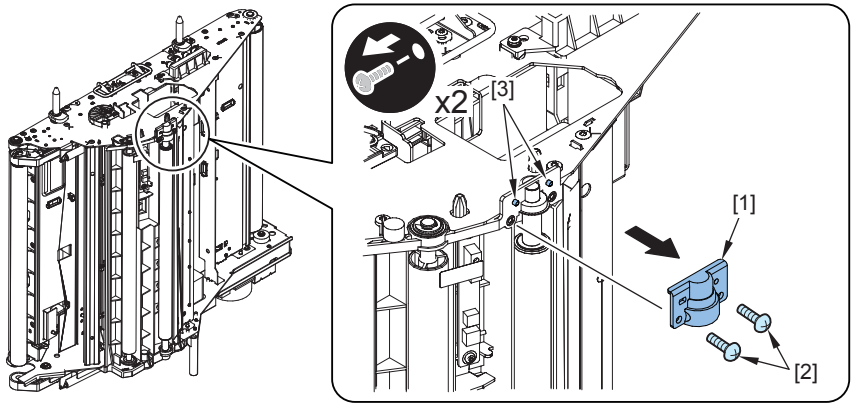
1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).
5) Remove the ITB Cleaning Unit (Refer to page 4-145).
6) Remove the ITB (Refer to page 4-147).

Procedure

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling.

1) Remove the Bearing Cover [1].
- 2 Screws [2]
- 2 Bosses [3]

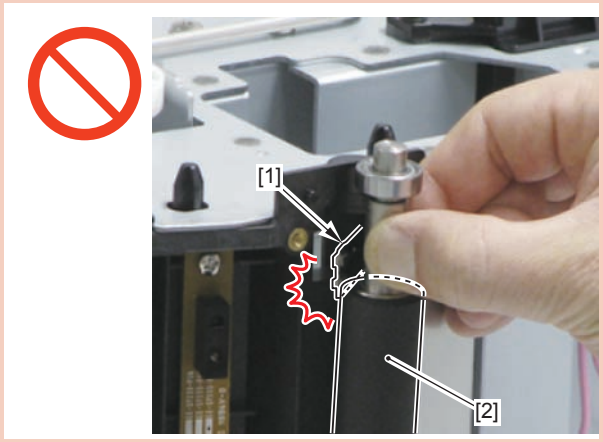


F-4-238

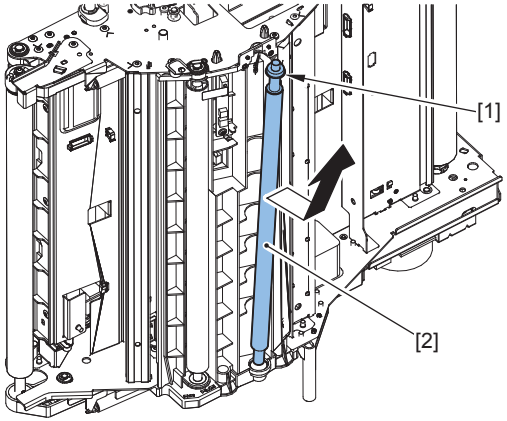
2) Remove the bearing [1] and the Secondary Transfer Roller [2] in the direction of the arrow.

CAUTION:

- Be sure not to deform the Grounding Spring [1].
- Be sure to keep the Secondary Transfer Inner Roller [2] from coming in contact with the Grounding Spring [1] to prevent it from being damaged.

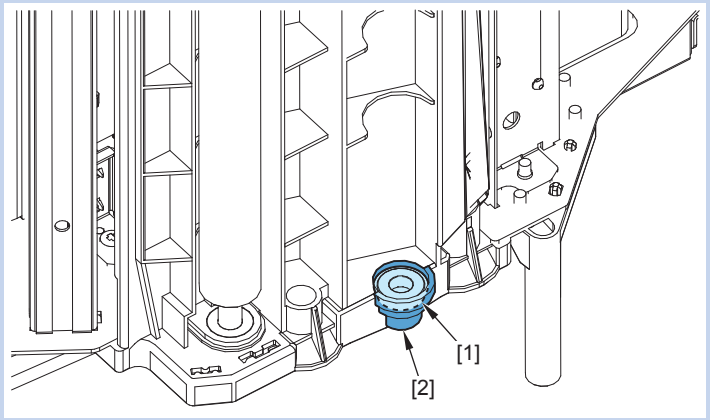


F-4-239



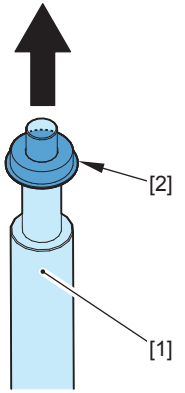
F-4-240

NOTE:
If replacement is not required, there is no need to remove the bearing [1] at the lower side.
If it is removed, place it in the Bearing Holder [2].



F-4-241

3) Remove the bearing [2] from the Secondary Transfer Inner Roller [1].



F-4-242

Removing the ITB Inner Scraper Holder

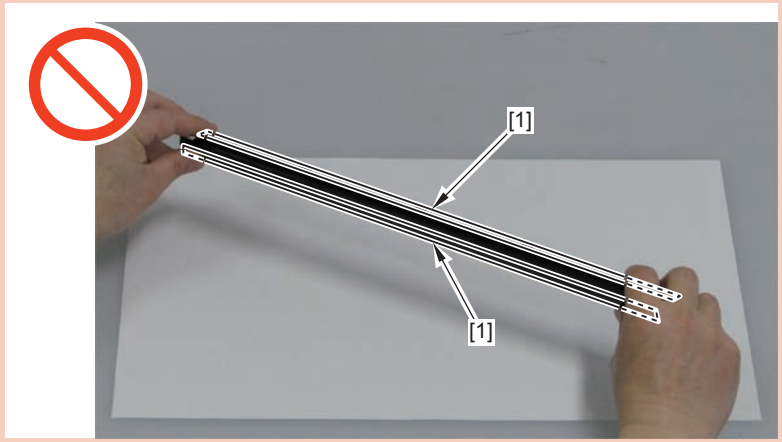
Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).
5) Remove the ITB Cleaning Unit (Refer to page 4-145).
6) Remove the ITB (Refer to page 4-147).

Procedure

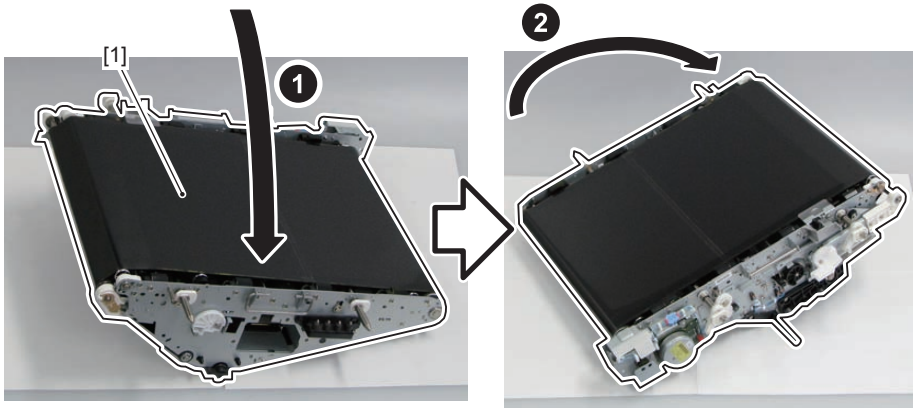
CAUTION:

Do not touch or bend the 2 sheets [1] in the ITB Inner Scraper Holder.



F-4-243

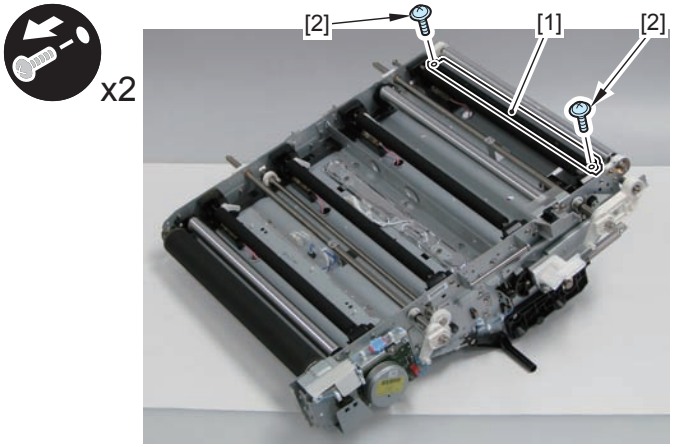
1) Place the ITB Unit [1] sideways.



F-4-244

2) Remove the ITB Inner Scraper Holder [1].

- 2 Screws [2]



F-4-245

Cleaning the ITB Inner Scraper

Preparation

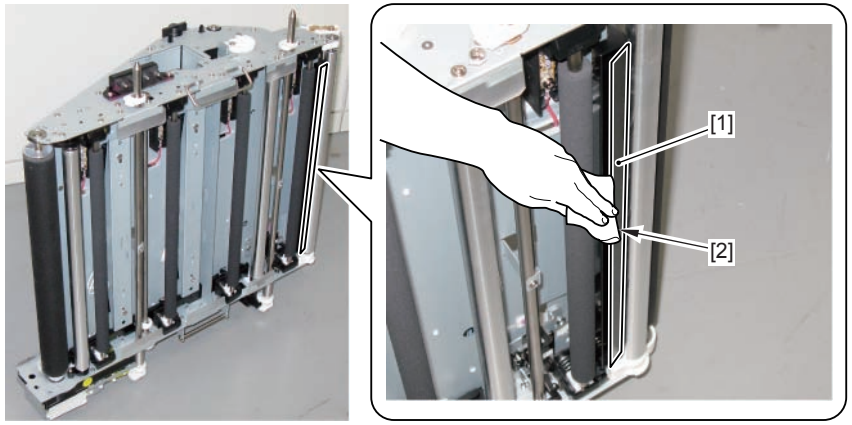
1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).
5) Remove the ITB Cleaning Unit (Refer to page 4-145).
6) Remove the ITB (Refer to page 4-147).

Procedure

CAUTION:

If the ITB Inner Scraper is soiled when the ITB is removed, be sure to perform the following procedure to clean it.

1) Clean the leading edge of the ITB Inner Scraper [2] with lint-free paper moistened with alcohol [1].



F-4-246

Removing the Drum Heater Unit

Preparation

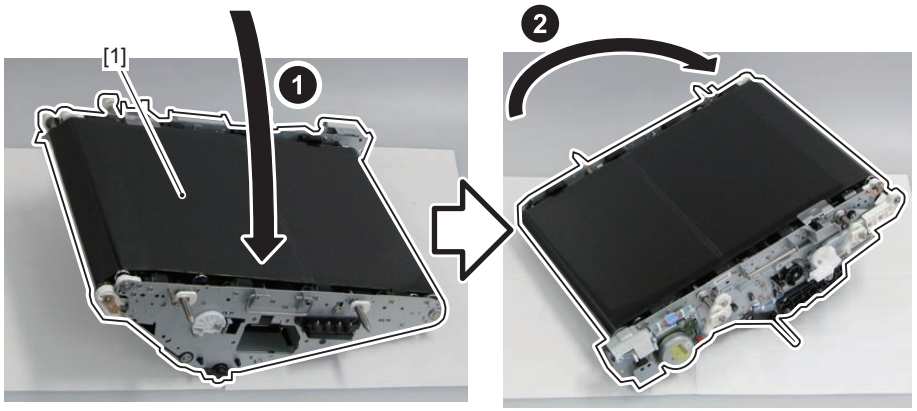
1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Remove the ITB Cleaning Blade Unit (Refer to page 4-140).
5) Remove the ITB Cleaning Unit (Refer to page 4-145).
6) Remove the ITB (Refer to page 4-147).

Procedure

CAUTION:

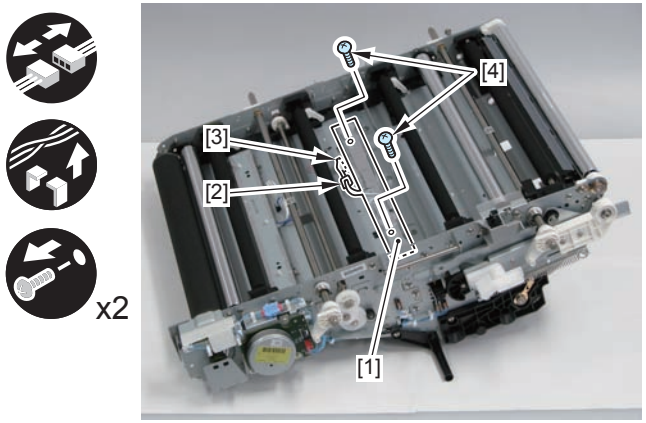
Because the Drum Heater is hot, be sure to perform disassembly/assembly after it is cooled down.

1) Place the ITB Unit [1] sideways to change its orientation.



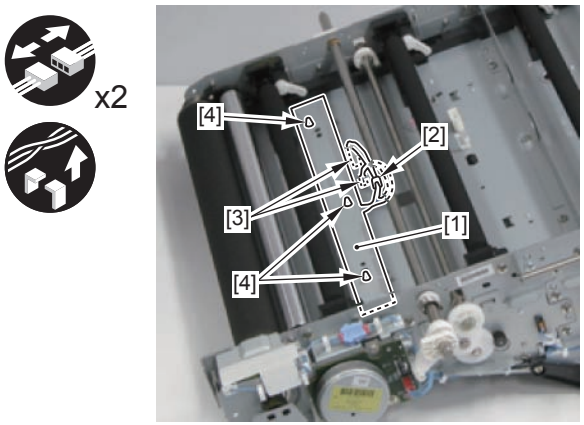
F-4-247

2) Remove the Drum Heater (M) Unit [1].
- 1 Wire Saddle [2]
- 1 Connector [3]
- 2 Screws [4]



F-4-248

3) Remove the Drum Heater (Y) Unit [1].
- 1 Wire Saddle [2]
- 2 Connectors [3]
- 3 Spacers [4]



F-4-249

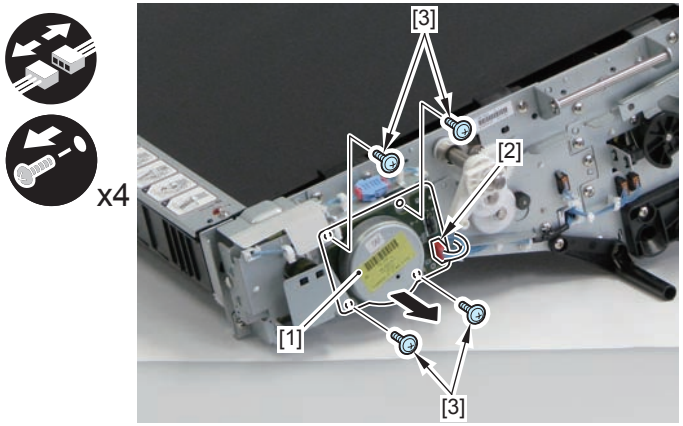
Removing the ITB Motor

Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).

Procedure

1) Remove the ITB Motor [1].
- 1 Connector [2]
- 4 Screws [3]

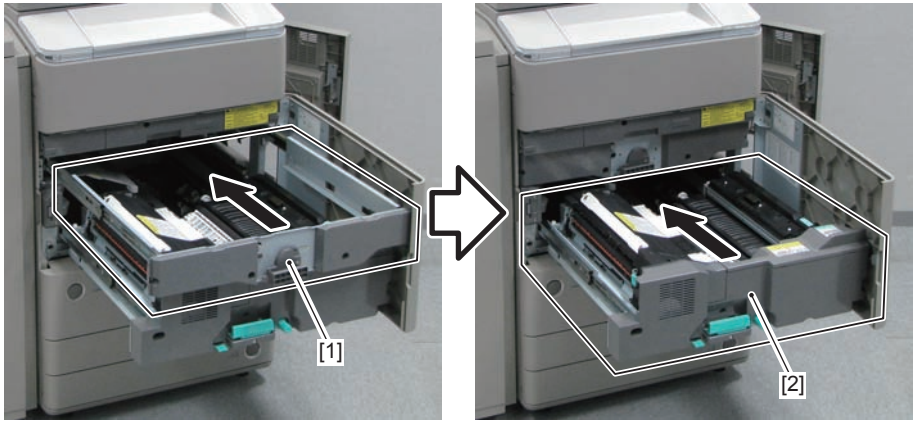


F-4-250

Removing the Patch Sensor Unit

Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Remove the Multi Unit Inner Cover (Refer to page 4-341).
3) Open the Front Cover.
4) Pull out the ITB Unit (Refer to page 4-134).
5) Remove the ITB Unit (Refer to page 4-136).
6) Put the ITB Frame [1] and the Fixing Feed Unit [2] back in the host machine.



F-4-251

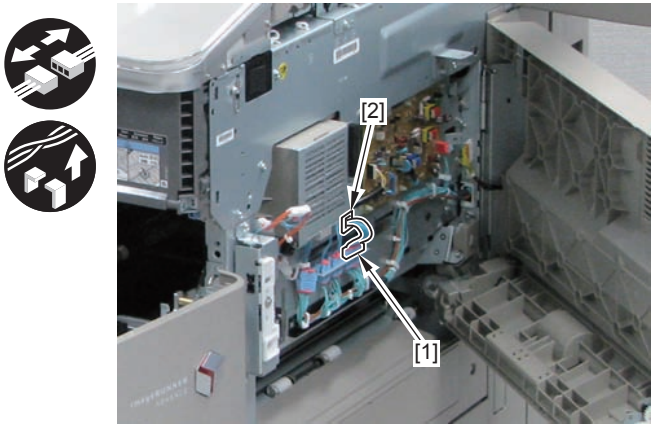
7) Remove the Upper Front Cover (Refer to page 4-339).
8) Open the Process Unit Inner Cover (Refer to page 4-131).
(Perform steps 3 through 5.)
9) Remove the Primary Charging Assembly (Refer to page 4-184).
10) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
11) Remove the Drum Unit (Bk) (Refer to page 4-214).

Procedure

CAUTION:

When replacing this part, execute the actions to be taken When Replacing the Patch Sensor Unit.

1) Disconnect the connector [1].
- 1 Edge Saddle [2]



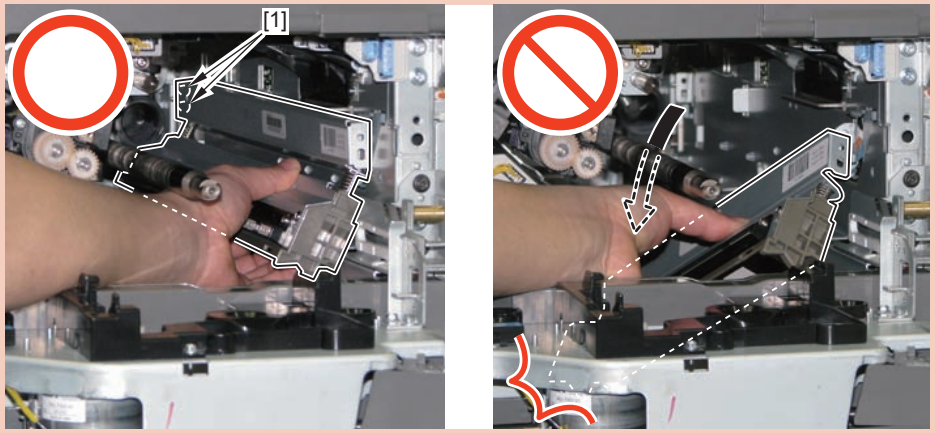
F-4-252

2) While inserting the connector [1] in the host machine, remove the Patch Sensor Unit [2].

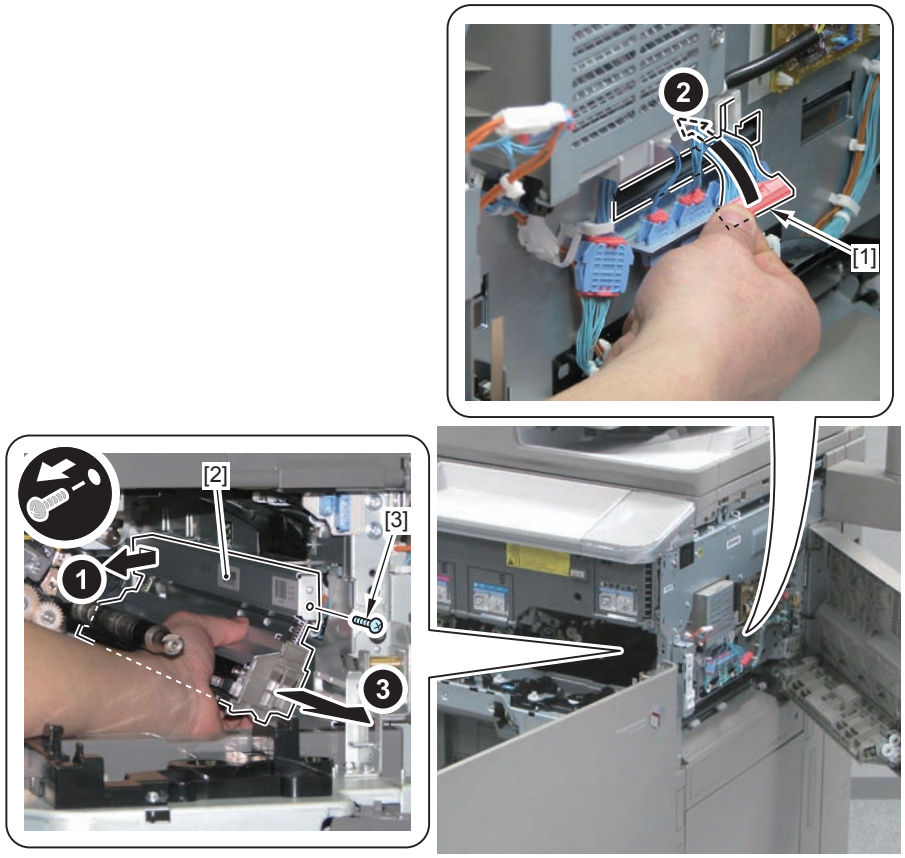
- 1 Screw [3]

CAUTION:

If the 2 Positioning Pins [1] of the rear side are removed when removing the Patch Sensor Unit, the Patch Sensor Unit may fall off inside the host machine. Therefore, firmly support the unit during the work.

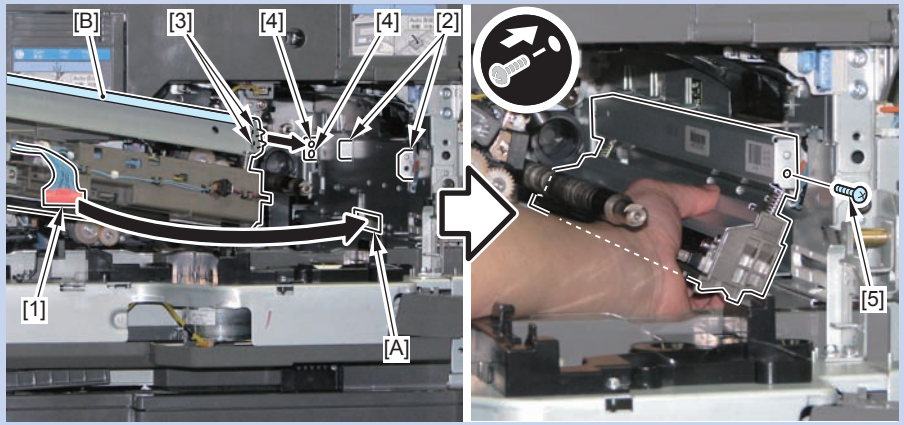


F-4-253



F-4-254

NOTE:
Patch Sensor Unit installation method
1) Pass the connector [1] through the hole [A] of the plate.
2) Hook the plate [B] of the Patch Sensor Unit to the 2 protrusions [2] of the host machine and then fit the Positioning Pins [3] of the rear side to the 2 holes [4] of the Rear Plate.
- 1 Screw [5]



F-4-255

When Replacing the Patch Sensor Unit

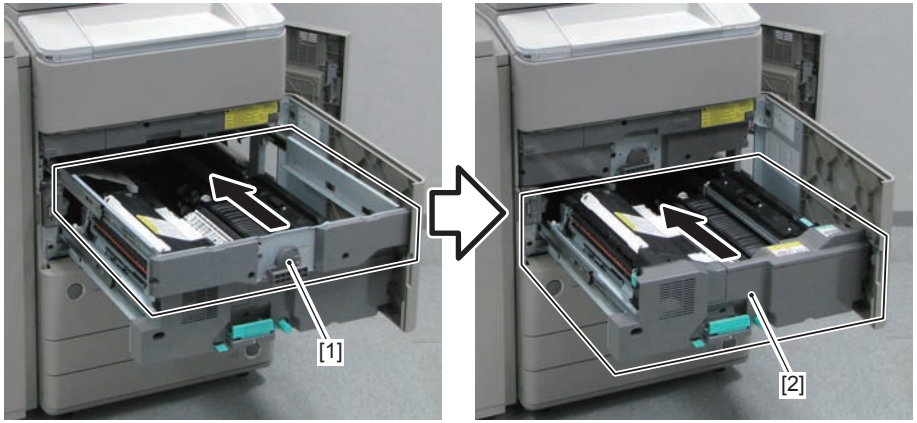
Procedure

1) Enter the alpha value of the Patch Sensor.
(COPIER > ADJUST > DENS > ALF-C)
2) Adjust the light intensity of the Patch Sensor.
(COPIER > FUNCTION > MISC-P > PT-LPADJ)

Cleaning the Patch Sensor Unit

Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Remove the Multi Unit Inner Cover (Refer to page 4-341).
3) Open the Front Cover.
4) Pull out the ITB Unit (Refer to page 4-134).
5) Remove the ITB Unit (Refer to page 4-136).
6) Put the ITB Frame [1] and the Fixing Feed Unit [2] back in the host machine.



F-4-256

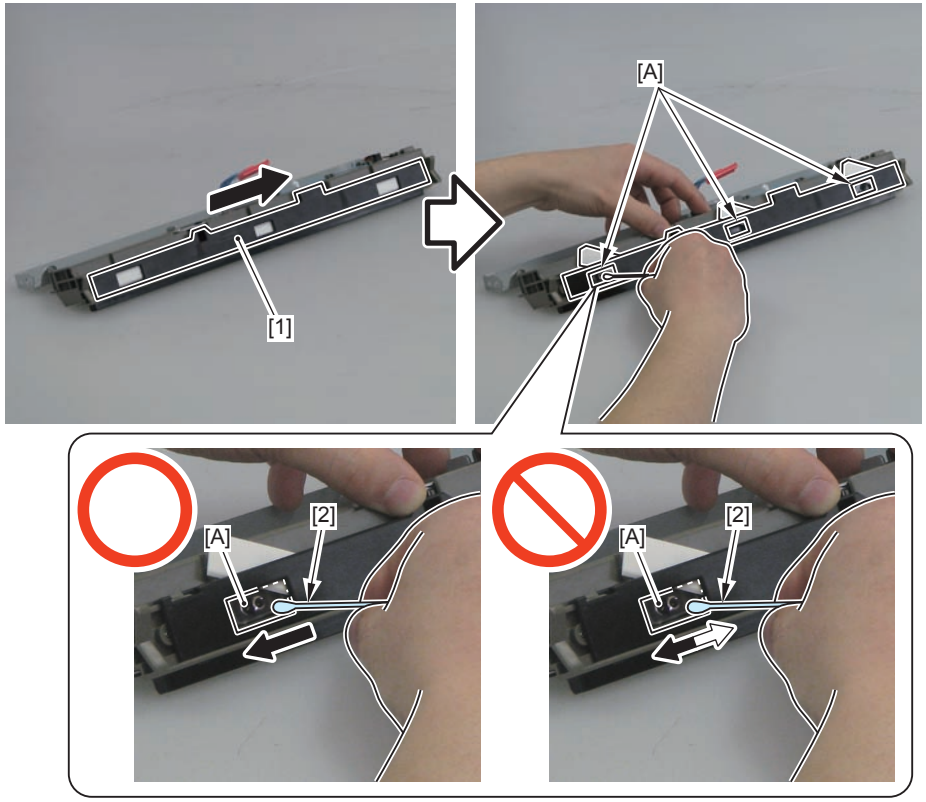
7) Remove the Upper Front Cover (Refer to page 4-339).
8) Open the Process Unit Inner Cover (Refer to page 4-131).
(Perform steps 3 through 5.)
9) Remove the Primary Charging Assembly (Refer to page 4-184).
10) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
11) Remove the Drum Unit (Bk) (Refer to page 4-214).
12) Remove the Patch Sensor Unit (Refer to page 4-164).

Procedure

1) Open the Shutter [1] and clean the surface [A] of the Patch Sensor with tightly-wrung cotton swab [2] moistened with water in the single direction.
After cleaning, check that there is no soiling caused by toner on the surface [A] of the sensor.

CAUTION:

- Do not use alcohol because it causes melting and clouding of the sensor window.
- Do not dry wipe the sensor window because it is charged to attract toner.



F-4-257

Removing the Secondary Transfer Outer Unit

Preparation

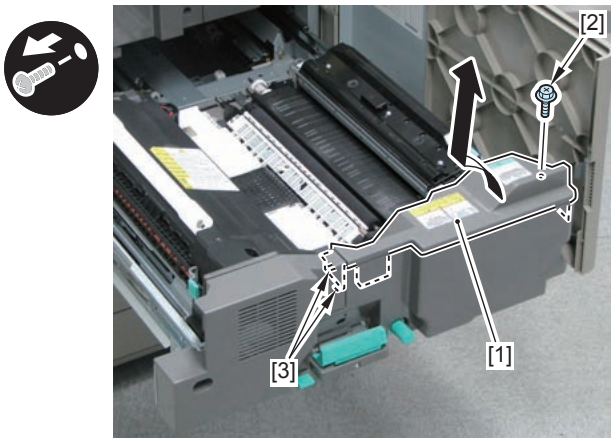
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).

Procedure

CAUTION:

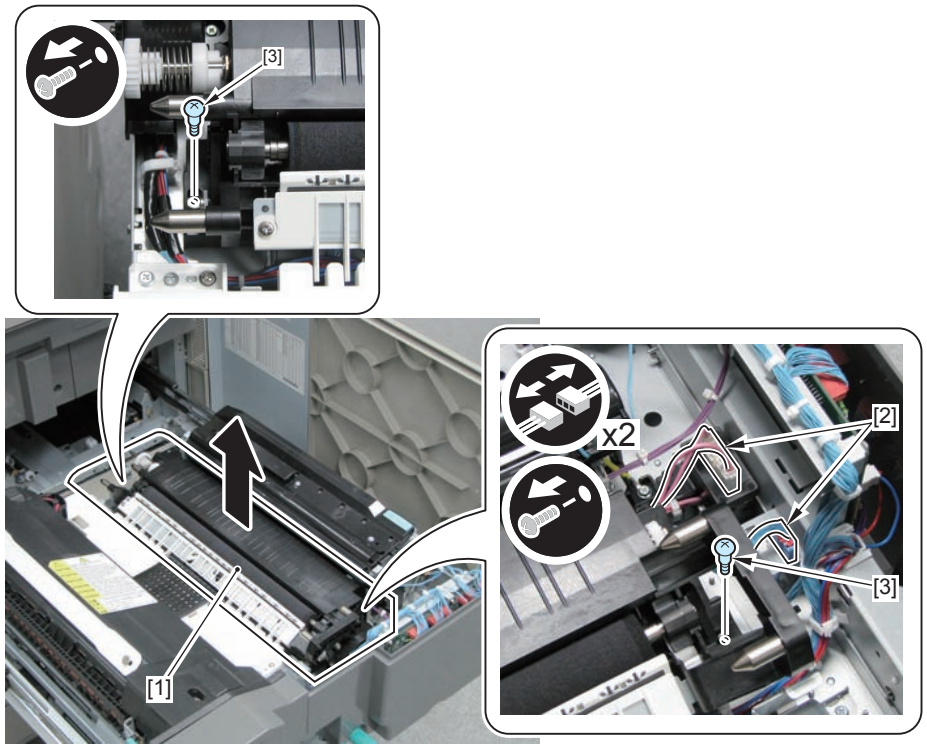
Be sure not to touch the surface of the Secondary Transfer Outer Roller when disassembling/assembling.

1) Remove the Fixing Feed Right Upper Inner Cover [1].
- 1 Screw [2]
- 2 Hooks [3]



F-4-258

2) Lift the Secondary Transfer Outer Unit [1] vertically to remove it.
- 2 Connectors [2]
- 2 Stepped Screws [3]



F-4-259

CAUTION:

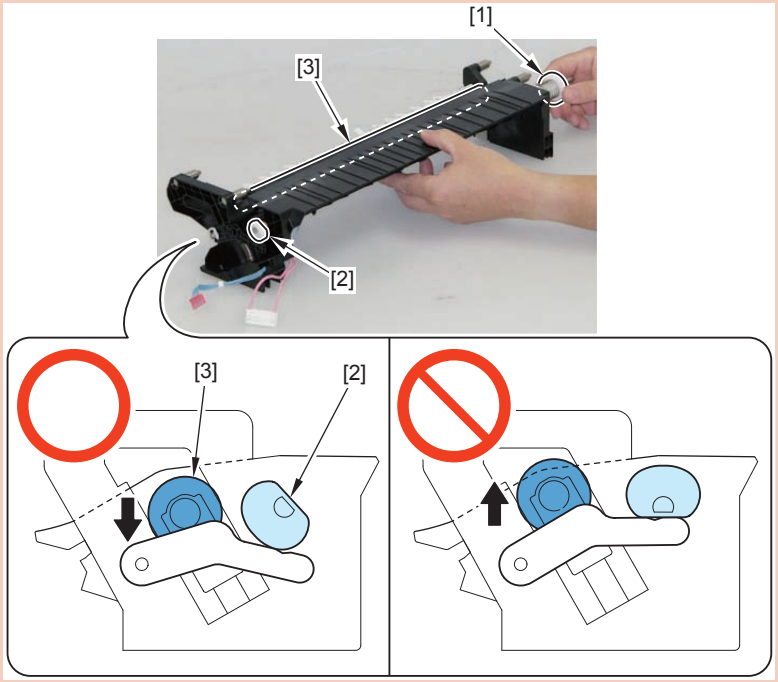
When installing the Secondary Transfer Outer Unit to the Fixing Feed Unit, be sure to do so after releasing the pressure applied on the Secondary Transfer Outer Roller.

(Otherwise, the Secondary Transfer Outer Roller may be deformed, or the ITB may be damaged.)

How to release the pressure applied on the Secondary Transfer Outer Roller

The pressure on the Secondary Transfer Outer Roller [3] can be released by turning the gear [1] and changing the direction of the cam [2].

Be sure to keep the Secondary Transfer Outer Roller lowered.



F-4-260

Removing the Secondary Transfer Static Eliminator

Preparation

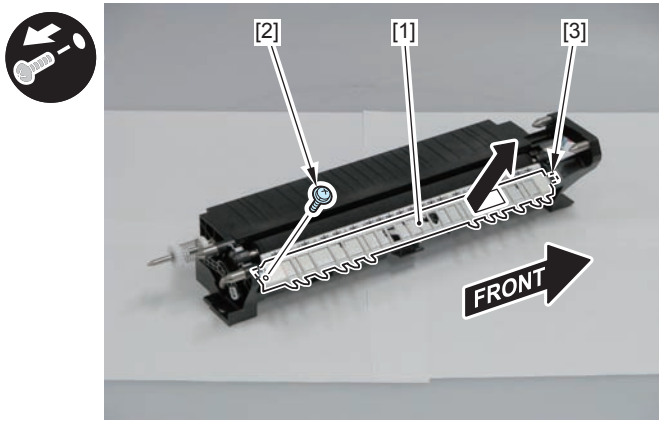
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).

Procedure

CAUTION:

Be sure not to touch the surface of the Secondary Transfer Outer Roller when disassembling/assembling.

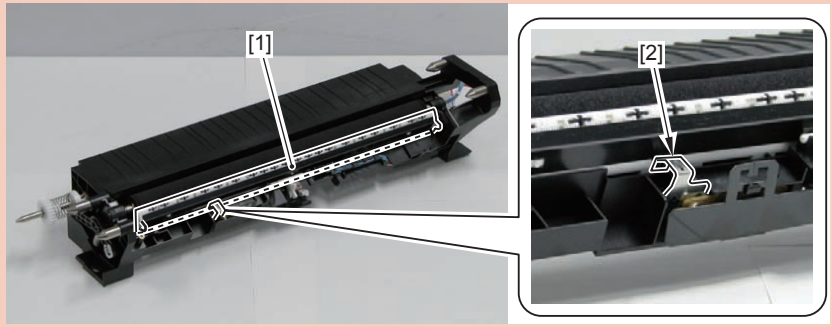
1) Remove the Secondary Transfer Guide [1].
- 1 Screw (with washer) [2]
- 1 Protrusion [3]



F-4-261

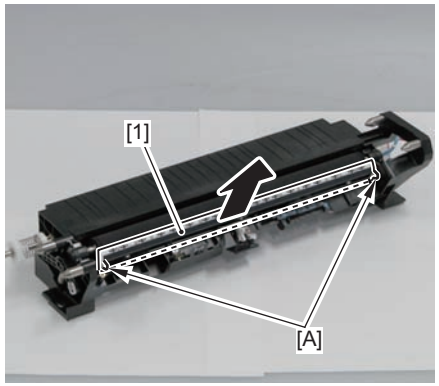
CAUTION:

- Be sure not to deform the Secondary Transfer Static Eliminator [1].
- Be sure not to deform the Grounding Spring [2].



F-4-262

2) Hold the protrusions [A] (front and rear) to remove the Secondary Transfer Static Eliminator [1].



F-4-263

Removing the Secondary Transfer Outer Roller

Preparation

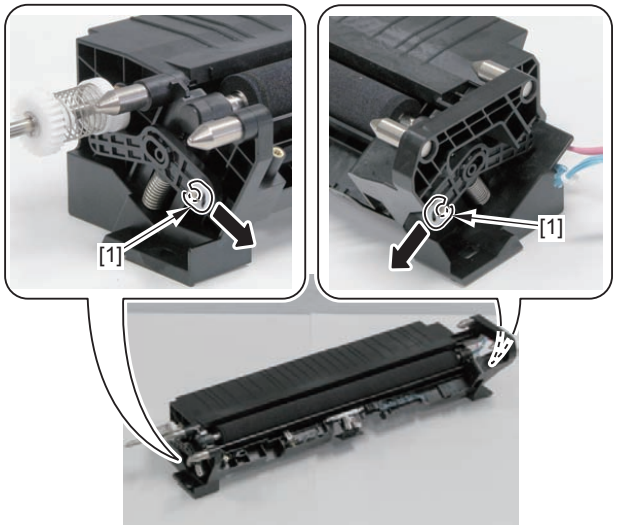
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).
4) Remove the Secondary Transfer Static Eliminator (Refer to page 4-169).

Procedure

CAUTION:

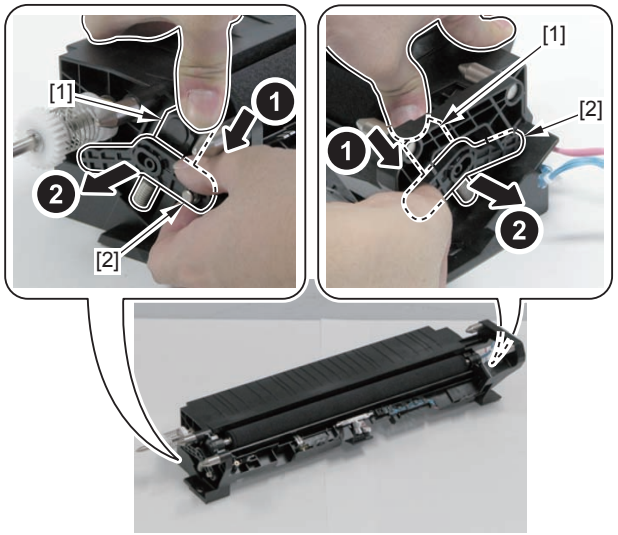
- If the Secondary Transfer Outer Roller is soiled when replacing it, Cleaning the Secondary Transfer Outer Unit and Cleaning the Secondary Transfer Static Eliminator Unit.
- Be sure not to touch the surface of the roller when disassembling/assembling.

1) Remove the 2 E-rings [1] at the front and rear sides.



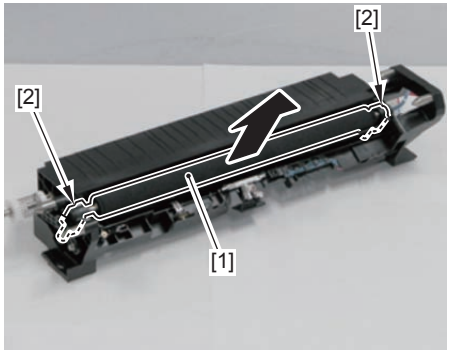
F-4-264

2) While pressing the Secondary Transfer Holder [1], remove the 2 arms [2] one by one.



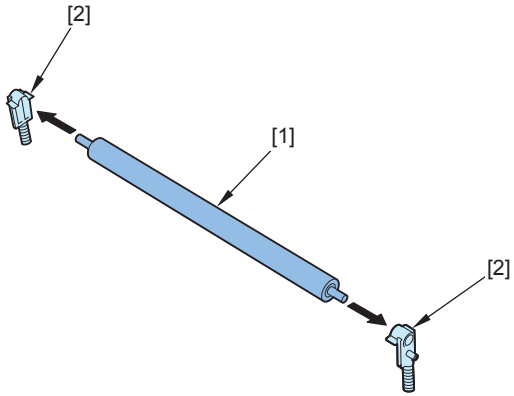
F-4-265

3) Remove the Secondary Transfer Outer Roller [1] and the 2 Secondary Transfer Holders (with springs) [2].



F-4-266

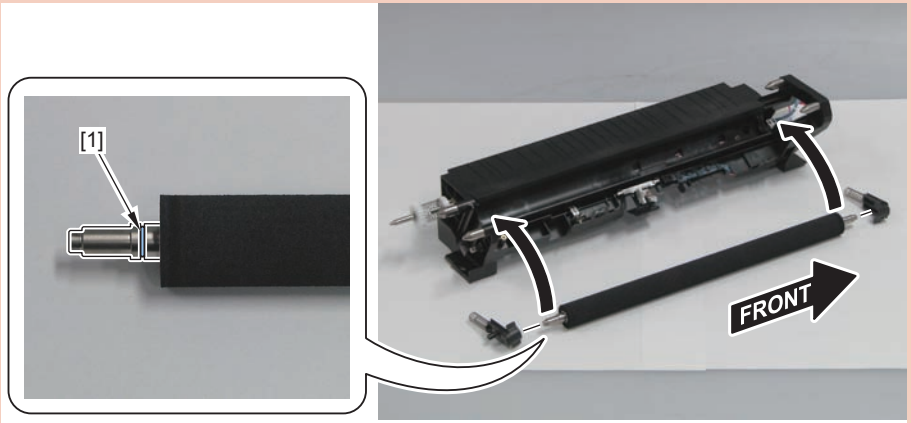
4) Remove the 2 Secondary Transfer Holders (with springs) [2] from the Secondary Transfer Outer Roller [1].



F-4-267

CAUTION:

When assembling, be sure to install with the groove [1] of the Secondary Transfer Outer Roller facing the rear side of the Secondary Transfer Outer Unit.



F-4-268

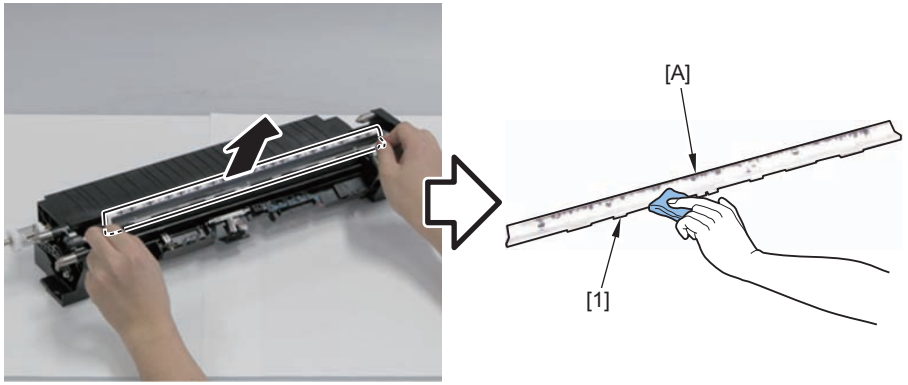
Cleaning the Secondary Transfer Static Eliminator Unit

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).
4) Remove the Secondary Transfer Static Eliminator (Refer to page 4-169).

Procedure

1) Clean paper dust accumulated at the back side [A] of the Secondary Transfer Static Eliminator Unit with dry lint-free paper [1].



F-4-269

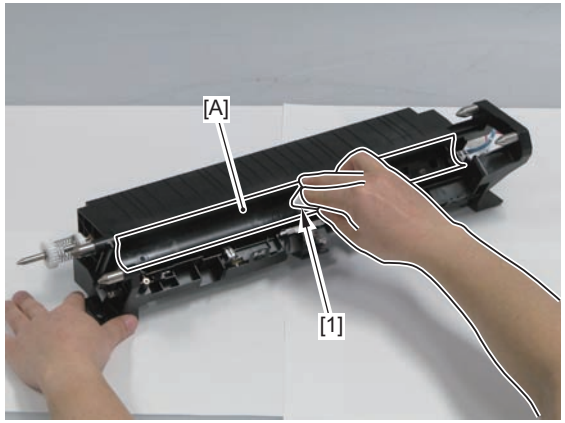
Cleaning the Secondary Transfer Outer Unit

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).
4) Remove the Secondary Transfer Static Eliminator (Refer to page 4-169).
5) Remove the Secondary Transfer Outer Roller (Refer to page 4-170).

Procedure

1) Clean paper dust accumulated at the groove [A] of the Secondary Transfer Outer Unit with dry lint-free paper [1].

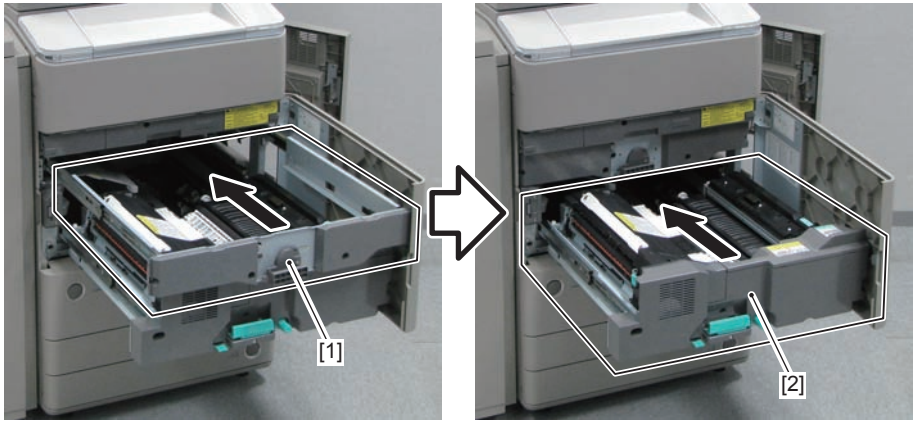


F-4-270

Removing the Primary Charging Rail

Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Remove the Multi Unit Inner Cover (Refer to page 4-341).
3) Open the Front Cover.
4) Pull out the ITB Unit (Refer to page 4-134).
5) Remove the ITB Unit (Refer to page 4-136).
6) Put the ITB Frame [1] and the Fixing Feed Unit [2] back in the host machine.

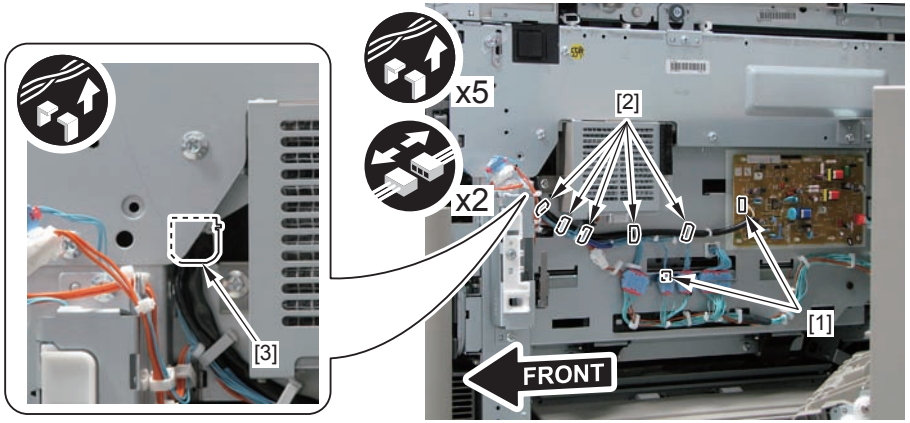


F-4-271

7) Remove the Upper Front Cover (Refer to page 4-339).
8) Open the Process Unit Inner Cover (Refer to page 4-131).
(Perform steps 3 through 5.)
9) Remove the Primary Charging Assembly (Refer to page 4-184).
10) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
11) Remove the Developing Assembly (Bk) (Refer to page 4-232).
12) Remove the Drum Unit (Bk) (Refer to page 4-214).

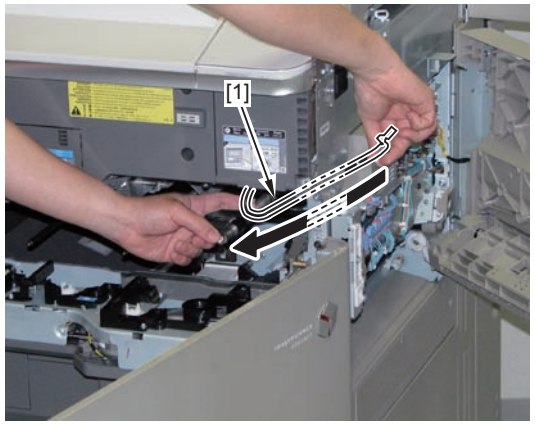
Procedure

1) Disconnect the 2 connectors [1].
- 5 Wire Saddles [2]
- 1 Edge Saddle [3]



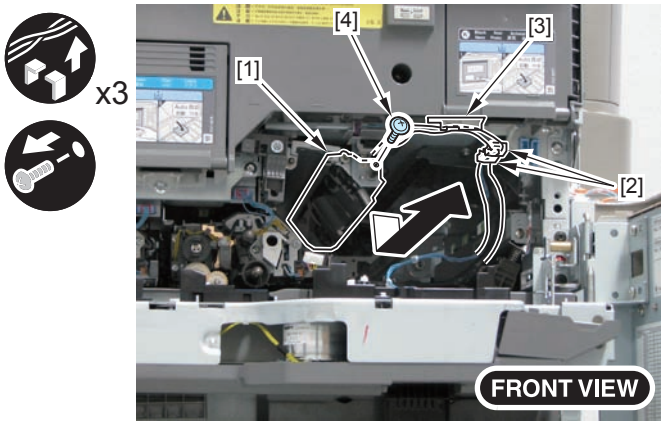
F-4-272

2) Put the removed harness [1] inside the host machine.



F-4-273

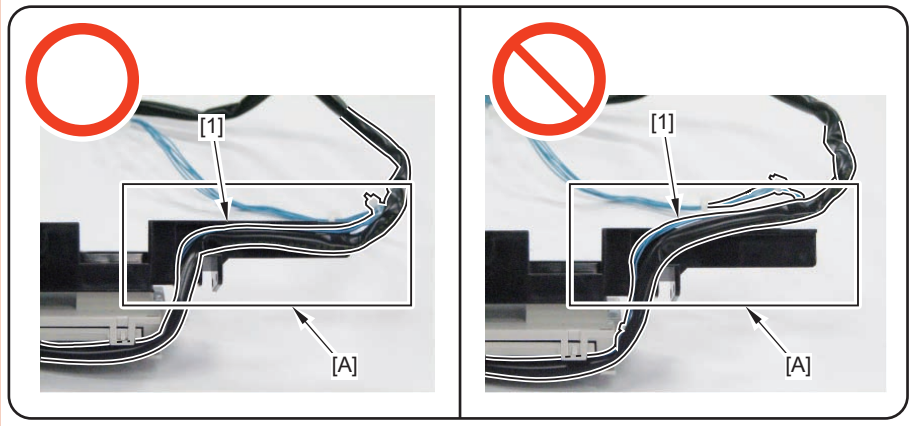
3) Remove the Primary Charging Rail [1].
- 2 Wire Saddles [2]
- 1 Harness Guide [3]
- 1 Screw [4]



F-4-274

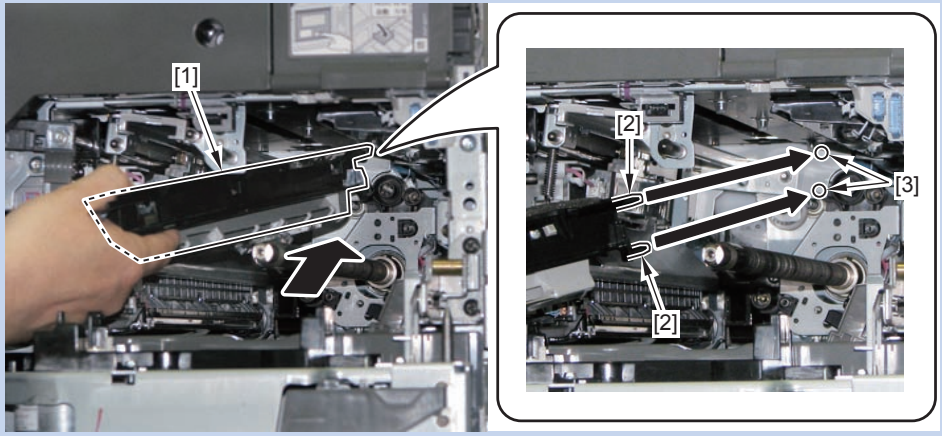
CAUTION:

Install the wiring [1] of the Potential Control PCB Unit along the Harness Guide [A] of the Primary Charging Rail.



F-4-275

NOTE:
When installing, insert the Primary Charging Rail [1] at the angle as shown in the figure, and then insert the 2 bosses [2] in the boss holes [3] of the host machine.

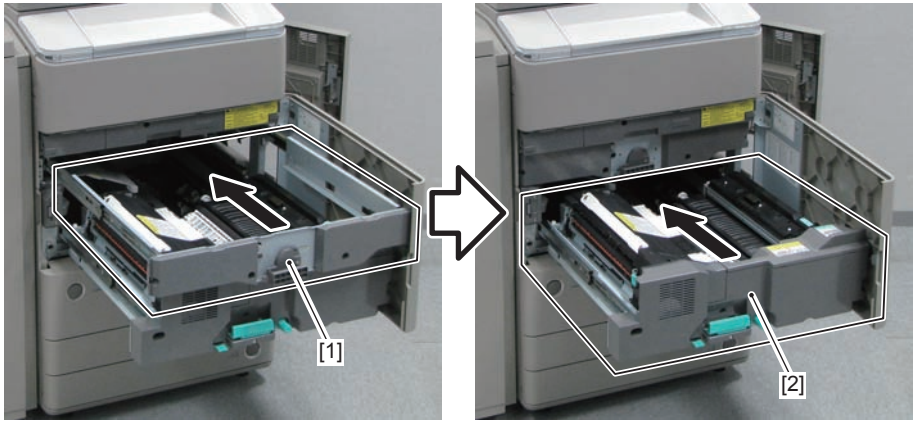


F-4-276

Removing the Drum Thermopile

Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Remove the Multi Unit Inner Cover (Refer to page 4-341).
3) Open the Front Cover.
4) Pull out the ITB Unit (Refer to page 4-134).
5) Remove the ITB Unit (Refer to page 4-136).
6) Put the ITB Frame [1] and the Fixing Feed Unit [2] back in the host machine.

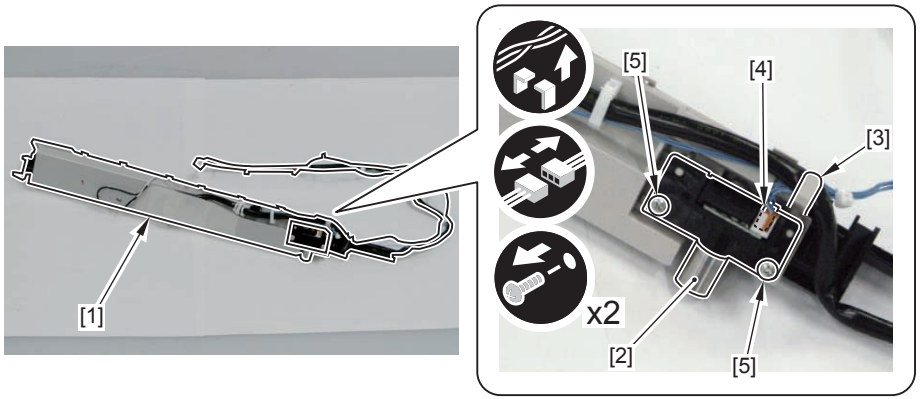


F-4-277

7) Remove the Upper Front Cover (Refer to page 4-339).
8) Open the Process Unit Inner Cover (Refer to page 4-131).
(Perform steps 3 through 5.)
9) Remove the Primary Charging Assembly (Refer to page 4-184).
10) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
11) Remove the Developing Assembly (Bk) (Refer to page 4-232).
12) Remove the Drum Unit (Bk) (Refer to page 4-214).
13) Remove the Primary Charging Rail (Refer to page 4-173).

Procedure

1) Remove the Drum Thermopile [2] from the Primary Charging Rail [1].
- 1 Guide [3]
- 1 Connector [4]
- 2 Screws [5]

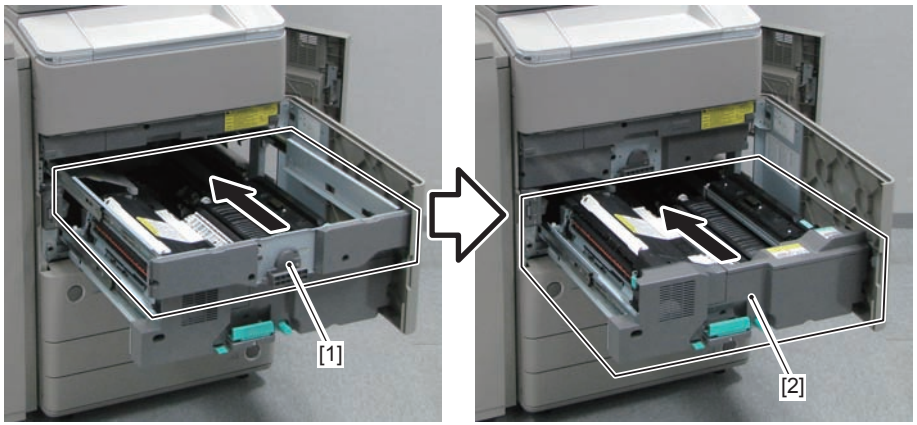


F-4-278

Removing the Potential Control PCB Unit (including Potential Sensor and Potential Control PCB)

Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Remove the Multi Unit Inner Cover (Refer to page 4-341).
3) Open the Front Cover.
4) Pull out the ITB Unit (Refer to page 4-134).
5) Remove the ITB Unit (Refer to page 4-136).
6) Put the ITB Frame [1] and the Fixing Feed Unit [2] back in the host machine.



F-4-279

7) Remove the Upper Front Cove (Refer to page 4-339)r.
8) Open the Process Unit Inner Cover (Refer to page 4-131).
(Perform steps 3 through 5.)
9) Remove the Primary Charging Assembly (Refer to page 4-184).
10) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
11) Remove the Developing Assembly (Bk) (Refer to page 4-232).
12) Remove the Drum Unit (Bk) (Refer to page 4-214).
13) Remove the Primary Charging Rail (Refer to page 4-173).

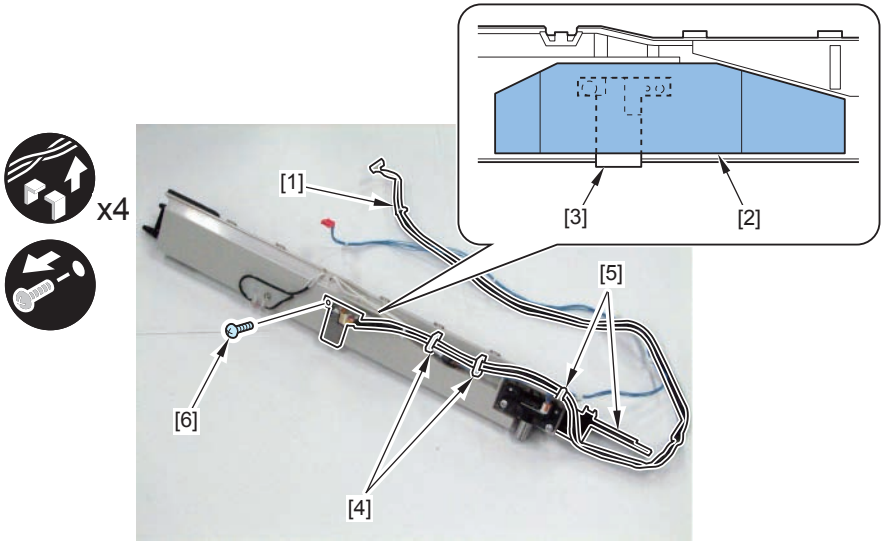
Procedure

CAUTION:

When replacing this part, execute the actions to be taken When Replacing the Potential Sensor and Potential Control PCB.

NOTE:
If the Potential Sensor is replaced, also replace the harness connected to the Potential Sensor and the Potential Control PCB as a Potential Control PCB Unit.

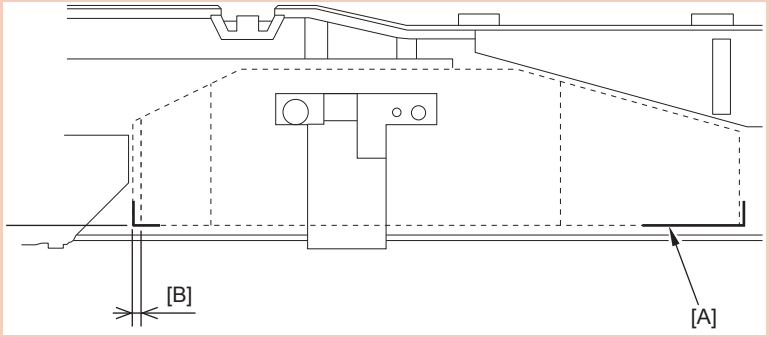
1) Remove the harness [1] connected to the Potential Sensor, Potential Sensor Protection Sheet [2], and Potential Sensor [3].
- 2 Wire Saddles [4]
- 2 Harness Guides [5]
- 1 Screw [6]



F-4-280

CAUTION:

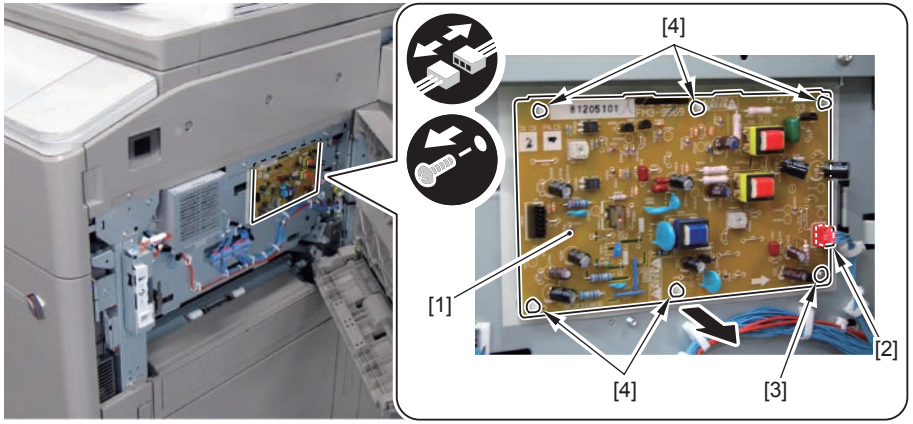
When installing, remove the release paper, and align the Potential Sensor Protection Sheet with the marking line [A] to affix it (be sure that the gap [B] between the marking line and the release paper is less than 0.5 mm).



F-4-281

2) Remove the Potential Control PCB [1].

- 1 Connector [2]
- 1 Screw [3]
- 5 PCB Supports [4]



F-4-282

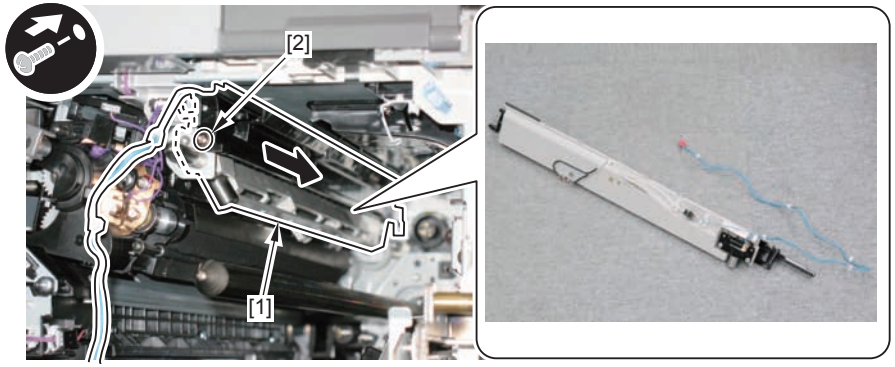
When Replacing the Potential Sensor and Potential Control PCB

Procedure

NOTE:
When replacing the Potential Sensor, replace the Potential Control PCB Unit (including the Potential Sensor, harness and Potential Control PCB).

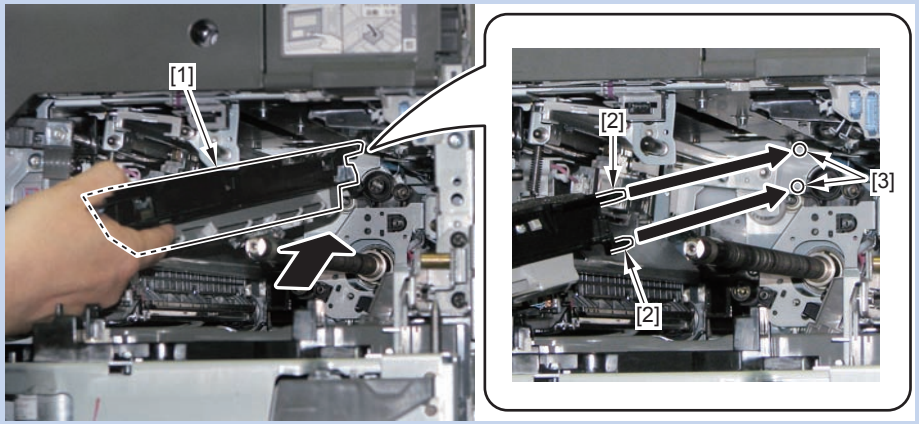
1) Install the Primary Charging Rail [1] with the Potential Sensor removed to the host machine.

- 1 Screw [2]



F-4-283

NOTE:
When installing, insert the Primary Charging Rail [1] at the angle as shown in the figure, and then insert the 2 bosses [2] in the boss holes [3] of the host machine.

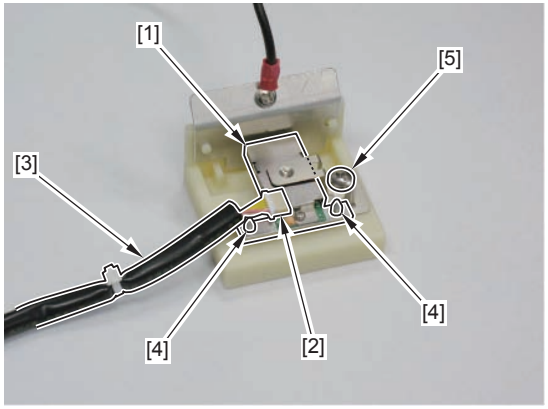


F-4-284

2) Install the ITB Unit to the host machine.
3) Connect a new cable [3] to the connector [2] of a new Potential Sensor [1].
4) Install the Potential Sensor [1] to the 2 pin electrodes [4] for checking the Potential Sensor.
- 1 Connector [2]
- 1 Screw [5]

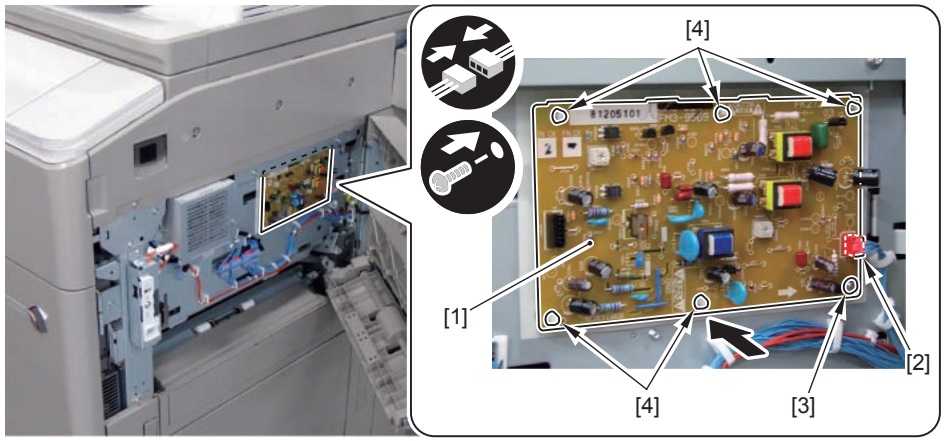
CAUTION:

Secure the screw firmly so that the Potential Sensor is not removed.



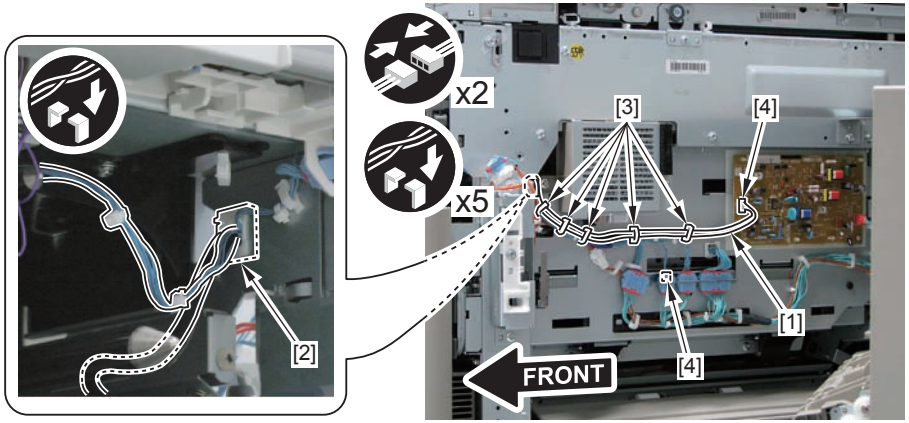
F-4-285

5) Install a new Potential Control PCB [1].
- 1 Connector [2]
- 1 Screw [3]
- 5 PCB Supports [4]



F-4-286

6) Pass the harness [1] of the Primary Charging Rail and the electrode for checking the Potential Sensor from the Edge Saddle [2] of the Right Side Plate of the host machine, and connect the 5 Wire Saddles [3] and the 2 connectors [4].

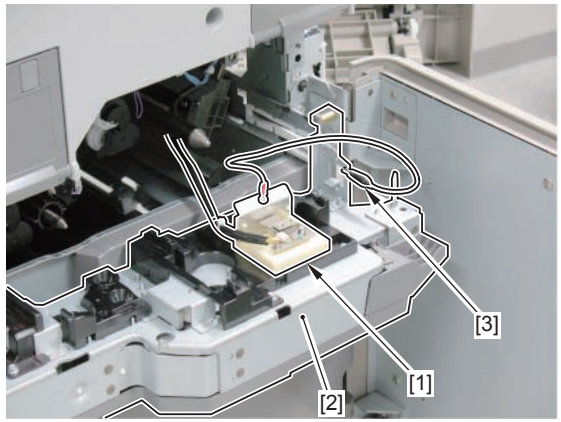


F-4-287

7) Place the electrode [1] for checking the Potential Sensor on the Process Unit Inner Cover [2], and use the Electrode Clip [3] to pinch the plate of the hinge to ground.

CAUTION:

Be careful not to drop the electrode for checking the Potential Sensor.



F-4-288

8) Close the Multi-purpose Tray Pickup Unit.

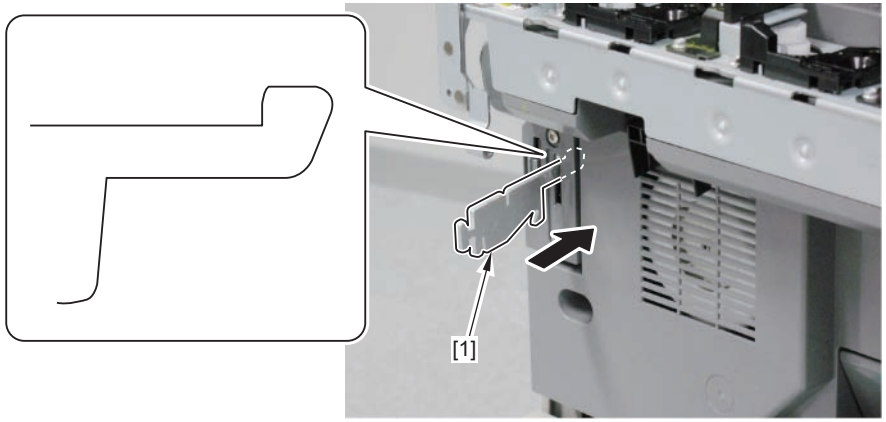
CAUTION:

Be careful not to trap the cable.

9) Turn ON the main power switch.

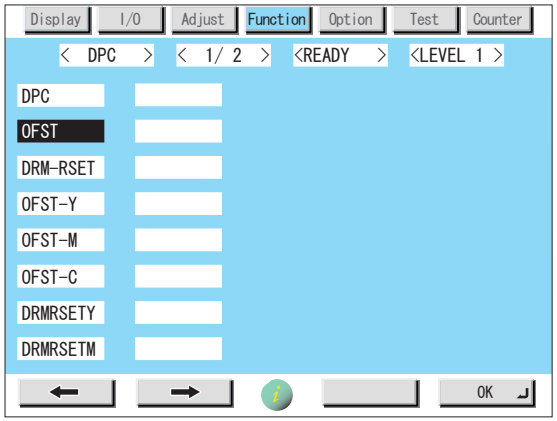
10) Disable the warm-up rotation in service mode immediately after turning ON the main power switch.
Set the service mode > COPIER > FUNCTION > INSTALL > AINR-OFF to 1.

11) Use a dedicated tool [1] to deactivate the Front Door Switch.



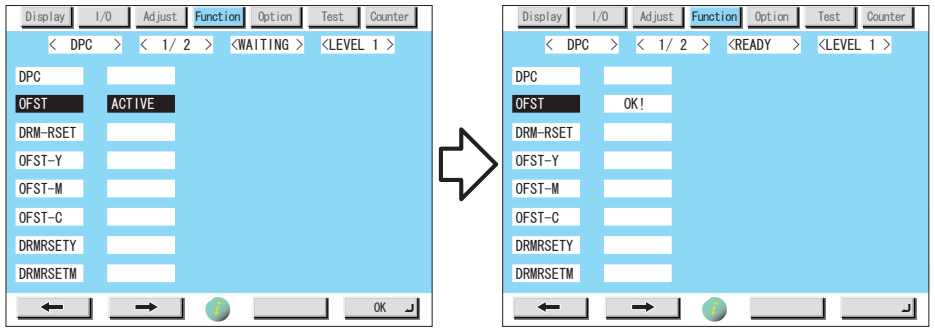
F-4-289

12) When the screen [A] displays [READY] in the service mode, adjust the Potential Sensor.
Service mode > COPIER > FUNCTION > DPC > OFST



F-4-290

13) Press [OK] on the indicator and the display changes from [ACTIVE] to [OK!].

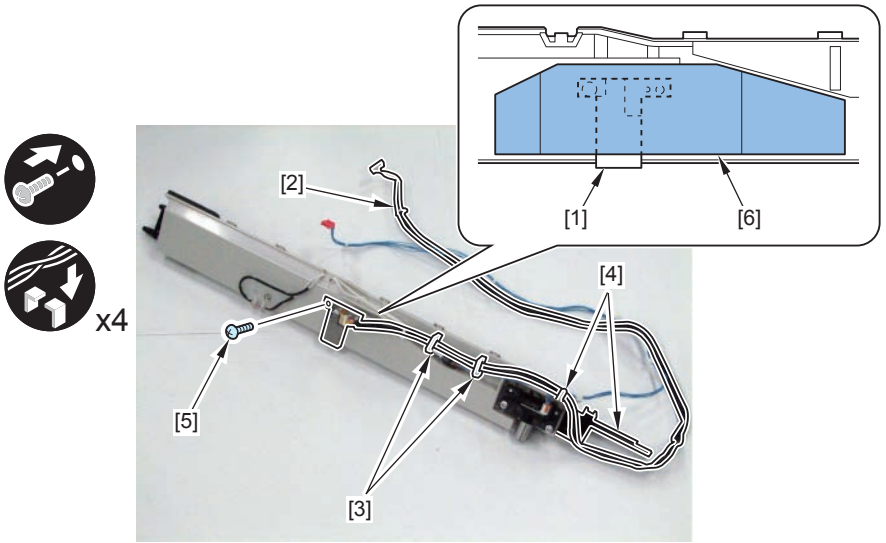


F-4-291

14) Enable the warm-up rotation in the service mode.
Set the service mode > COPIER > FUNCTION > INSTALL > AINR-OFF to 0.

15) Turn OFF the main power switch.
16) Install a new Potential Sensor [1] to the Primary Charging Rail.
- 1 Harness [2]
- 2 Wire Saddles [3]
- 2 Harness Guides [4]
- 1 Screw [5]

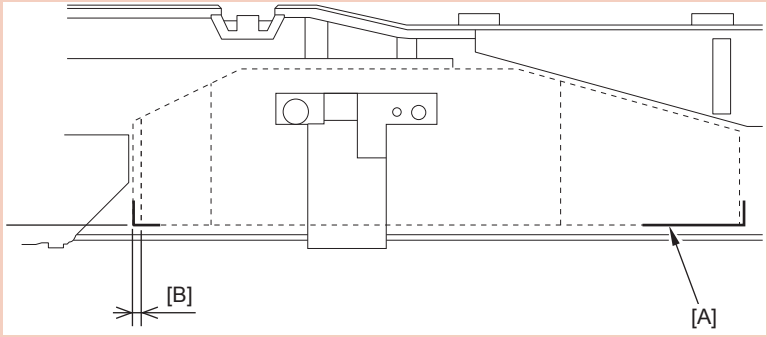
17) Install a new Potential Sensor Protection Sheet [6].



F-4-292

CAUTION:

When installing, remove the release paper, and align the Potential Sensor Protection Sheet with the marking line [A] to affix it (be sure that the gap [B] between the marking line and the release paper is less than 0.5 mm).



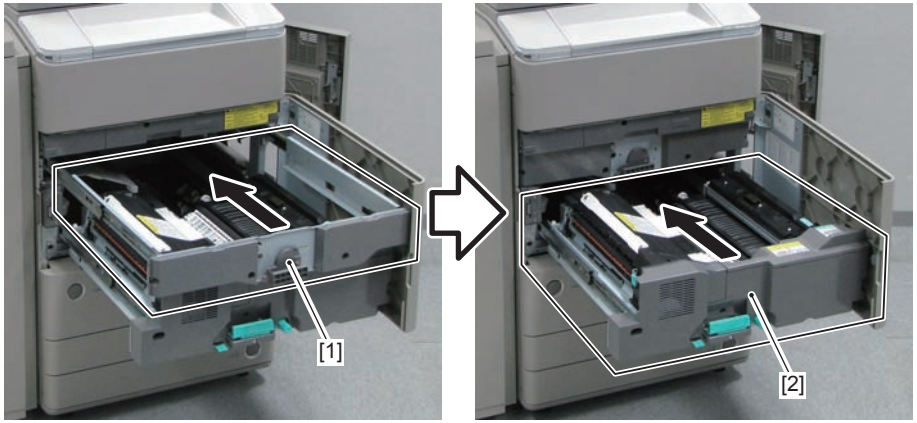
F-4-293

18) Install the Primary Charging Rail to the host machine.
19) Install the removed parts in reverse order.

Removing the Drum Thermistor

Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).
2) Remove the Multi Unit Inner Cover (Refer to page 4-341).
3) Open the Front Cover.
4) Pull out the ITB Unit (Refer to page 4-134).
5) Remove the ITB Unit (Refer to page 4-136).
6) Put the ITB Frame [1] and the Fixing Feed Unit [2] back in the host machine.

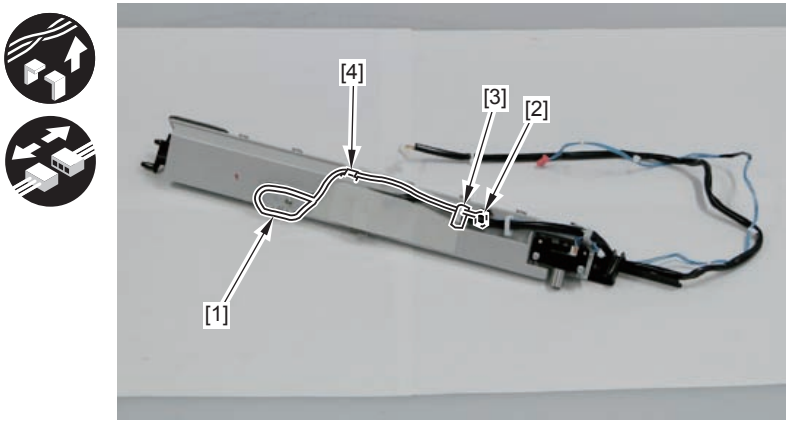


F-4-294

7) Remove the Upper Front Cover (Refer to page 4-339).
8) Open the Process Unit Inner Cover (Refer to page 4-131).
(Perform steps 3 through 5.)
9) Remove the Primary Charging Assembly (Refer to page 4-184).
10) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
11) Remove the Developing Assembly (Bk) (Refer to page 4-232).
12) Remove the Drum Unit (Bk) (Refer to page 4-214).
13) Remove the Primary Charging Rail (Refer to page 4-173).

Procedure

1) Remove the Drum Thermistor [1].
- 1 Connector [2]
- 1 Wire Saddle [3]
- 1 Harness Guide [4]

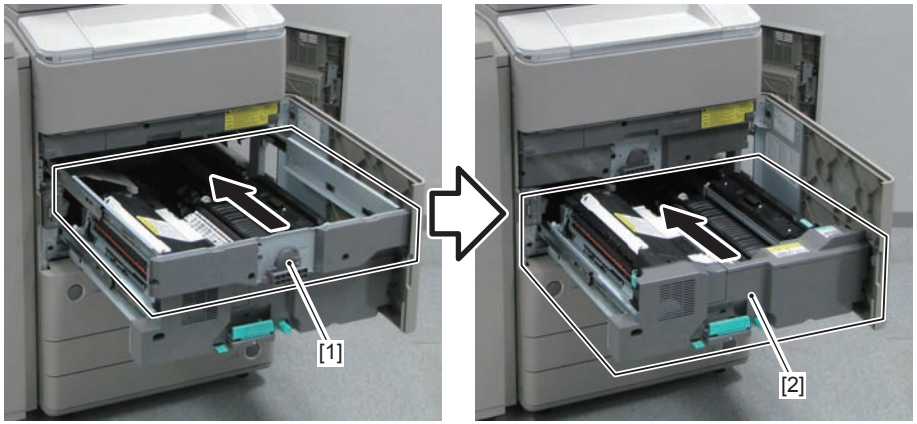


F-4-295

Removing the Developing Assembly Inner Temperature Detection PCB (Y)/(M) and (C)/(Bk)

Preparation

1) Open the Front Cover.
2) Pull out the ITB Unit (Refer to page 4-134).
3) Remove the ITB Unit (Refer to page 4-136).
4) Put the ITB Frame [1] and the Fixing Feed Unit [2] back in the host machine.

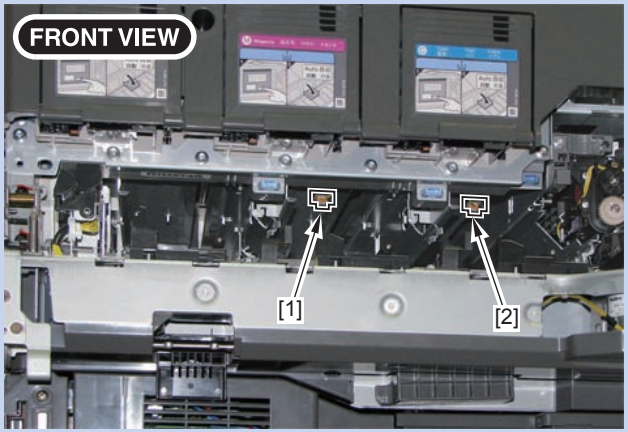


F-4-296

5) Remove the Upper Front Cover (Refer to page 4-339).
6) Open the Process Unit Inner Cover (Refer to page 4-131).
7) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).

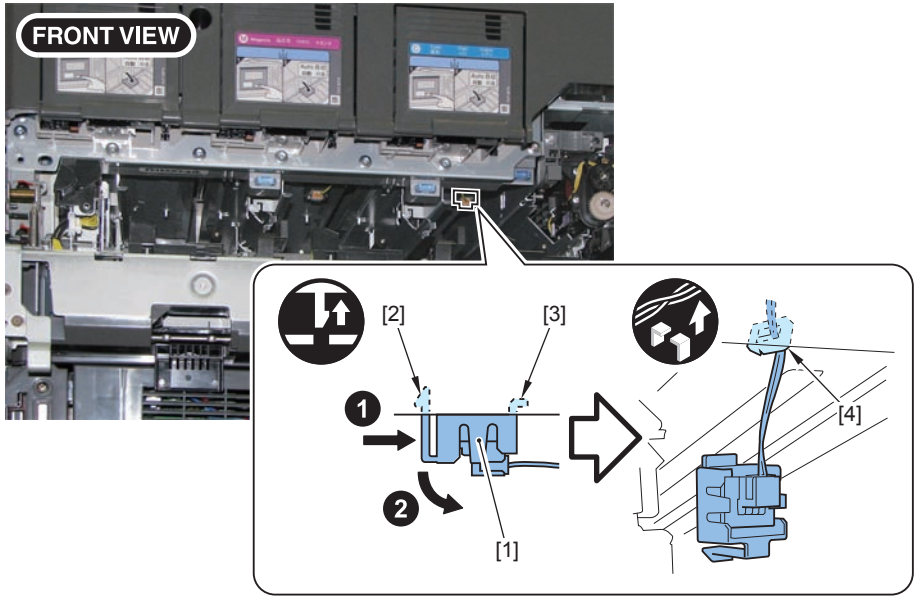
Procedure

NOTE:
The 2 Developing Assembly Inner Temperature Detection PCBs for (Y)/(M) [1] and (C)/(Bk) [2] are installed.
This procedure explains how to remove the Developing Assembly Inner Temperature Detection PCB (C)/(Bk).
Be sure to perform the same procedure to remove the Developing Assembly Inner Temperature Detection PCB (Y)/(M).



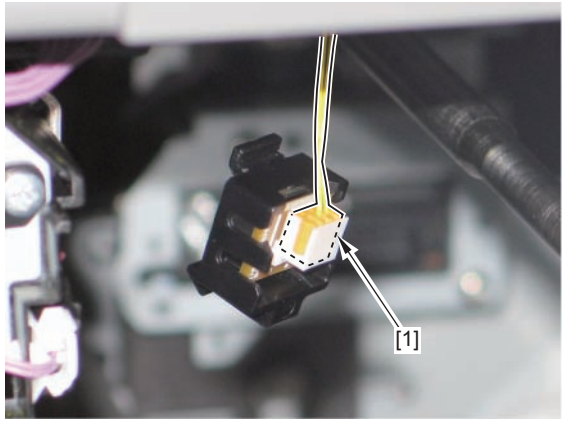
F-4-297

1) Remove the Thermistor Holder [1].
- 1 Claw [2]
- 1 Protrusion [3]
- 1 Wire Saddle [4]



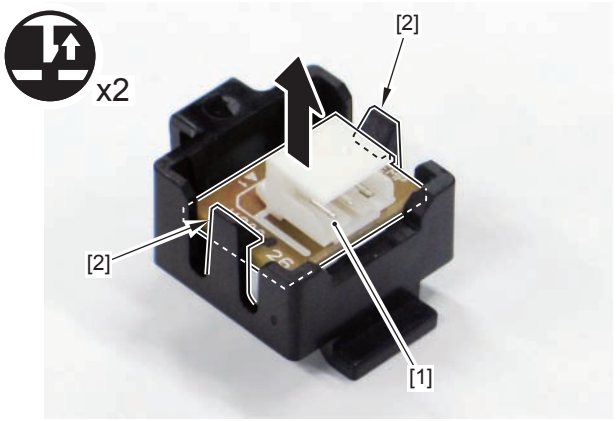
F-4-298

2) Disconnect the connector [1].



F-4-299

3) Remove the Developing Assembly Inner Temperature Detection PCB [1].
- 2 Claws [2]



F-4-300

Removing the Primary Charging Assembly

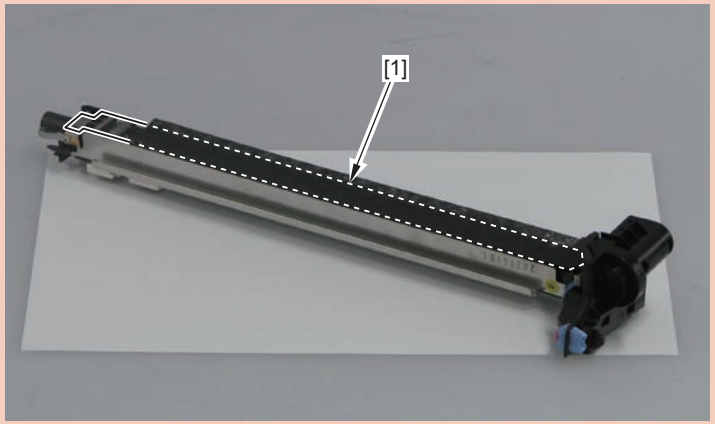
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).

Procedure

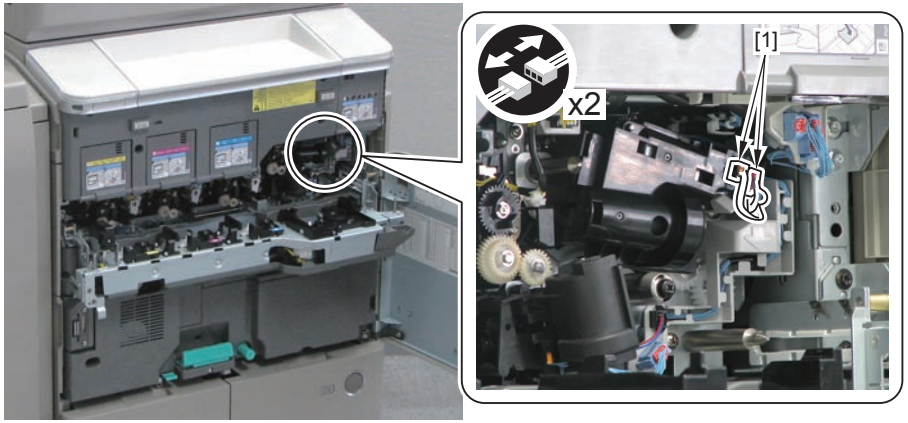
CAUTION:

- When replacing this part, execute the actions to be taken When Replacing the Primary Charging Assembly.
- Do not touch the surface [1] of the Grid Plate. Otherwise functional failure may occur.
- Do not place the side with the Grid down when placing the Primary Charging Assembly.



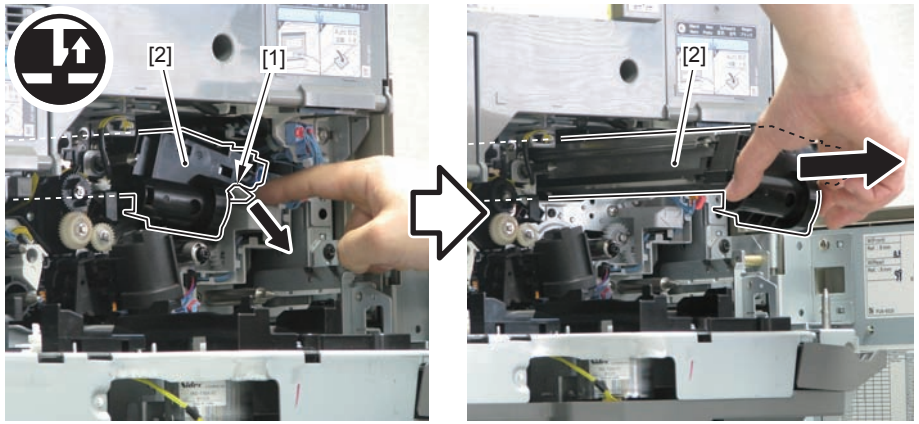
F-4-301

1) Disconnect the 2 connectors [1].



F-4-302

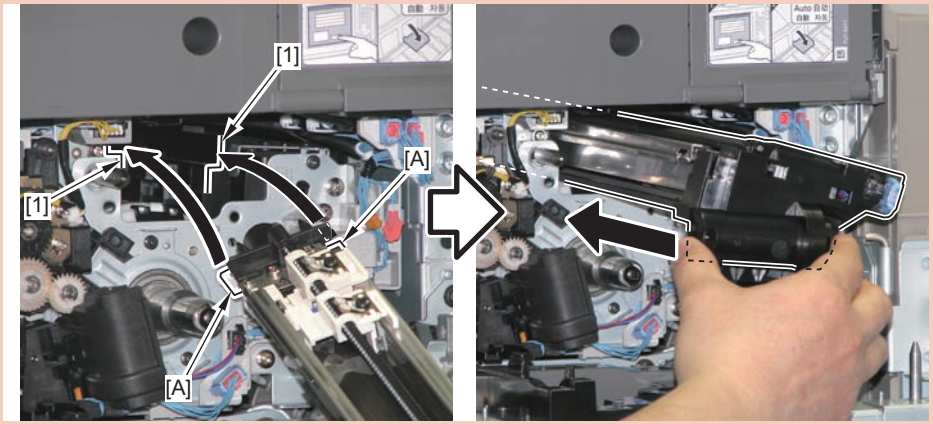
2) While pressing down the claw [1], pull out the Primary Charging Assembly [2] horizontally.



F-4-303

CAUTION:

When installing, align the 2 rails [1] of the Primary Charging Assembly with the 2 protrusions [A] of the Primary Charging Assembly, and then install it horizontally.



F-4-304

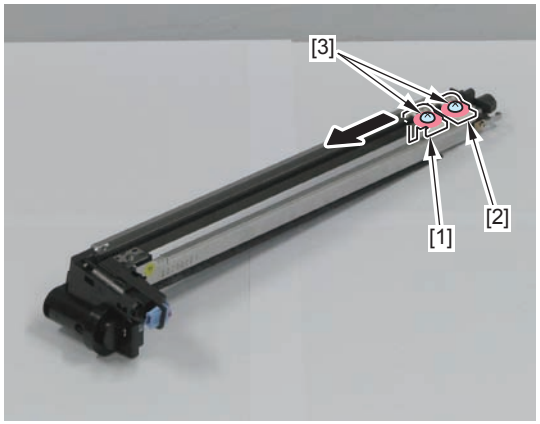
When Replacing the Primary Charging Assembly

Procedure

1) Output a Bk halftone image using the service mode.
- (TEST > PG > TYPE: 5)
- (TEST > PG > COLOR-Y/M/C: 0)
- (TEST > PG > COLOR-K: 1)

2) If there is density difference between the front and the rear side of the test print image, refer to step 4 to adjust if the front side is dark, or refer to step 3 if the rear side is dark. If the density is even, execute step 6 and later.

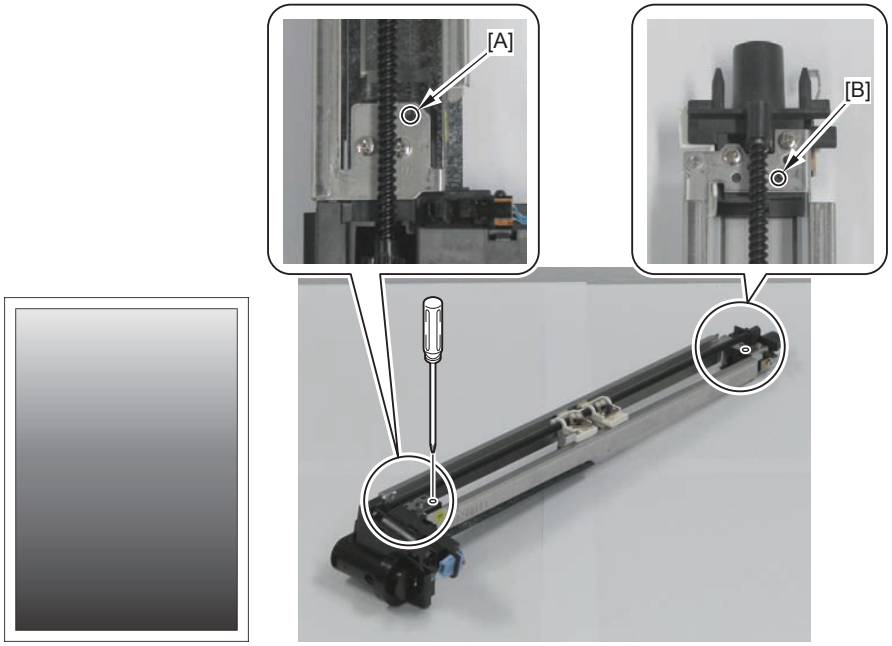
3) Move the Shutter Arm [1] and the Cleaning Pad Arm [2].
- 2 Screws [3]



F-4-305

4) Adjust the Primary Charging Assembly (if the front side of the test print image is dark).

NOTE:
- If the front side of the test print image is dark [1], execute steps from 4-1 to 4-3 as shown below until the density becomes even. When the density becomes even, execute step 6 and later.
- If the adjustment screw is turned counterclockwise, the Charging Wire goes down (gap between the Grid and the Charging Wire becomes narrow). As a result, the density of output image becomes light. If the adjustment screw is turned clockwise, the Charging Wire goes up (gap between the Grid and the Charging Wire becomes wide). As a result, the density of output image becomes dark.



F-4-306

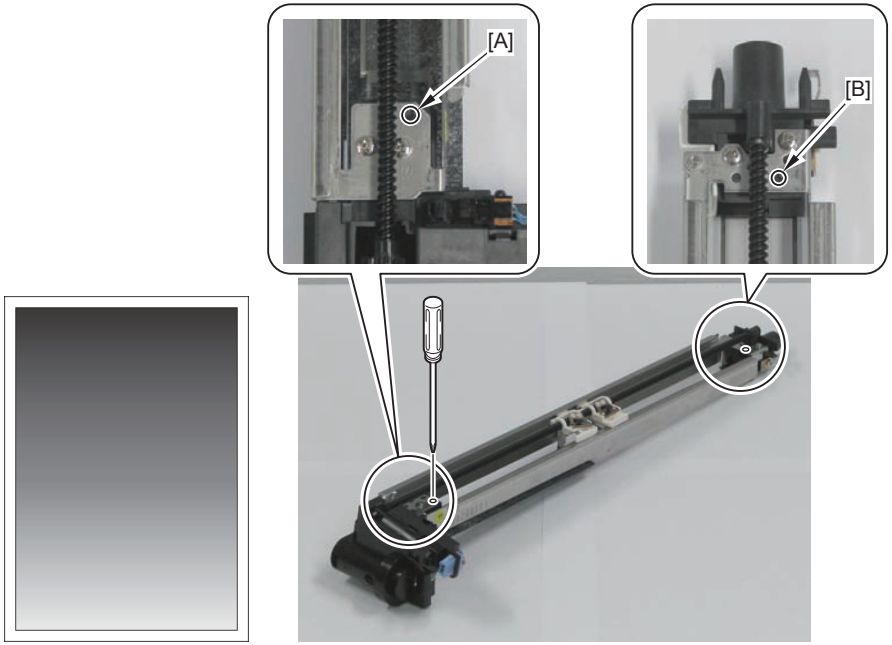
4-1) Rotate the Resin Screws [A] a full turn counterclockwise.
While referring to the Removing the Primary Charging Assembly, install it to the host machine, output a test print and check the image.

4-2) If the front side of the test print image is still dark, further rotate the Resin Screw [A] a full turn counterclockwise.
While referring to the Removing the Primary Charging Assembly, install it to the host machine, output a test print and check the image.

4-3) If the front side of the test print image is still dark, rotate the Resin Screw [B] a half turn clockwise.
While referring to the Removing the Primary Charging Assembly, install it to the host machine, output a test print and check the image.

5) Adjust the Primary Charging Assembly (if the rear side of the test print image is dark).

NOTE:
- If the rear side of the test print image is dark [2], execute steps from 5-1 to 5-3 as shown below until the density becomes even. When the density becomes even, execute steps 6 and later.
- If the adjustment screw is turned counterclockwise, the Charging Wire goes down (gap between the Grid and the Charging Wire becomes narrow). As a result, the density of output image becomes light.
  If the adjustment screw is turned clockwise, the Charging Wire goes up (gap between the Grid and the Charging Wire becomes wide). As a result, the density of output image becomes dark.



F-4-307

5-1) Rotate the Resin Screw [B] a full turn counterclockwise.
While referring to the Removing the Primary Charging Assembly, install it to the host machine, output a test print and check the image.

5-2) If the rear side of the test print image is still dark, further rotate the Resin Screw [B] a full turn counterclockwise.
While referring to the Removing the Primary Charging Assembly, install it to the host machine, output a test print and check the image.

5-3) If the rear side of the test print image is still dark, rotate the Resin Screw [A] a half turn clockwise.
While referring to the Removing the Primary Charging Assembly, install it to the host machine, output a test print and check the image.

6) Clean the Charging Wire using the service mode.
(FUNCTION > CLAENING > WIRE-CLN) Time required: Approx. 30 sec.

7) Execute the potential control using the service mode.
(COPIER > FUNCTION >DPC >DPC) Time required: Approx. 30 sec.

8) Execute the uneven density correction using the user mode.
(Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Correct Shading)

Removing the Primary Charging Assembly Shutter Unit

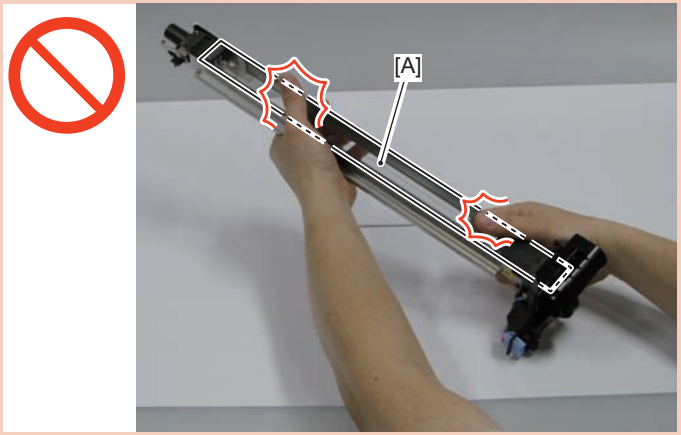
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).

Procedure

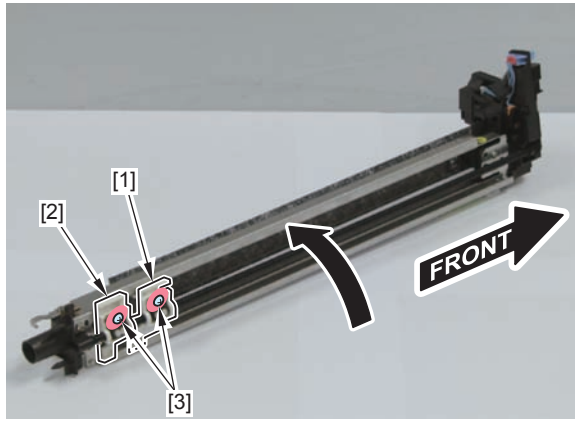
CAUTION:

Do not touch the surface [A] of the Grid when disassembling/assembling.



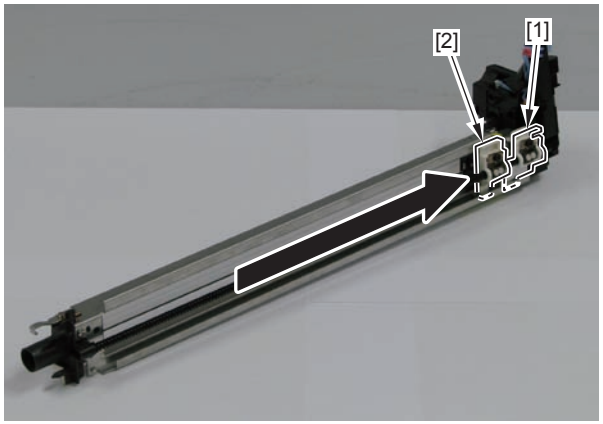
F-4-308

1) Loosen the 2 screws [3] of the Shutter Arm [1] and the Cleaning Pad Arm [2].



F-4-309

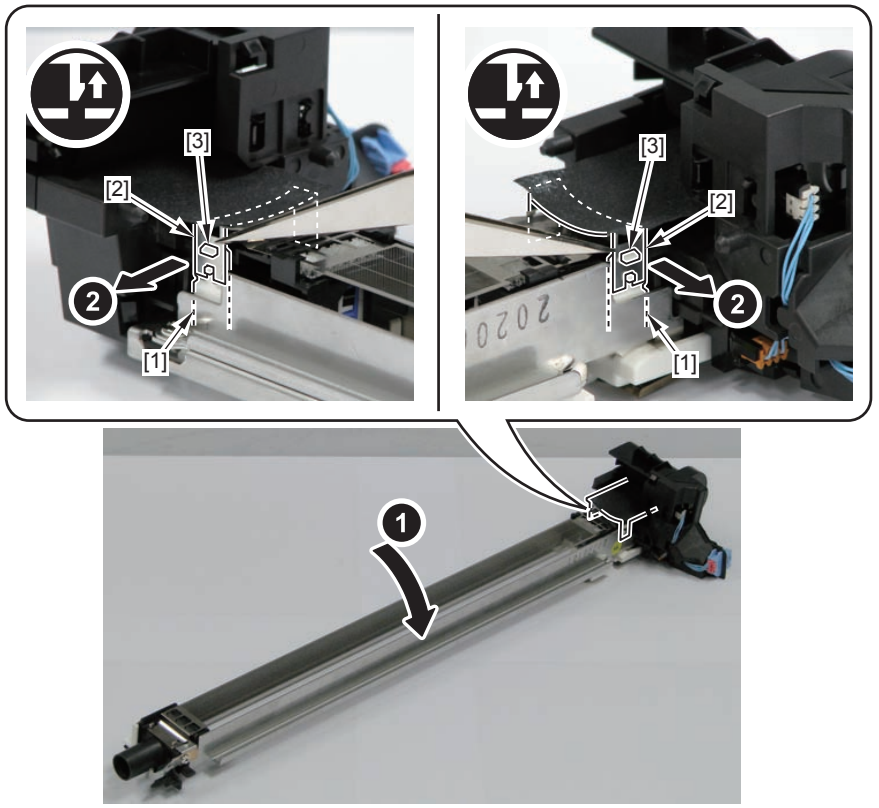
2) Move the Shutter Arm [1] and the Cleaning Pad Arm [2] until they stop.



F-4-310

3) Remove the Shutter Sheet Installation Fixtures [2] from the Shutter Arm [1].

- 2 Claws [3]



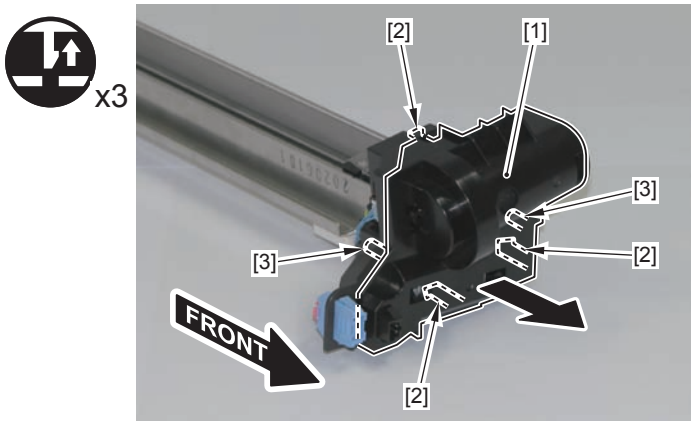
F-4-311

CAUTION:

When installing the Shutter Sheet Installation Fixture, check that the Shutter Arm is engaged with the claw properly.

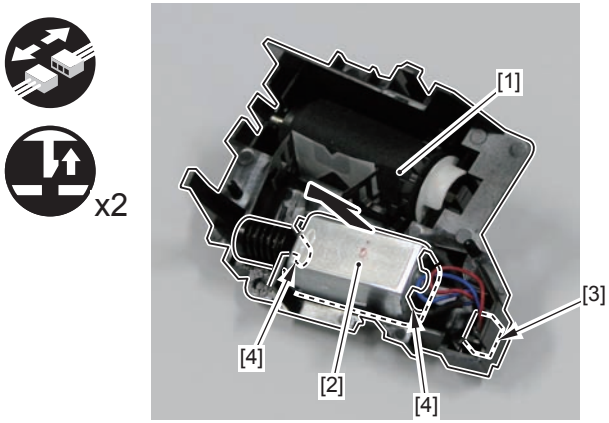
(Move the Shutter Sheet installation Fixture to the right and left to check that it does not come off.)

4) Remove the Primary Charging Assembly Shutter Unit [1].
- 3 Claws [2]
- 2 Bosses [3]



F-4-312

5) Remove the Primary Charging Wire Cleaning Motor [2] from the Primary Charging Assembly Shutter Unit [1].
- 1 Connector [3]
- 2 Claws [4]



F-4-313

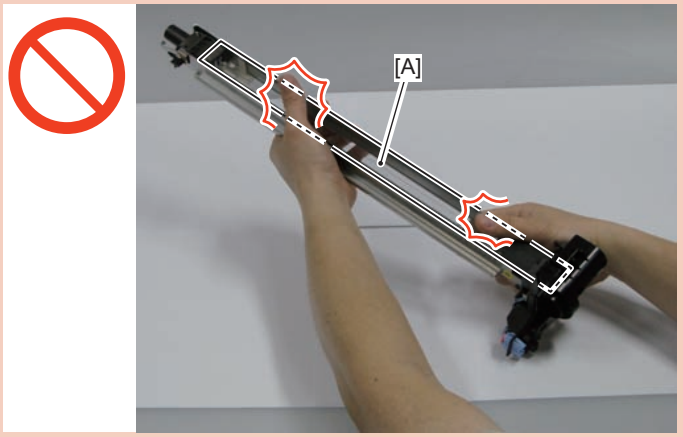
Removing the Grid Plate

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).

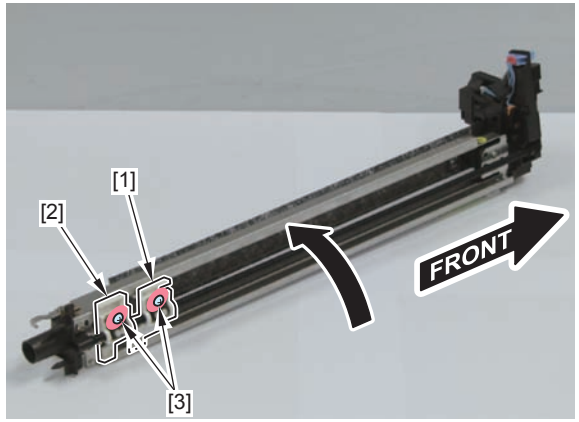
Procedure

CAUTION:
- When replacing this part, execute the actions to be taken When Replacing the Primary Charging Assembly.
- Do not touch the surface [A] of the Grid when disassembling/assembling.



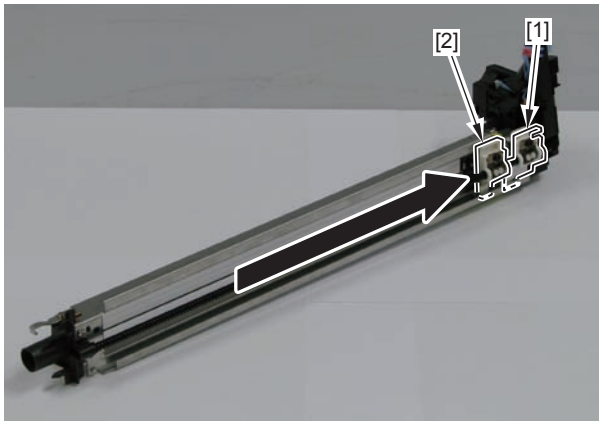
F-4-314

1) Loosen the 2 screws [3] of the Shutter Arm [1] and the Cleaning Pad Arm [2].



F-4-315

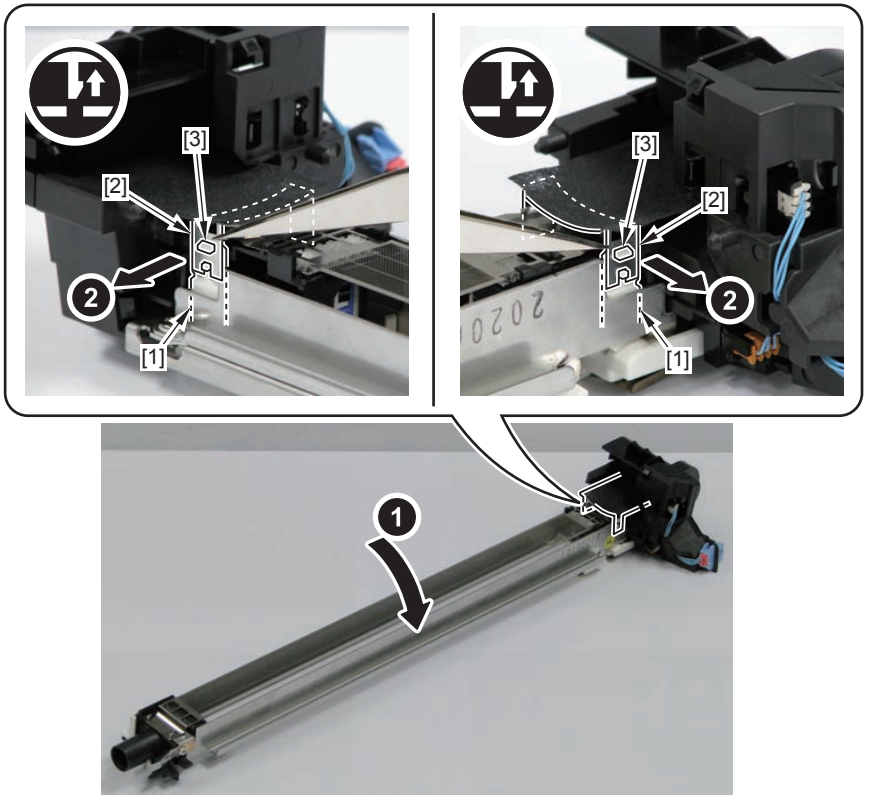
2) Move the Shutter Arm [1] and the Cleaning Pad Arm [2] until they stop.



F-4-316

3) Remove the Shutter Sheet Installation Fixtures [2] from the Shutter Slider [1].

- 2 Claws [3]



F-4-317

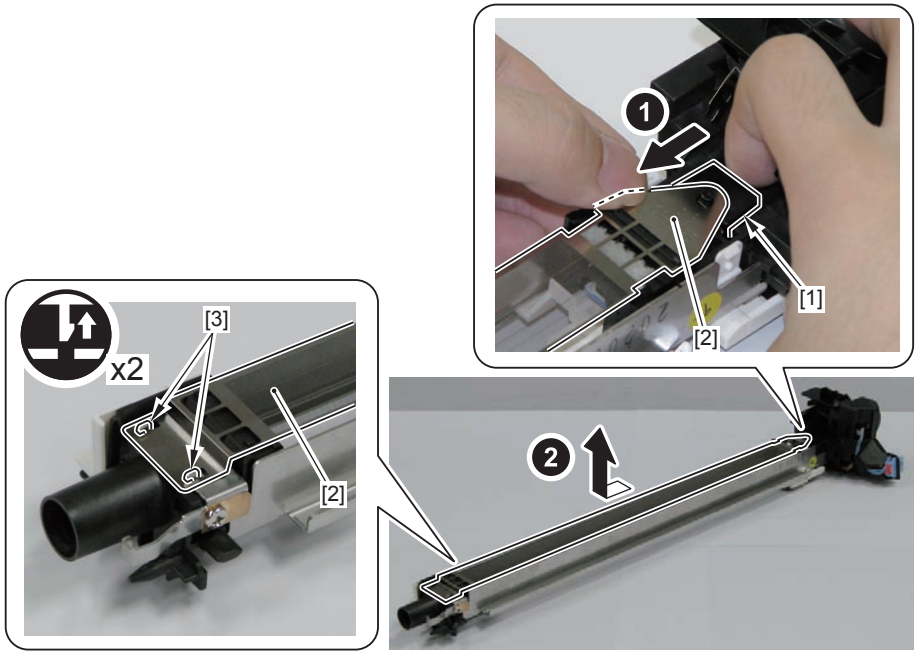
CAUTION:

When installing the Shutter Sheet Installation Fixture, check that the Shutter Arm is engaged with the claw properly.

(Move the Shutter Sheet installation Fixture to the right and left to check that it does not come off.)

4) Press the lever [1] in the direction of the arrow to remove the Grid Plate [2].

- 2 Claws [3]

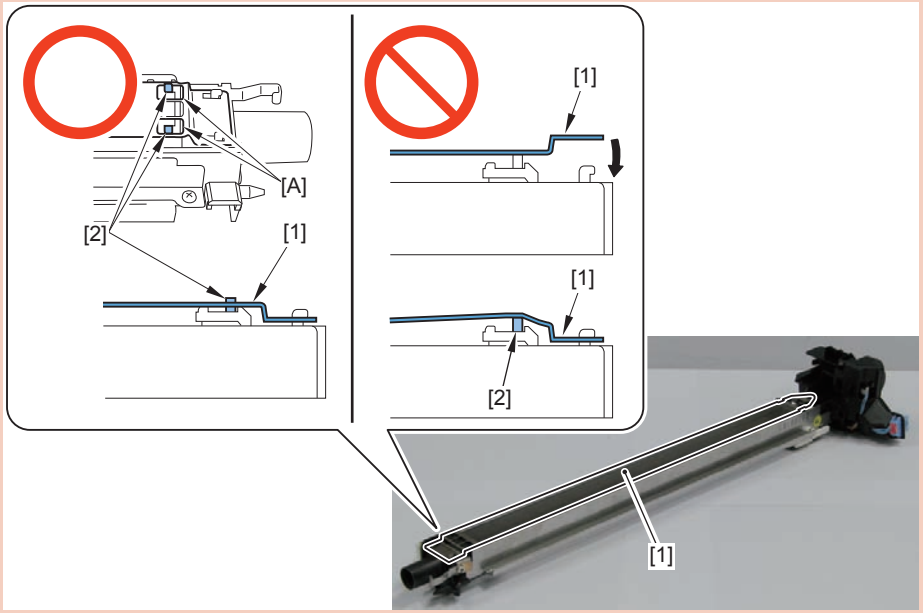


F-4-318

CAUTION:

Point to Note When Installing the Grid Plate

- The Grid Plate [1] has a front side and a rear side. Therefore, install it in the correct direction.
- Be sure that the Grid Plate [1] is not placed on the protrusions [2] of the Primary Charging Assembly when installing it.
- After installing the Grid Plate [1] on the Primary Charging Assembly, check that the protrusions [2] are fitted in the holes [A] of the Grid.



F-4-319

When Replacing the Grid Plate

Procedure

1) Clean the Charging Wire.
   (COPIER > FUNCTION > CLEANING > WIRE-EX)
2) Execute the potential control.
   (COPIER > FUNCTION > DPC > DPC)

Removing the Grid Cleaning Pad

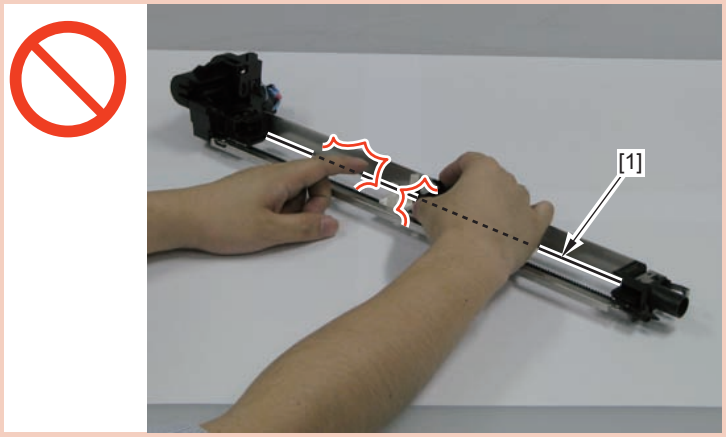
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Grid Plate (Refer to page 4-189).

Procedure

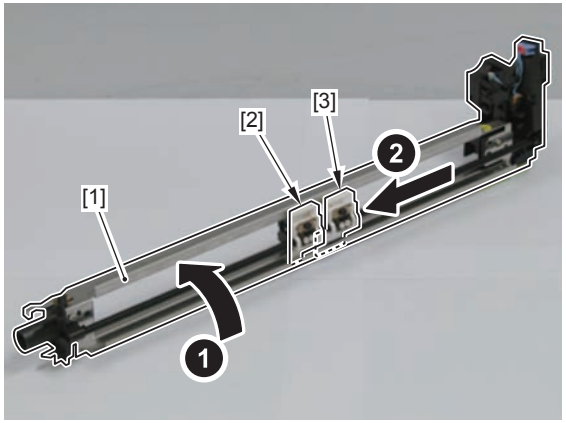
CAUTION:

Do not touch the Primary Charging Wire [1] when disassembling/assembling.



F-4-320

1) Move the Cleaning Pad Arm [1] to the center of the Primary Charging Assembly [2].



F-4-321

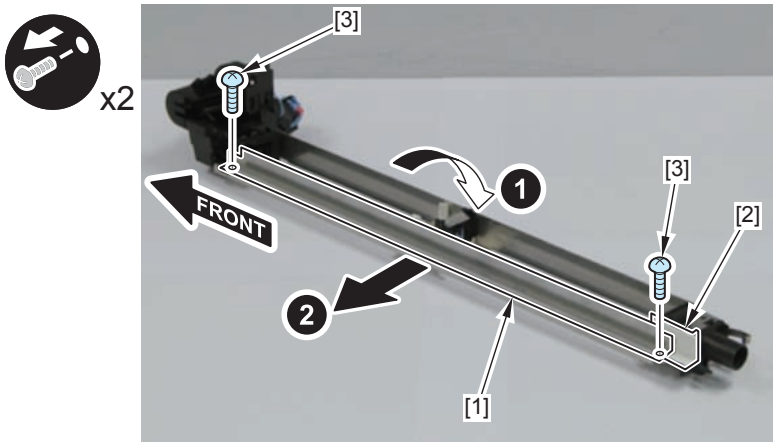
CAUTION:

After the work, return the Cleaning Pad Arm to the front.

This is to shorten the Cleaning Pad Arm detection time after the power is turned ON.

2) Remove the Primary Charging Assembly Shield Plate (L) [1] and the Primary Charging Assembly Rear Cover [2].

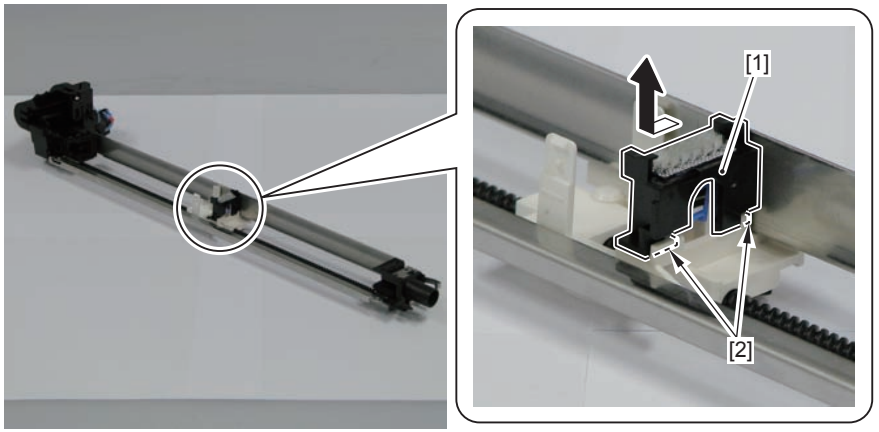
- 2 Screws [3]



F-4-322

3) Remove the Grid Cleaning Pad [1] in the direction of the arrow.

- 2 Protrusions [2]



F-4-323

Removing the Primary Charging Wire Cleaning Pad Holder

Preparation

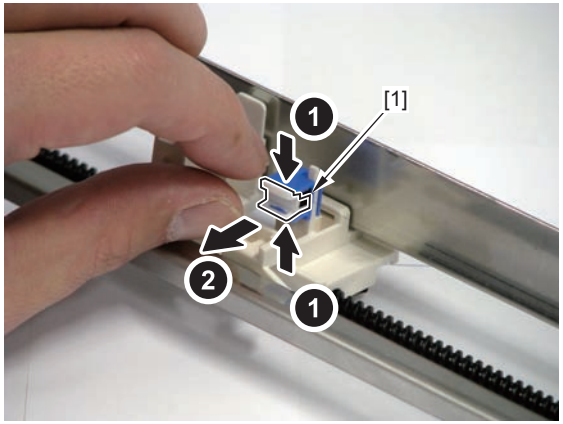
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Grid Plate (Refer to page 4-189).
6) Remove the Grid Cleaning Pad (Refer to page 4-192).

Procedure

CAUTION:

Do not damage the Primary Charging Wire when disassembling/assembling.

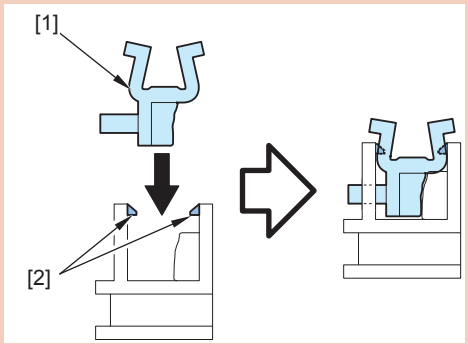
1) Use your fingers to pinch and remove the Primary Charging Wire Cleaning Pad Holder [1].



F-4-324

CAUTION:

Push in the Primary Charging Wire Cleaning Pad Holder [1] until it is secured to the 2 claws [2].



F-4-325

Removing the Primary Charging Wire Cleaning Pad Slider

Preparation

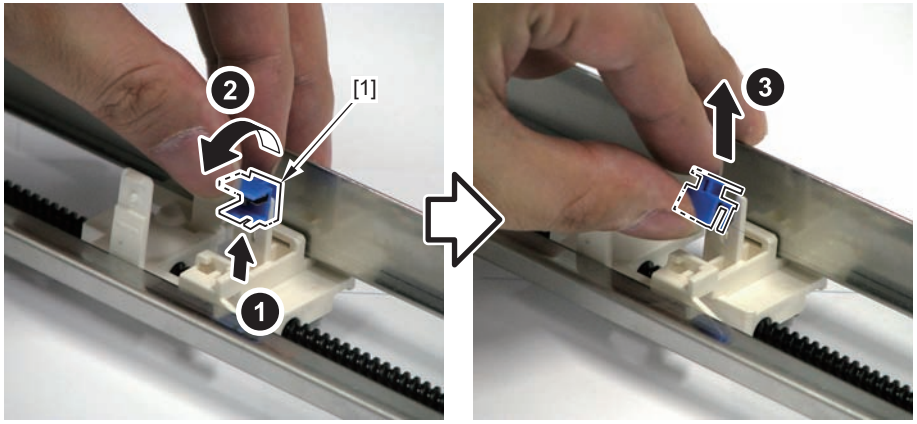
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Grid Plate (Refer to page 4-189).
6) Remove the Grid Cleaning Pad (Refer to page 4-192).
7) Remove the Primary Charging Wire Cleaning Pad Holder (Refer to page 4-194).

Procedure

CAUTION:

Do not damage the Primary Charging Wire when disassembling/assembling.

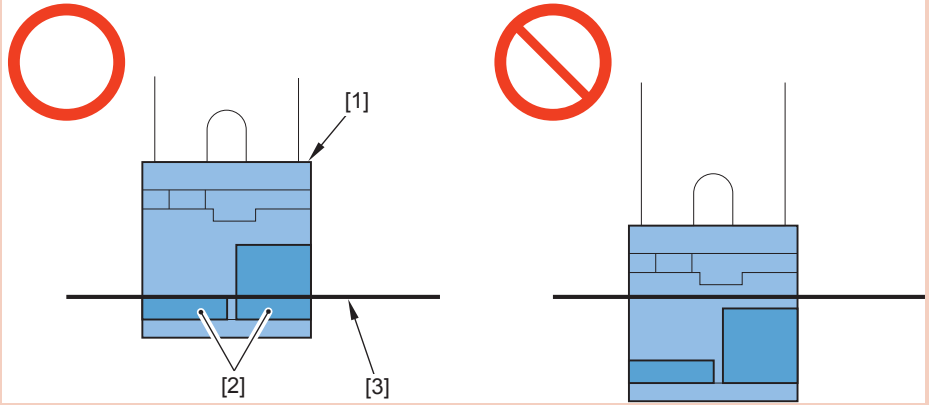
1) Remove the Primary Charging Wire Cleaning Pad Slider [1].



F-4-326

CAUTION:

Push the Charging Wire [3] against the 2 pads [2] of the Primary Charging Wire Cleaning Pad Slider [1] to install.



F-4-327

Replacing the Primary Charging Wire

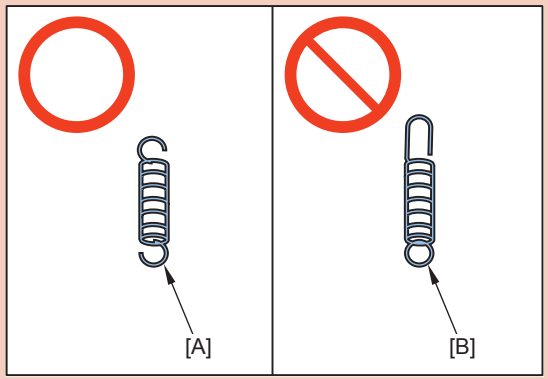
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Grid Plate (Refer to page 4-189).
6) Remove the Grid Cleaning Pad (Refer to page 4-192).
7) Remove the Primary Charging Wire Cleaning Pad Holder (Refer to page 4-194).
8) Remove the Primary Charging Wire Cleaning Pad Slider (Refer to page 4-195).

Disassembling Procedure

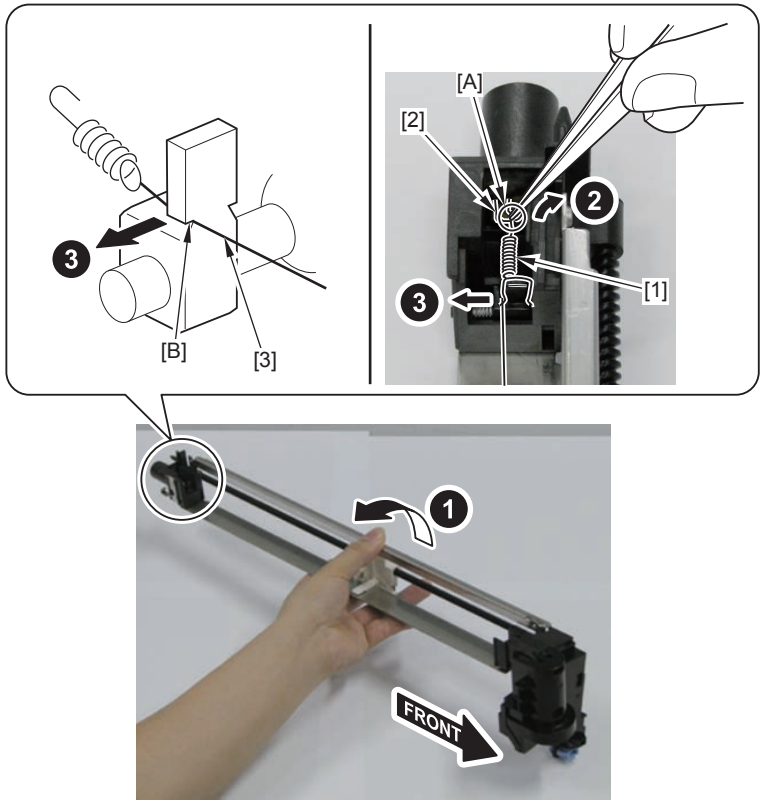
CAUTION:

- When replacing this part, Cleaning the Primary Charging Assembly and execute the actions to be taken When Replacing the Primary Charging Wire.
- In the case of replacing the Charging Wire on a Charging Wire basis, be sure to use the dedicated Charging Wire Tension Spring (97-5527) [A].
- Do not use the spring [B] attached to the Charging Wire.



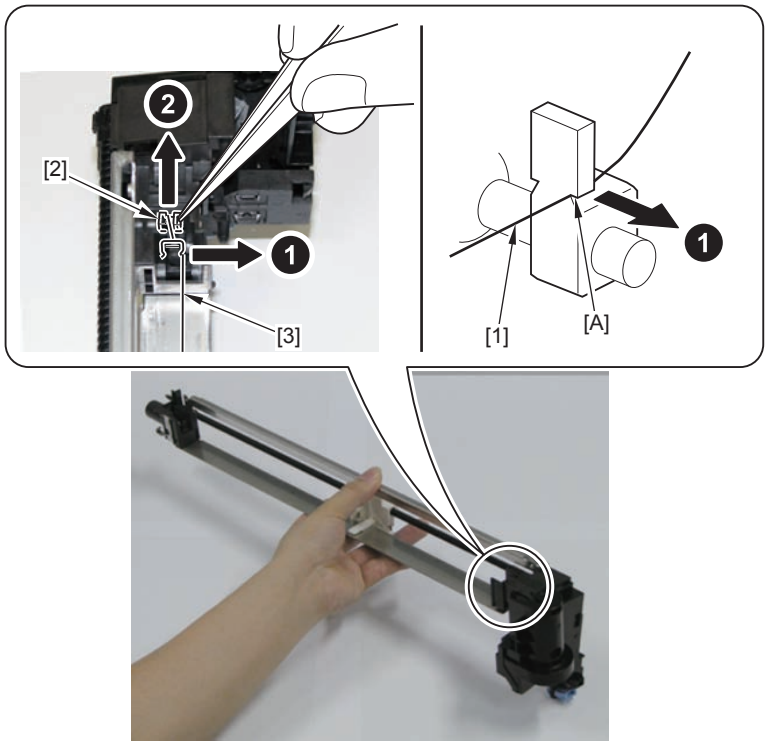
F-4-328

1) Use tweezers to hold the leading edge [A] of the spring [1] to remove it from the hook [2].
2) Remove the Primary Charging Wire [3] from the groove [B] in the direction of the arrow.



F-4-329

3) Remove the Charging Wire [1] from the groove [A] in the direction of the arrow.
4) Remove the block [2] with tweezers by pulling it upward, and then remove Primary Charging Wire Unit [3].



F-4-330

5) Cut off the old Charging Wire from the block with nippers.

Assembling Procedure

CAUTION:

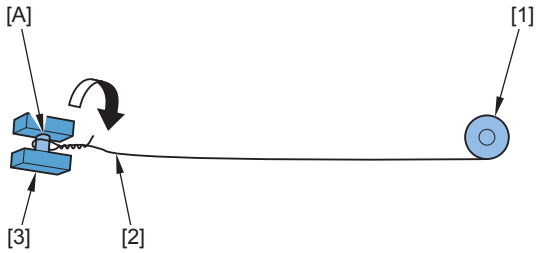
Do not touch the new Charging Wire with hand.

Otherwise functional failure may occur.

1) Untie approx. 5 cm of the new Charging Wire [2] from the 0.06 mm (wire-diameter) Charging Wire Reel [1] to make a 3-mm-diameter ring at the block [A].

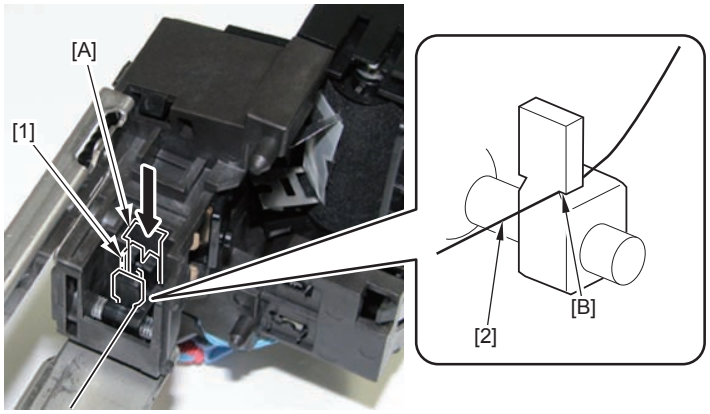
NOTE:
When creating the ring, wrap the Charging Wire [2] around the block [A] to make a full round, and then turn the block [3] for 6 times or more to twist the Charging Wire [2] for a length of 4 mm.

2) Cut the Charging Wire [2] to leave an edge of 1.5 mm or less with nippers.



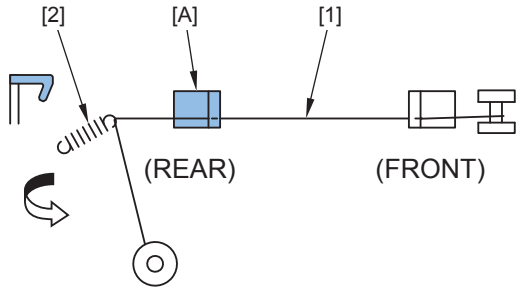
F-4-331

3) Insert the block [1] into the groove [A] of the Primary Charging Assembly.
4) Pass the Charging Wire [2] through the lower part [B] of the groove.



F-4-332

5) After hooking the Charging Wire [1] to the charging wire positioning part [A] at the rear side of the Primary Charging Assembly, hook the Charging Wire Tension Spring [2] to the Charging Wire [1] at the position shown in the figure below and twist with it.

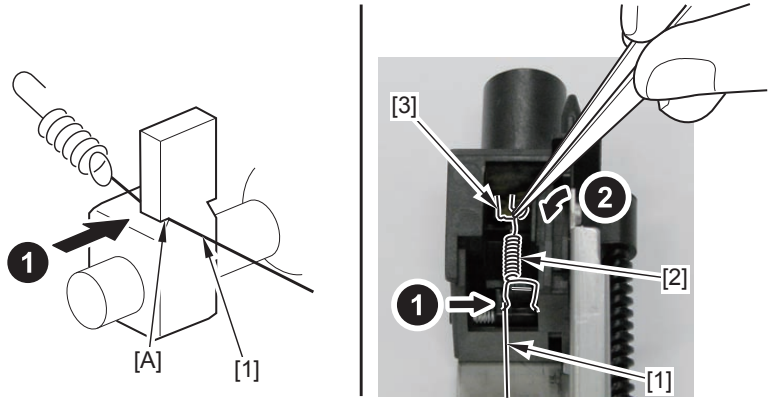


F-4-333

6) Cut off extra length of the Charging Wire with nippers.
7) Pass the Charging Wire [1] through the lower part [A] of the groove, and then use tweezers to hold the leading edge of the spring [2] and attach it to the hook [3].

CAUTION:

The groove used for hooking the Charging Wire must be at the position shown in the figure (the side for installing the Grid).



F-4-334

CAUTION:

After hooking the Charging Wire, be sure that it is not broken or twisted.

8) Clean the Charging Wire with lint-free paper moistened with alcohol.
9) Assemble the Primary Charging Wire Cleaning Pad Slider and the Primary Charging Wire Cleaning Pad Holder in reverse order.

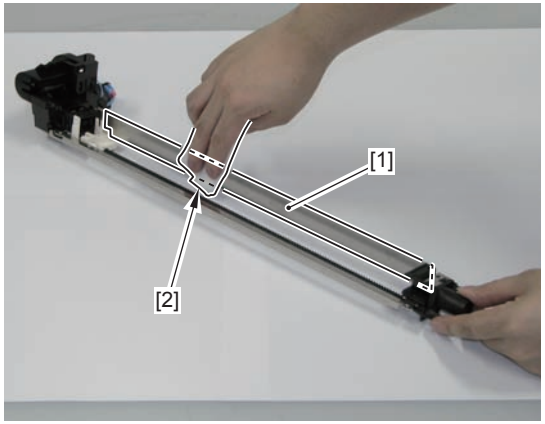
Cleaning the Primary Charging Assembly

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Grid Plate (Refer to page 4-189).
6) Remove the Grid Cleaning Pad (Refer to page 4-192).
7) Remove the Primary Charging Wire Cleaning Pad Holder (Refer to page 4-194).
8) Remove the Primary Charging Wire Cleaning Pad Slider (Refer to page 4-195).
9) Replace the Primary Charging Wire (Refer to page 4-196).

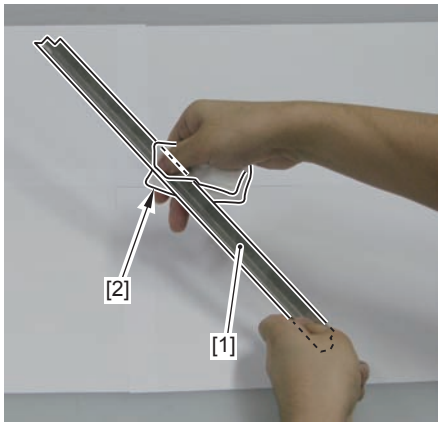
Procedure

1) Clean the Inner Shield Plate [1] of the Primary Charging Assembly with lint-free paper [2] moistened with alcohol.



F-4-335

2) Clean both sides of the Shield Plate (Right) [1] removed from the Primary Charging Assembly with lint-free paper [2] moistened with alcohol.



F-4-336

When Replacing the Primary Charging Wire

Procedure

1) Clean the Charging Wire.
   (COPIER > FUNCTION > CLEANING > WIRE-EX)
2) Execute the potential control.
   (COPIER > FUNCTION > DPC > DPC)

Replacing the Primary Charging Wire Unit

Preparation

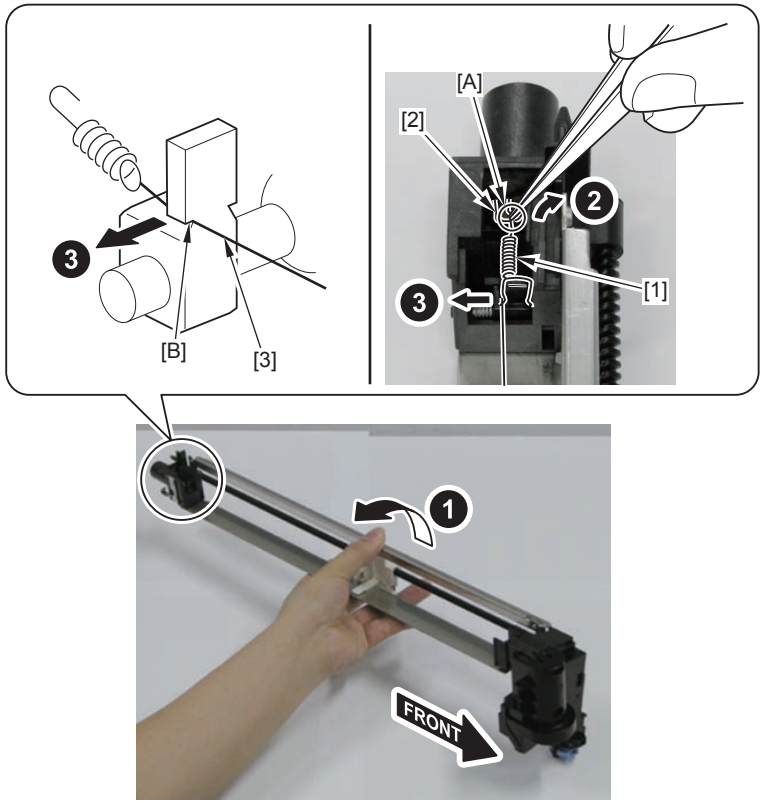
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Grid Plate (Refer to page 4-189).
6) Remove the Grid Cleaning Pad (Refer to page 4-192).

Disassembling Procedure

CAUTION:

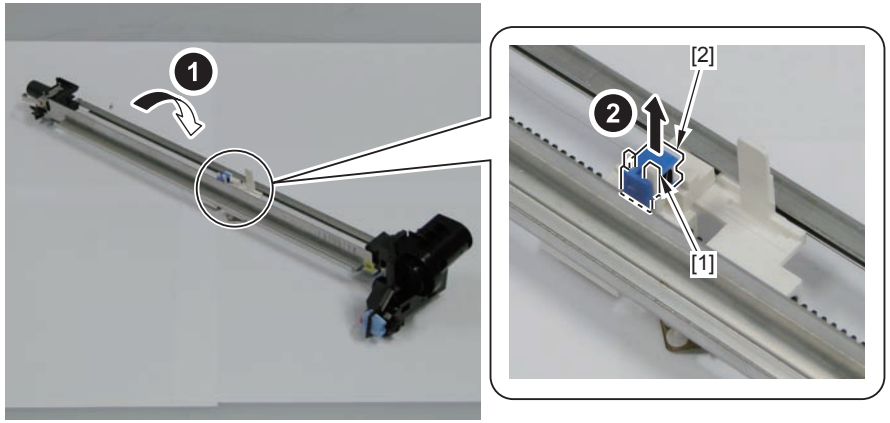
When replacing this part, Cleaning the Primary Charging Assembly and execute the actions to be taken When Replacing the Primary Charging Wire.

1) Use tweezers to hold the leading edge [A] of the spring [1] to remove it from the hook [2].
2) Remove the Primary Charging Wire [3] from the groove [B] in the direction of the arrow.



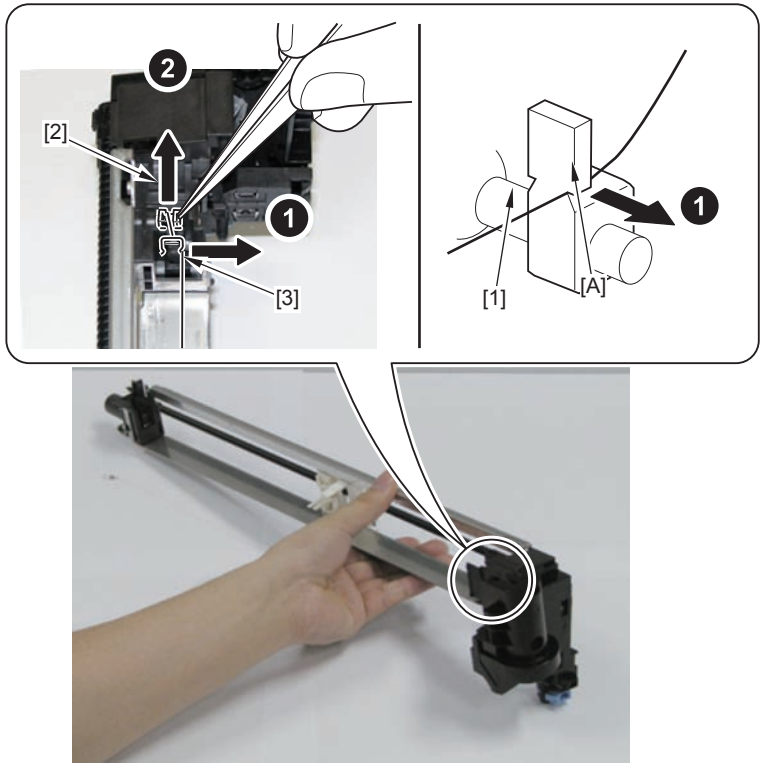
F-4-337

3) Remove the Primary Charging Wire Cleaning Pad [2] from the Cleaning Pad Arm [1].



F-4-338

4) Remove the Charging Wire [1] from the groove [A] in the direction of the arrow.
5) Remove the block [2] with tweezers by pulling it upward, and then remove Primary Charging Wire Unit [3].

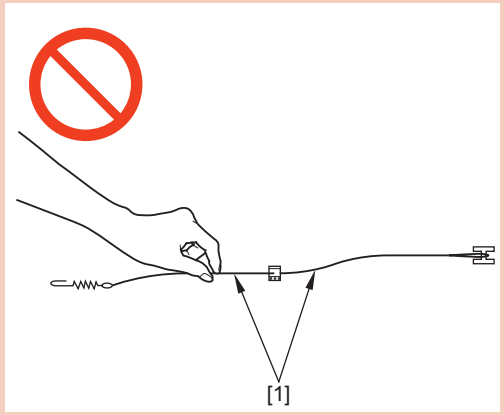


F-4-339

Assembling Procedure

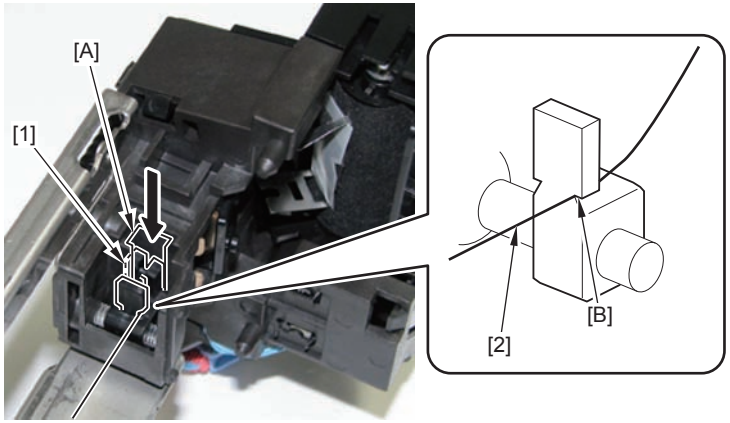
CAUTION:

When replacing, do not touch the new Primary Charging Wire [1] directly with hand.



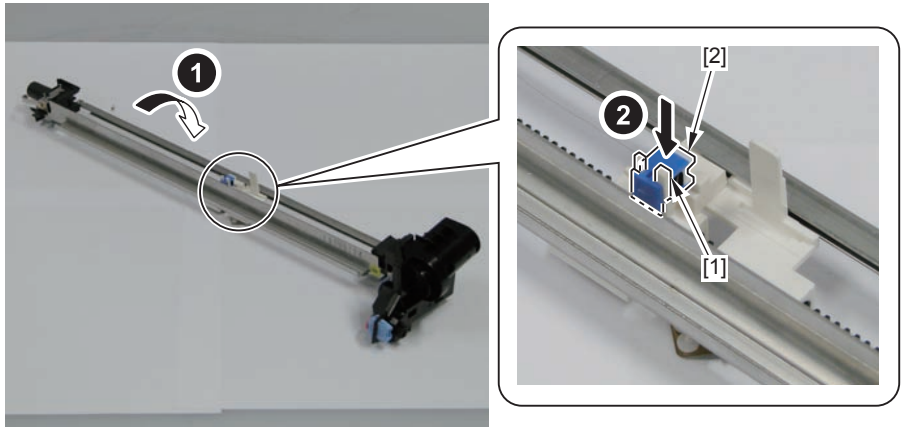
F-4-340

1) Insert the block [1] into the groove [A] of the Primary Charging Assembly.
2) Pass the Charging Wire [2] through the lower part [B] of the groove.



F-4-341

3) Install the Primary Charging Wire Cleaning Pad [2] to the Cleaning Pad Arm [1].

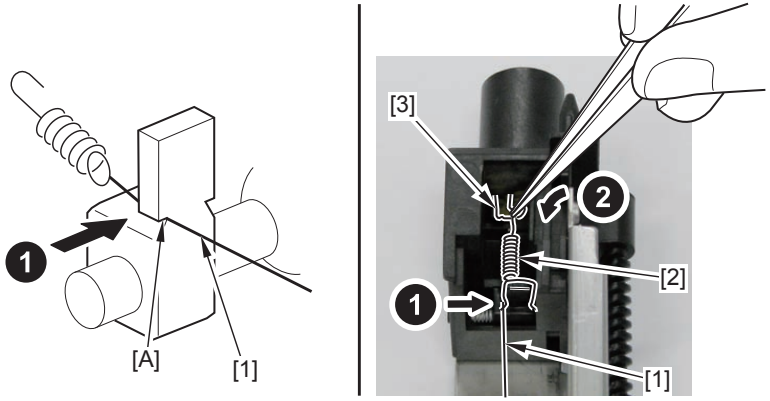


F-4-342

4) Pass the Charging Wire [1] through the lower part [A] of the groove, and then use tweezers to hold the leading edge of the spring [2] and attach it to the hook [3].

CAUTION:

The groove used for hooking the Charging Wire must be at the position shown in the figure (the side for installing the Grid).



F-4-343

When Replacing the Primary Charging Wire Unit

Procedure

1) Clean the Charging Wire.
(COPIER > FUNCTION > CLEANING > WIRE-EX)
2) Execute the potential control.Z
(COPIER > FUNCTION > DPC > DPC)

Removing the Pre-transfer Charging Assembly

Preparation

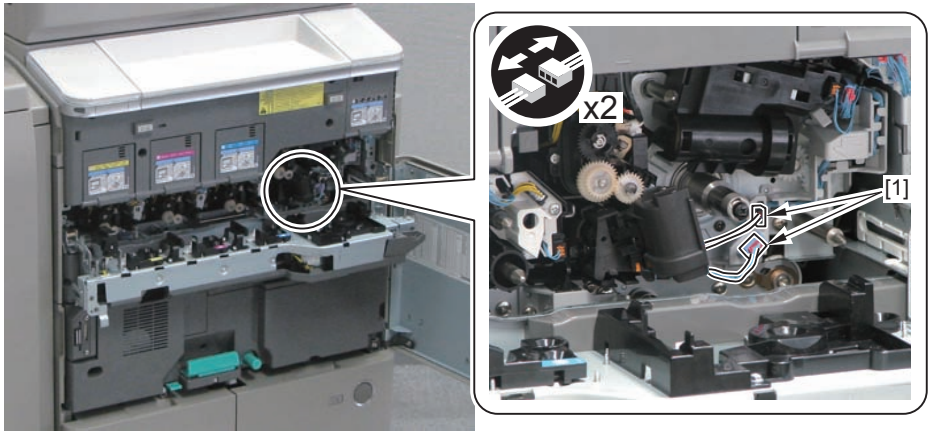
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).

Procedure

CAUTION:

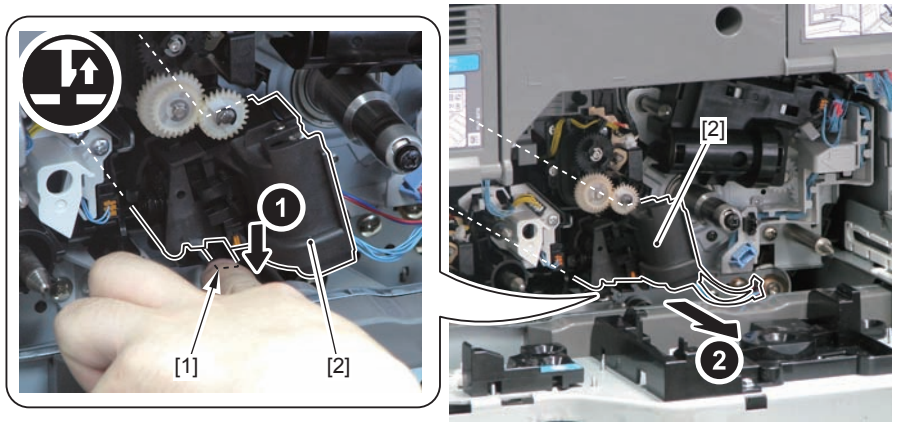
When replacing this part, execute the actions to be taken When Replacing the Pre-transfer Charging Assembly.

1) Disconnect the 2 connectors [1].



F-4-344

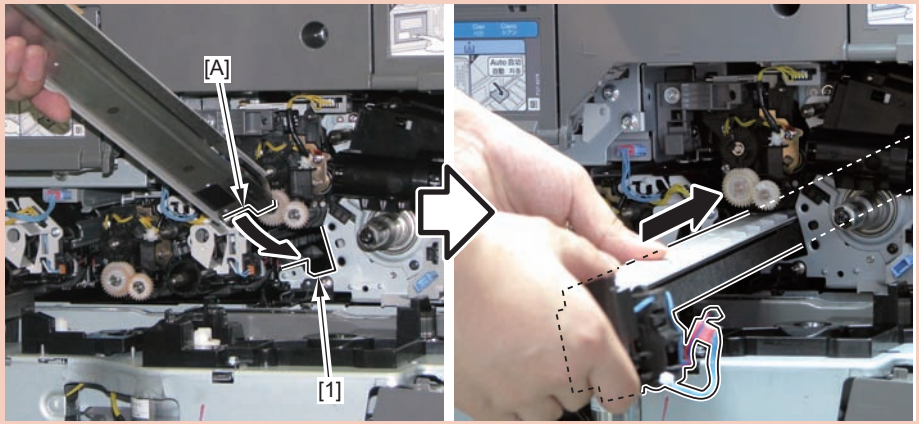
2) While pressing down the claw [1], pull out the Pre-transfer Charging Assembly [2] horizontally.



F-4-345

CAUTION:

When installing, align the rail [1] of the Pre-transfer Charging Assembly with the protrusion [A] of the Pre-transfer Charging Assembly, and then install it horizontally.



F-4-346

When Replacing the Pre-transfer Charging Assembly

Procedure

1) Clean the Charging Wire.
(COPIER > FUNCTION > CLEANING > WIRE-EX)

Removing the Pre-transfer Charging Assembly Shutter Unit

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).

Procedure

CAUTION:

Do not touch the Charging Wire with hand.

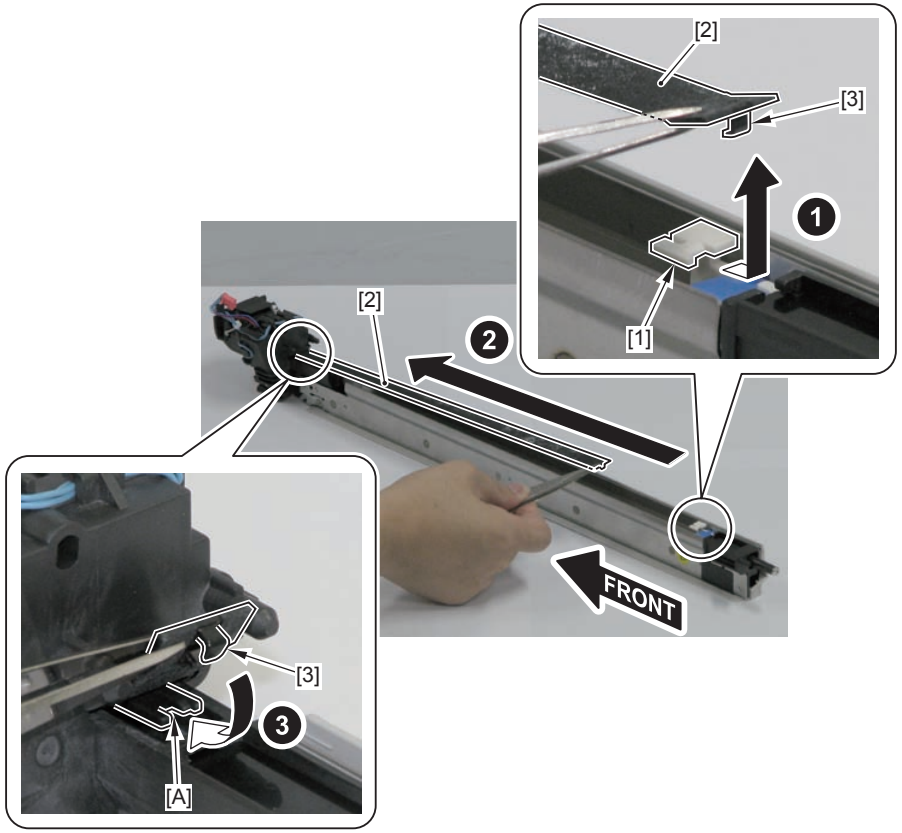
Otherwise functional failure may occur.

1) Remove the Shutter Sheet Holder [2] from the Pre-transfer Charging Wire Cleaning Pad Slider [1].

- 1 Hook [3]

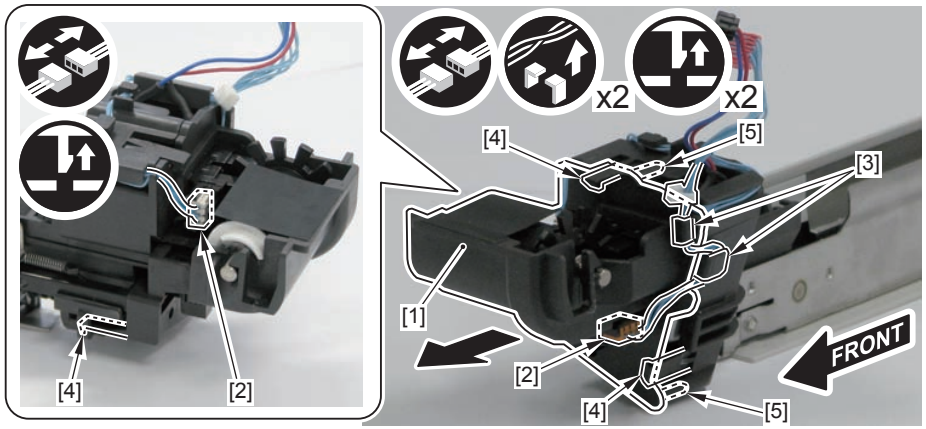
CAUTION:

Because the Shutter Sheet is taken up when the Shutter Sheet Holder [2] is removed from the Pre-transfer Charging Wire Cleaning Pad Slider [1], attach the hook [3] of the removed Shutter Sheet Holder to the [A] part of the Pre-transfer Charging Assembly Shutter in advance.



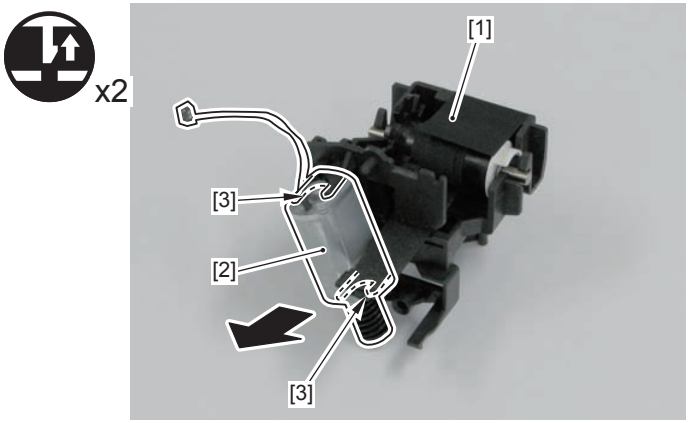
F-4-347

2) Remove the Pre-transfer Charging Assembly Shutter Unit [1].
- 2 Connectors [2]
- 1 Guide [3]
- 3 Claws [4]
- 2 Bosses [5]



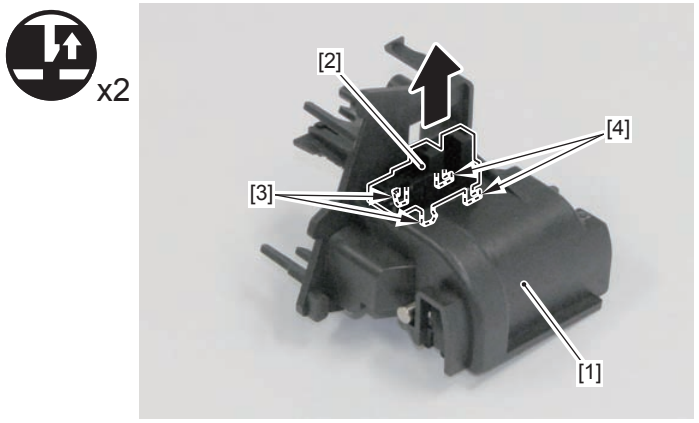
F-4-348

3) Remove the Pre-transfer Charging Wire Cleaning Motor [2] from the Pre-transfer Charging Assembly Shutter Unit [1].
- 2 Claws [3]



F-4-349

4) Remove the Post Charging Wire HP Sensor [2] from the Pre-transfer Charging Assembly Shutter Unit [1].
- 2 Claws [3]
- 2 Hooks [4]



F-4-350

Removing the Pre-transfer Charging Wire Cleaning Pad Holder and the Pre-transfer Charging Wire Cleaning Pad Slider

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).

Procedure

CAUTION:

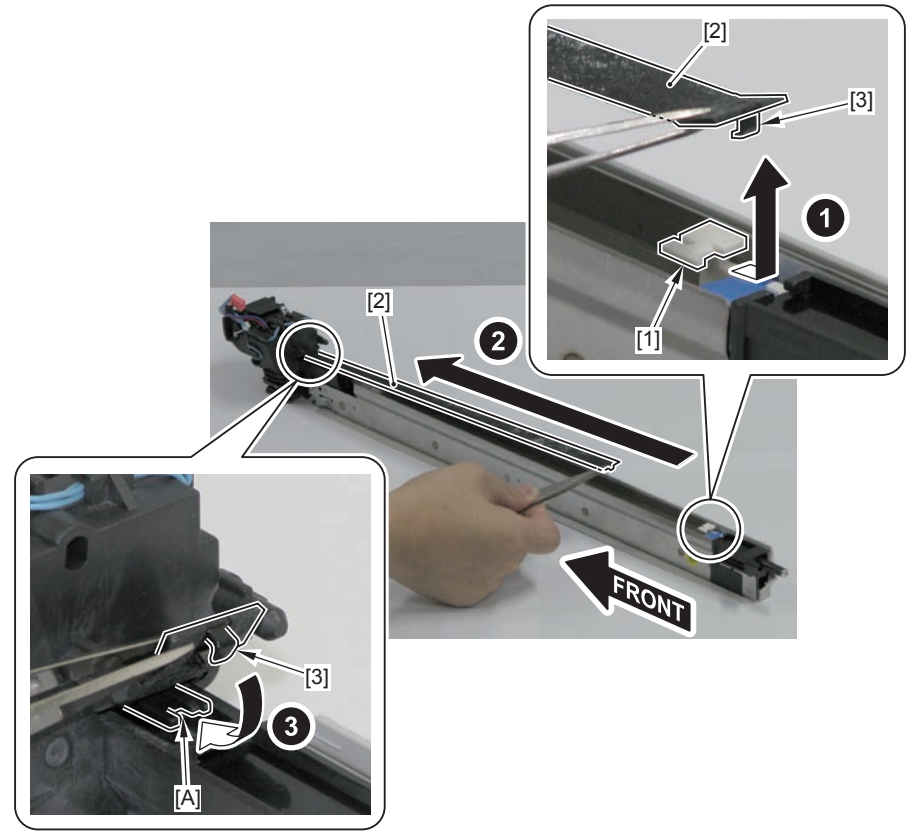
Do not touch the Charging Wire with hand.
Otherwise functional failure may occur.

1) Remove the Shutter Sheet Holder [2] from the Pre-transfer Charging Wire Cleaning Pad Slider [1].

- 1 Hook [3]

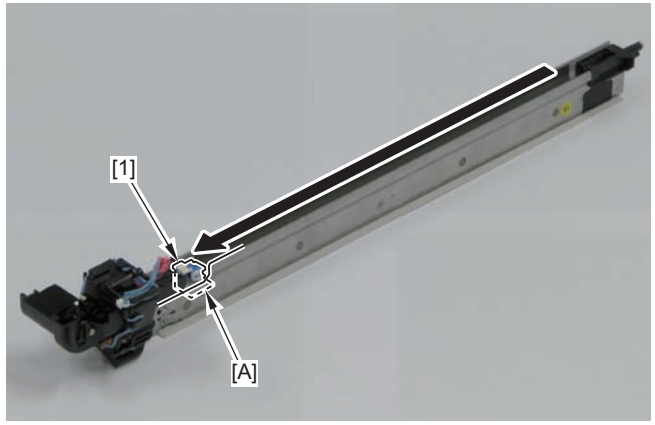
CAUTION:

Because the Shutter Sheet is taken up when the Shutter Sheet Holder [2] is removed from the Pre-transfer Charging Wire Cleaning Pad Slider [1], attach the hook [3] of the removed Shutter Sheet Holder to the [A] part of the Pre-transfer Charging Assembly Shutter in advance.



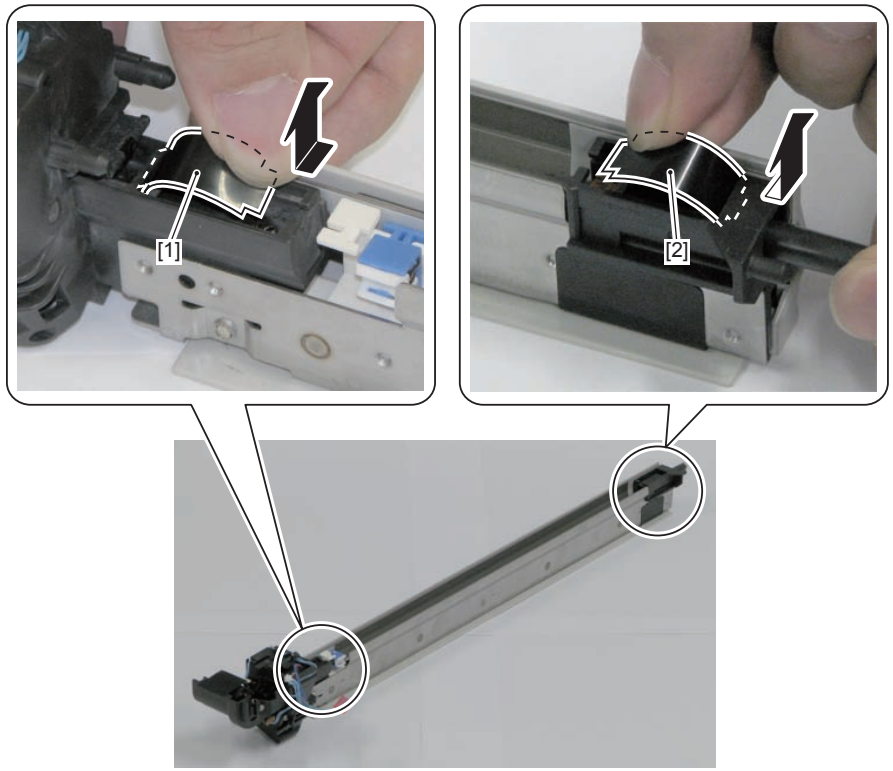
F-4-351

2) Move the Pre-transfer Charging Wire Cleaning Pad Slider [1] to the cut-off [A] of the Shield Plate at the front side.



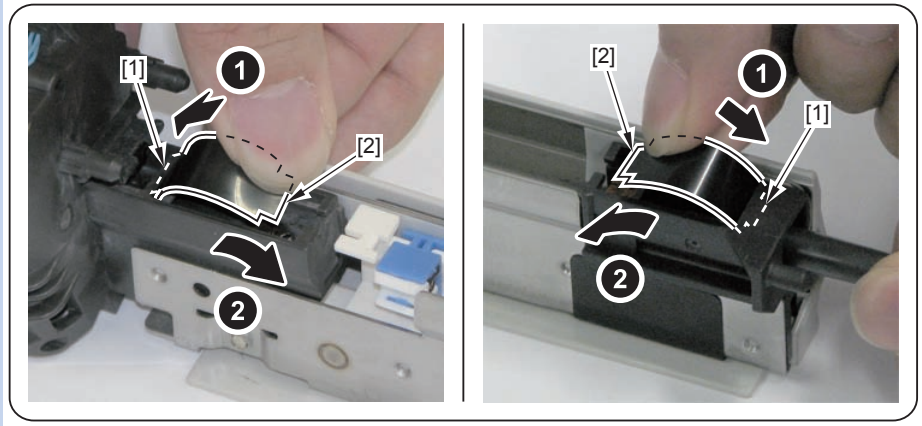
F-4-352

3) Remove the Pre-transfer Charging Assembly Cover (Front) [1] and Pre-transfer Charging Assembly Cover (Rear) [2].



F-4-353

NOTE:
When assembling the Pre-transfer Charging Assembly Cover, insert the protrusion [1] of one side and bend the Pre-transfer Charging Assembly Cover, and then insert the protrusion [2] of the opposite side to install.

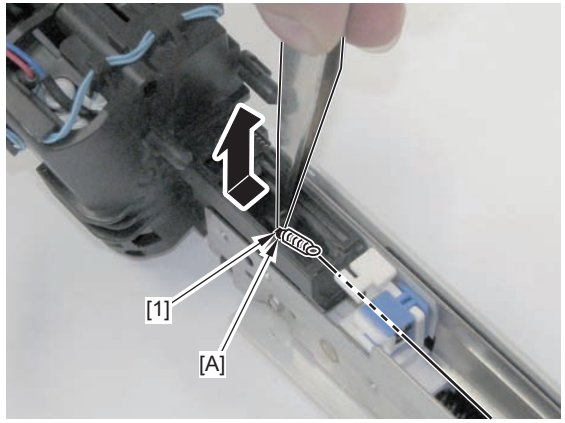


F-4-354

4) Use tweezers to hold the leading edge [A] of the spring to remove it from the hook [1].

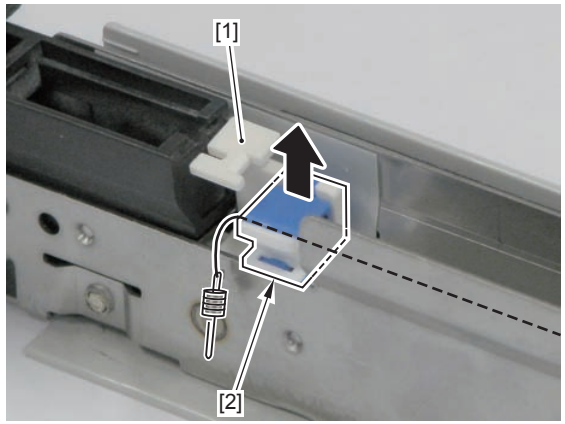
CAUTION:

When disassembling/assembling the Pre-transfer Charging Wire Cleaning Pad Holder and the Pre-transfer Charging Wire Cleaning Pad Slider, do not damage the Charging Wire.



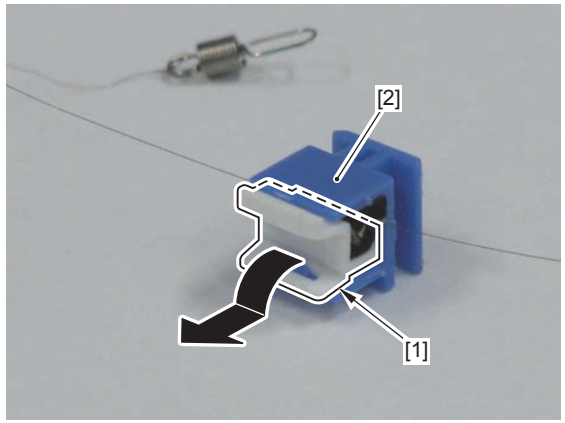
F-4-355

5) Remove the Pre-transfer Charging Wire Cleaning Pad Holder and the Pre-transfer Charging Wire Cleaning Pad Slider [2] from the Cleaning Pad Arm [1].



F-4-356

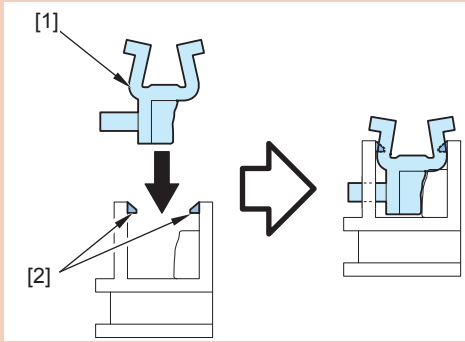
6) Use your fingers to pinch and then remove the Pre-transfer Charging Wire Cleaning Pad Holder [1] and the Pre-transfer Charging Wire Cleaning Pad Slider [2].



F-4-357

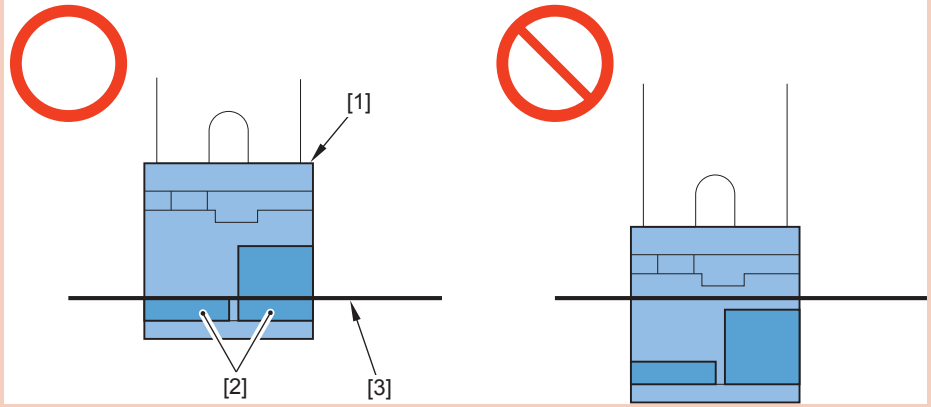
CAUTION:

- When assembling, push in the Pre-transfer Charging Wire Cleaning Pad Holder [1] until it is secured to the 2 claws [2].



F-4-358

- When assembling, push the Charging Wire [3] against the 2 pads [2] of the Pre-transfer Charging Wire Cleaning Pad Slider [1] to install.



F-4-359

Replacing the Pre-transfer Charging Wire

Preparation

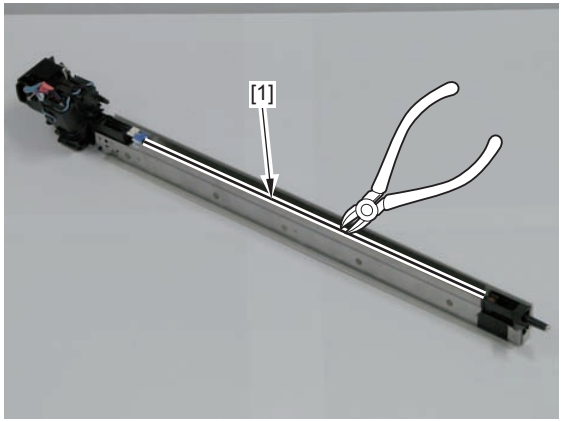
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
5) Remove the Pre-transfer Charging Wire Cleaning Pad Holder and the Pre-transfer Charging Wire Cleaning Pad Slider (Refer to page 4-207).

Disassembling Procedure

CAUTION:

When replacing this part, Cleaning the Pre-transfer Charging Assembly and execute the actions to be taken When Replacing the Pre-transfer Charging Wire.

1) Cut off the old Charging Wire [1] from the Pre-transfer Charging Assembly with nippers.

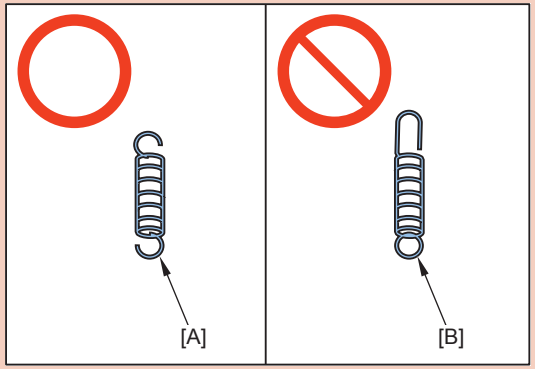


F-4-360

Assembling Procedure

CAUTION:

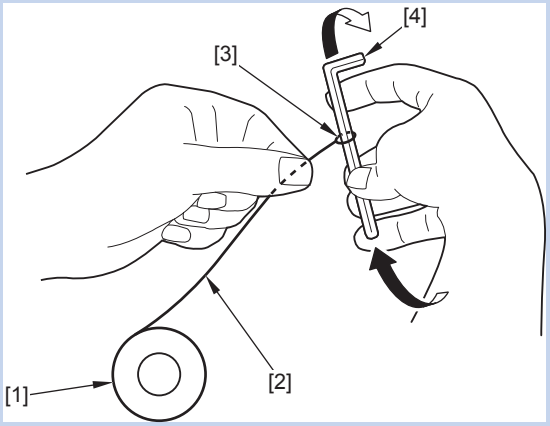
- In the case of replacing the Charging Wire on a Charging Wire basis, be sure to use the dedicated Charging Wire Tension Spring (97-5527) [A].
- Do not use the spring [B] attached to the Charging Wire.



F-4-361

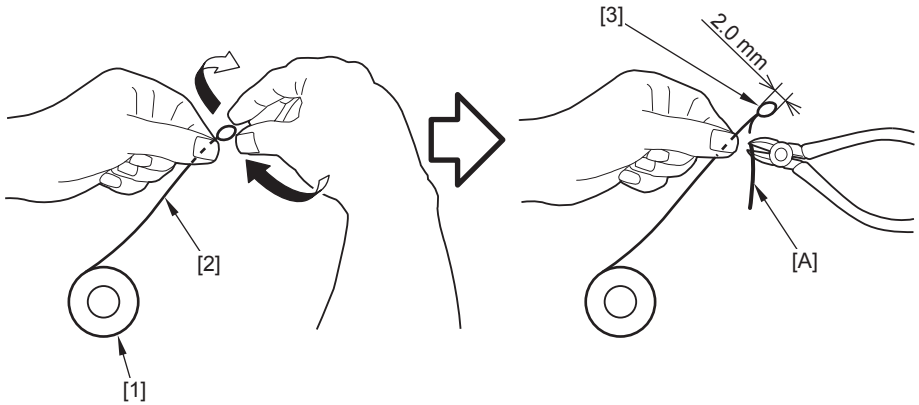
1) Untie approx. 5 cm of the Charging Wire [2] from the 0.06 mm (wire-diameter) Charging Wire Reel [1] to make a 2-mm-diameter ring [3] at the edge.

NOTE:
The ring [3] can be easily made by the following procedure: Wrap the Charging Wire [2] around the Hex Key [4] to make a full round, and then turn the Hex Key [4] for 3 to 4 times to twist the Charging Wire [2].



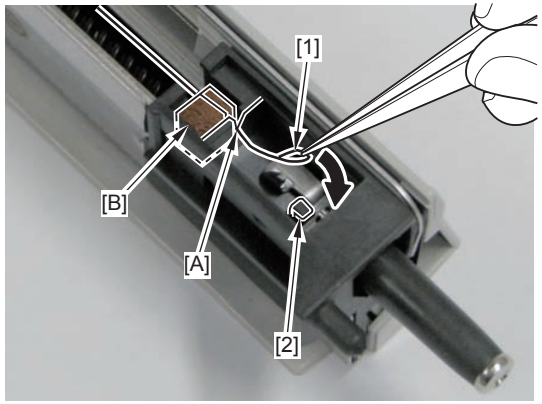
F-4-362

2) Cut off the edge (extra wire) [A] of the twisted Charging Wire with nippers.



F-4-363

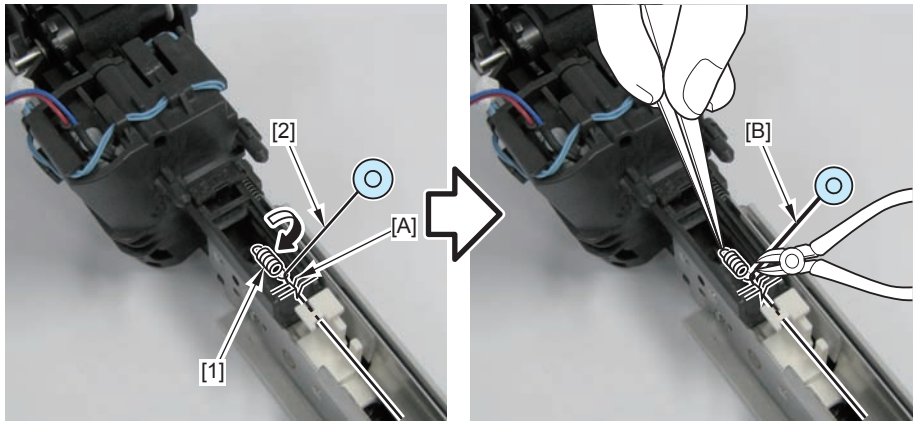
3) Attach the ring [1] of the Charging Wire to the hook [2], and then pass it through the groove [A] of the rear side and the groove [B] of the sponge.



F-4-364

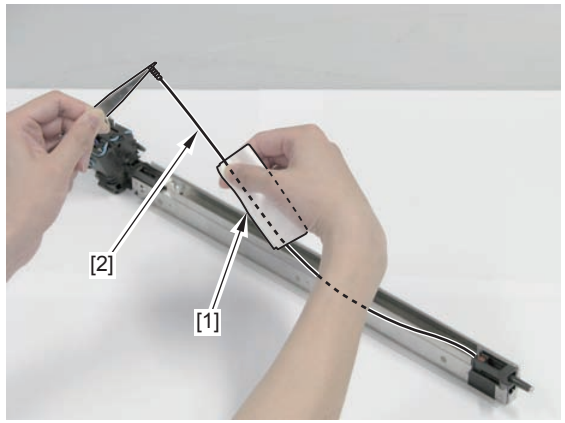
4) On the front side of the Pre-transfer Charging Assembly, hook the Charging Wire Tension Spring [1] to the Charging Wire [2] at the position [A] shown in the figure below to twist with it.

5) Cut off extra length of the Charging Wire [B] with nippers.



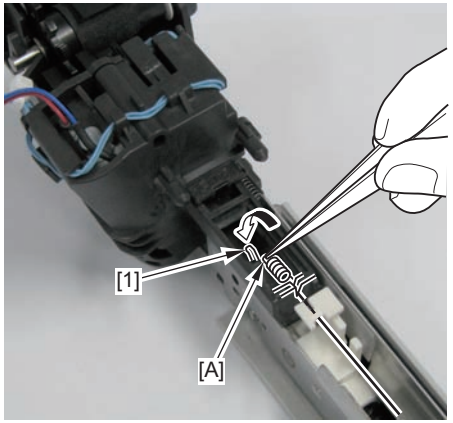
F-4-365

6) Clean the Charging Wire [2] with lint-free paper [1] moistened with alcohol.



F-4-366

7) Use tweezers to hold the leading edge [A] of the spring to attach it to the hook [1].



F-4-367

8) Assemble the Pre-transfer Charging Wire Cleaning Pad Slider and the Pre-transfer Charging Wire Cleaning Pad Holder in reverse order.

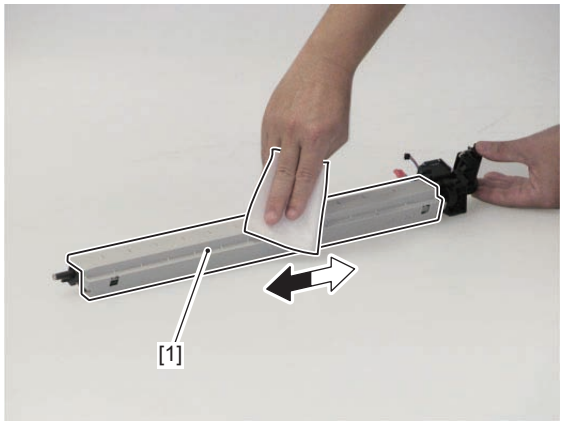
Cleaning the Pre-transfer Charging Assembly

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
5) Remove the Pre-transfer Charging Wire Cleaning Pad Holder and the Pre-transfer Charging Wire Cleaning Pad Slider (Refer to page 4-207).
6) Replace the Pre-transfer Charging Wire (Refer to page 4-210).

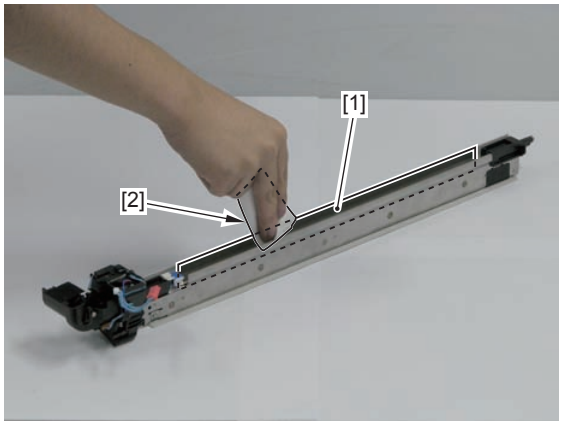
Procedure

1) Clean the Upper Duct [1] of the Pre-transfer Charging Assembly with lint-free paper [2] moistened with alcohol.



F-4-368

2) Clean the Inner Shield Plate [1] of the Pre-transfer Charging Assembly with lint-free paper [2] moistened with alcohol.



F-4-369

When Replacing the Pre-transfer Charging Wire

Procedure

1) Clean the Charging Wire.
(COPIER > FUNCTION > CLEANING > WIRE-EX)

Removing the Drum Unit (Bk)

Preparation: Removing the Toner Container Manually

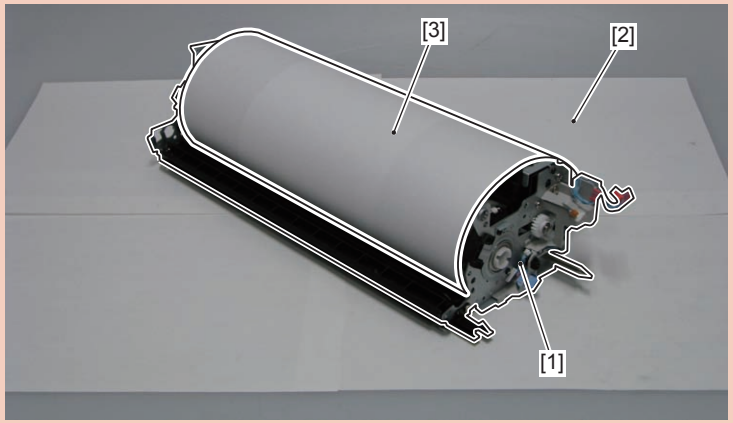
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).

Procedure

CAUTION:

When handling the Drum Unit (Bk), be sure to follow the points to note below.

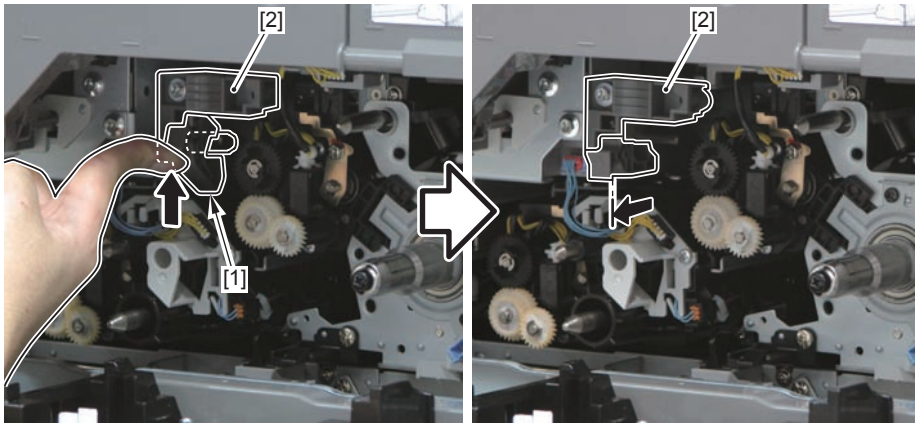
- When handling the Drum Unit (Bk) [1], place it on a sheet of paper [2], etc.
- After removing the Drum Unit (Bk), be sure to block light to the drum.
  Cover with the Drum Protection Sheet [3] or wrap 5 or more papers [3] around the drum to block light.



F-4-370

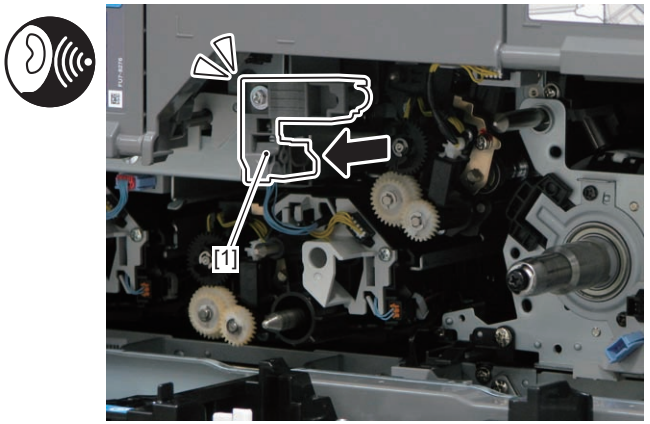
- Do not place the Drum (Bk) in a location where is exposed to direct rays of the sun (e.g. near the window).
- Do not store in a location with high/low temperature/humidity, or in a location where temperature or humidity is dramatically changed.
- Do not store in a dusty area or in a location full of ammonia gas or organic solvent gas.

1) Raise the Lock Release Lever [1] to release the lock of the Black Developing Assembly Pressure Lever [2].



F-4-371

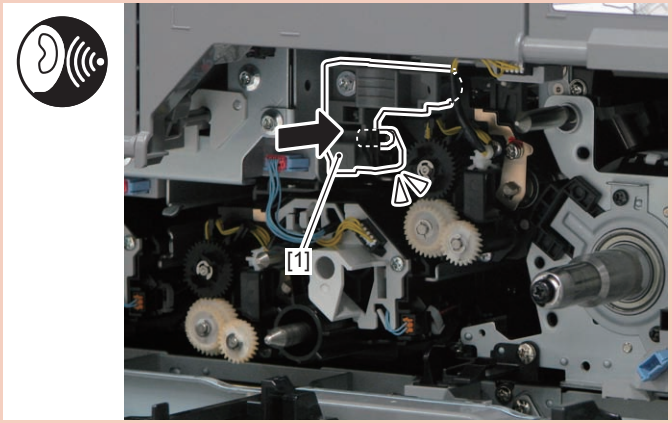
2) Pull out the Black Developing Assembly Pressure Lever [1] until it stops to release the pressure applied on the Developing Assembly (Bk).



F-4-372

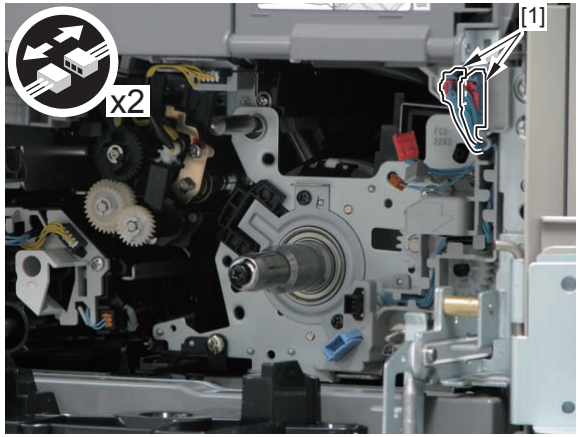
CAUTION:

When installing, push in the Black Developing Assembly Pressure Lever [1] until it stops.



F-4-373

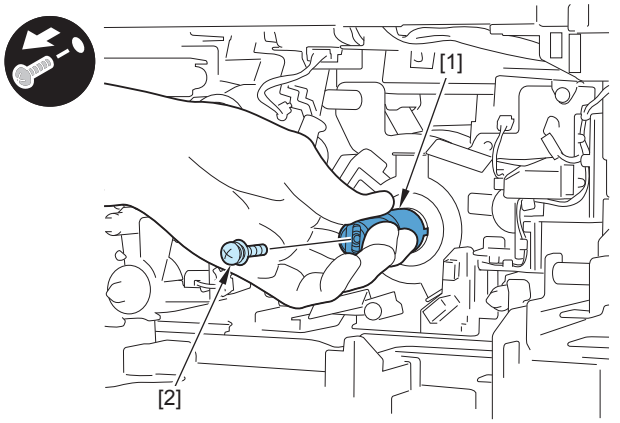
3) Disconnect the 2 connectors [1].



F-4-374

4) Remove the Drum Shaft Cap [1].

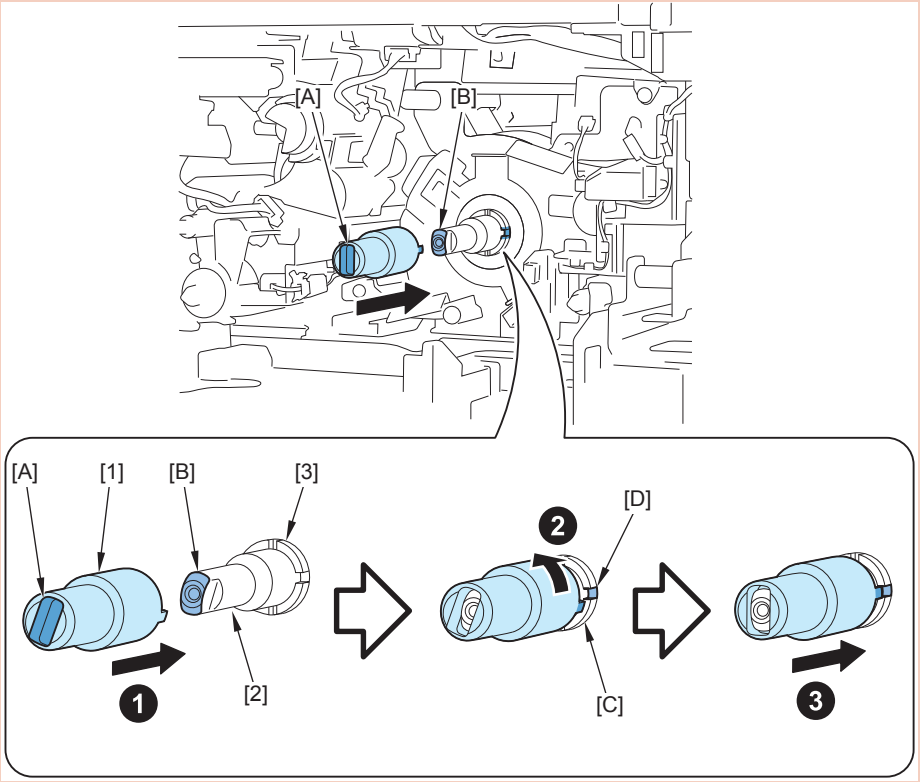
- 1 Screw [2]



F-4-375

CAUTION:

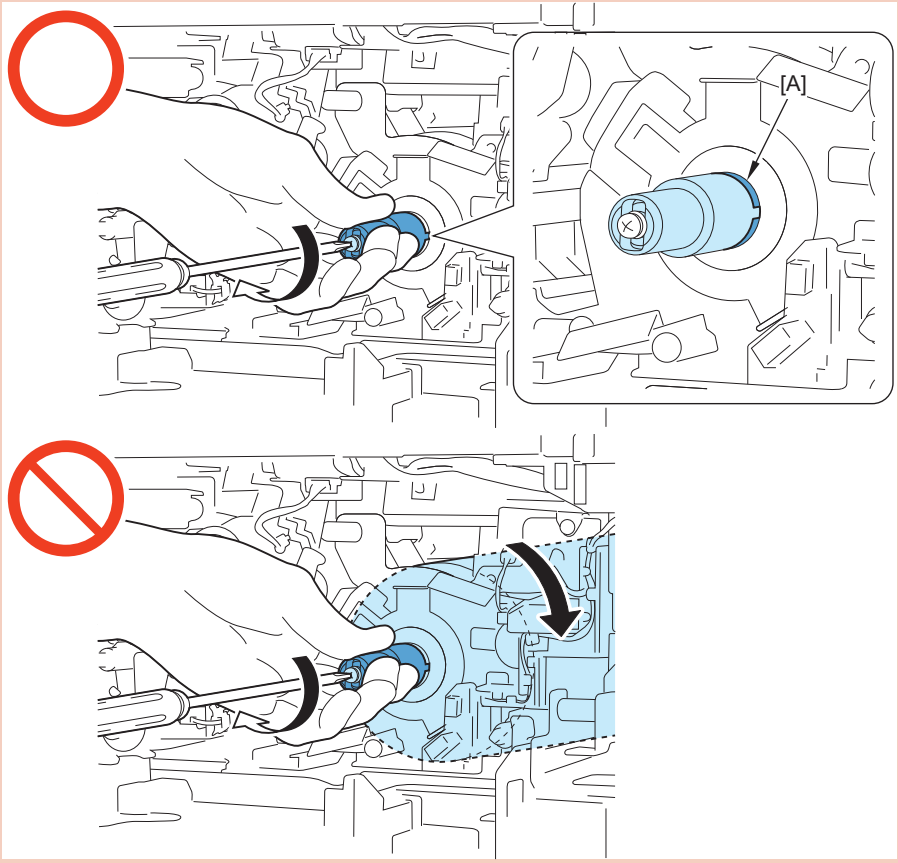
- When installing the Drum Shaft Cap [1], be sure to install it in the phase where the hole [A] of the Drum Shaft Cap is aligned with the leading edge [B] of the Drum Drive Shaft [2], and at the same time the protrusion [C] of the Drum Shaft Cap is aligned with the groove [D] of the Drum Flange.
- If the phase is mismatched, hook the protrusion of the Drum Shaft Cap to the groove of the Drum Flange, and then rotate the Drum Flange [3] counterclockwise so that the phase is matched.



F-4-376

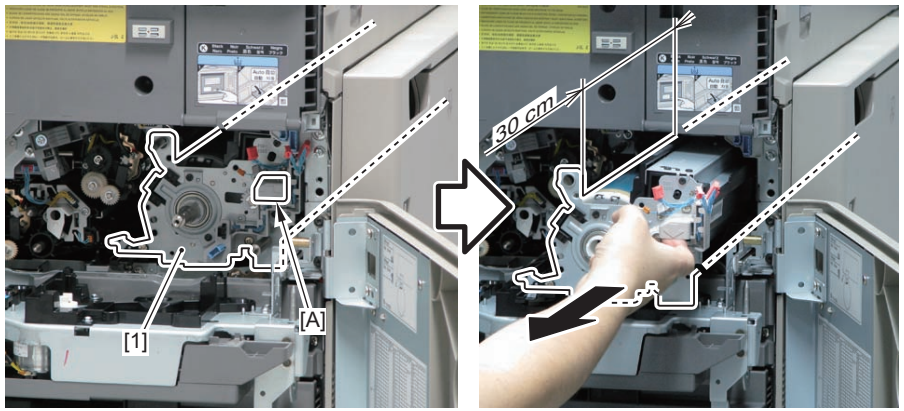
CAUTION:

- When tightening the screw of the Drum Shaft Cap, tighten the screw while pushing the Drum Shaft Cap against the rear side, until it is no longer easy to turn the screwdriver so that it does not cause the drum to rotate clockwise together.
- After tightening the screw, check that the end face [A] of the Drum Shaft Cap touches the drum.



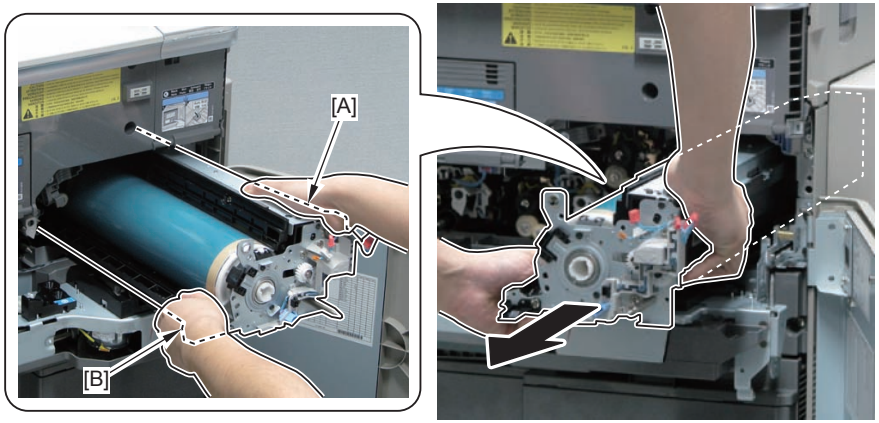
F-4-377

5) Hold the handle [A] to pull out the Drum Unit (Bk) [1] for about 30 cm.



F-4-378

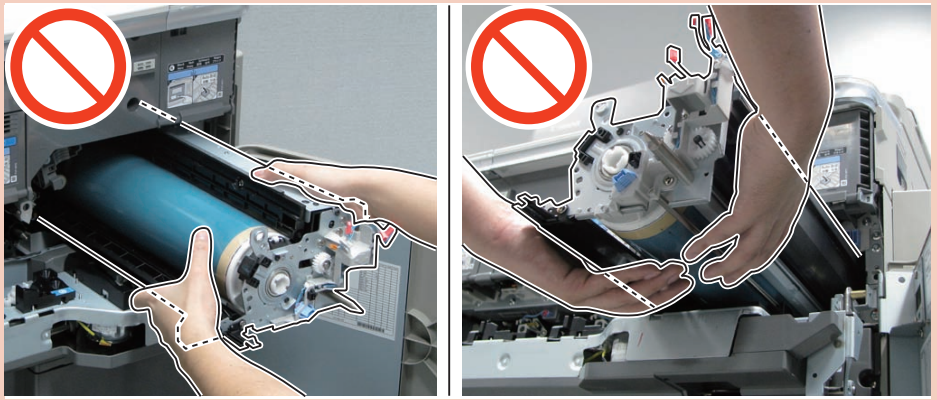
6) Hold the front upper part [A] and the left side [B] of the Drum Unit (Bk) and remove it.



F-4-379

CAUTION:

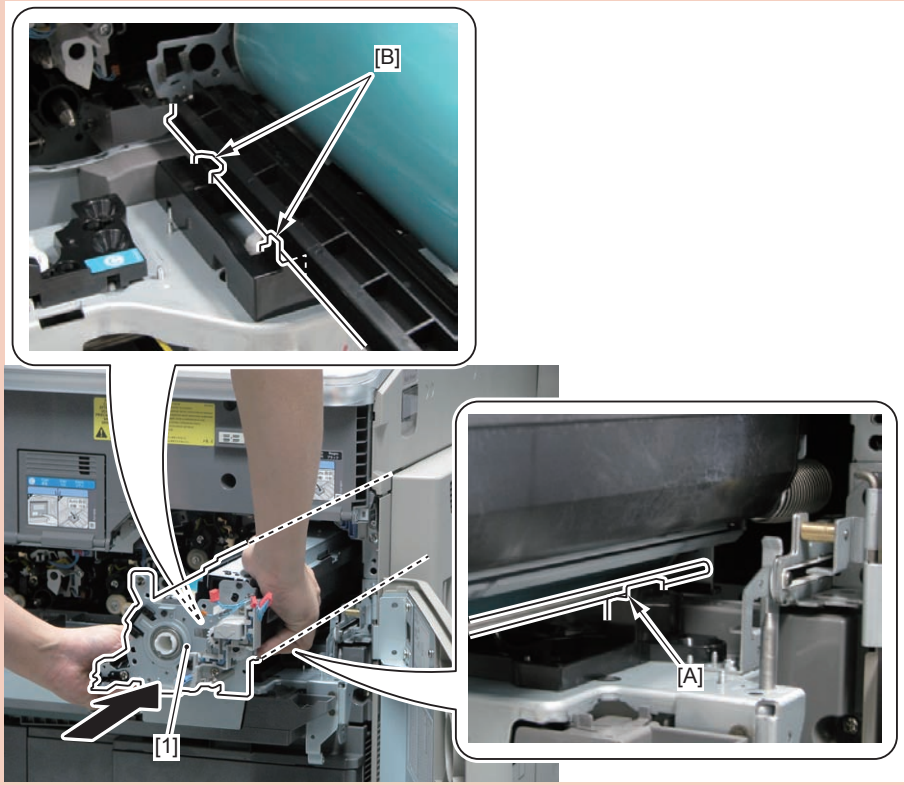
When installing/removing, do not touch the surface of the Photosensitive Drum.



F-4-380

CAUTION:

When installing the Drum Unit (Bk) [1], place the lower right side of the Drum Unit (Bk) on the guide [A] of the Process Unit Inner Cover, then check that the Drum Unit (Bk) [1] is placed on the guide [B], and then push it in slowly and horizontally.



F-4-381

Removing the Drum Cleaning Unit

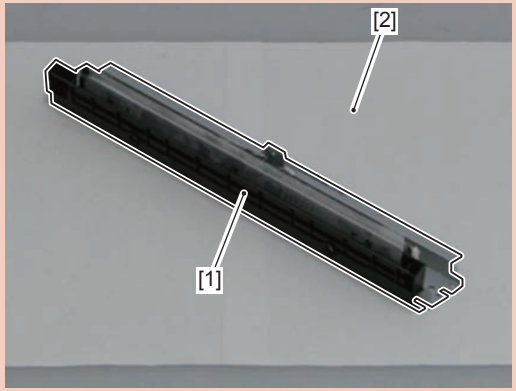
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
6) Remove the Drum Unit (Bk) (Refer to page 4-214).

Procedure

CAUTION:

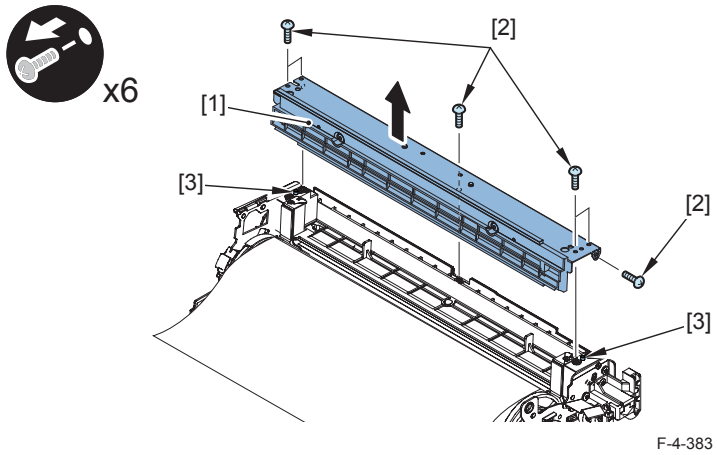
Because there is toner on the Drum Cleaning Unit [1], be sure to turn it over and then place it on a sheet of paper [2], etc.



F-4-382

1) Remove the Drum Cleaning Unit [1].

- 6 Screws [2]
- 2 Bosses [3]



F-4-383

Removing the Drum Cleaning Blade (Bk) and the Side Seal (Front)/(Rear)

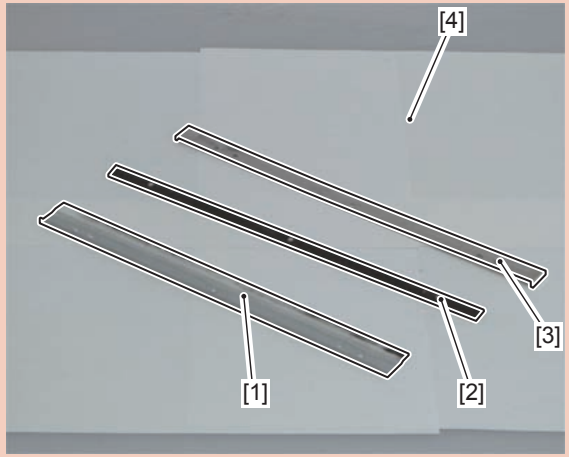
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
6) Remove the Drum Unit (Bk) (Refer to page 4-214).
7) Remove the Drum Cleaning Unit (Refer to page 4-218).

Procedure

CAUTION:

Because there is toner on the Drum Cleaning Blade (Bk) [1], Blade Spacer [2], and the Side Seal (Front)/(Rear) [3], be sure to place them on a sheet of paper [4], etc.

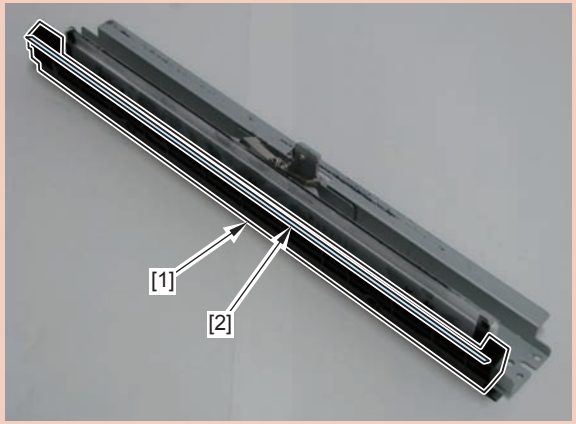


F-4-384

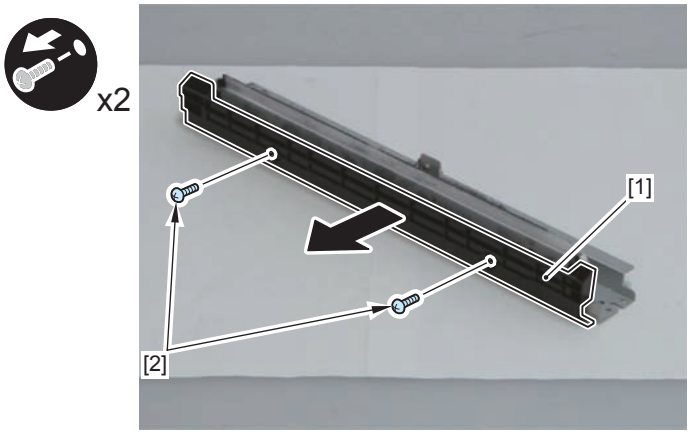
1) Remove the Drum Cleaning Blade Cover [1].
- 2 Screws [2]

CAUTION:

When disassembling/assembling the Drum Cleaning Blade Cover [1], do not bend the sheet [2].

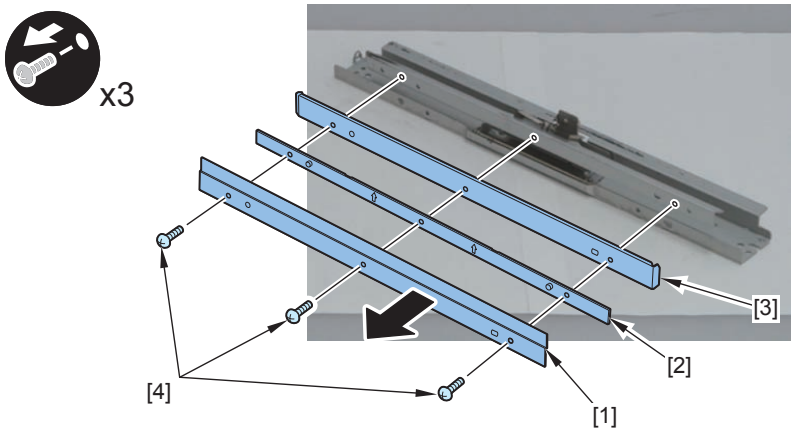


F-4-385



F-4-386

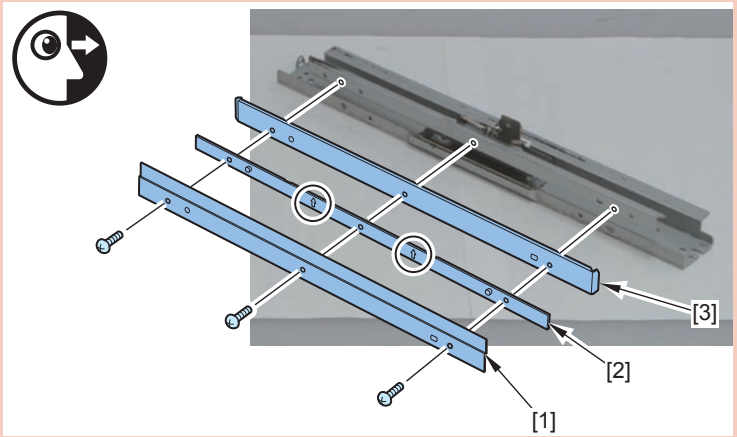
2) Remove the Drum Cleaning Blade (Bk) [1], Blade Spacer [2], and Side Seal (Front)/(Rear) [3] from the Drum Cleaning Blade Unit.
- 3 Screws [4]



F-4-387

CAUTION:

When assembling the Drum Cleaning Blade Unit, be sure to pay attention to the direction of installing the Drum Cleaning Blade (Bk) [1], Blade Spacer [2], and Side Seal (Front)/(Rear) [3].



F-4-388

Removing the Drum (Bk)

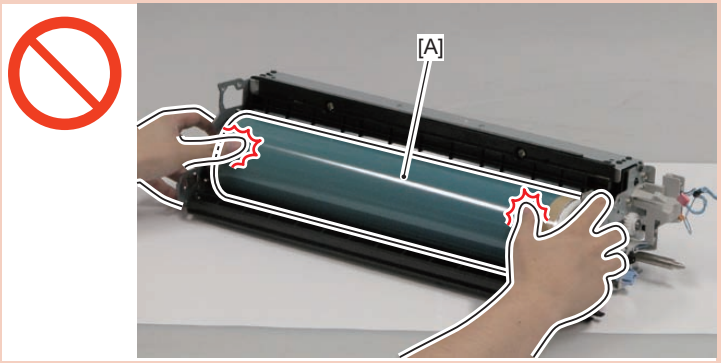
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
6) Remove the Drum Unit (Bk) (Refer to page 4-214).
7) Remove the Drum Cleaning Unit (Refer to page 4-218).

Procedure

CAUTION:

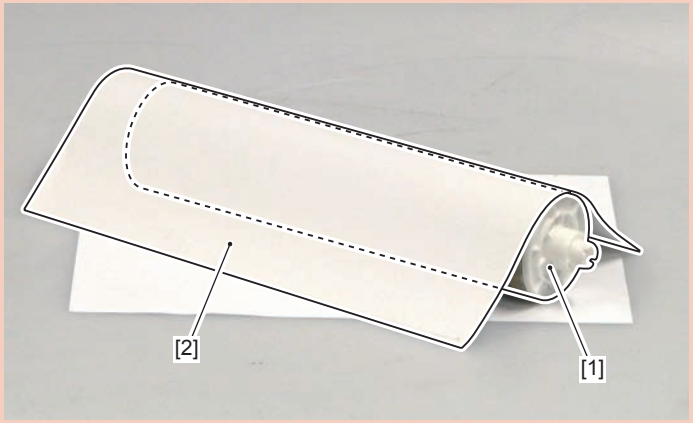
- When replacing this part, Cleaning the Patch Sensor Unit and execute the actions to be taken When Replacing the Drum (Bk).
- When installing/removing, do not touch the surface of the Photosensitive Drum. An illustration from a new photo.



F-4-389

CAUTION:

- Cover the drum [1] with 5 or more papers or the Lightproof Sheet [2].



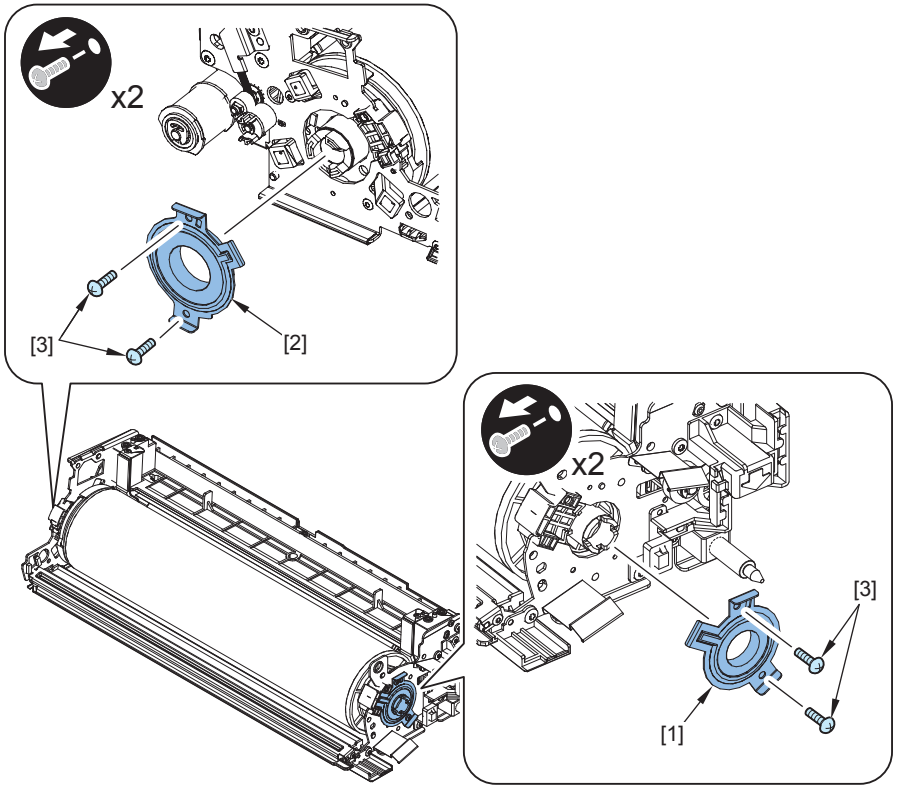
F-4-390

NOTE:
If there is abnormal noise from the drum (Bk), apply Barrierta to the circumference of the 3 Slip Rings [1] of the Sliding Assembly of the drum.
(Apply 1 rice-grain sized, 2 rice-grain sized, and 3 rice-grain sized Barrierta from the innermost side (in order of increasing diameter).)

F-4-391

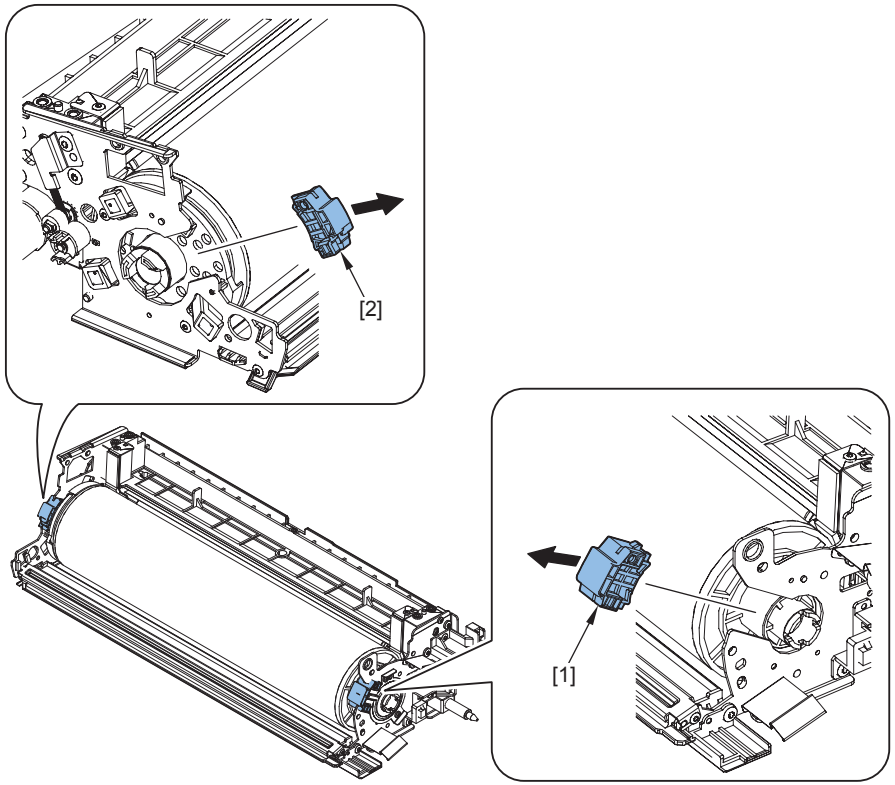
1) Remove the Drum Shaft Bearing (Front) [1] and Drum Shaft Bearing (Rear) [2].

- 2 Screws [3] for each



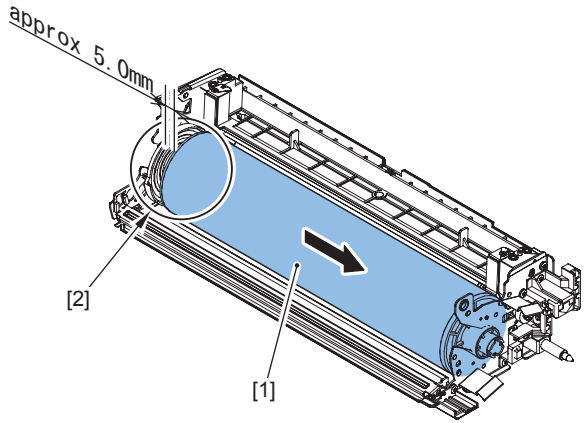
F-4-392

2) Remove the SD Spacer (Front) [1] and SD Spacer (Rear) [2].



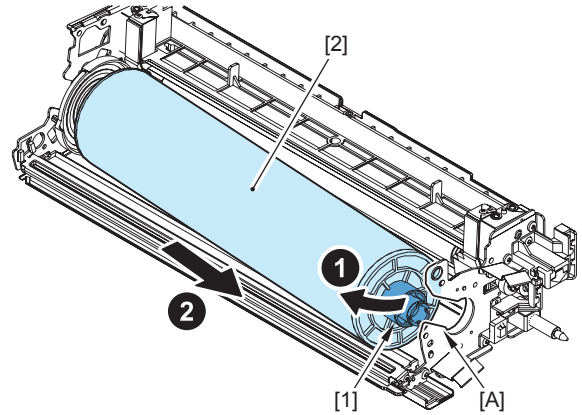
F-4-393

3) Move the Drum (Bk) [1] in the direction of the arrow by about 5.0 mm, and then remove the Drum Sliding Assembly [2].



F-4-394

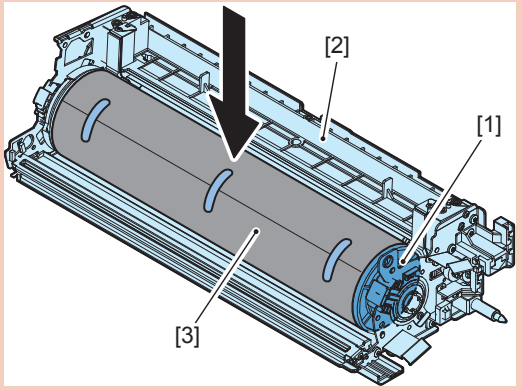
4) Pull out horizontally the Drum Shaft [1] on the front side from the groove [A] of the Drum Unit Frame, and then remove the Drum (Bk) [2] in the direction of the arrow.



F-4-395

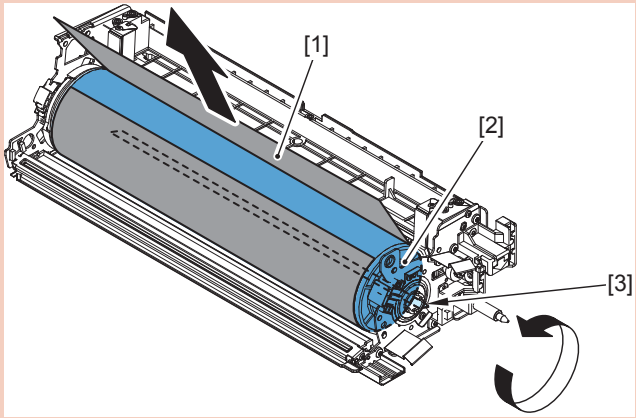
CAUTION:

- When installing a new drum (Bk), be sure to remove the Lightproof Sheet [3] after installing the drum [1] to the Drum Unit Frame [2].



F-4-396

- In addition, be sure to rotate the drum [2] counterclockwise when removing the Lightproof Sheet [1].
(If the drum is rotated clockwise, the Scoop-up Sheet [3] may be everted.)



F-4-397

Cleaning the Toner Catch Tray (Bk)

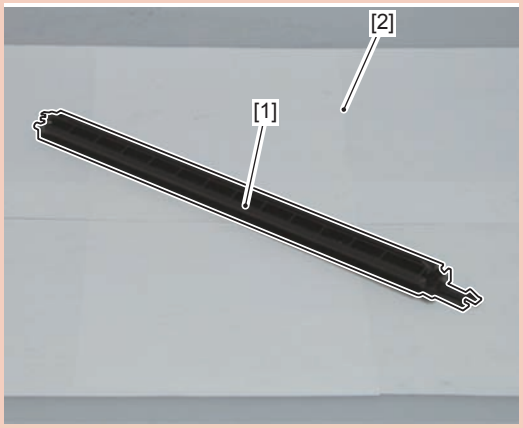
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
6) Remove the Drum Unit (Bk) (Refer to page 4-214).

Procedure

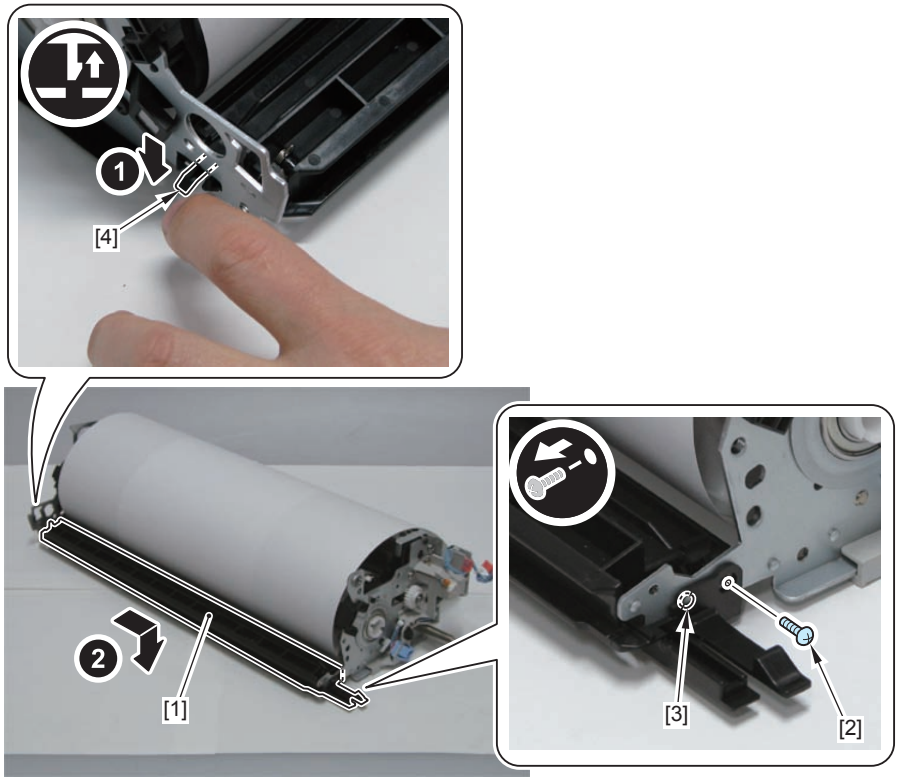
CAUTION:

Because there is toner on the Toner Catch Tray (Bk) [1], be sure to place it on a sheet of paper [2], etc.



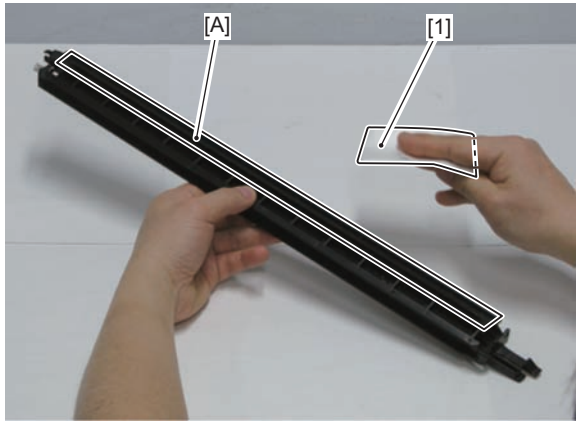
F-4-398

1) Remove the Toner Catch Tray (Bk) [1].
- 1 Screw [2]
- 1 Boss [3]
- 1 Claw [4]



F-4-399

2) Remove soiling accumulated at the [A] part of the Toner Catch Tray (Bk) with lint-free paper moistened with alcohol.



F-4-400

When Replacing the Drum (Bk)

Procedure

1) Disable the warm-up rotation control.
   (COPIER > FUNCTION > INSTALL > AINR-OFF)
2) Turn OFF the main power, and replace the Drum (Bk).
3) Turn ON the main power.
4) Execute the drum replacement mode forcibly.
   (COPIER > FUNCTION > DPC > DRMRSETK)
5) Enable the warm-up rotation control.
   (COPIER > FUNCTION > INSTALL > AINR-OFF)
6) Execute Settings/Registration > Adjustment /Maintenance > Adjust Image Quality > Auto Adjust Gradation > Full Adjustment.

Removing the Drum Cleaning Scoop-up Sheet (Bk)

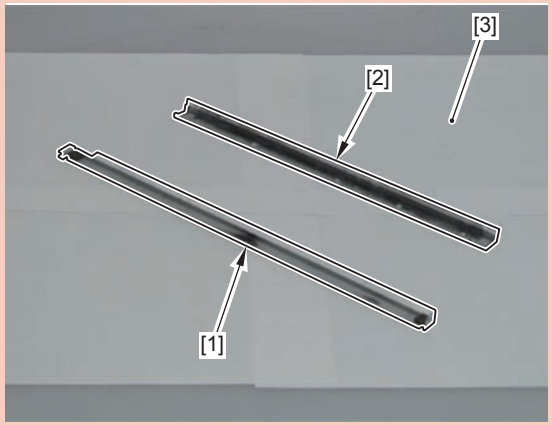
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
6) Remove the Drum Unit (Bk) (Refer to page 4-214).
7) Remove the Drum Cleaning Unit (Refer to page 4-218).
8) Remove the Drum (Bk) (Refer to page 4-221).

Procedure

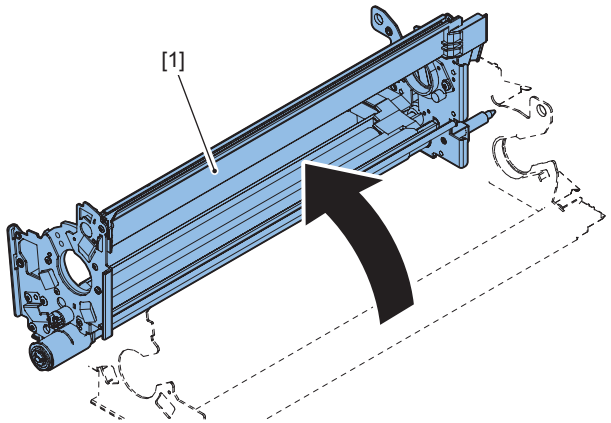
CAUTION:

Because there is toner on the Drum Cleaning Scoop-up Plate [1] and the Drum Cleaning Scoop-up Sheet (Bk) [2], be sure to place them on a sheet of paper [3], etc.



F-4-401

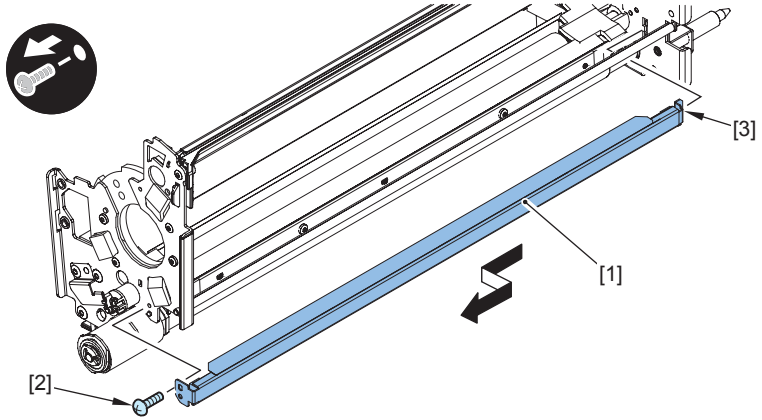
1) Move the Drum Unit (Bk) [1] in the direction of the arrow.



F-4-402

2) Remove the Drum Cleaning Scoop-up Plate [1].

- 1 Screw [2]
- 1 Protrusion [3]

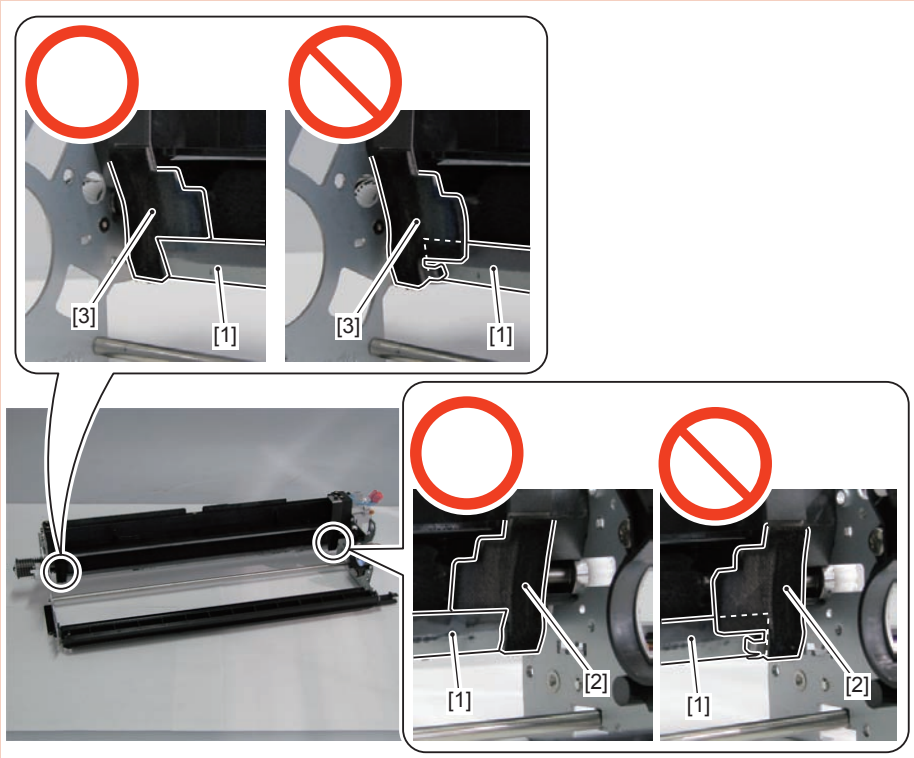


F-4-403

CAUTION:

When disassembling/assembling the Drum Cleaning Scoop-up Sheet (Bk), perform the operation in the order below, because the Drum Cleaning Scoop-up Sheet (Bk) [1] needs to overlap the Edge Scraper 1 (Bk) [2] and the Edge Scraper 2 (Bk) [3] in the correct order.

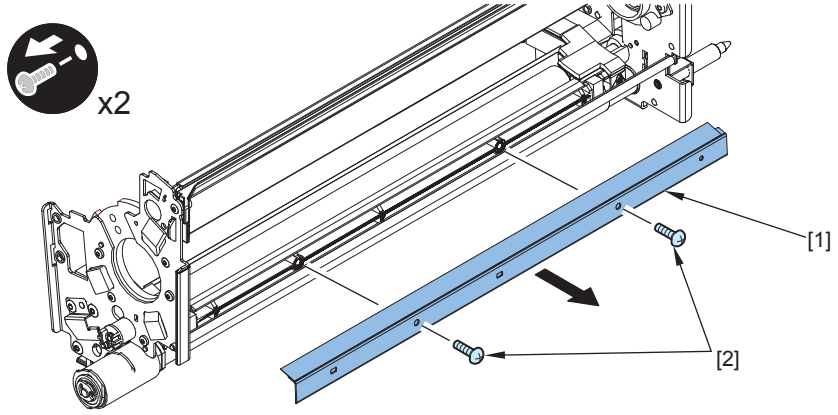
- When disassembling:
  Remove the Drum Cleaning Scoop-up Sheet (Bk) [1] first, before the Edge Scraper 1 (Bk) [2] and the Edge Scraper 2 (Bk) [3].
- When assembling:
  Install the Drum Cleaning Scoop-up Sheet (Bk) [1] last, after the Edge Scraper 1 (Bk) [2] and the Edge Scraper 2 (Bk) [3].



F-4-404

3) Remove the Drum Cleaning Scoop-up Sheet (Bk) [1].

- 2 Screws [2]



F-4-405

Removing the Edge Scraper 1 (Bk) and the Edge Scraper 2 (Bk)

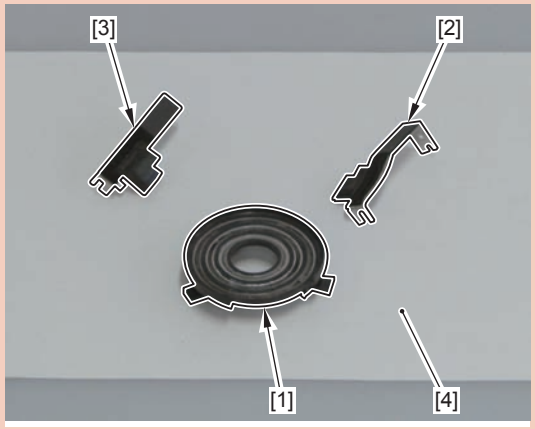
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
6) Remove the Drum Unit (Bk) (Refer to page 4-214).
7) Remove the Drum Cleaning Unit (Refer to page 4-218).
8) Remove the Drum (Bk) (Refer to page 4-221).
9) Remove the Drum Cleaning Scoop-up Sheet (Bk) (Refer to page 4-225).

Procedure

CAUTION:

Because there is toner on the Drum Sliding Shaft Support [1], the Edge Scraper 1 (Bk) [2] and the Edge Scraper 2 (Bk) [3], place them on a sheet of paper [4], etc.

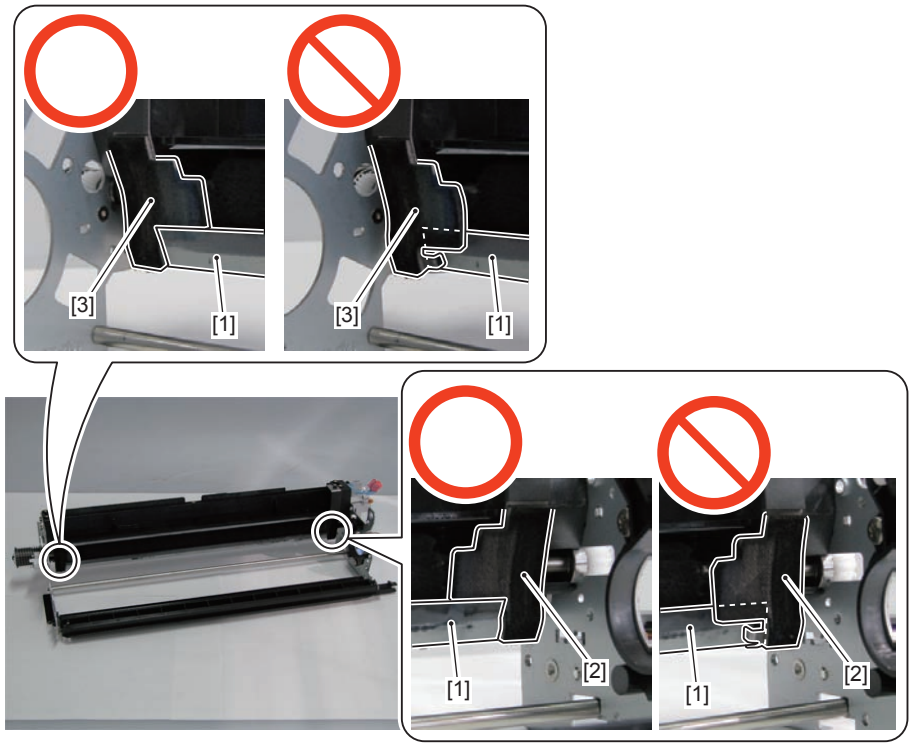


F-4-406

CAUTION:

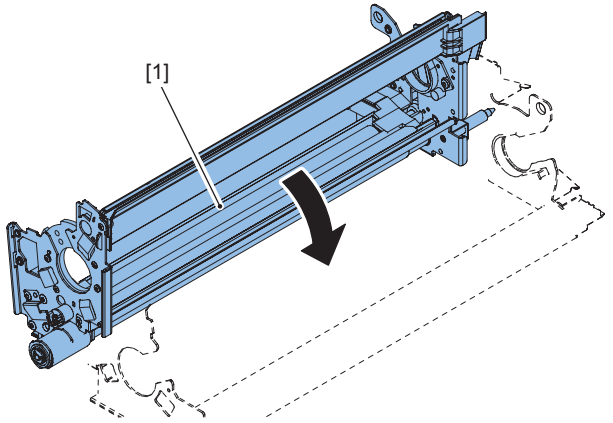
When disassembling/assembling the Drum Cleaning Scoop-up Sheet (Bk), perform the operation in the order below, because the Drum Cleaning Scoop-up Sheet (Bk) [1] needs to overlap the Edge Scraper 1 (Bk) [2] and the Edge Scraper 2 (Bk) [3] in the correct order.

- When disassembling:
  Remove the Drum Cleaning Scoop-up Sheet (Bk) [1] first, before the Edge Scraper 1 (Bk) [2] and the Edge Scraper 2 (Bk) [3].
- When assembling:
  Install the Drum Cleaning Scoop-up Sheet (Bk) [1] last, after the Edge Scraper 1 (Bk) [2] and the Edge Scraper 2 (Bk) [3].



F-4-407

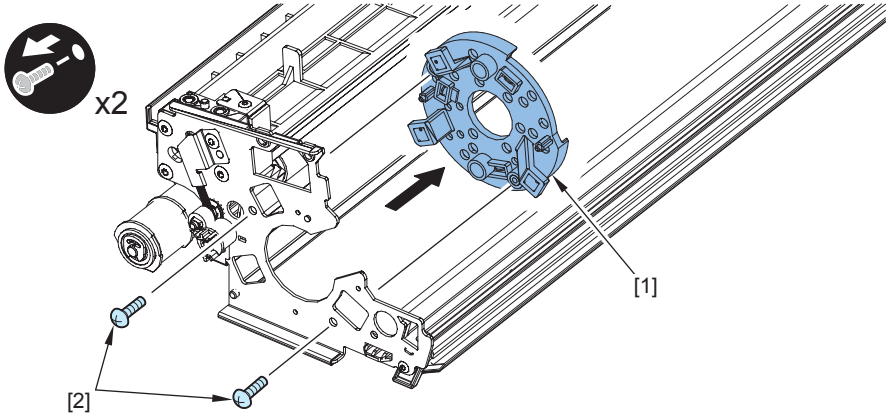
1) Move the Drum Unit (Bk) [1] in the direction of the arrow.



F-4-408

2) Remove the Drum Sliding Shaft Support [1] at the rear side.

- 2 Screws [2]



F-4-409

3) Remove the Edge Scraper 1 (Bk) [1] and the Edge Scraper 2 (Bk) [2].

- 2 Screws [3]

F-4-410

Removing the Drum Fur Brush

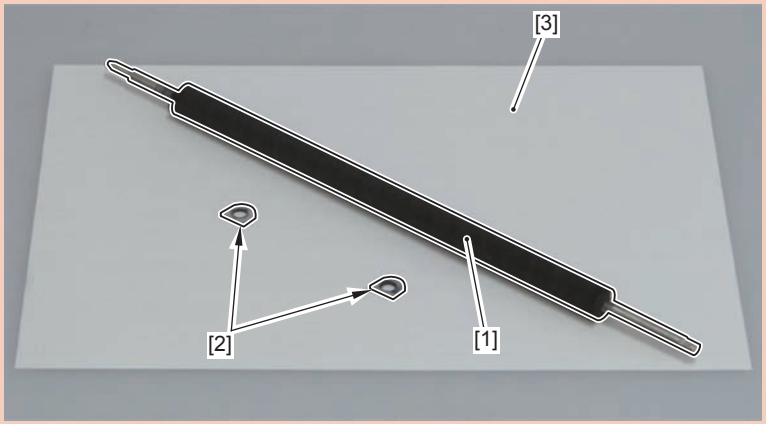
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Primary Charging Assembly (Refer to page 4-184).
5) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
6) Remove the Drum Unit (Bk) (Refer to page 4-214).
7) Remove the Drum Cleaning Unit (Refer to page 4-218).
8) Remove the Drum (Bk) (Refer to page 4-221).
9) Remove the Drum Cleaning Scoop-up Sheet (Bk) (Refer to page 4-225).
10) Remove the Edge Scraper 1 (Bk) and the Edge Scraper 2 (Bk) (Refer to page 4-227).

Procedure

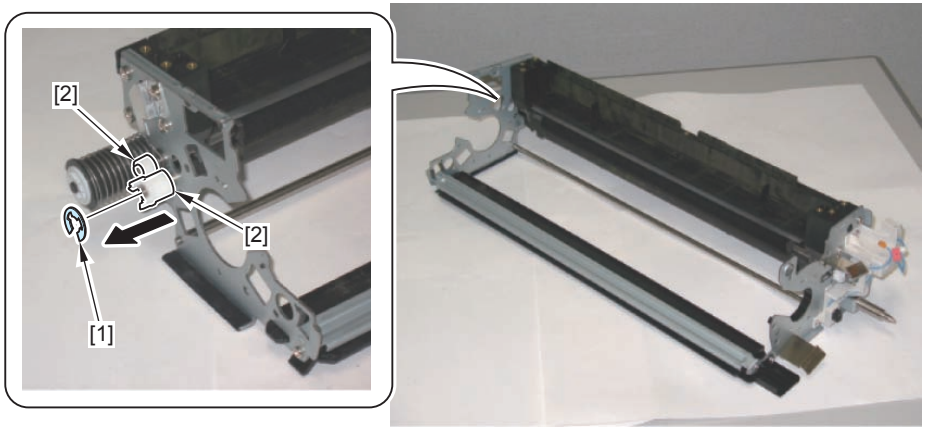
CAUTION:

Because there is toner on the Drum Fur Brush [1] and the Felt Seal [2], place them on a sheet of paper [3], etc.



F-4-411

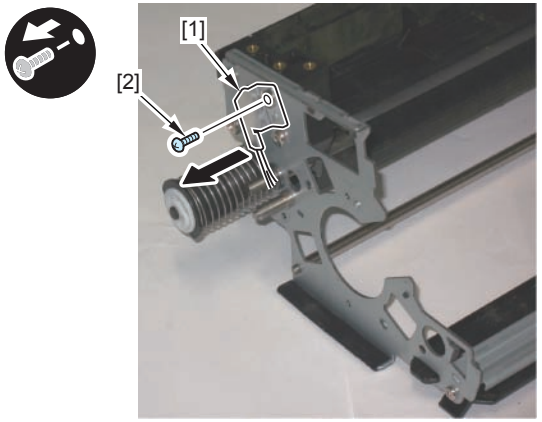
1) Remove the E-ring [1] and the 2 gears [2].



F-4-412

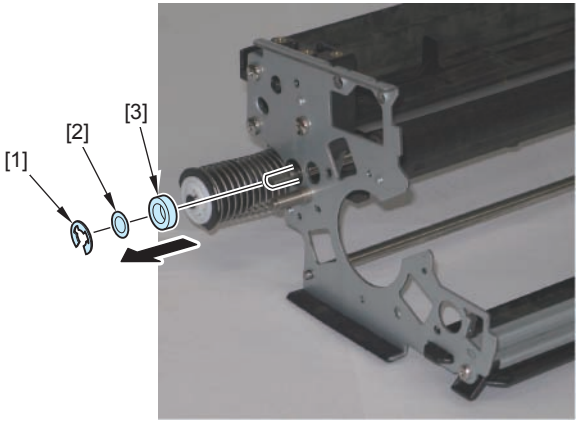
2) Remove the Brush Plate [1].

- 1 Screw [2]



F-4-413

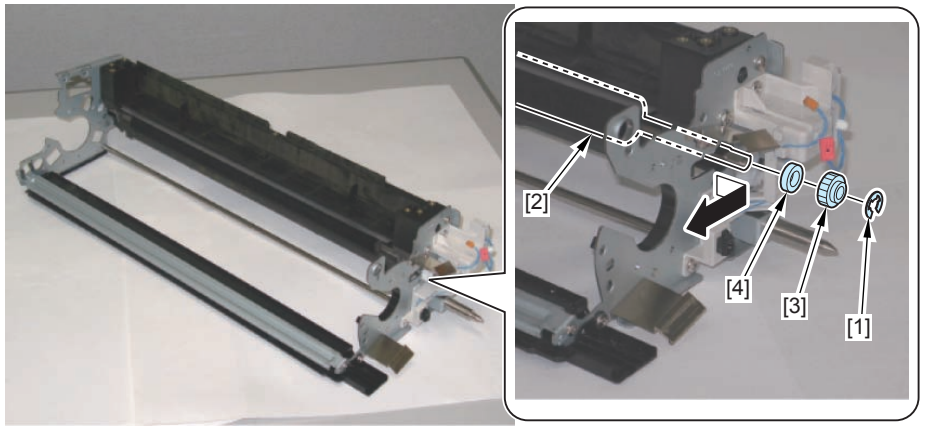
3) Remove the E-ring [1], washer [2], and Ball Bearing [3].



F-4-414

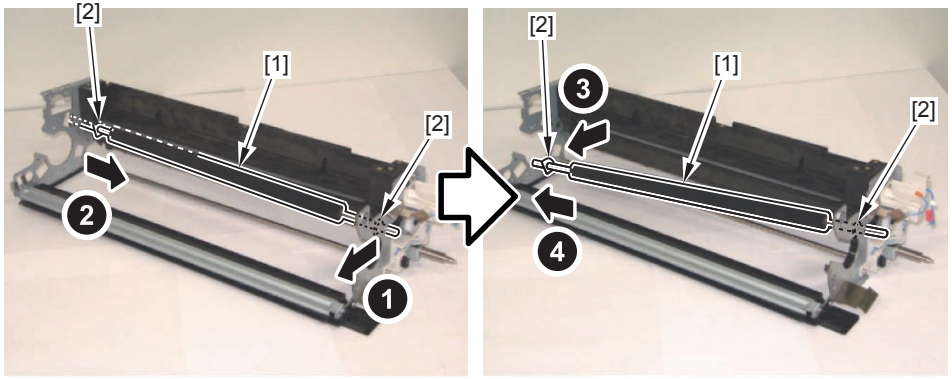
4) Remove the E-ring [1] to move the Drum Fur Brush [2].

5) Remove the gear [3] and the Ball Bearing [4].



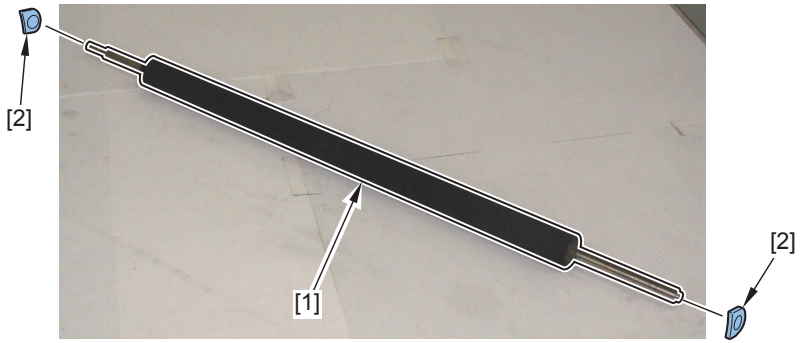
F-4-415

6) Remove the Drum Fur Brush [1] and the 2 Felt Seals [2] in the direction of the arrow.



F-4-416

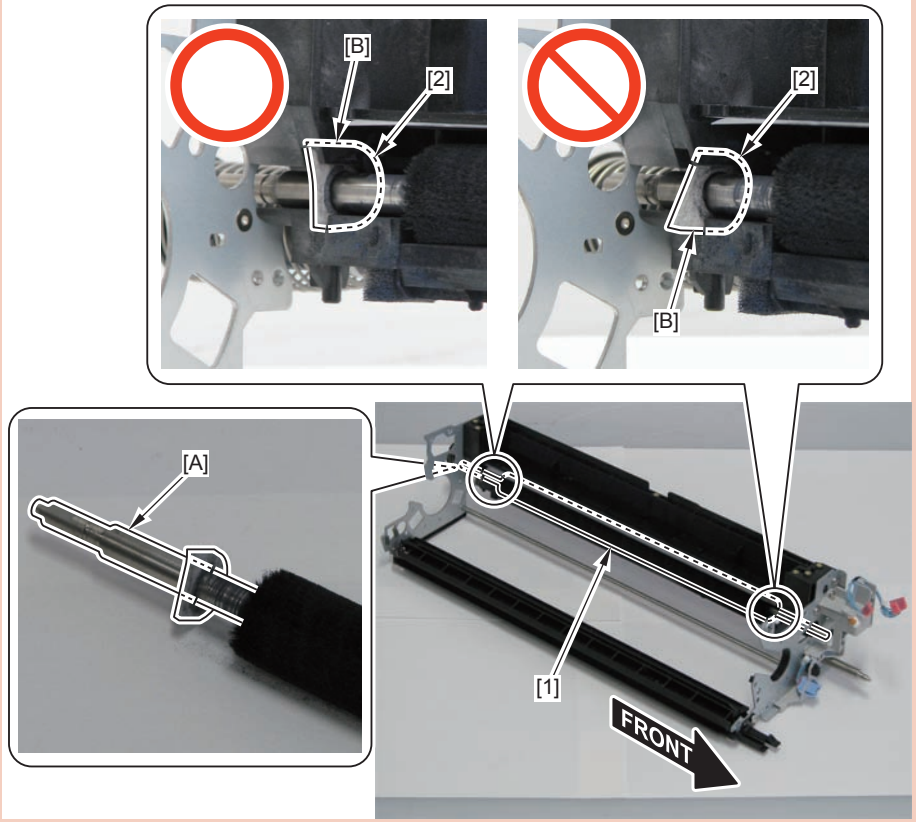
7) Remove the 2 Felt Seals [2] from the Drum Fur Brush [1].



F-4-417

CAUTION:

- When installing the Drum Fur Brush [1], install it with the shaft [A] on the rear side.
- When installing the 2 Felt Seals [2], install it with the long side [B] up.



F-4-418

Removing the Developing Assembly (Bk)

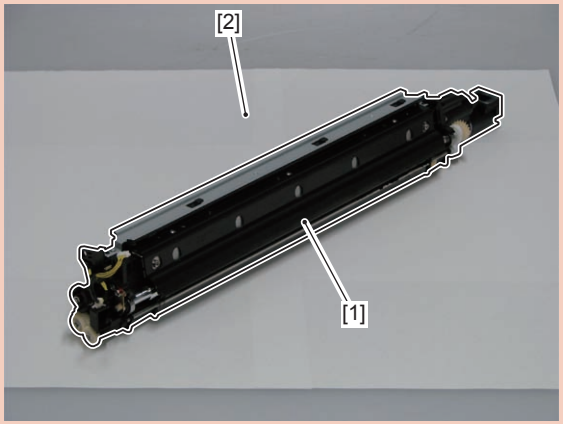
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).

Procedure

CAUTION:

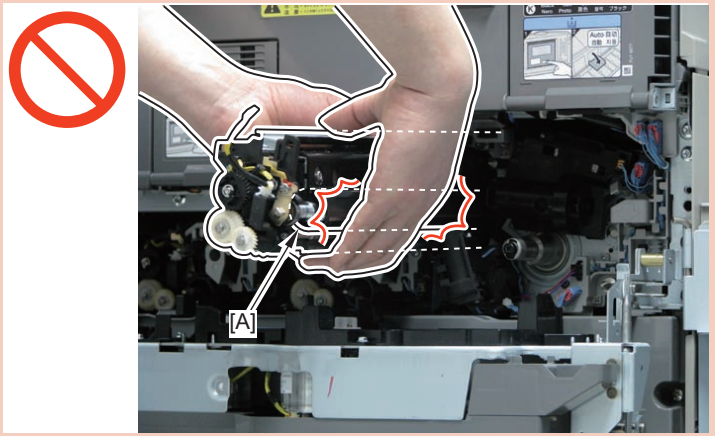
Be sure to place the Developing Assembly (Bk) [1] on a sheet of paper [2], etc.



F-4-419

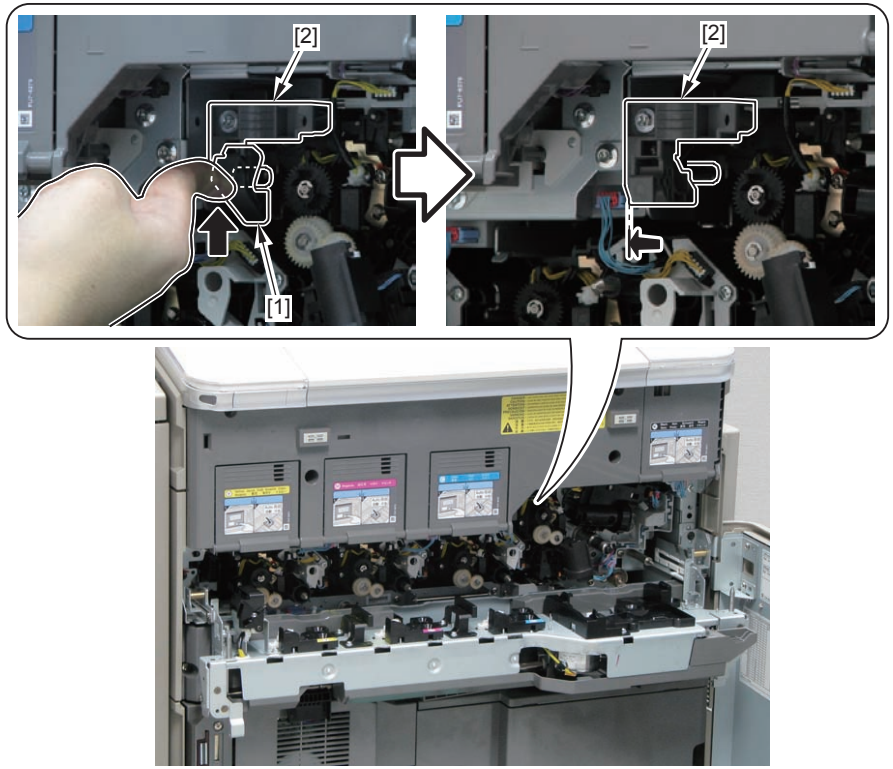
CAUTION:

Do not touch the surface [A] of the Developing Cylinder.



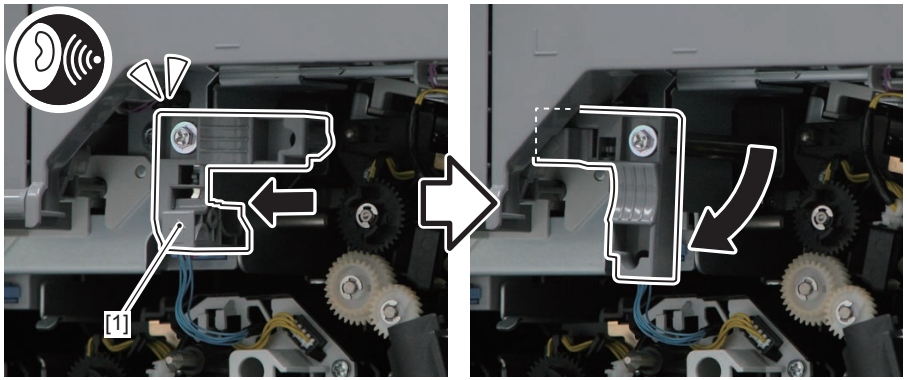
F-4-420

1) Raise the Lock Release Lever [1] to release the Black Developing Assembly Pressure Lever [2].



F-4-421

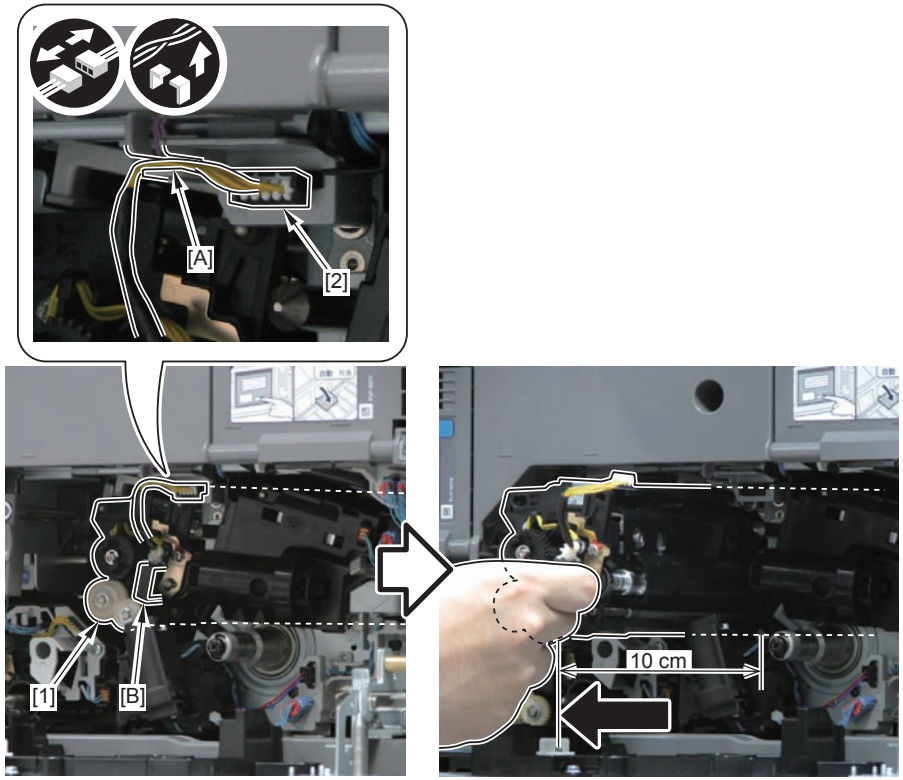
2) Pull out the Black Developing Assembly Pressure Lever [1] until it stops to release the pressure applied on the Developing Assembly (Bk).
3) Turn the Black Developing Assembly Pressure Lever [1] in the direction of the arrow.



F-4-422

4) Free the harness from the guide [A], and hold the handle [B] to pull out the Developing Assembly (Bk) [1] for approx. 100 mm.

- 1 Connector [2]

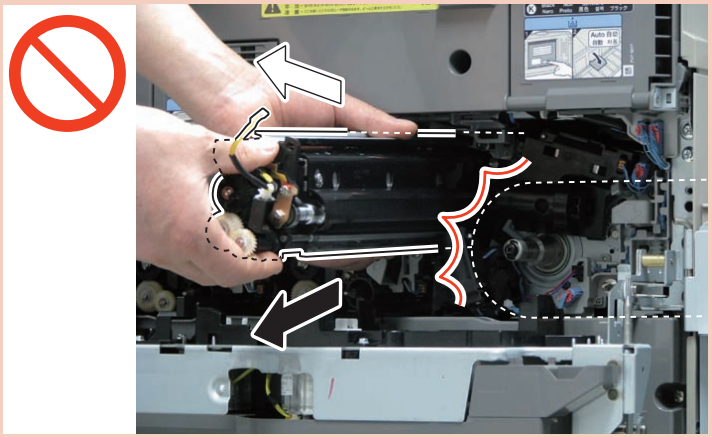


F-4-423

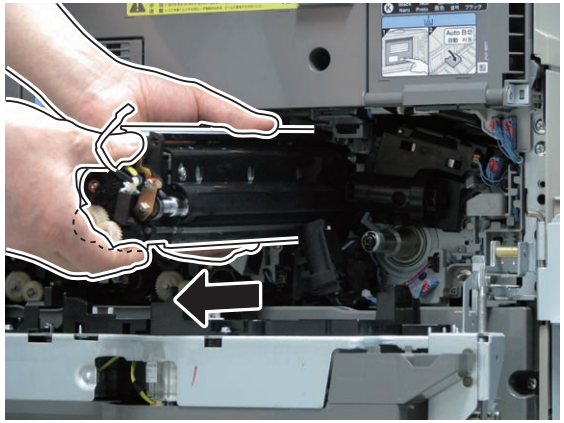
5) Hold the front upper part and the left side of the Developing Assembly (Bk) and remove it horizontally.

CAUTION:

If the Developing Assembly is tilted inside the host machine, the Developing Assembly and the drum may come into contact causing damage to the drum. Therefore, be sure to install or remove it horizontally.



F-4-424



F-4-425

Installing the Developing Assembly (Bk)

Unpacking a new Developing Assembly (Bk)

CAUTION:

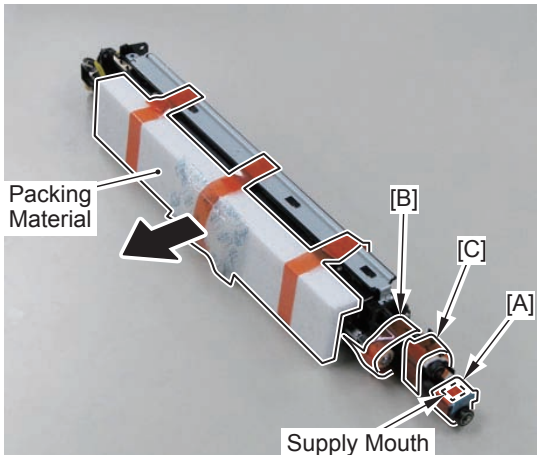
When taking out a Developing Assembly, do not tilt it or shake it strongly.

Otherwise, toner may scatter.

1) Unpack the Developing Assembly, and remove the packaging material.

CAUTION:

- Do not remove the tape [A] of the Supply Mouth until just before installing it in the host machine.
- Do not remove tapes [B] and [C].
- Be sure to remove tapes [B] and [C] after the Sleeve Seal because the roller is fixed so that it cannot move when removing the Sleeve Seal.
- Be sure that there is no foreign matter (metal pieces in particular) on your hand when touching the Developing Assembly. (If any foreign matters get onto the cylinder of the Developing Assembly, it may cause image failure.)
- After unpacking, do not work with the Supply Mouth facing down to avoid any risk of toner spilling out.



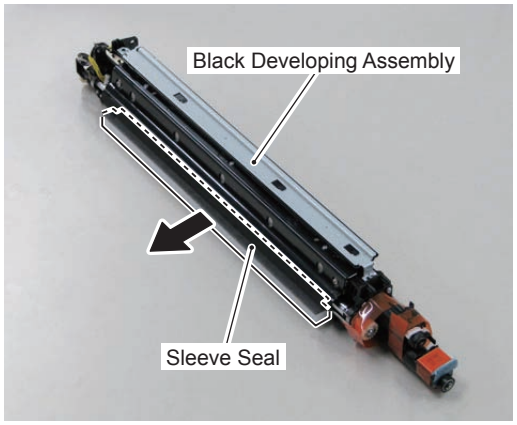
F-4-426

2) Remove the Sleeve Seal from the Developing Assembly (Bk).

CAUTION:

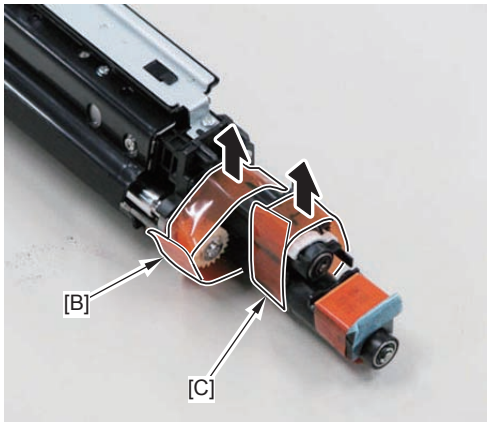
When removing the Sleeve Seal, be careful not to make any crease in the seal.

Otherwise, the Toner Blocking Sheet may be caught and damaged by the crease.



F-4-427

3) Remove tape [B] and tape [C] securing the roller.



F-4-428

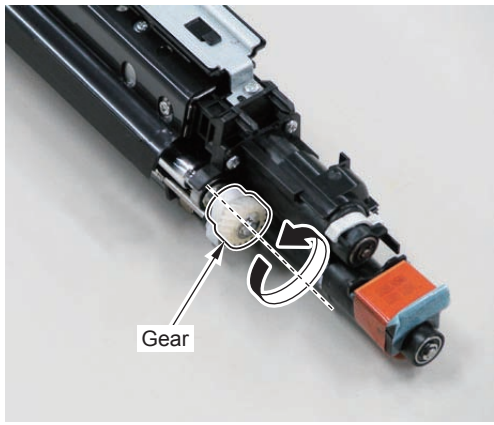
4) Make the gear of the Sleeve rotate a full turn or 1.5 turns in the direction of the arrow (clockwise).

CAUTION:

Do not turn the Developing Sleeve in the reverse direction.

If you rotate it in the reverse direction, toner clots on the Sleeve may damage the Toner Blocking Sheet on the cylinder.

NOTE:
Toner clots are removed by rotating the cylinder in the direction of the arrow (clockwise).

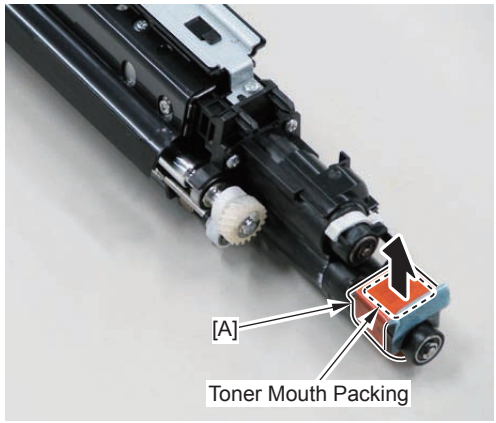


F-4-429

5) Remove the tape [A] and the packaging material of the Supply Mouth.

CAUTION:

Be sure to remove the packaging material of the Supply Mouth.



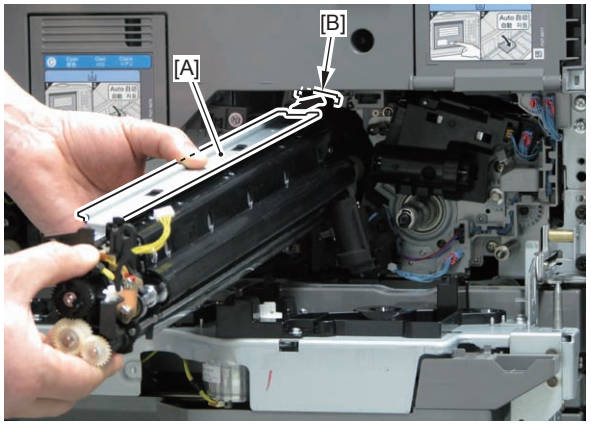
F-4-430

Procedure

CAUTION:

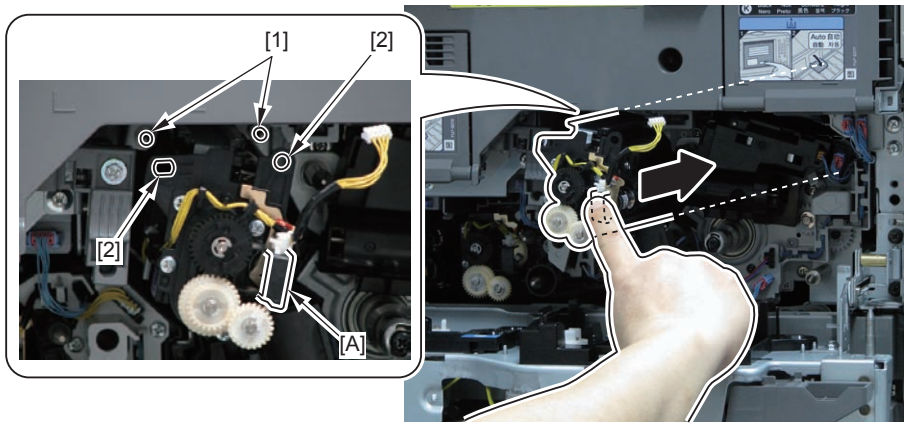
When replacing this part, execute the When Replacement the Developing Assembly and Cleaning the Developing Assembly Toner Blocking Sheet (Bk).

1) Align the rail [A] of the Developing Assembly (Bk) with the rail receptacle [B] of the host machine, and then insert the Developing Assembly (Bk) horizontally about 2/3 of its length.



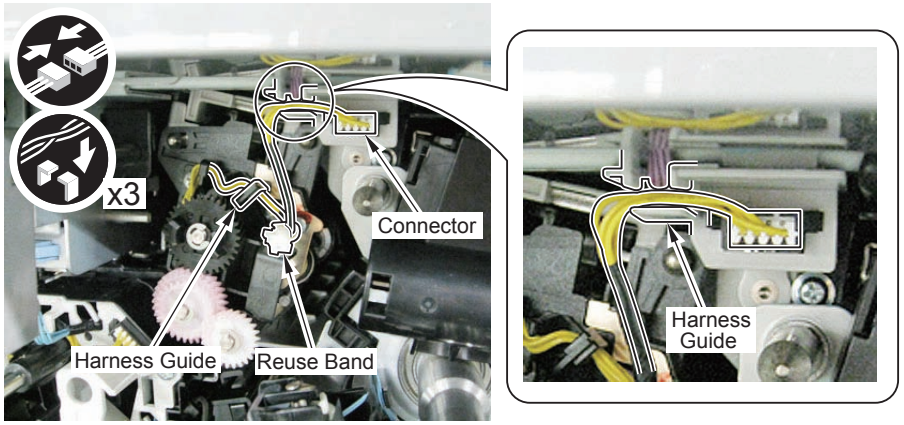
F-4-431

2) Press the handle [A] of the Developing Assembly (Bk) with your finger to align the 2 Positioning Pins [1] with the 2 boss holes [2], and push the assembly until it stops.



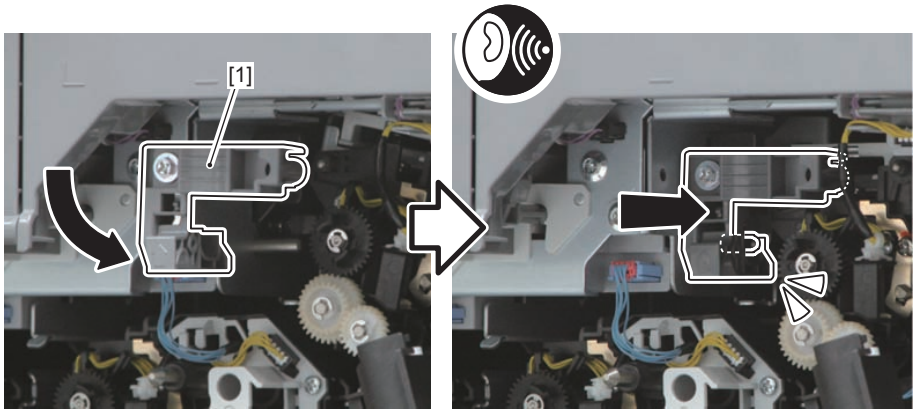
F-4-432

3) Secure the harness using the Harness Guide and the Reuse Band, and connect the connector.



F-4-433

4) Turn the Black Developing Assembly Pressure Lever [1] counterclockwise, and push in the Developing Assembly (Bk) to apply pressure.



F-4-434

When Replacement the Developing Assembly

Procedure

1) Disable the warm-up rotation control.
(COPIER > FUNCTION > INSTALL > AINR-OFF)
2) Execute the initial installation mode of the Developing Assembly.
(COPIER > FUNCTION > INSTALL > INISET-Y/M/C/K)
3) Enable the warm-up rotation control.
(COPIER > FUNCTION > INSTALL > AINR-OFF)

Cleaning the Developing Assembly Sleeve Cover (Bk)/ Developing Assembly Toner Blocking Sheet (Bk)

Preparation

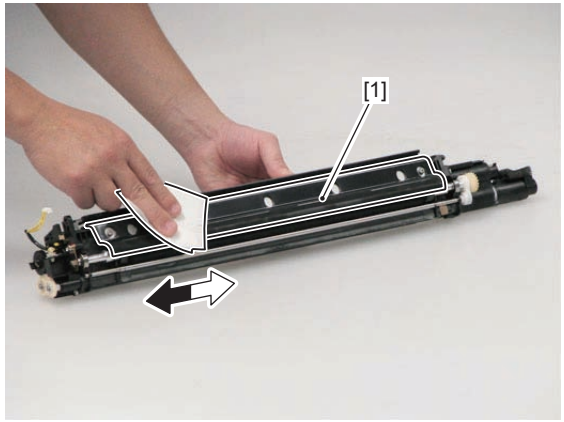
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Developing Assembly (Bk) (Refer to page 4-232).

Procedure

CAUTION:

Clean the following parts at work intervals of 150,000 sheets, or as needed basis when soiling is remarkable.

1) Clean the Sleeve Cover (Bk) [1] of the Developing Assembly with lint-free paper.

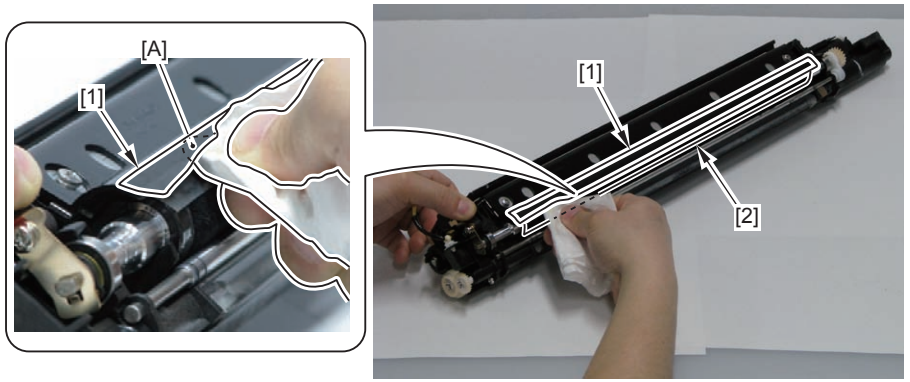


F-4-435

2) Clean the inner surface [A] of the Toner Blocking Sheet [1] of the Developing Assembly with lint-free paper.

CAUTION:

- When cleaning, do not touch the surface [2] of the Developing Cylinder.
- Check that the developer is not placed on the Toner Blocking Sheet before returning it to the host machine.



F-4-436

Removing the Process Unit (Y)/(M)/(C)

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).

Procedure

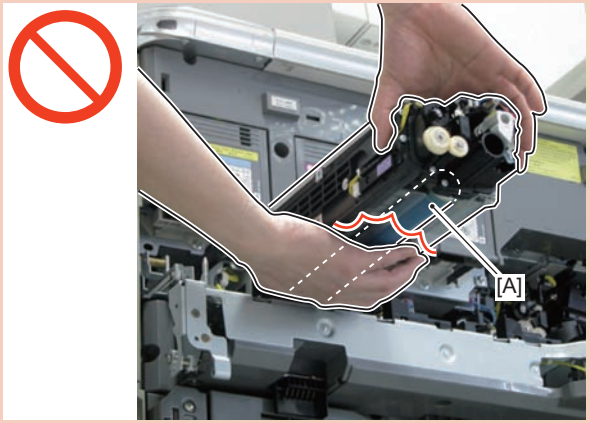
CAUTION:

- When replacing this part, Cleaning the Toner Catch Sheet (Y)/(M)/(C) and execute the actions to be taken When Replacing the Drum Unit (Y)/(M)/(C) and the When Replacement the Developing Assembly.
- When releasing pressure of the ITB Unit, execute the Adjustment when Installing/ Removing the ITB Unit.

CAUTION:

When handling the Process Unit (Y)/(M)/(C), be sure to follow the points to note below.

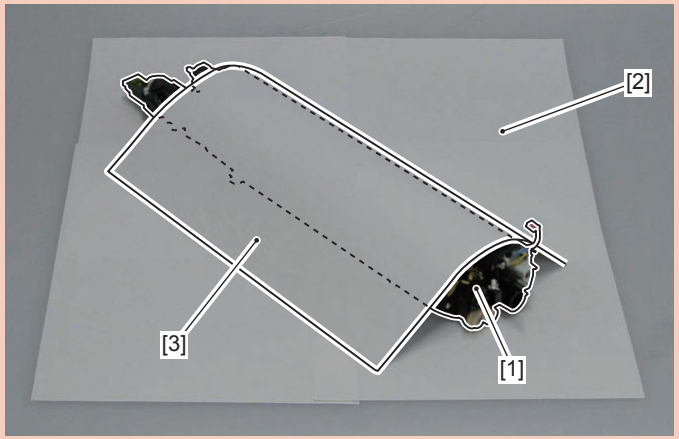
- Do not touch the surface [A] of the Photosensitive Drum.



F-4-437

CAUTION:

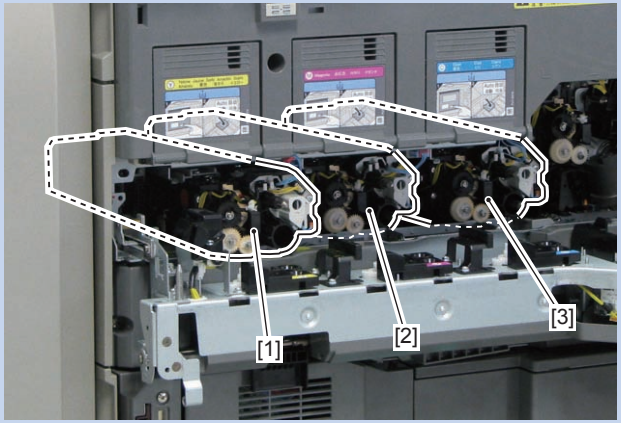
- When handling the Process Unit (Y)/(M)/(C) [1], place it on a sheet of paper [2] and cover it with the Drum Protection Sheet, or wrap 5 or more papers [3] around it to block light.



F-4-438

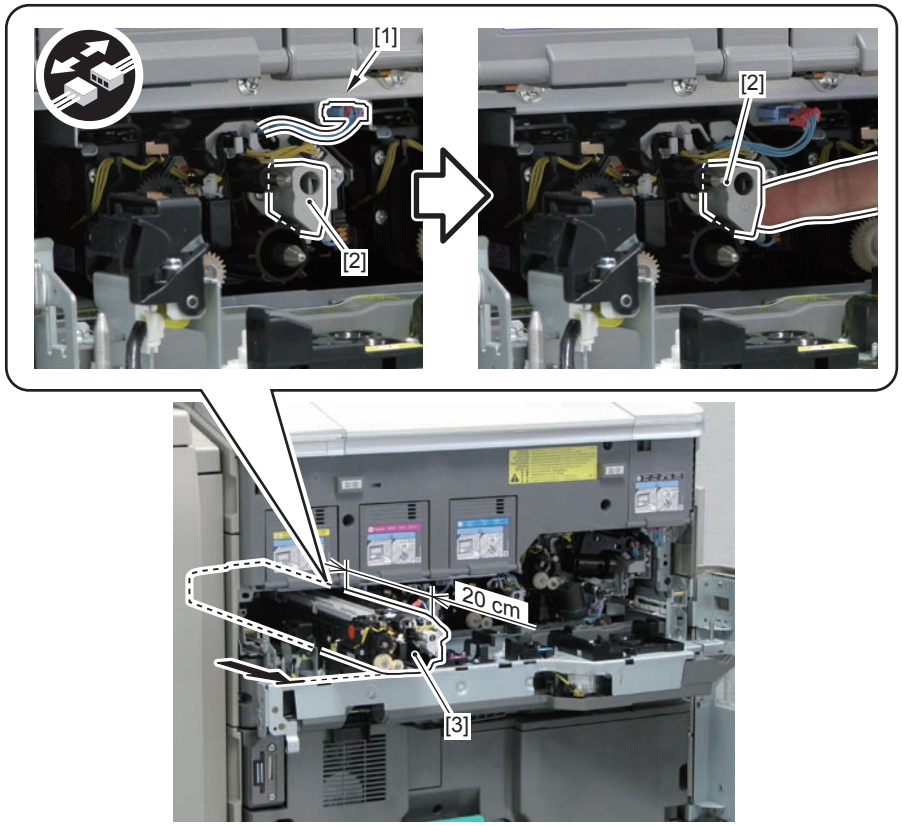
- Do not place the Drum in a location where is exposed to direct rays of the sun (e.g. near the window).
- Do not store in a location with high/low temperature/humidity, or in a location where temperature or humidity is dramatically changed.
- Do not store in a dusty area or in a location full of ammonia gas or organic solvent gas.

NOTE:
This procedure explains the case for the Process Unit (Y) [1].
Be sure to perform the same procedure for the Process Unit (M) [2]/(C) [3].



F-4-439

1) Disconnect the connector [1], and hook the handle [2] of the Drum Cartridge with your index finger to pull out the Process Unit [3] for about 200 mm.

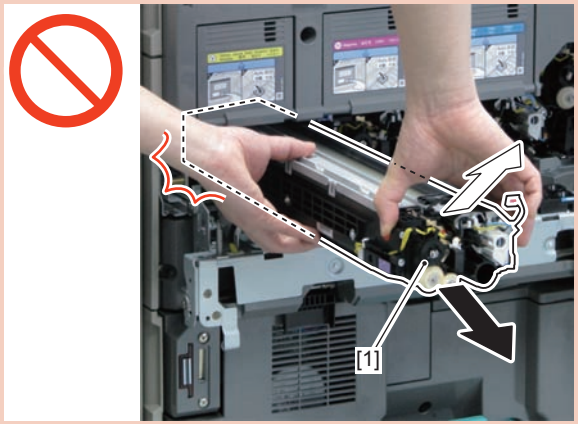


F-4-440

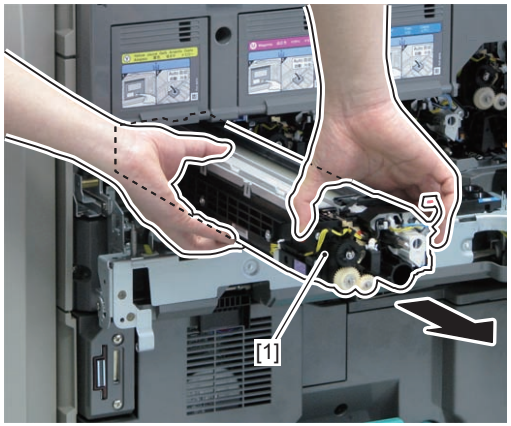
2) Hold the front upper part and the left side of the Process Unit [1] and pull it out horizontally.

CAUTION:

If the Process Unit [1] is tilted inside the host machine, it may damage the ITB. Therefore, hold it horizontally when pulling out/pushing in.



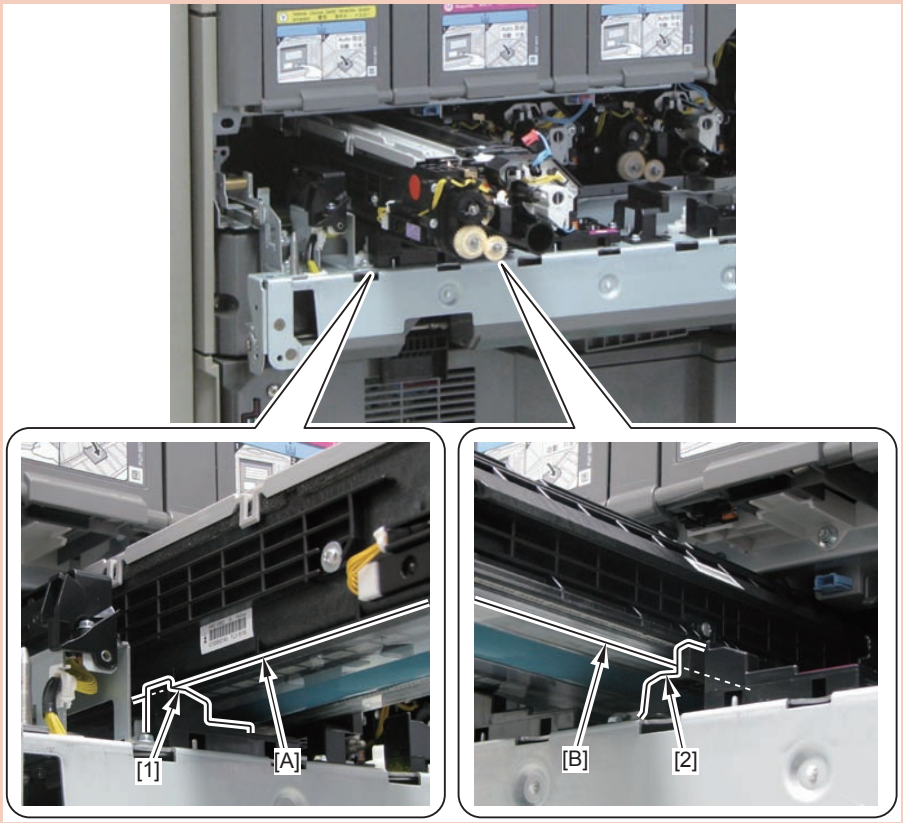
F-4-441



F-4-442

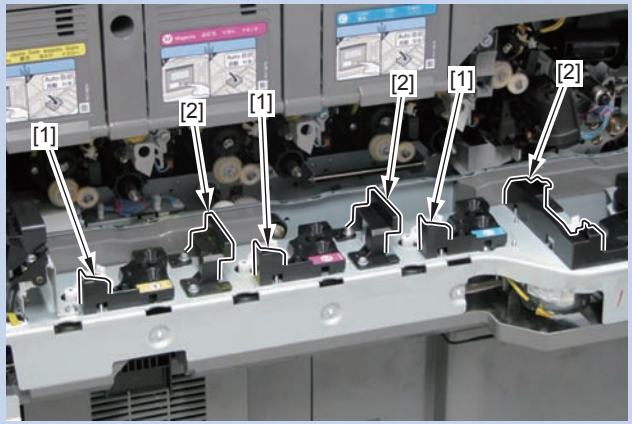
CAUTION:

When installing, place the left side [A] of the Process Unit on the guide [1] of the Process Unit Inner Cover, and align the lower right side [B] of the Process Unit with the guide [2] of the Process Unit Inner Cover. Then push it in horizontally.



F-4-443

NOTE:
The following shows the guides [1] and [2] on the Process Unit Inner Cover for (Y), (M), and (C).



F-4-444

Separating the Developing Assembly (Y)/(M)/(C) from the Drum Unit (Y)/(M)/(C)

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).

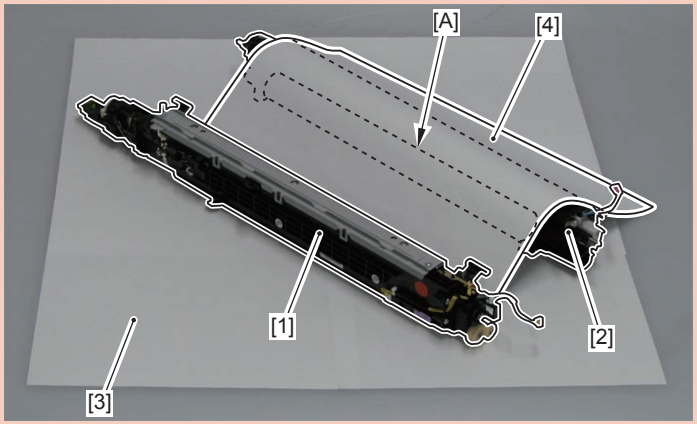
Procedure

CAUTION:

Because there is toner on the Developing Assembly [1] and the Drum Unit [2], be sure to place them on a sheet of paper [3], etc.

To prevent the sensitivity of the Photosensitive Drum from deteriorating, note the following points.

- Do not touch the surface [A] of the Photosensitive Drum.
- To prevent the Photosensitive Drum from exposure to light for a long time, cover it with 5 or more papers [4] or the Lightproof Sheet [4].



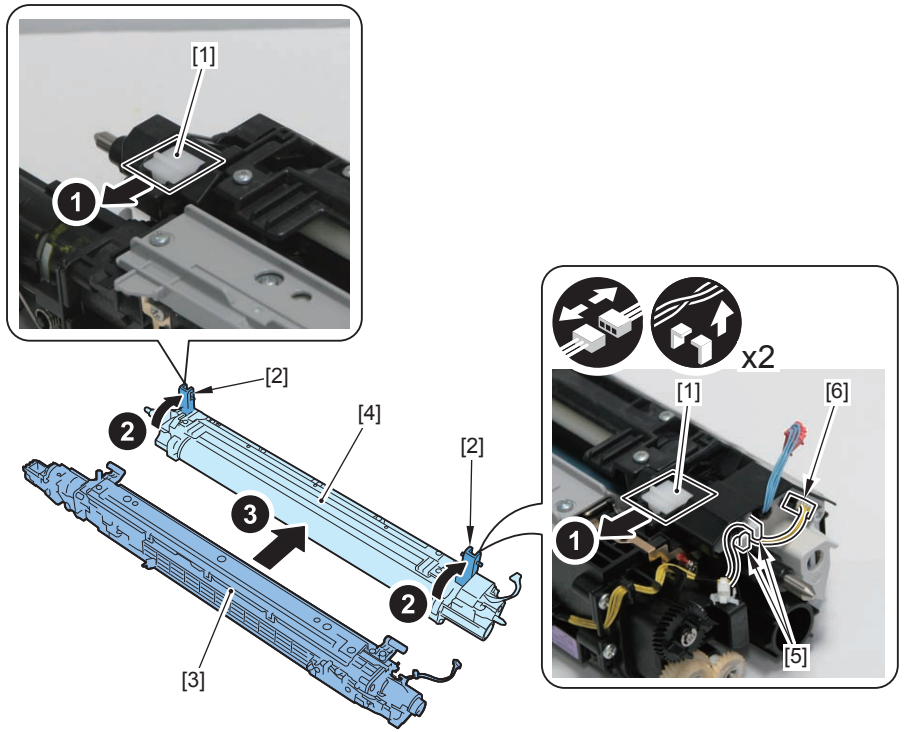
F-4-445

CAUTION:

- Do not place the Process Unit and the Drum in a location where is exposed to direct rays of the sun (e.g. near the window).
- Do not store in a location with high/low temperature/humidity, or in a location where temperature or humidity is dramatically changed.
- Do not store in a dusty area or in a location full of ammonia gas or organic solvent gas.

1) While pressing the locks [1] of the Connecting Arms, release the 2 Connecting Arms [2] to open them, and separate the Developing Assembly [3] and the Drum Unit [4].

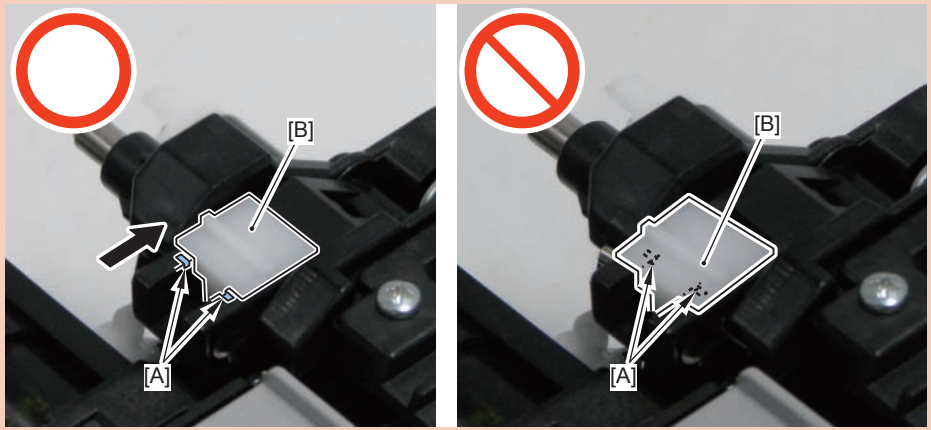
- 2 Harness Guides [5]
- 1 Connector [6]



F-4-446

CAUTION:

When connecting the Developing Assembly and the Drum Unit, move the lock [B] of the Connecting Arm to the position where the lines [A] of the Connecting Arm can be seen, and then lock it.



F-4-447

Unpacking a new Developing Assembly (Y)/(M)/(C) and Drum Unit (Y)/(M)/(C)

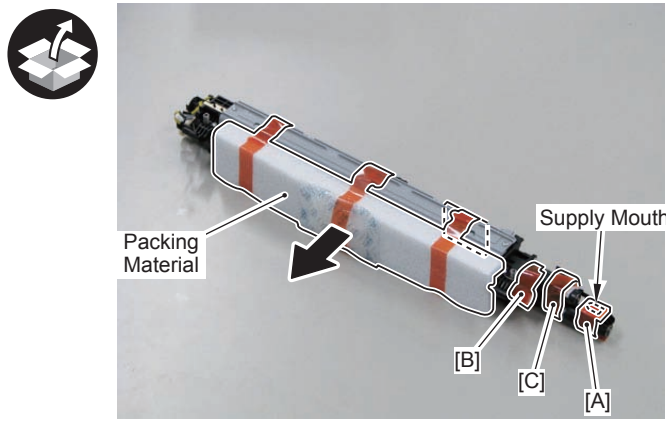
CAUTION:

- A Developing Assembly (for color use) is specified with color.
- When taking out a Developing Assembly (for color use), do not tilt it or shake it strongly.
  Otherwise, toner may scatter.
  When replacing the Drum Unit (Y)/(M)/(C), Cleaning the Developing Assembly Toner Blocking Sheet (Y)/(M)/(C) and execute the actions to be taken When Replacing the Drum Unit (Y)/(M)/(C).

1) Unpack the Developing Assembly, and remove the packaging material.

CAUTION:

- Do not remove the tape [A] of the Supply Mouth until just before installing it in the host machine.
- Do not remove tapes [B] and [C].
- Be sure to remove tapes [B] and [C] after the Sleeve Seal because the roller is fixed so that it cannot move when removing the Sleeve Seal.
- Be sure that there is no foreign matter (metal pieces in particular) on your hand when touching the Developing Assembly. (If any foreign matters get onto the cylinder of the Developing Assembly, it may cause image failure.)
- After unpacking, do not work with the Supply Mouth facing down to avoid any risk of toner spilling out.

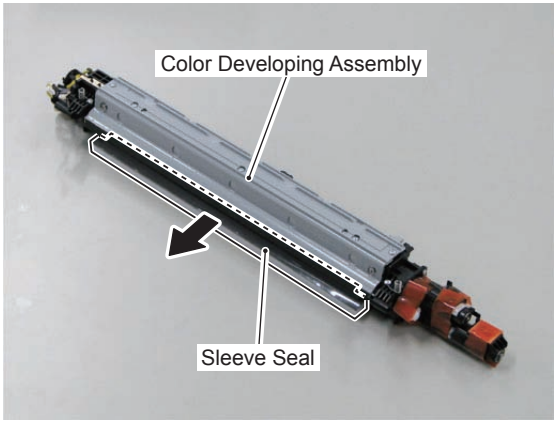


F-4-448

2) Remove the Sleeve Seal from the Developing Assembly.

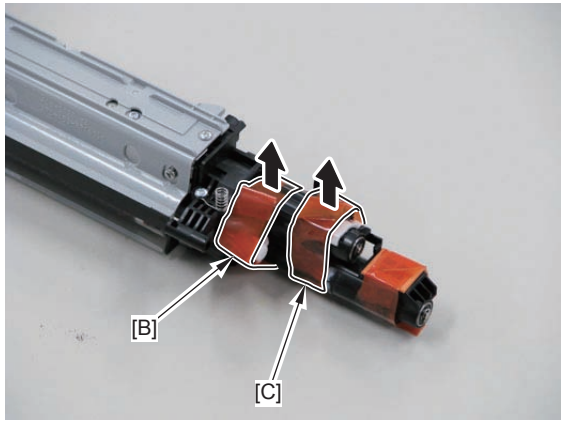
CAUTION:

When removing the Sleeve Seal, be careful not to make any crease in the seal.
Otherwise, the Toner Blocking Sheet may be caught and damaged by the crease.



F-4-449

3) Remove tape [B] and tape [C] securing the roller.



F-4-450

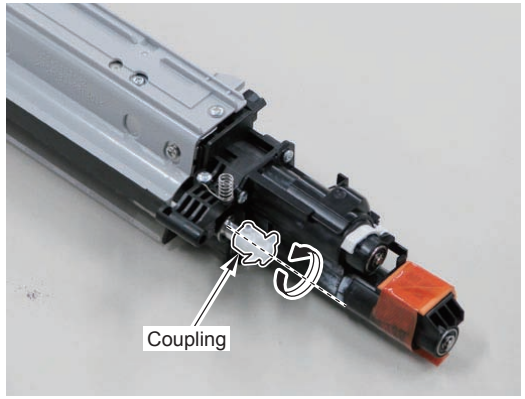
4) Make the coupling of the Sleeve rotate a full turn or 1.5 turns in the direction of the arrow (clockwise).

CAUTION:

Do not turn the Developing Sleeve in the reverse direction.

If you rotate it in the reverse direction, toner clots on the Sleeve may damage the Toner Blocking Sheet on the cylinder.

NOTE:
Toner clots are removed by rotating the cylinder in the direction of the arrow (clockwise).



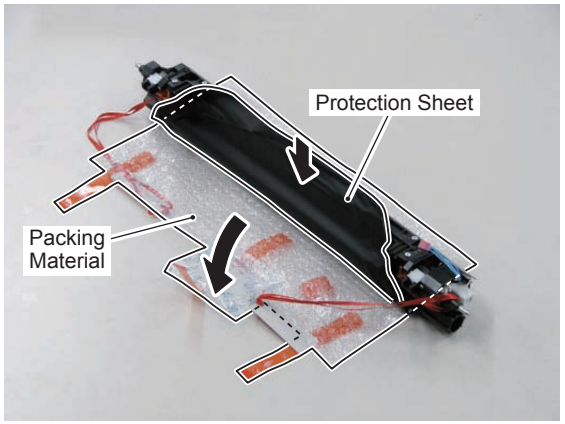
F-4-451

5) Take out the Drum Unit from the packaging box.

6) Unpack the Drum Unit, and remove the packaging material.

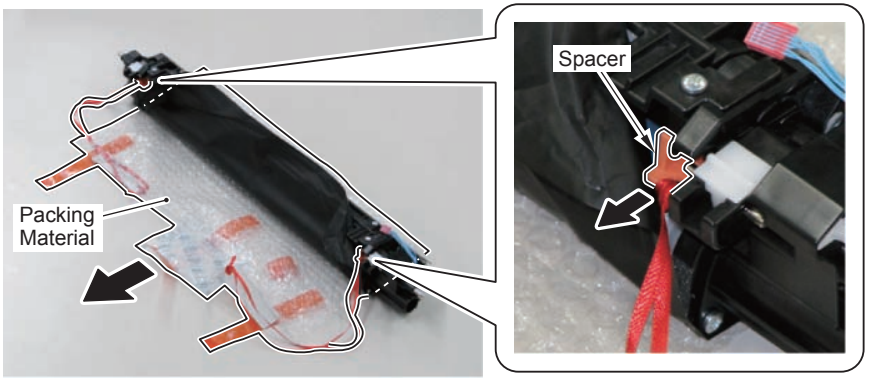
CAUTION:

- Do not touch the Photosensitive Drum.
- During work, cover it with the Protection Sheet.



F-4-452

7) Pull the 2 spacers in the direction of the arrow to remove them from the Drum Unit.

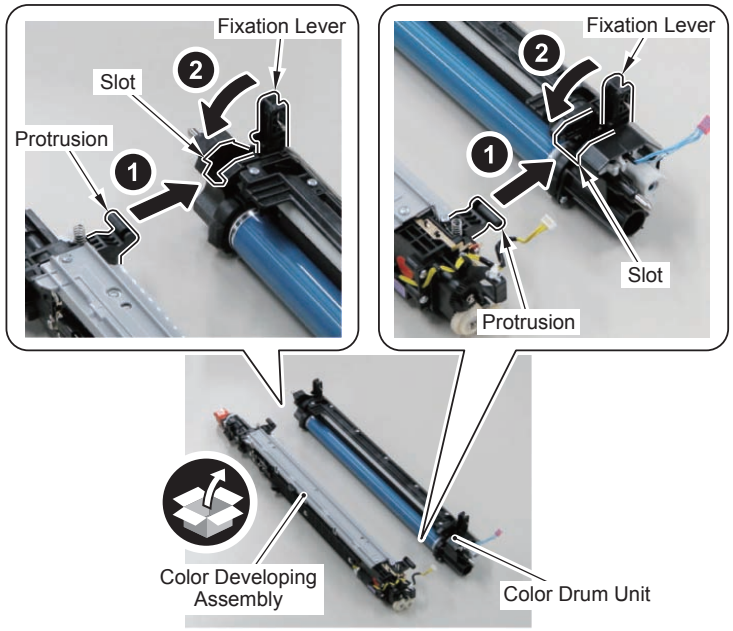


F-4-453

8) Release the lock of the Fixation Lever of the Drum Unit to lift up the Fixation Lever.

F-4-454

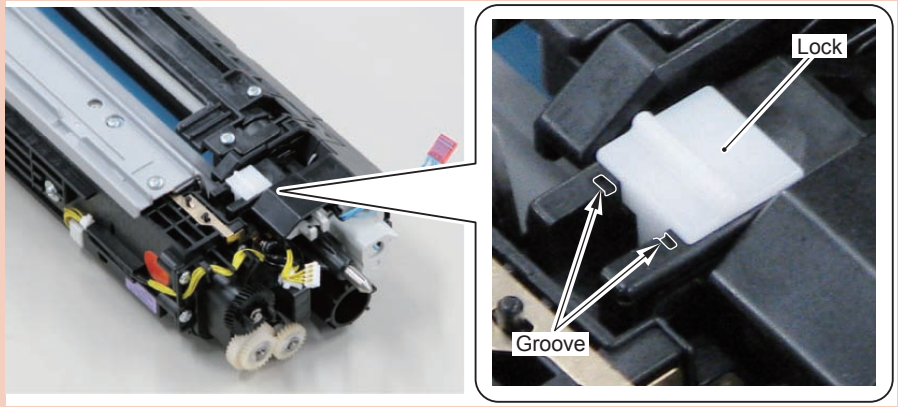
9) Insert the 2 protrusions of the Developing Assembly into the Drum Unit (yellow) to join the Developing Assembly and the Drum Unit, and then turn over the Fixation Lever in the direction of the arrow to assemble the Process Unit.



F-4-455

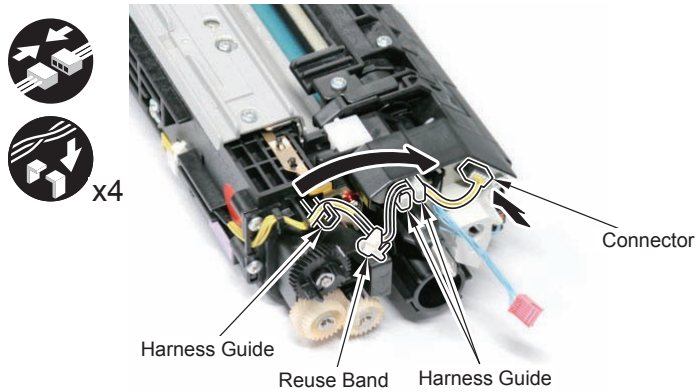
CAUTION:

Check to see whether the lock is securely in place or the grooves as shown in the figure are visible. (If the lock is not completely secure when the Process Unit is introduced into the host machine, it may not be possible to remove it from the host machine.)



F-4-456

10) Secure the harness using the Harness Guide and the Reuse Band, and connect the connector.

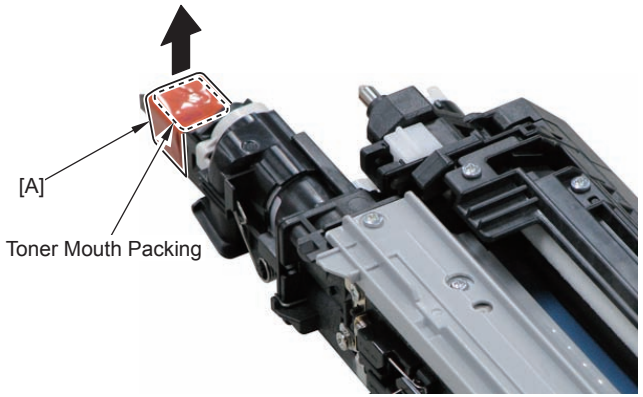


F-4-457

11) Remove the tape [A] and the packaging material of the Supply Mouth.

CAUTION:

Be sure to remove the packaging material of the Supply Mouth.



F-4-458

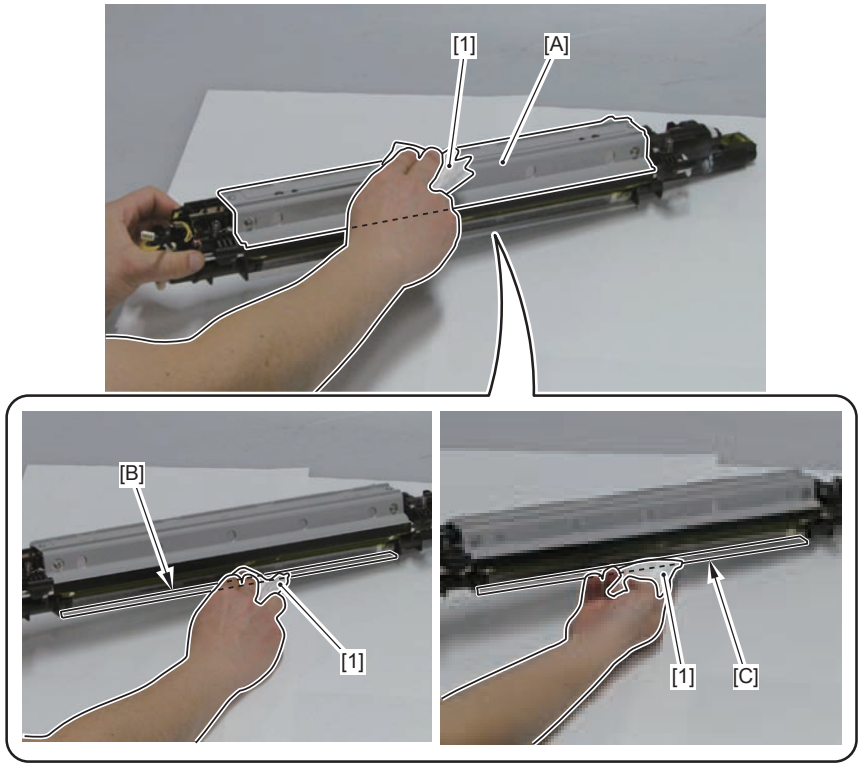
Cleaning the Toner Catch Sheet (Y)/(M)/(C)

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).
5) Separate the Developing Assembly (Y)/(M)/(C) from the Drum Unit (Y)/(M)/(C) (Refer to page 4-242).

Procedure

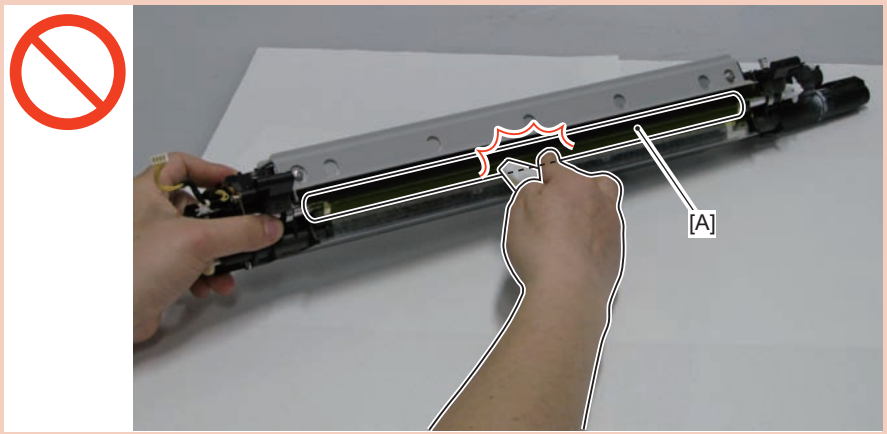
1) Remove soiling at the surface [A] of the Sleeve Cover, as well as the front side [B] and the back side [C] of the Toner Catch Sheet of the Developing Assembly (Y)/(M)/(C) with dry lint-free paper.



F-4-459

CAUTION:

Do not touch the surface of the sleeve [A] with the lint-free paper or finger.



F-4-460

When Replacing the Drum Unit (Y)/(M)/(C)

Procedure

1) Disable the warm-up rotation control.
   (COPIER > FUNCTION > INSTALL > AINR-OFF)
2) Turn OFF the main power, and replace the Drum Unit.
3) Turn ON the main power.
4) Execute the drum replacement mode forcibly.
   (COPIER > FUNCTION > DPC > DRMRSETY/M/C)
5) Enable the warm-up rotation control.
   (COPIER > FUNCTION > INSTALL > AINR-OFF)
6) Execute Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation > Full Adjust.

Cleaning the Developing Assembly Toner Blocking Sheet (Y)/(M)/(C)

Preparation

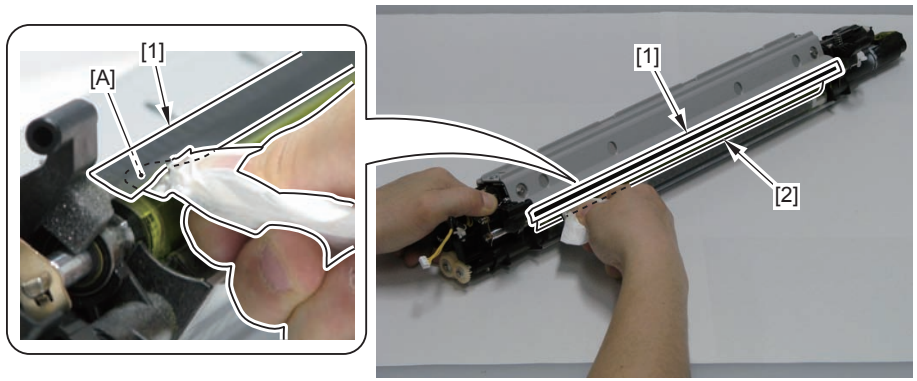
1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).
5) Separate the Developing Assembly (Y)/(M)/(C) from the Drum Unit (Y)/(M)/(C) (Refer to page 4-242).

Procedure

1) Clean the inner surface [A] of the Toner Blocking Sheet [1] of the Developing Assembly with lint-free paper.

CAUTION:

- When cleaning, do not touch the surface [2] of the Developing Cylinder.
- Check that the developer is not placed on the Toner Blocking Sheet before returning it to the host machine.



F-4-461

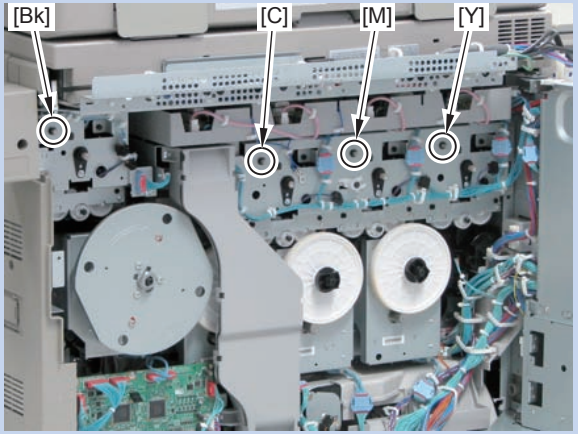
Removing the Toner Container Manually

Preparation

1) Open the Upper Front Cover.
2) Remove the Box Left Cover (Refer to page 4-343).
3) Remove the Box Upper Cover (Refer to page 4-343).
4) Open the Controller Box (Refer to page 4-108).

Procedure

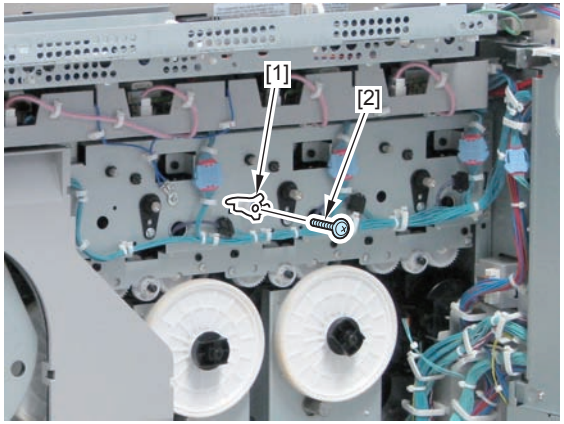
NOTE:
This procedure explains how to remove the Toner Container (Bk).
Be sure to perform the same procedure for the Toner Container (Y)/(M)/(C).



F-4-462

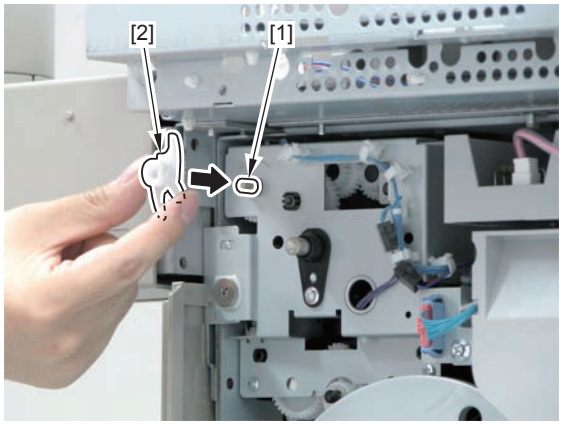
1) Remove the Toner Container Removing Tool [1].

- 1 Screw [2]



F-4-463

2) nsert the Toner Container Removing Tool [2] into the Toner Container Lock Shaft [1].



F-4-464

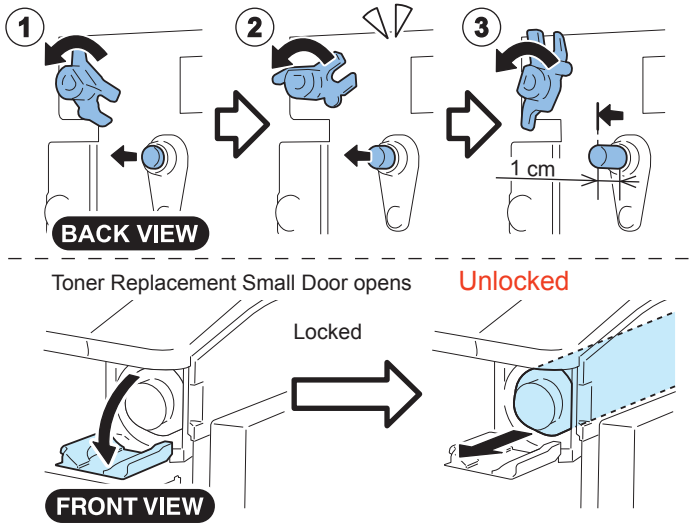
3) Rotate the Toner Container Removing Tool [1] counterclockwise to set the Toner Container to "unlocked state".

Unlocked state refers to the following condition:

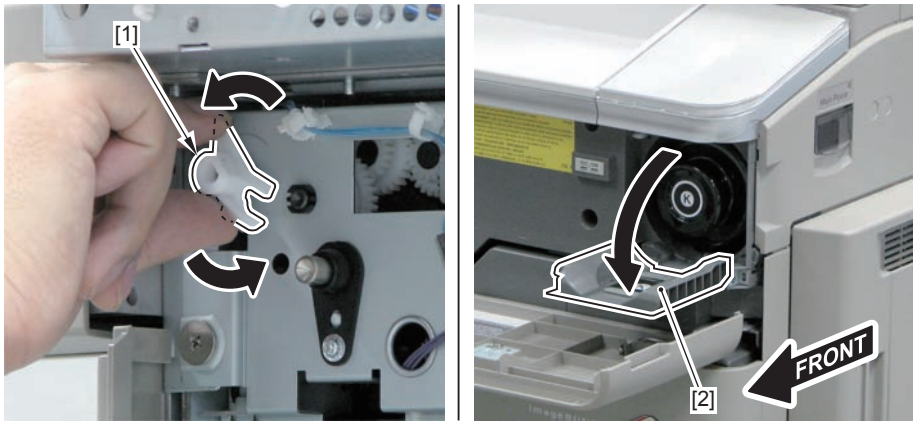
(1) The Toner Replacement Small Door [2] at the front side opens.

(2) A click sound is heard.

(3) After that, the pin pops out to its maximum (approx. 1 cm).

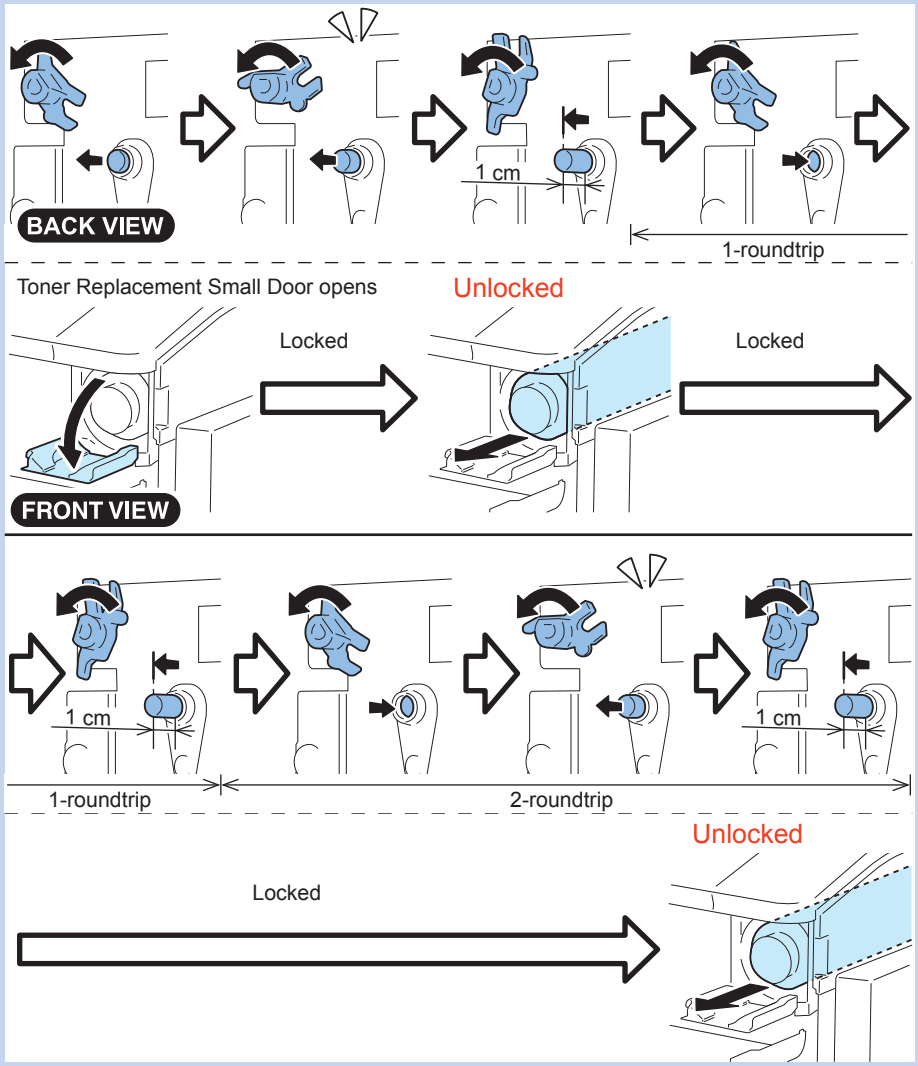


F-4-465



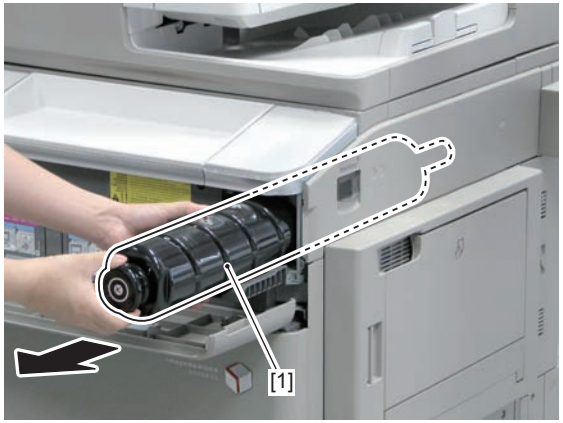
F-4-466

NOTE: Unlocked state of the Toner Container
Normally, the Toner Container is "locked" so that it cannot be taken out.
To manually take out the Toner Container, you need to rotate the Lock Shaft counterclockwise to set it to the "unlocked state".
The Toner Container is in the "unlocked state" when the pin pops out to its maximum at this moment.
Because the Lock Shaft cannot be rotated reversely, if you miss the "unlocked state" once, wait for the next turn when the pin pops out to its maximum, which indicates the next "unlocked state".



F-4-467

4) Take out the Toner Container [1].



F-4-468

CAUTION:

Even when the Toner Container is "locked", you can install it and close the Toner Replacement Small Door.

In this case, toner is not supplied from the Toner Container and "Remaining Toner Error Message" appears.

When this happens, remove and then install the Toner Container again.

Removing the Hopper Tray (Bk)

Preparation

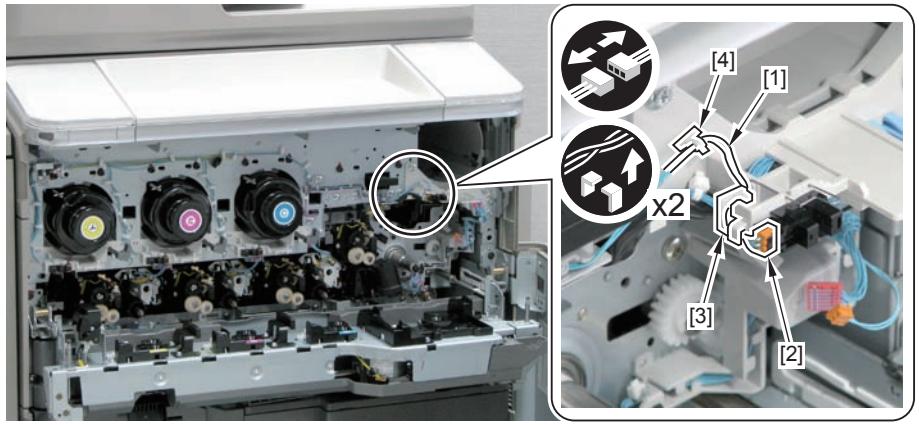
1) Remove the Toner Container (Bk).

NOTE:
Before turning OFF the power of the host machine, use the Control Panel to remove the Toner Container of the corresponding color.
If the power of the host machine is already turned OFF, see the procedure on manually removing the Toner Container to remove the Toner Container of the corresponding color.

2) Open the Front Cover.
3) Remove the Front Upper Cover (Refer to page 4-339).
4) Remove the Toner Container Replacement Unit Inner Cover (Refer to page 4-339).
5) Open the Process Unit Inner Cover (Refer to page 4-131).
6) Remove the Primary Charging Assembly (Refer to page 4-184).

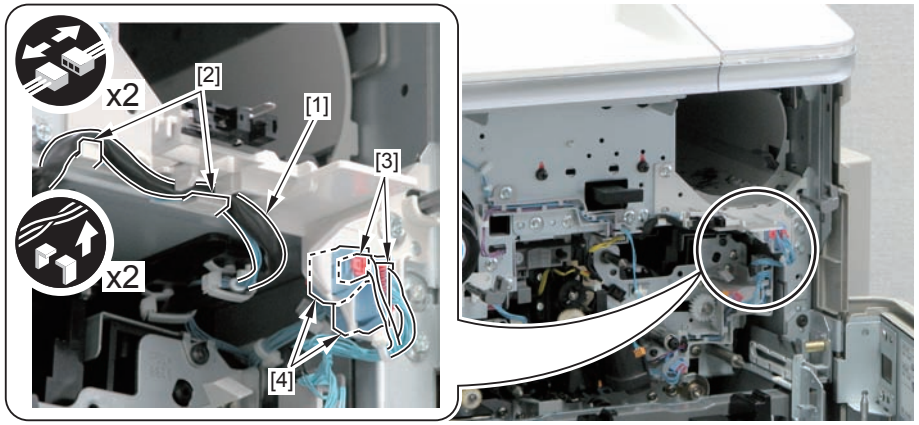
Procedure

1) Free the harness [1].
- 1 Connector [2]
- 1 Harness Guide [3]
- 1 Reuse Band [4]



F-4-469

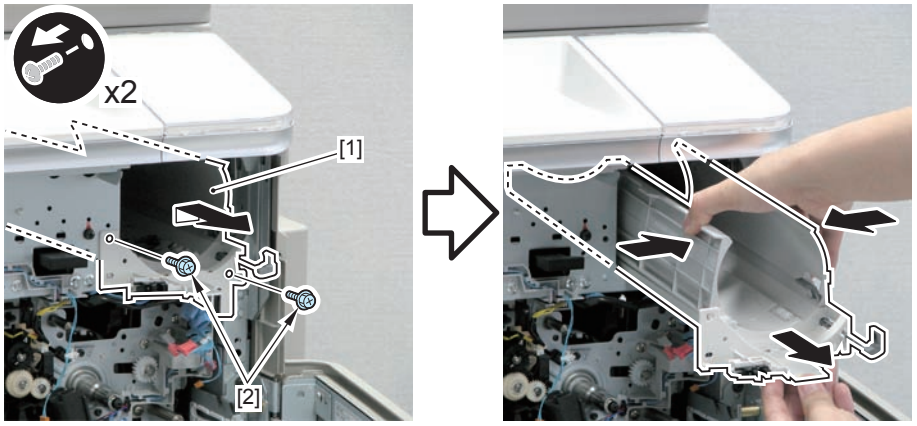
2) Free the 2 harnesses [1] from the 2 guides [2], and disconnect the 2 connectors [3] and the 2 Relay Connectors [4].



F-4-470

3) Remove the Hopper Tray (Bk) [1] while bending it.

- 2 Screws [2]



F-4-471

Removing the Hopper Tray (Y)/(M)/(C)

Preparation

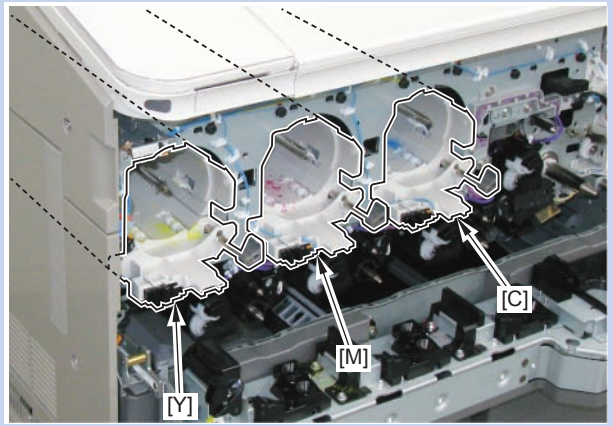
1) Remove the Toner Container (Y)/(M)/(C).

NOTE:
Before turning OFF the power of the host machine, use the Control Panel to remove the Toner Container of the corresponding color.
If the power of the host machine is already turned OFF, see the procedure on manually removing the Toner Container to remove the Toner Container of the corresponding color.

2) Open the Front Cover.
3) Remove the Front Upper Cover (Refer to page 4-339).
4) Remove the Toner Container Replacement Unit Inner Cover (Refer to page 4-339).
5) Open the Process Unit Inner Cover (Refer to page 4-131).

Procedure

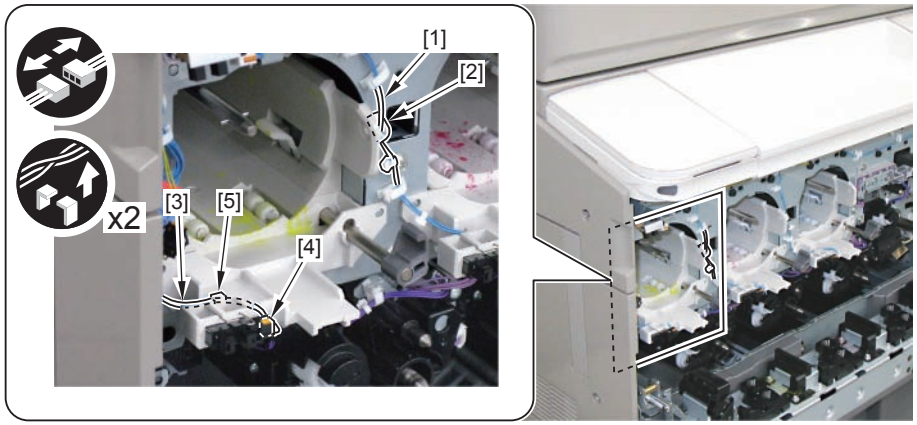
NOTE:
This procedure explains how to remove the Hopper Tray (Y).
Be sure to perform the same procedure for the Hopper Tray (M)/(C).



F-4-472

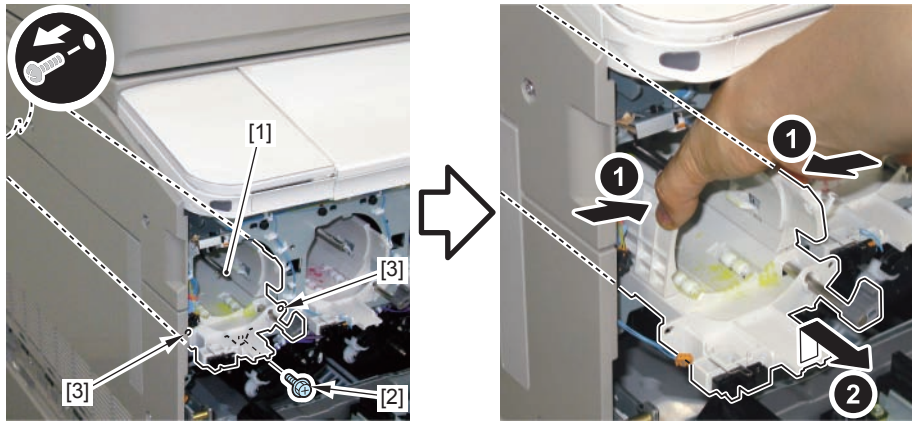
1) Free the harness [1].
- 1 Wire Saddle [2]

2) Free the harness [3].
- 1 Connector [4]
- 1 Harness Guide [5]



F-4-473

3) Remove the Hopper Tray (Y) [1] while bending it.
- 1 Screw [2]
- 2 Bosses [3]

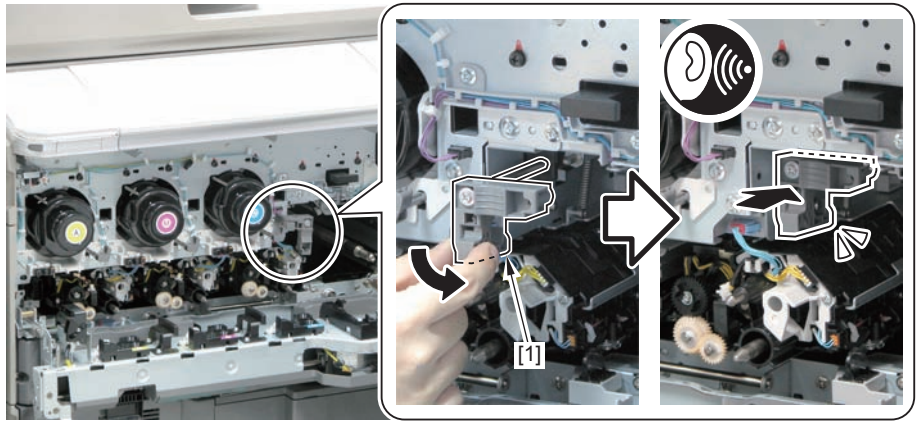


F-4-474

Removing the Drum Drive Unit (Bk)

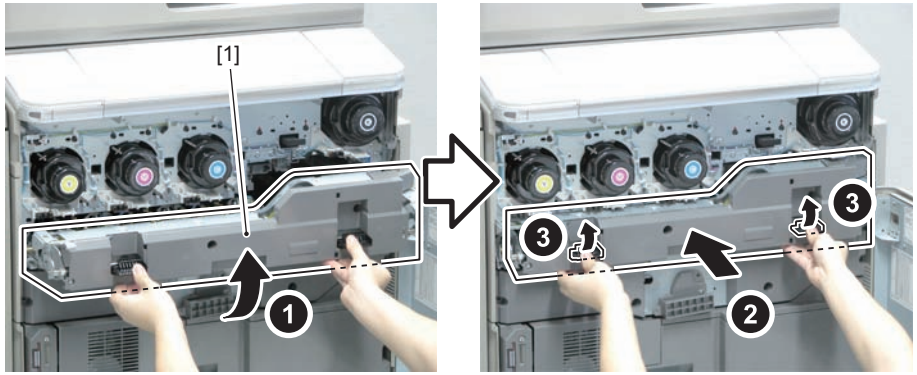
Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Developing Assembly (Bk) (Refer to page 4-232).
5) Remove the Primary Charging Assembly (Refer to page 4-184).
6) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
7) Remove the Drum Unit (Bk) (Refer to page 4-214).
8) Push in the Black Developing Assembly Pressure Lever [1] to apply pressure.



F-4-475

9) Close the Process Unit Inner Cover [1].



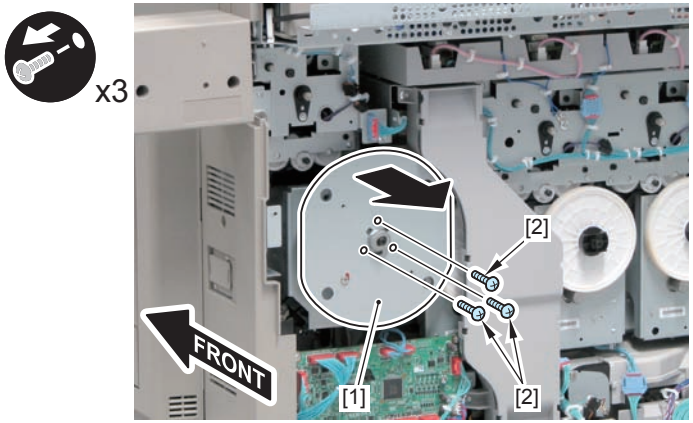
F-4-476

10) Pull out the ITB Unit (Refer to page 4-134).

11) Remove the Box Left Cover (Refer to page 4-343).
12) Remove the Box Upper Cover (Refer to page 4-343).
13) Open the Controller Box (Refer to page 4-108).

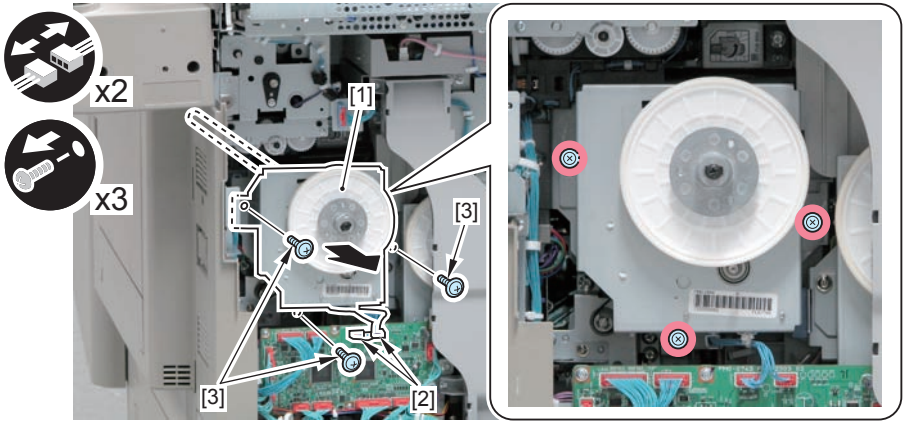
Disassembling Procedure

1) Remove the Flywheel [1].
- 3 Screws [2]



F-4-477

2) Remove the Drum Drive Unit (Bk) [1].
- 2 Connectors [2]
- 3 Screws [3]

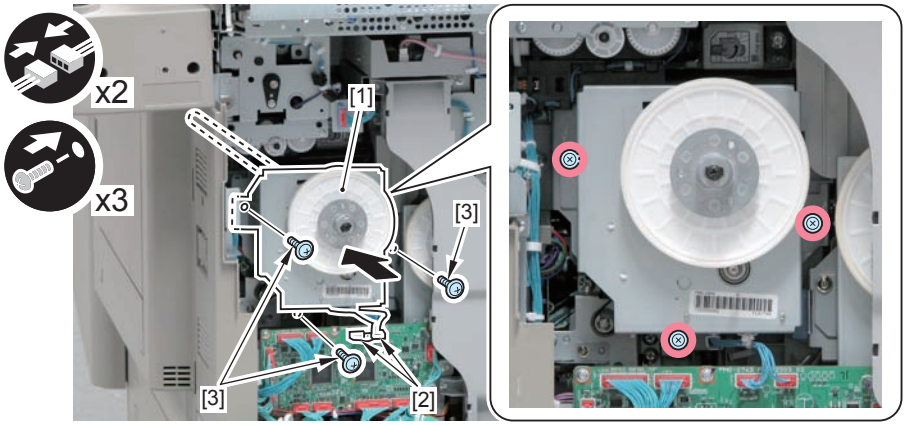


F-4-478

Assembling Procedure

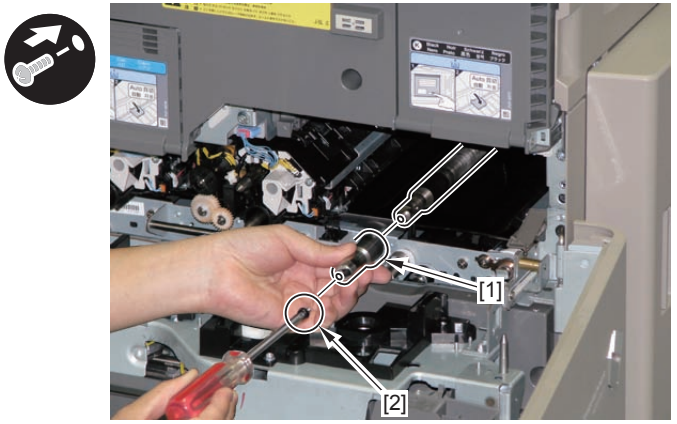
NOTE:
Because the positioning of the Drum Drive Unit (Bk) is necessary for installation, tighten the screws according to the following order.

1) Install the Drum Drive Unit (Bk) [1], and tighten the 3 screws [3] temporarily.
- 2 Connectors [2]



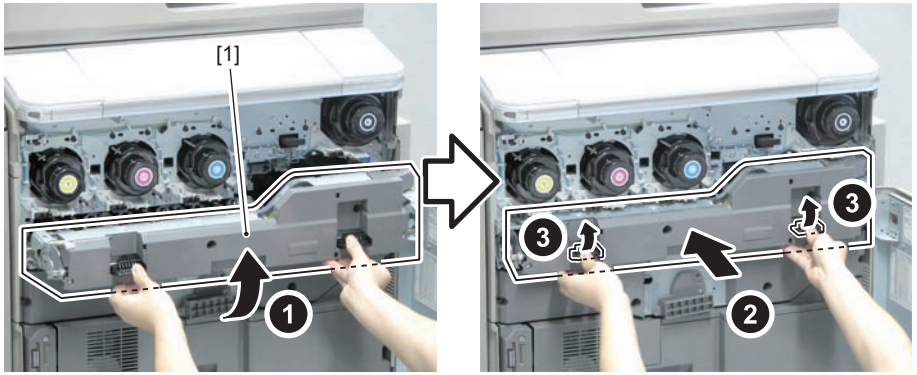
F-4-479

2) Install the Drum Cap [1].
- 1 Screw [2]



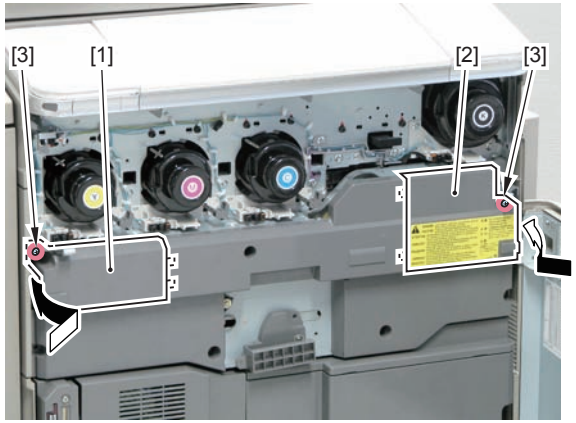
F-4-480

3) Close the Process Unit Inner Cover [1].



F-4-481

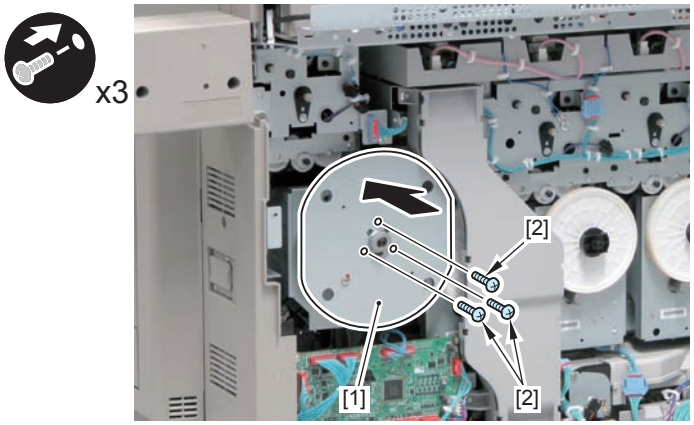
4) Install the Front Inner Handle Left Cover [1] and the Front Inner Handle Right Cover [2] in the direction of the arrows, and tighten a screw [3] for each of them.



F-4-482

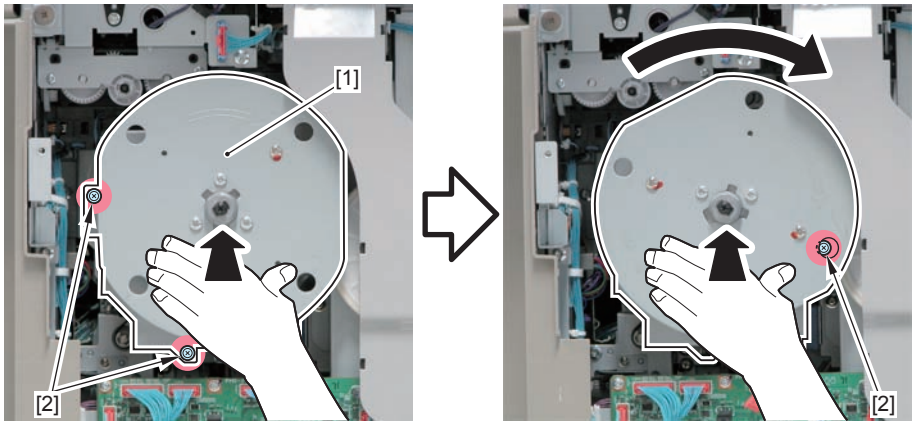
5) Install the Flywheel [1].

- 3 Screws [2]



F-4-483

6) Finally, push the Drum Drive Unit (Bk) [1] against the Rear Plate, and fully tighten the 3 screws [2].



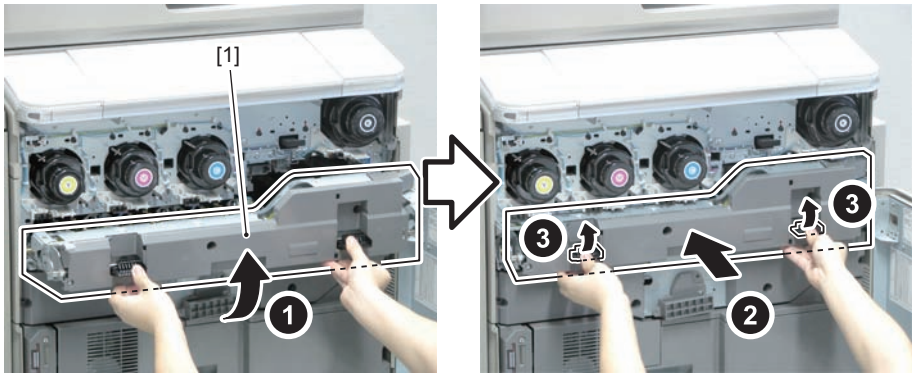
F-4-484

7) Open the Process Unit Inner Cover, and remove the Drum Cap installed in step 2.]

Removing the Drum Drive Unit (Y)/(M)/(C)

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).
5) Close the Process Unit Inner Cover [1].

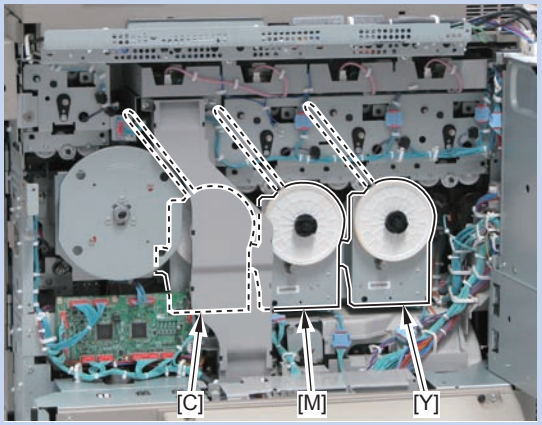


F-4-485

6) Pull out the ITB Unit (Refer to page 4-134).
7) Remove the Box Left Cover (Refer to page 4-343).
8) Remove the Box Upper Cover (Refer to page 4-343).
9) Open the Controller Box (Refer to page 4-108).

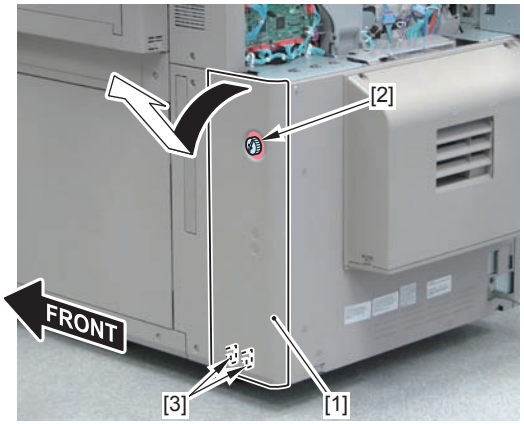
Disassembling Procedure

NOTE:
This procedure explains how to remove the Drum Drive Unit (C).
Be sure to perform the same procedure for the Drum Drive Unit (M)/(Y).



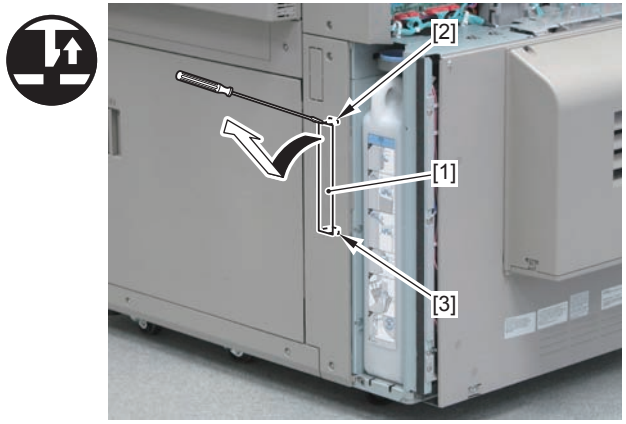
F-4-486

1) Remove the Waste Toner Container Cover [1].
- 1 Finger Screw [2] (to loosen)
- 2 Hooks [3]



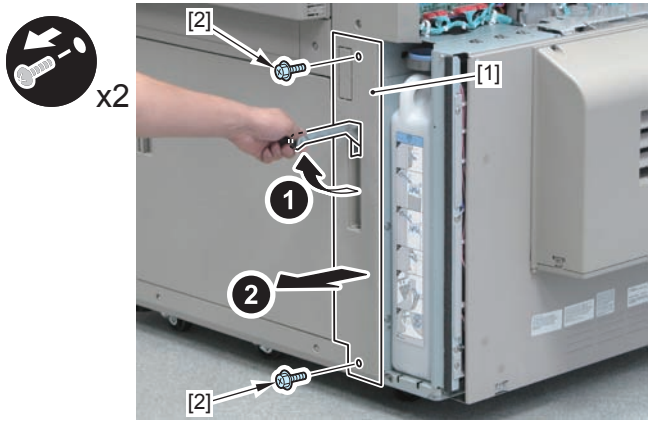
F-4-487

2) Remove the Handle Cover [1].
- 1 Claw [2]
- 1 Hook [3]



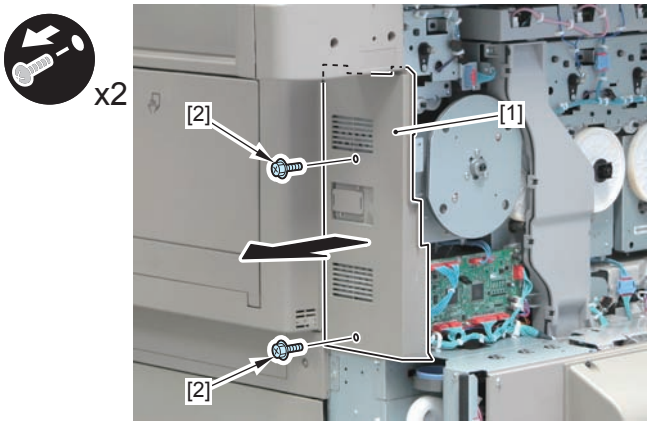
F-4-488

3) Remove the Lower Right Cover 3 [1].
- 2 Screws [2]



F-4-489

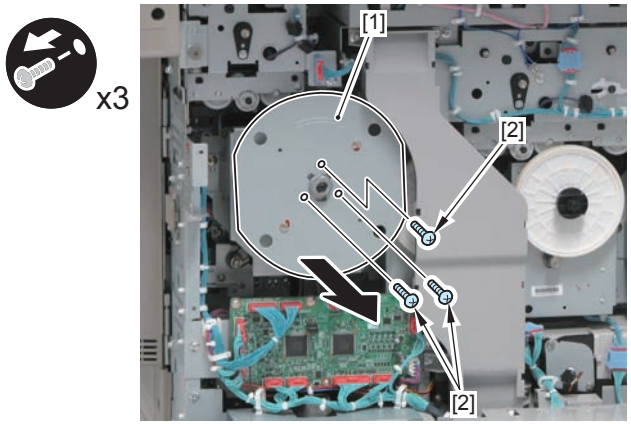
4) Remove the Right Middle Cover [1].
- 2 Screws [2]



F-4-490

5) Remove the Flywheel [1].
- 3 Screws [2]

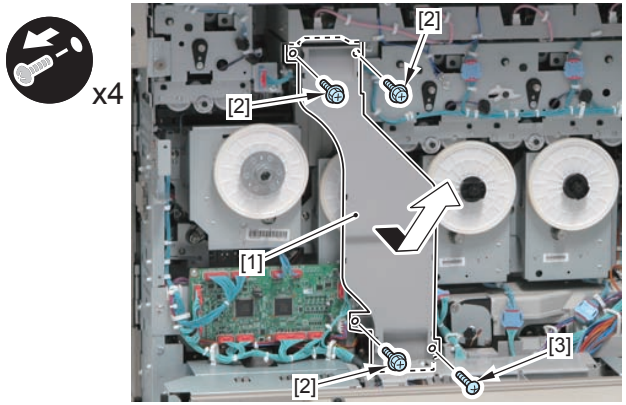
NOTE:
When removing the Drum Drive Unit (M)/(Y), there is no need to remove the Flywheel.



F-4-491

6) Remove the Duct [1].
- 3 Screws (RS) [2]
- 1 Screw (Tapping) [3]

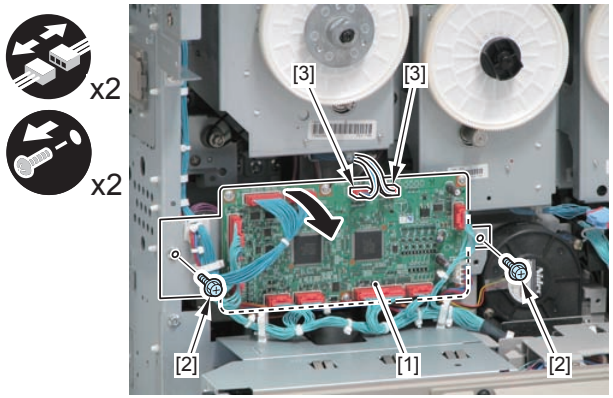
NOTE:
When removing the Drum Drive Unit (Y), there is no need to remove the Duct.



F-4-492

7) Tilt the PCB Mounting Base [1] forward.
- 2 Screws [2]
- 2 Connectors [3]

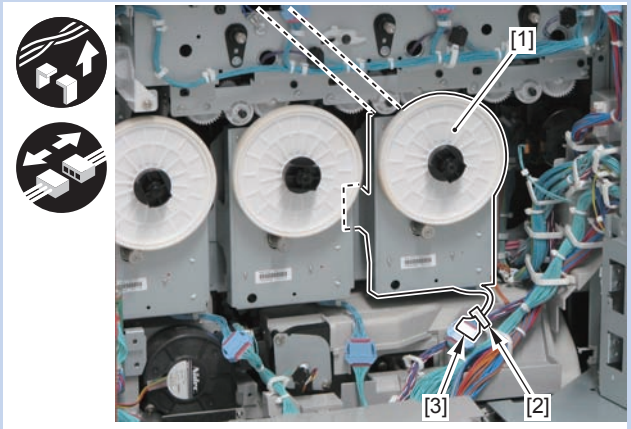
NOTE:
When removing the Drum Drive Unit (M)/(Y), there is no need to tilt the PCB Mounting Base forward.



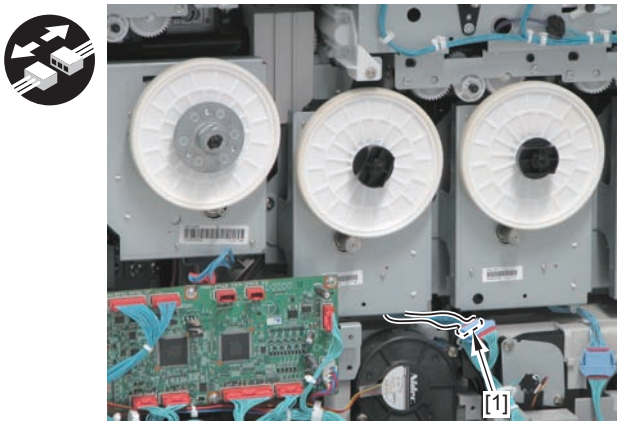
F-4-493

8) Disconnect the connector [1].

NOTE:
When removing the Drum Drive Unit (Y) [1], remove the Wire Saddle [2] and the Relay Connector [3].



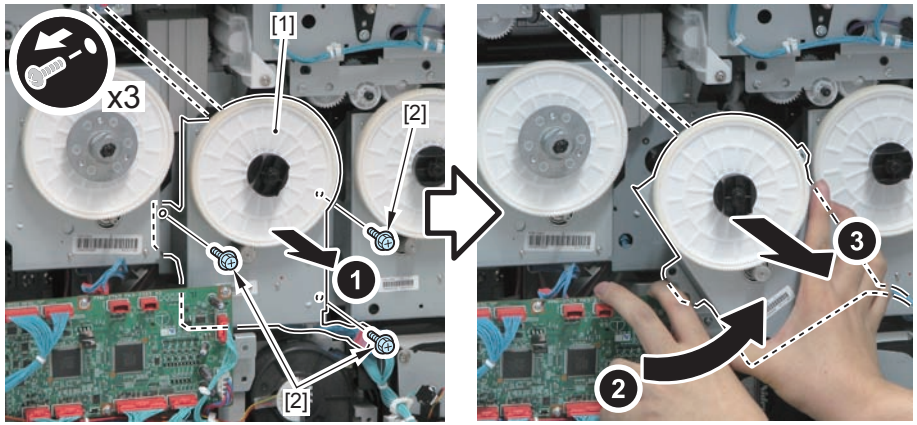
F-4-494



F-4-495

9) Remove the Drum Drive Unit (C) [1].

- 3 Screws [2]

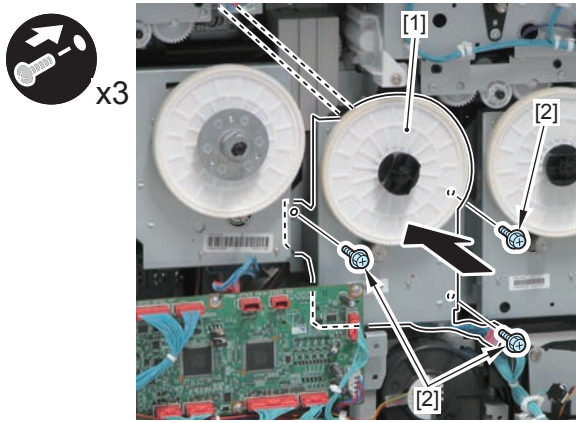


F-4-496

Assembling Procedure

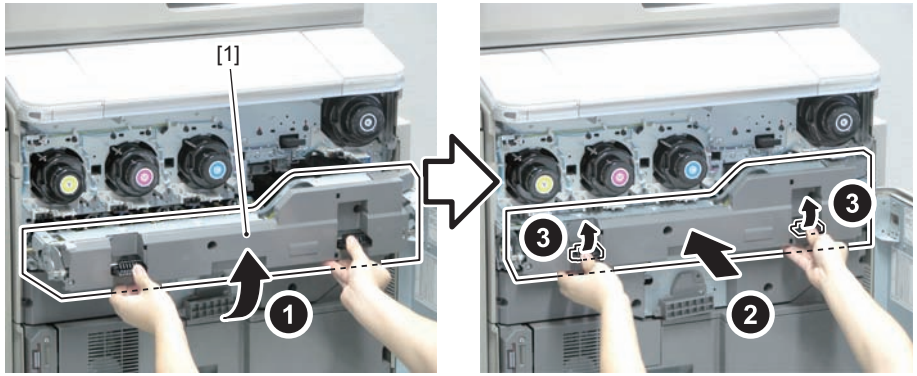
NOTE:
Because the positioning of the Drum Drive Unit (Y)/(M)/(C) is necessary for installation, tighten the screws according to the following order.

1) Install the Drum Drive Unit (C) [1], and tighten the 3 screws [2] temporarily.



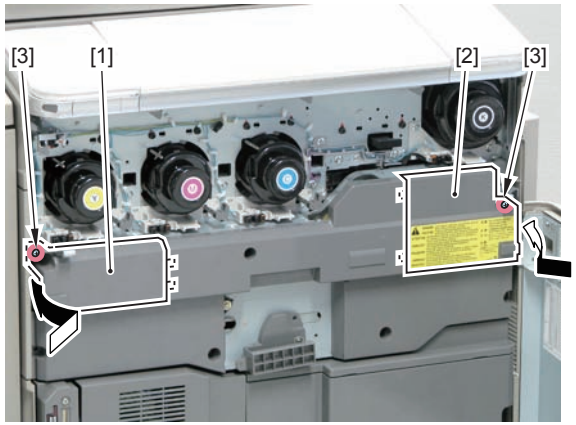
F-4-497

2) Close the Process Unit Inner Cover [1].



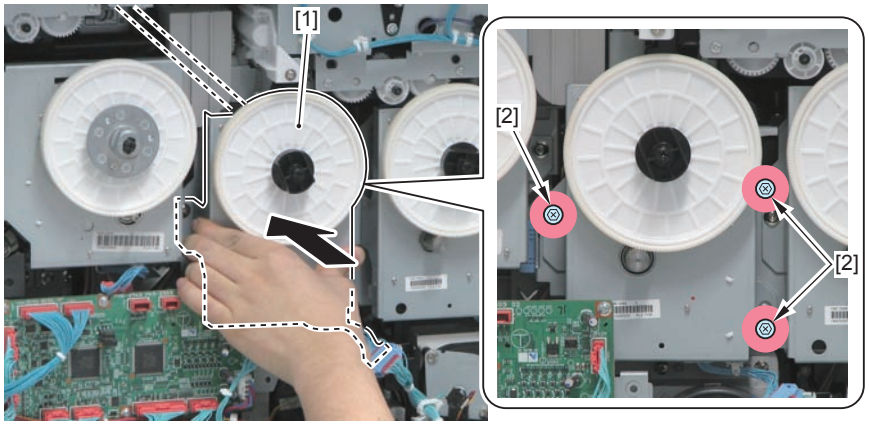
F-4-498

3) Install the Front Inner Handle Left Cover [1] and the Front Inner Handle Right Cover [2] in the direction of the arrows, and tighten a screw [3] for each of them.



F-4-499

4) Finally, push the Drum Drive Unit (C) [1] against the Rear Plate, and fully tighten the 3 screws [2].



F-4-500

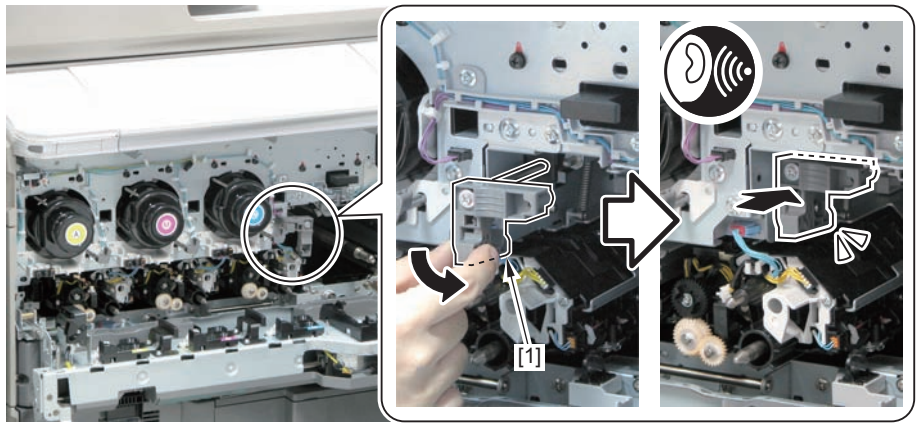
Removing the Hopper Unit (Bk)

Preparation

1) Remove the Toner Container (Bk).

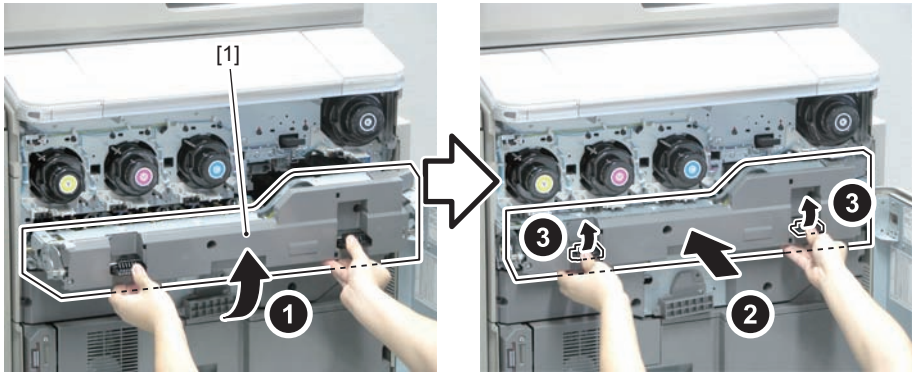
NOTE:
Before turning OFF the power of the host machine, use the Control Panel to remove the Toner Container of the corresponding color.
If the power of the host machine is already turned OFF, see the procedure on manually removing the Toner Container to remove the Toner Container of the corresponding color.

2) Open the Front Cover.
3) Remove the Front Upper Cover (Refer to page 4-339).
4) Remove the Toner Container Replacement Unit Inner Cover (Refer to page 4-339).
5) Open the Process Unit Inner Cover (Refer to page 4-131).
6) Remove the Developing Assembly (Bk) (Refer to page 4-232).
7) Remove the Primary Charging Assembly (Refer to page 4-184).
8) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
9) Remove the Drum Unit (Bk) (Refer to page 4-214).
10) Push in the Black Developing Assembly Pressure Lever [1] to apply pressure.



F-4-501

11) Close the Process Unit Inner Cover [1].



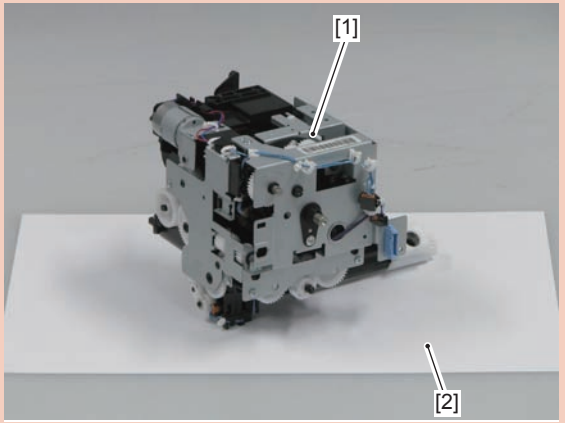
F-4-502

12) Pull out the ITB Unit (Refer to page 4-134).
13) Remove the Box Left Cover (Refer to page 4-343).
14) Remove the Box Upper Cover (Refer to page 4-343).
15) Open the Controller Box (Refer to page 4-108).
16) Remove the Drum Drive Unit (Bk) (Refer to page 4-254).

■ Disassembling Procedure

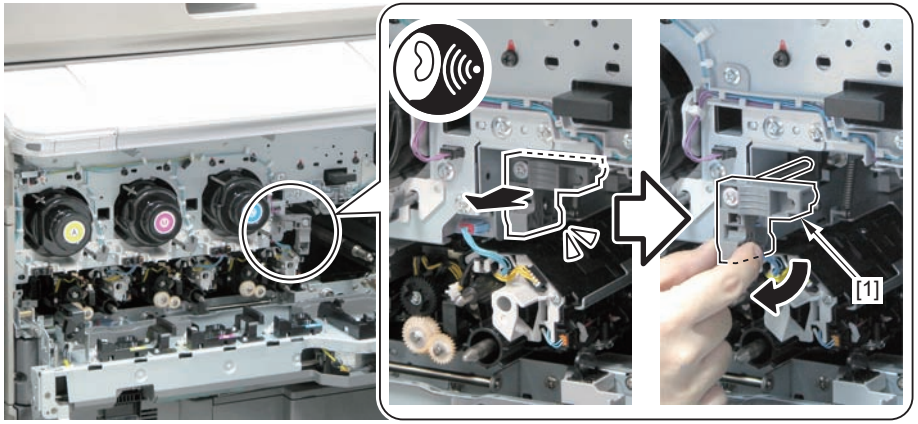
CAUTION:

Place the Hopper Unit (Bk) [1] on a sheet of paper [2], etc. when disassembling/assembling.



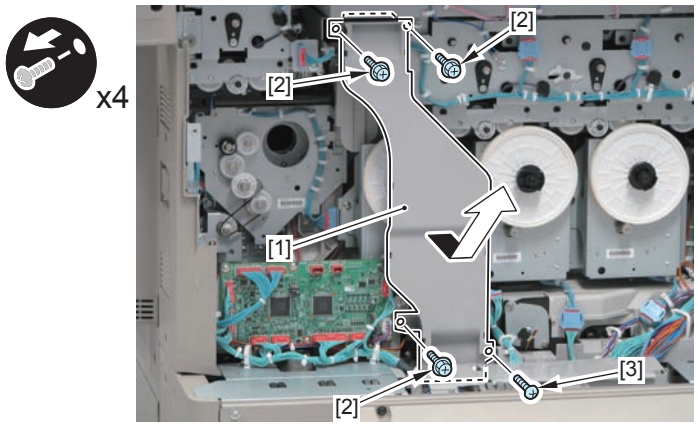
F-4-503

1) Pull the Black Developing Assembly Pressure Lever [1] toward the front to release the pressure.



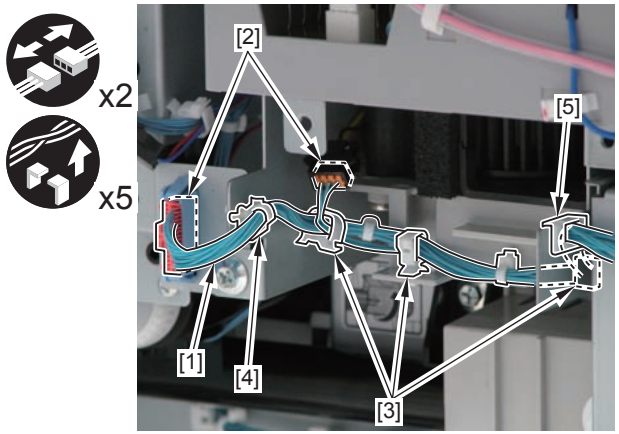
F-4-504

2) Remove the Duct [1].
- 3 Screws (RS) [2]
- 1 Screw (Tapping) [3]



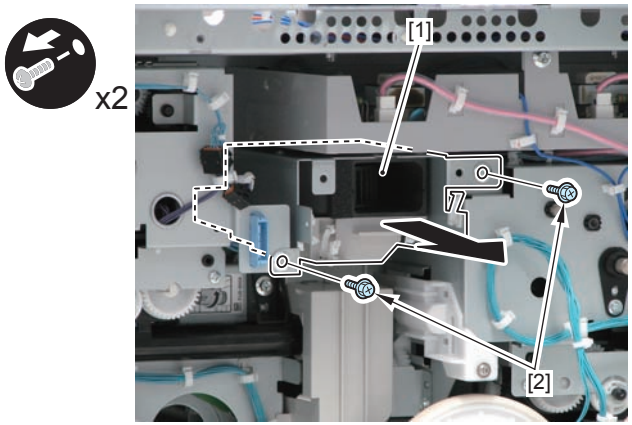
F-4-505

3) Free the harness [1].
- 2 Connectors [2]
- 3 Wire Saddles [3]
- 1 Reuse Band [4]
- 1 Edge Saddle [5]



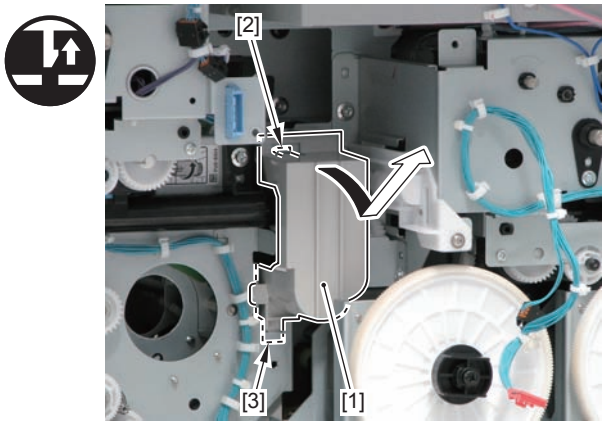
F-4-506

4) Remove the Fan Unit [1].
- 2 Screws [2]



F-4-507

5) While opening the upper part of the Hopper Shield [1], pull it forward to remove it.
- 1 Claw [2]
- 1 Hook [3]

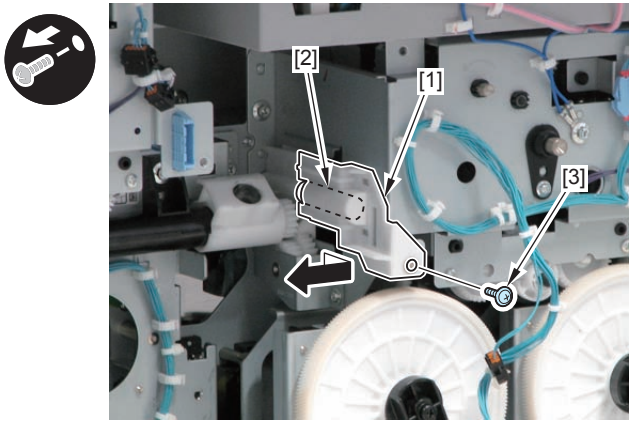


F-4-508

6) Remove the Rail Cover (Front) [1] and the spring [2].
- 1 Screw [3]

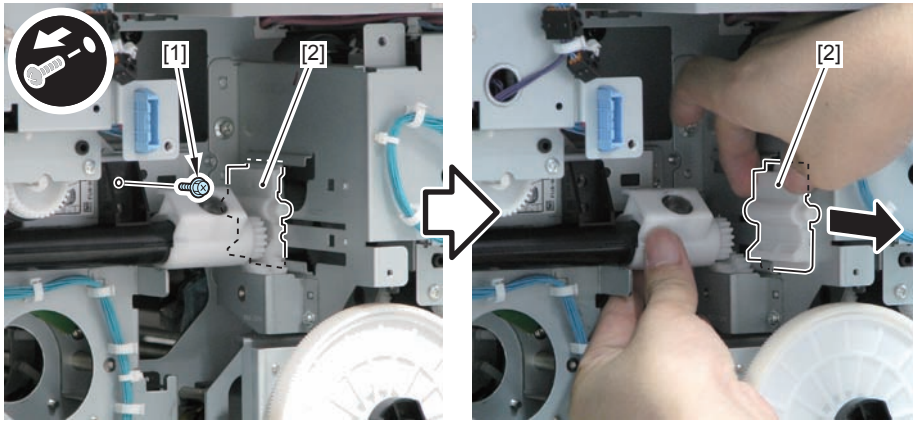
CAUTION:

Be sure to hold the Rail Cover (Front) [1] not to drop the spring [2] when removing it.



F-4-509

7) Remove the screw [1] of the pipe and the Rail Cover (Rear) [2].

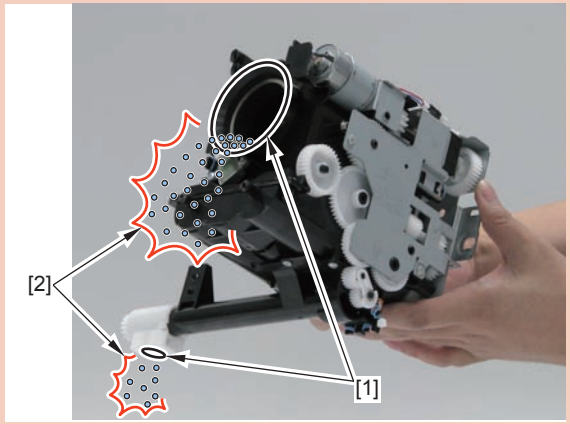


F-4-510

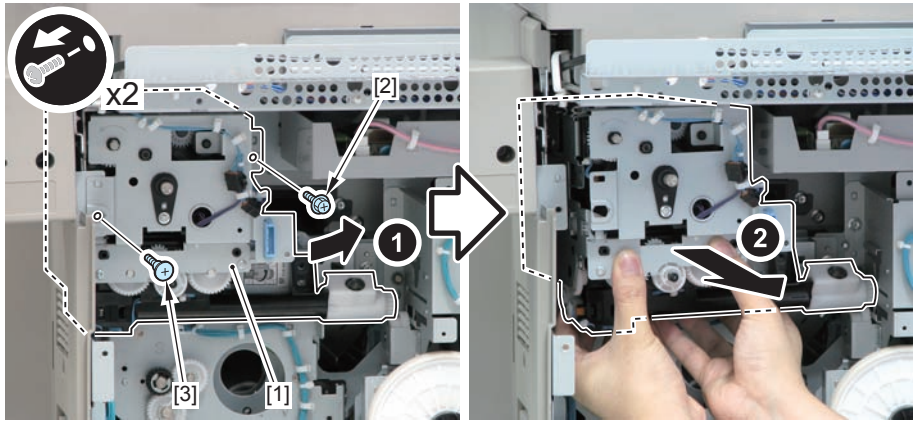
8) Remove the Hopper Unit (Bk) [1].
- 1 Screw [2]
- 1 Stepped Screw [3]

CAUTION:

When removing the Hopper Unit (Bk), be sure not to spill toner [2] from the Toner Supply Mouth [1].



F-4-511

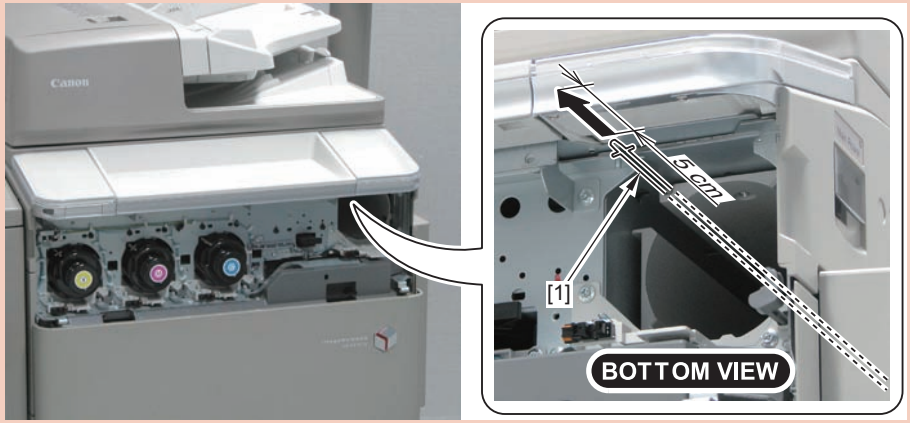


F-4-512

Assembling Procedure

CAUTION:

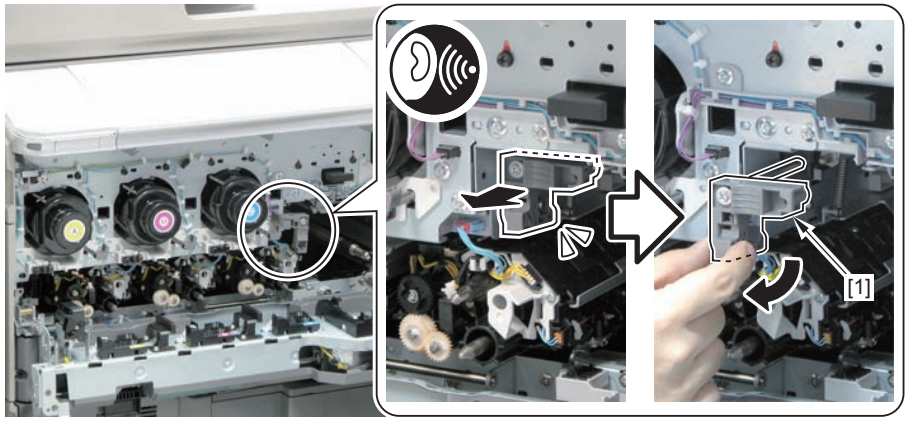
When assembling the Hopper Unit (Bk), pull out the Small Door Open/Close Shaft [1] at the front side of the host machine by approx. 50 mm, and then install the Hopper Unit (Bk).



F-4-513

NOTE:
When assembling the Hopper Unit (Bk), use the following procedure to match the phase of the gear.

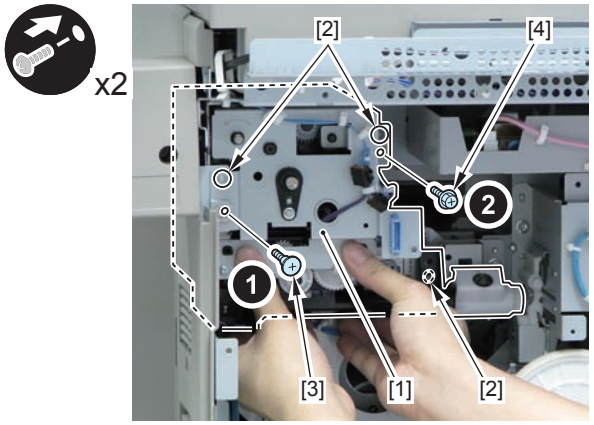
1) Be sure that the Black Developing Assembly Pressure Lever [1] is pulled to the front.



F-4-514

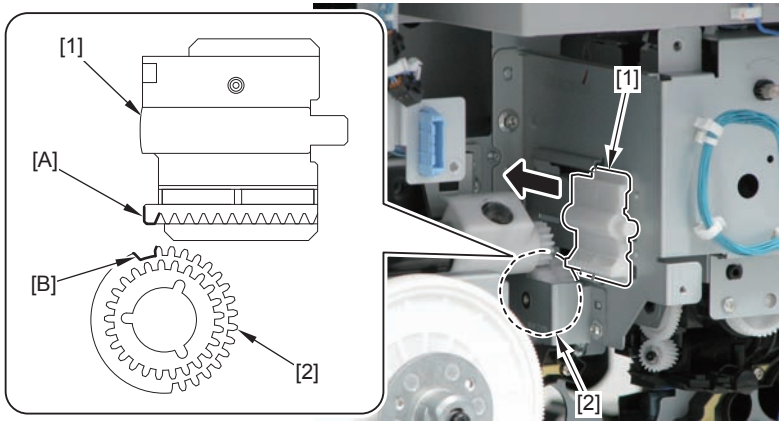
2) Install the Hopper Unit (Bk) [1].

- 3 Bosses [2]
- 1 Stepped Screw [3]
- 1 Screw [4]



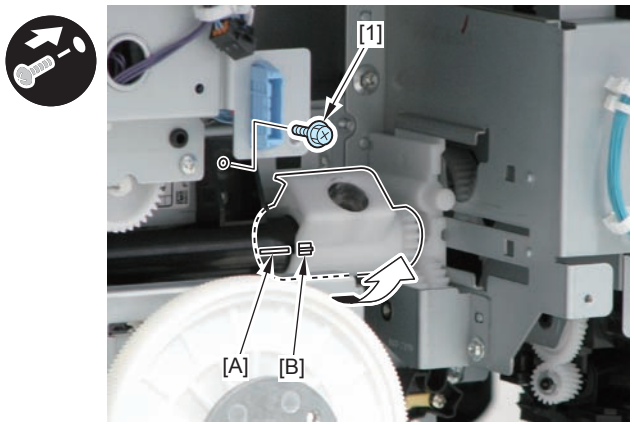
F-4-515

3) Match the phase of the tooth [A] of the Rail Cover (Rear) [1] with the tooth [B] of the gear [2], and then push in the Rail Cover (Rear) [1] until it stops.



F-4-516

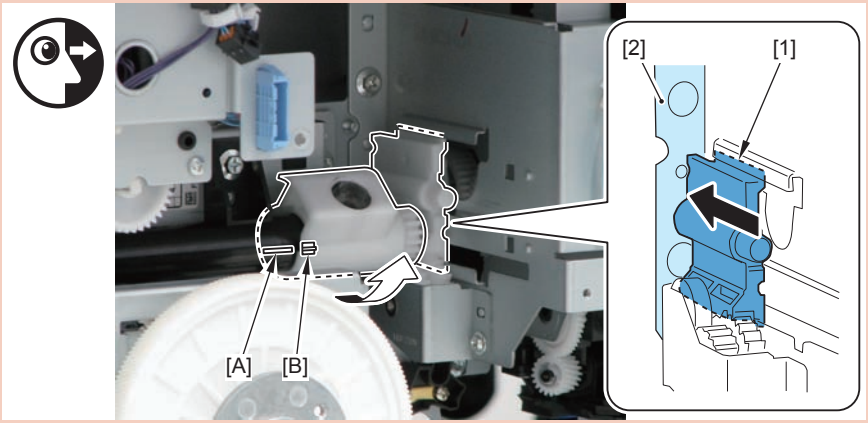
4) Align the line [A] on the pipe of the Hopper Unit (Bk) with the line [B] on the Toner Supply Mouth, and then use the screw [1] to secure it.



F-4-517

CAUTION:

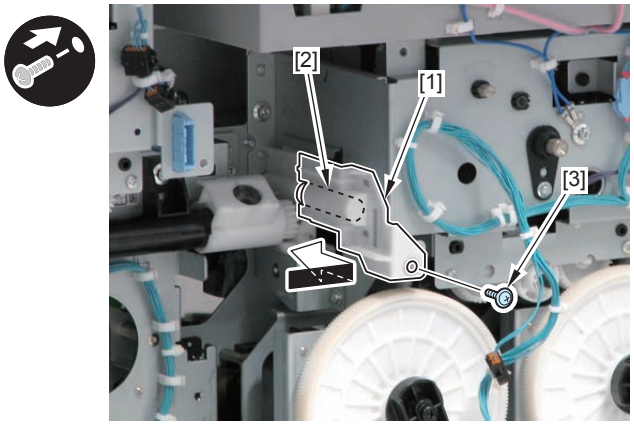
- Be sure that the Rail Cover (Rear) [1] touches the plate [2] on the rear side.
- Be sure to rotate the Toner Supply Mouth in the direction of the arrow until it stops so that the line [A] on the pipe of the Hopper Unit (Bk) is aligned with the line [B] on the Toner Supply Mouth.



F-4-518

5) Install the Rail Cover (Front) [1].

- 1 Spring [2]
- 1 Screw [3]



F-4-519

6) Install the Hopper Shield, Fan Unit, harness, and duct.

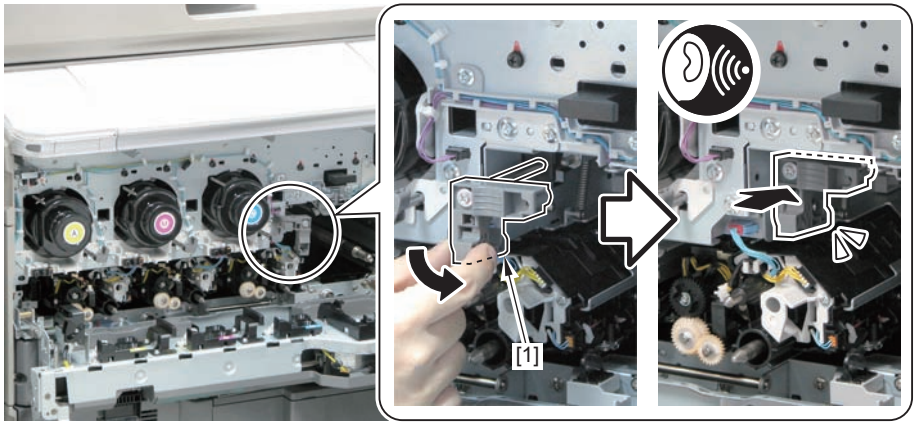
Removing the Hopper Unit (Y)/(M)/(C)

Preparation

1) Remove the Toner Container (Y)/(M)/(C).

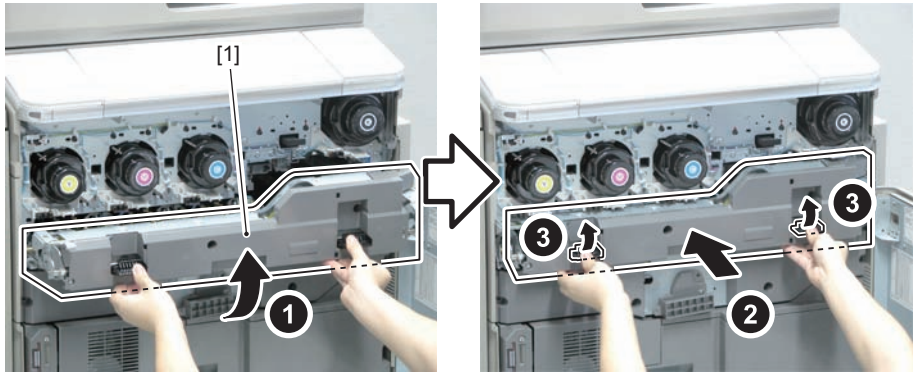
NOTE:
Before turning OFF the power of the host machine, use the Control Panel to remove the Toner Container (Y)/(M)/(C).
If the power of the host machine is already turned OFF, see the procedure on manually removing the Toner Container to remove the Toner Container (Y)/(M)/(C).

2) Open the Front Cover.
3) Remove the Front Upper Cover (Refer to page 4-339).
4) Remove the Toner Container Replacement Unit Inner Cover (Refer to page 4-339).
5) Open the Process Unit Inner Cover (Refer to page 4-131).
6) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).
7) Remove the Developing Assembly (Bk) (Refer to page 4-232).
8) Push in the Black Developing Assembly Pressure Lever [1] to apply pressure.



F-4-520

9) Close the Process Unit Inner Cover [1].



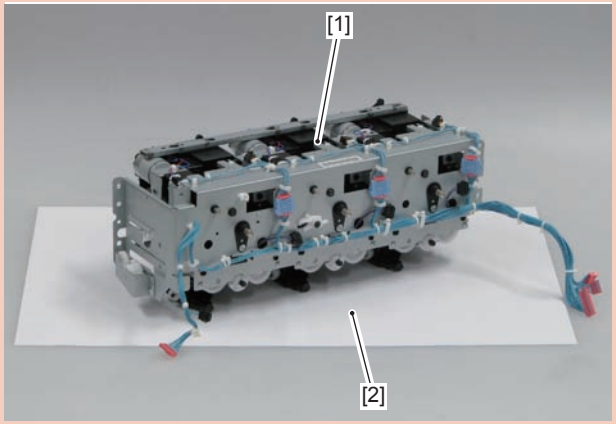
F-4-521

10) Pull out the ITB Unit (Refer to page 4-134).
11) Remove the Box Left Cover (Refer to page 4-343).
12) Remove the Box Upper Cover (Refer to page 4-343).
13) Open the Controller Box (Refer to page 4-108).
14) Remove the Drum Drive Unit (Y)/(M)/(C) (Refer to page 4-257).
15) Remove the Developing Drive Unit (Y)/(M)/(C) (Refer to page 4-276).

Procedure

CAUTION:

Place the Hopper Unit (Y)/(M)/(C) [1] on a sheet of paper [2], etc. when disassembling/assembling.

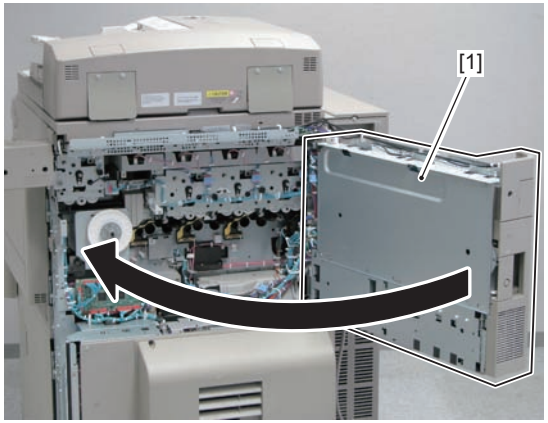


F-4-522

1) Close the Controller Box [1].

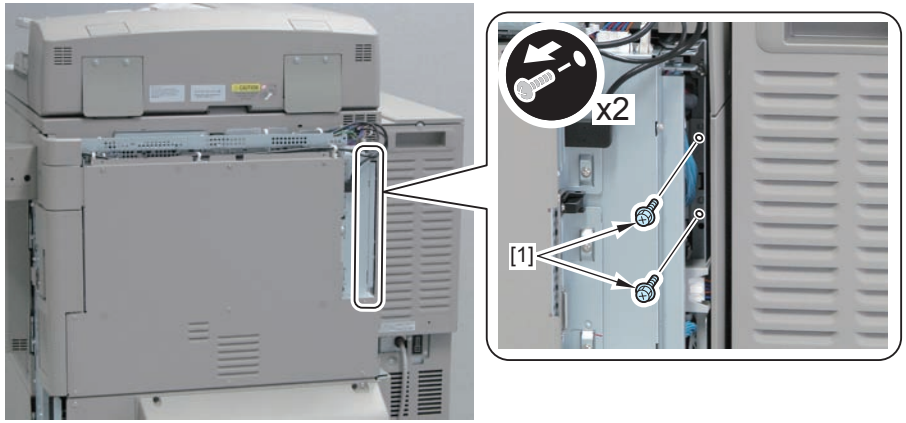
CAUTION:

When closing the Controller Box, be careful not to trap the harness.



F-4-523

2) Remove the 2 screws [1] of the Hopper Unit (Y)/(M)/(C).

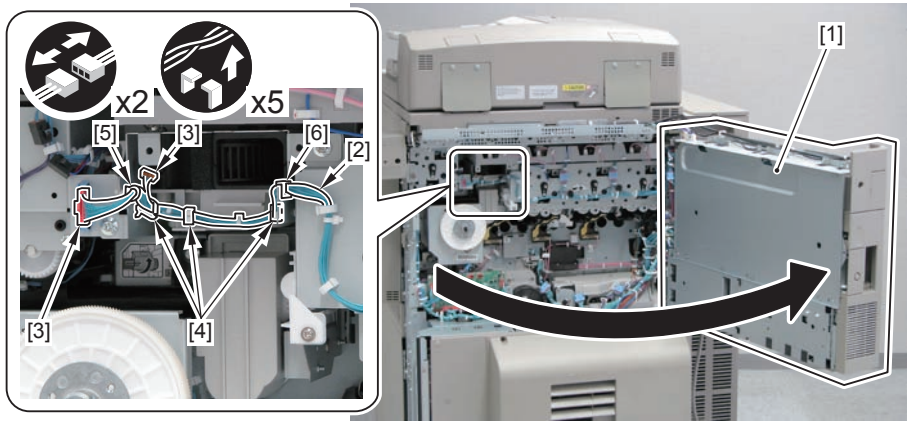


F-4-524

3) Open the Controller Box [1].

4) Free the harness [2].

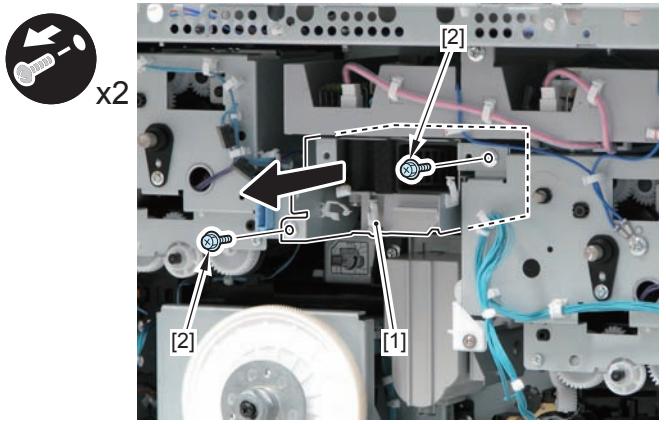
- 2 Connectors [3]
- 3 Wire Saddles [4]
- 1 Reuse Band [5]
- 1 Edge Saddle [6]



F-4-525

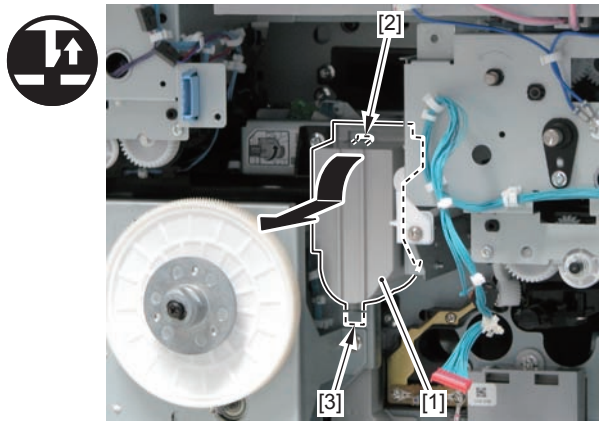
5) Remove the Fan Unit [1].

- 2 Screws [2]



F-4-526

6) While opening the upper part of the Hopper Shield [1], pull it forward to remove it.
- 1 Claw [2]
- 1 Hook [3]

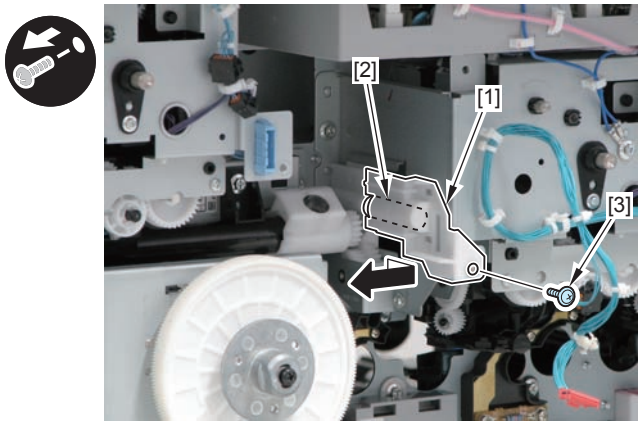


F-4-527

7) Remove the Rail Cover (Front) [1] and the spring [2].
- 1 Screw [3]

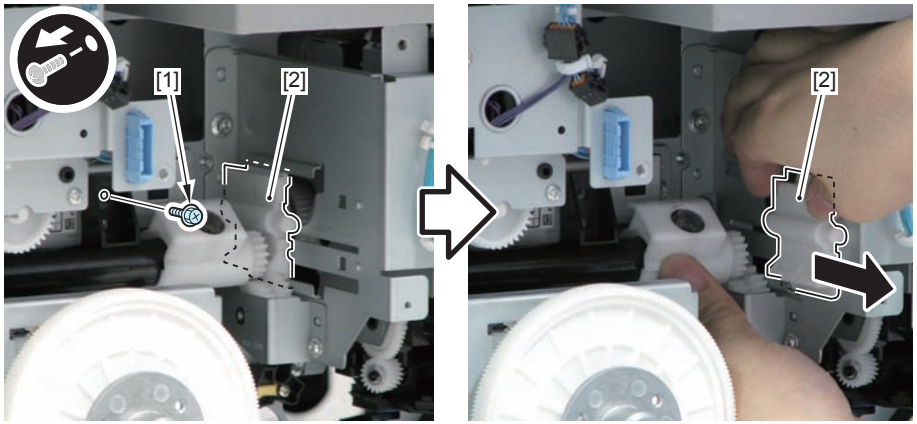
CAUTION:

Be sure to hold the Rail Cover (Front) [1] not to drop the spring [2] when removing it.



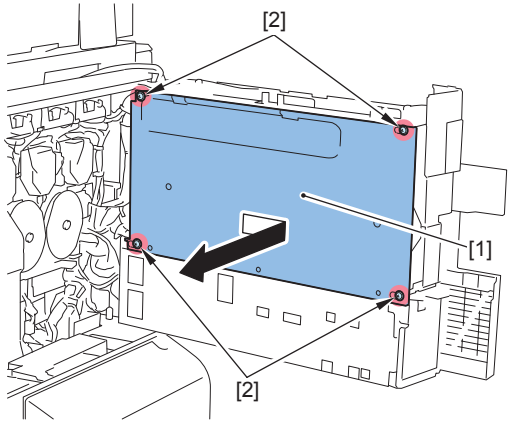
F-4-528

8) Remove the screw [1] of the pipe and the Rail Cover (Rear) [2].



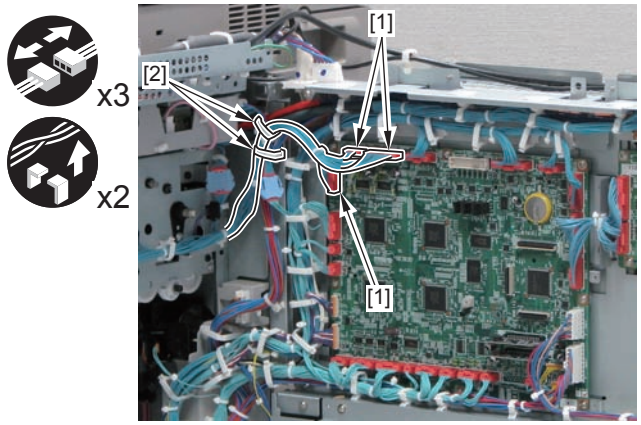
F-4-529

9) Remove the DC Controller Cover [1].
- 4 Screws [2] (to loosen)



F-4-530

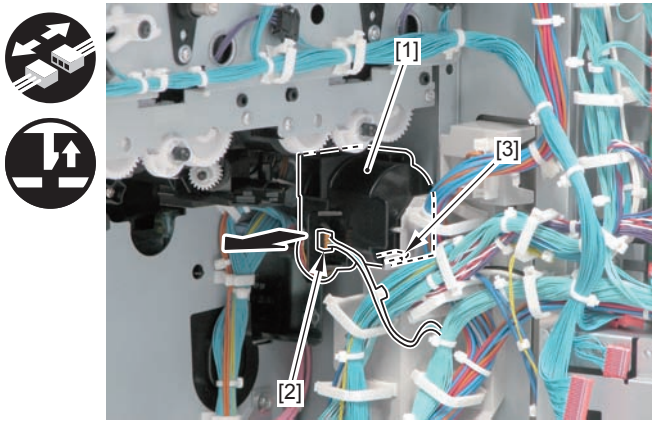
10) Disconnect the 3 connectors [1] and remove the 2 Wire Saddles [2].



F-4-531

11) Remove the Hopper Cooling Suction Fan [1].

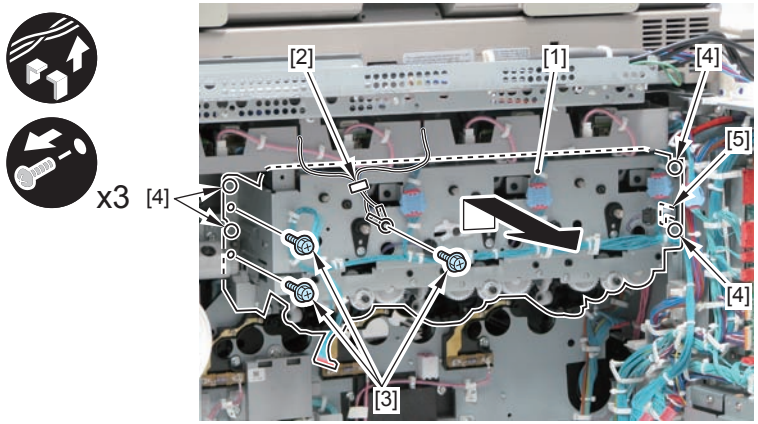
- 1 Connector [2]
- 1 Claw [3]



F-4-532

12) Remove the Hopper Unit (Y)/(M)/(C) [1].

- 1 Wire Saddle [2]
- 3 Screws [3]
- 4 Bosses [4]
- 1 Hook [5]

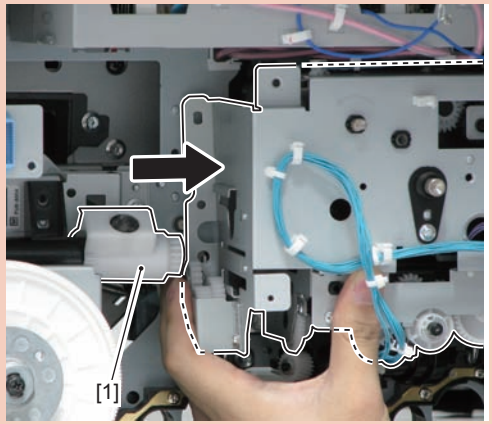


F-4-533

CAUTION:

When disassembling/assembling the Hopper Unit (Y)/(M)/(C), pay attention to the following points.

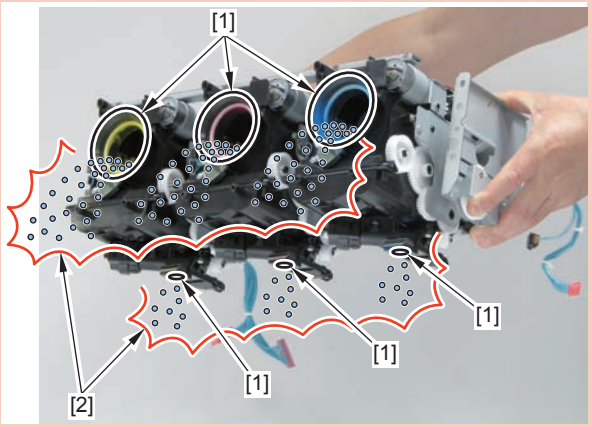
- When removing, be sure to avoid the contact with the gear [1] of the Hopper Unit (Bk).



F-4-534

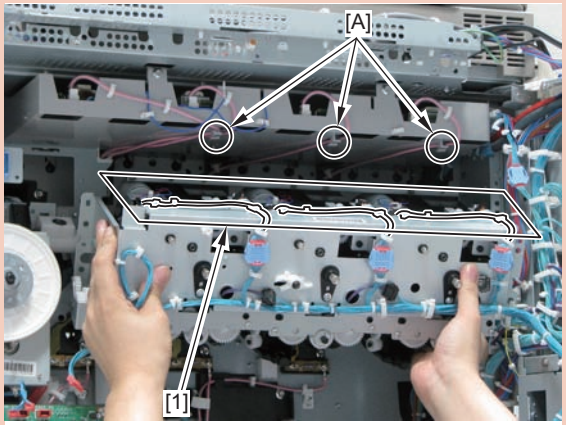
CAUTION:

- Do not spill toner [2] from the Toner Supply Mouth [1].



F-4-535

- Do not hook the harness [1] at the upper part of the Hopper Unit (Y)/(M)/(C) to the guides [A].

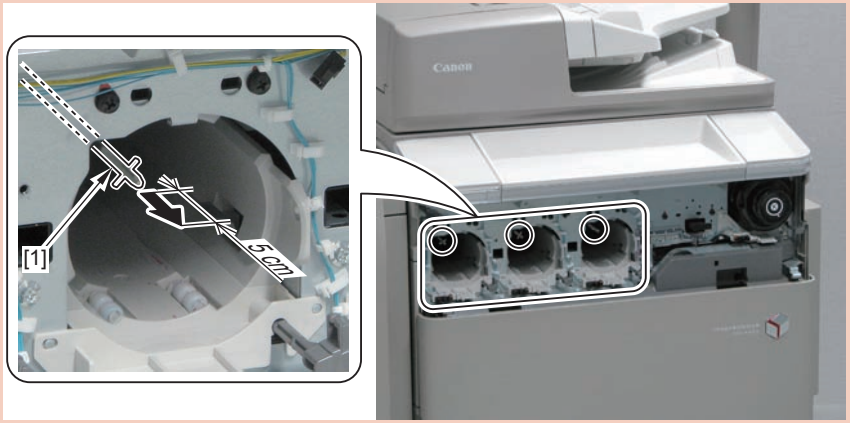


F-4-536

Assembling Procedure

CAUTION:

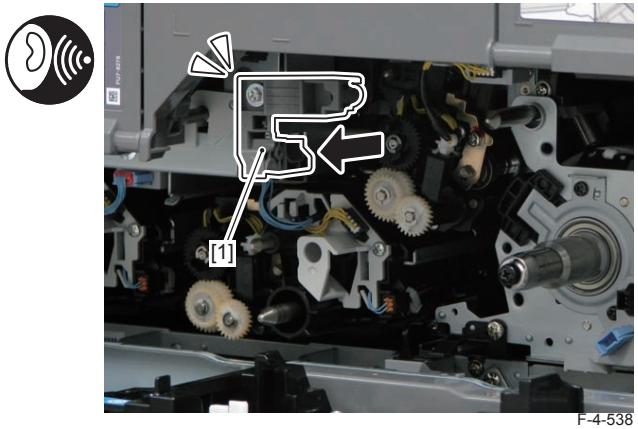
When assembling the Hopper Unit (Y)/(M)/(C), pull out the 3 Small Door Open/Close Shafts [1] at the front side of the host machine by approx. 50 mm, and then install the Hopper Unit (Y)/(M)/(C).



F-4-537

NOTE:
When assembling the Hopper Unit (Y)/(M)/(C), use the following procedure to match the phase of the gear.

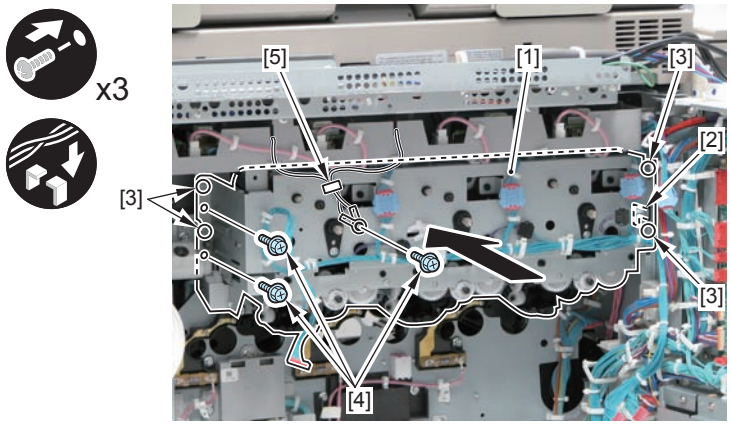
1) Be sure that the Black Developing Assembly Pressure Lever [1] is pulled to the front.



F-4-538

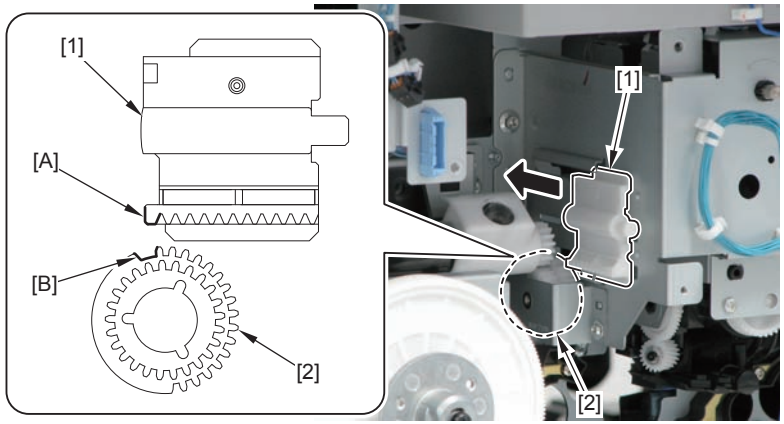
2) Install the Hopper Unit (Y)/(M)/(C) [1].

- 1 Hook [2]
- 4 Bosses [3]
- 3 Screws [4]
- 1 Wire Saddle [5]



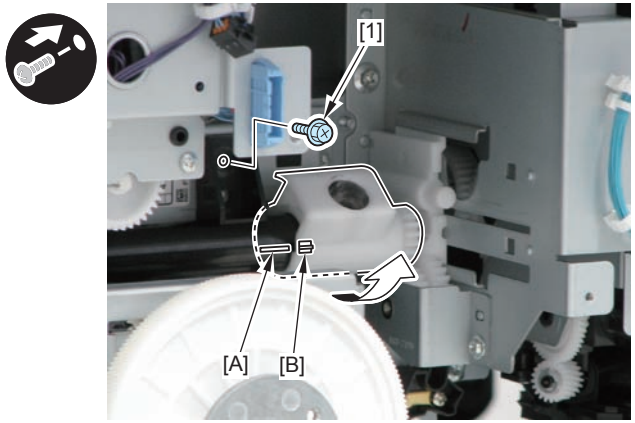
F-4-539

3) Match the phase of the tooth [A] of the Rail Cover (Rear) [1] with the tooth [B] of the gear [2], and then push in the Rail Cover (Rear) [1] until it stops.



F-4-540

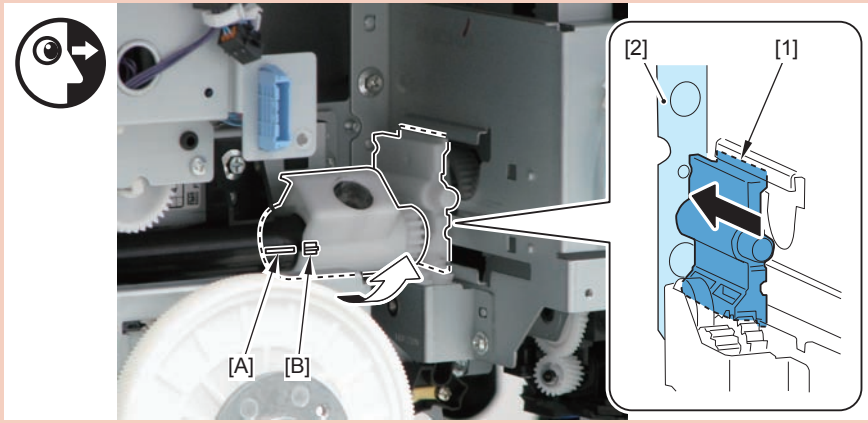
4) Align the line [A] on the pipe of the Hopper Unit (Bk) with the line [B] on the Toner Supply Mouth, and then use the screw [1] to secure it.



F-4-541

CAUTION:

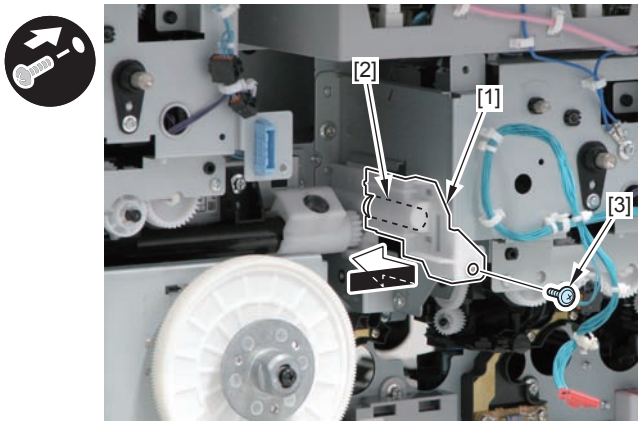
- Be sure that the Rail Cover (Rear) [1] touches the plate [2] on the rear side.
- Be sure to rotate the Toner Supply Mouth in the direction of the arrow until it stops so that the line [A] on the pipe of the Hopper Unit (Bk) is aligned with the line [B] on the Toner Supply Mouth.



F-4-542

5) Install the Rail Cover (Front) [1].

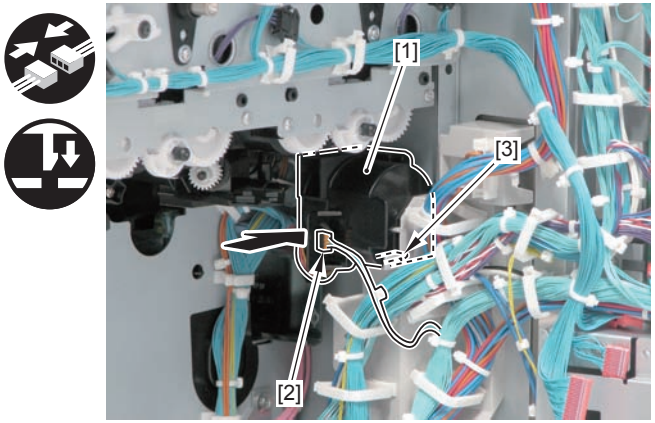
- 1 Spring [2]
- 1 Screw [3]



F-4-543

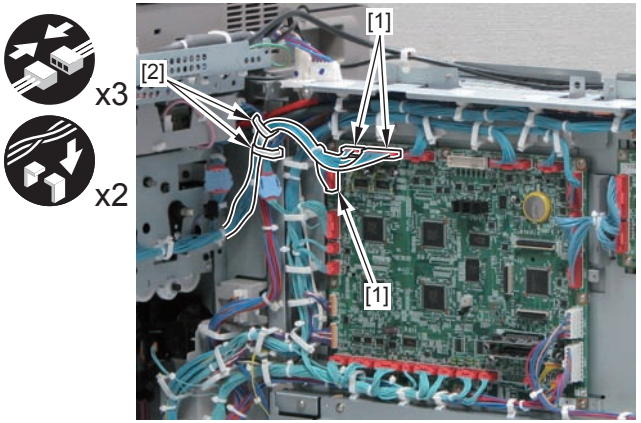
6) Install the Hopper Cooling Suction Fan [1].

- 1 Connector [2]
- 1 Claw [3]



F-4-544

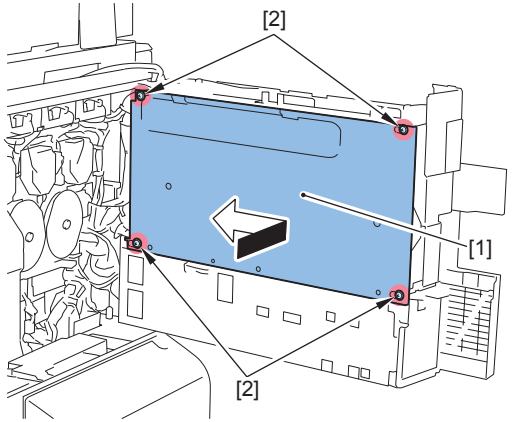
7) Install the 3 connectors [1] and the 2 Wire Saddles [2].



F-4-545

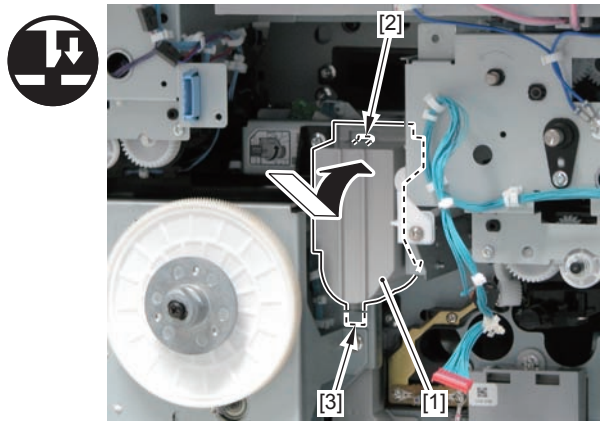
8) Install the DC Controller Cover [1].

- 4 Screws [2]



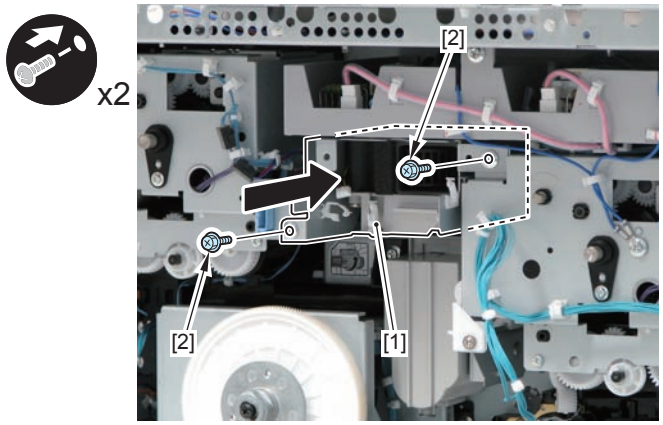
F-4-546

9) Install the Hopper Shield [1].
- 1 Claw [2]
- 1 Hook [3]



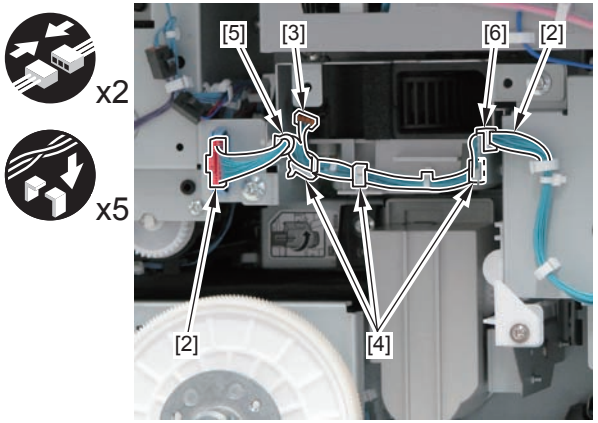
F-4-547

10) Install the Fan Unit [1].
- 2 Screws [2]



F-4-548

11) Connect the harness [2].
- 2 Connectors [3]
- 3 Wire Saddles [4]
- 1 Reuse Band [5]
- 1 Edge Saddle [6]



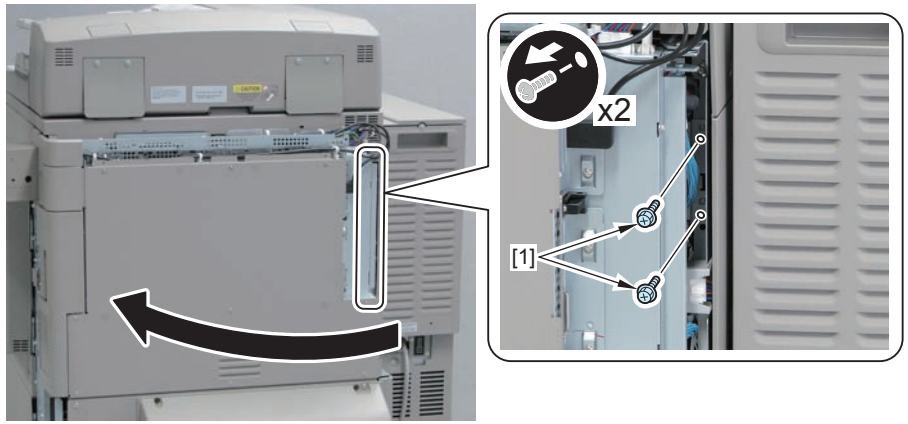
F-4-549

12) Close the Controller Box [1].

CAUTION:

When closing the Controller Box, be careful not to trap the harness.

13) Install the 2 screws [1] of the Hopper Unit (Y)/(M)/(C).



F-4-550

14) Open the Controller Box.

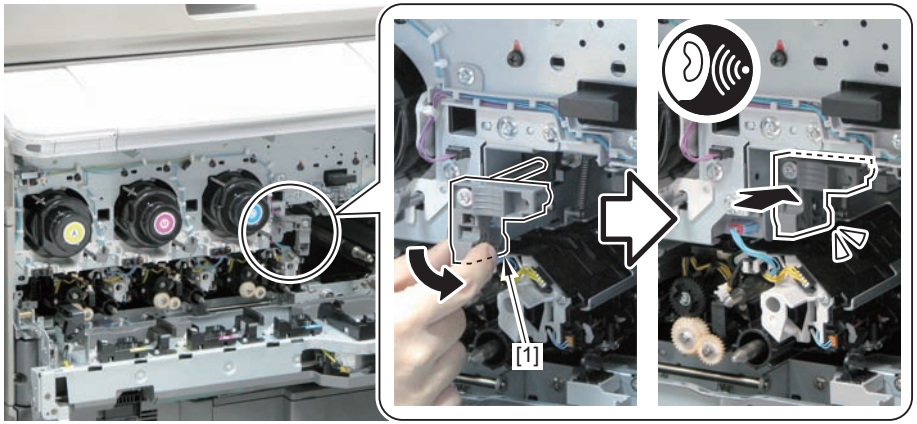
Removing the Developing Drive Unit (Bk)

Preparation

1) Remove the Toner Container (Bk).

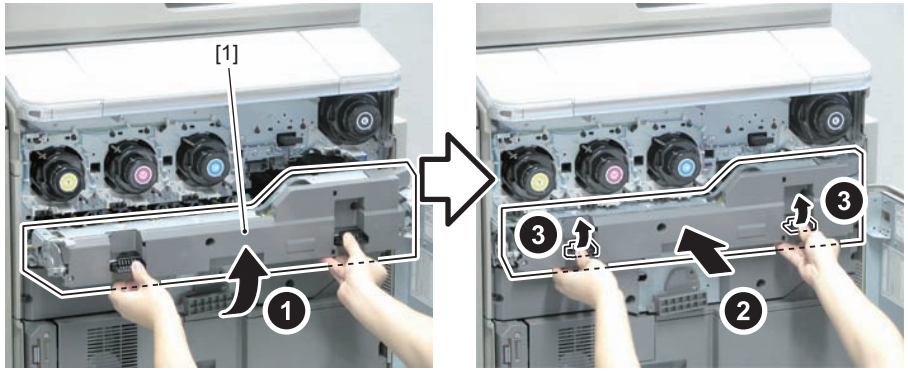
NOTE:
Before turning OFF the power of the host machine, use the Control Panel to remove the Toner Container of the corresponding color.
If the power of the host machine is already turned OFF, see the procedure on manually removing the Toner Container to remove the Toner Container of the corresponding color.

2) Open the Front Cover.
3) Remove the Front Upper Cover (Refer to page 4-339).
4) Open the Process Unit Inner Cover (Refer to page 4-131).
5) Remove the Developing Assembly (Bk) (Refer to page 4-232).
6) Remove the Primary Charging Assembly (Refer to page 4-184).
7) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
8) Remove the Drum Unit (Bk) (Refer to page 4-214).
9) Push in the Black Developing Assembly Pressure Lever [1] to apply pressure.



F-4-551

10) Close the Process Unit Inner Cover [1].

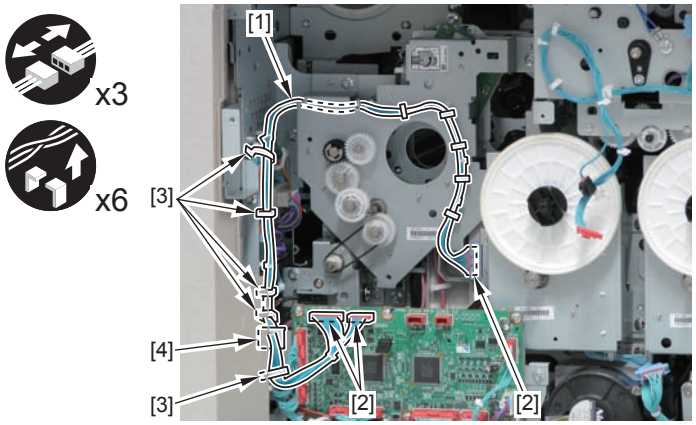


F-4-552

11) Pull out the ITB Unit (Refer to page 4-134).
12) Remove the Box Left Cover (Refer to page 4-343).
13) Remove the Box Upper Cover (Refer to page 4-343).
14) Open the Controller Box (Refer to page 4-108).
15) Remove the Drum Drive Unit (Bk) (Refer to page 4-254).
16) Remove the Hopper Unit (Bk) (Refer to page 4-254).

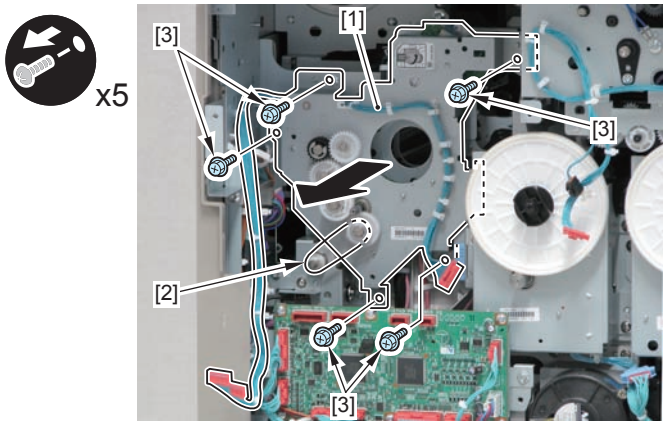
Procedure

1) Free the harness [1].
- 3 Connectors [2]
- 5 Wire Saddles [3]
- 1 Edge Saddle [4]



F-4-553

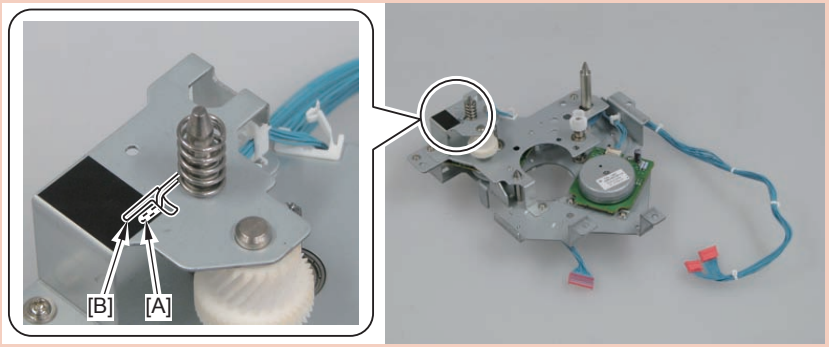
2) Remove the Developing Drive Unit (Bk) [1].
- 1 Timing Belt [2]
- 5 Screws [3]



F-4-554

CAUTION:

When assembling the Developing Drive Unit (Bk), be sure to hook the leading edge [A] of the spring to the groove [B] of the Developing Drive Unit (Bk).

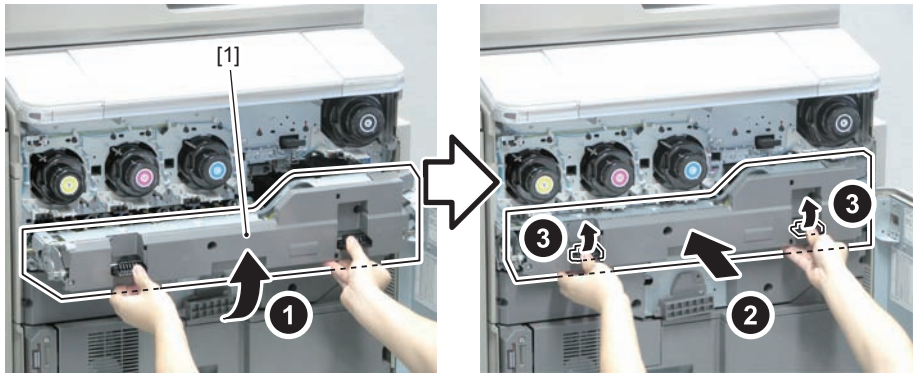


F-4-555

Removing the Developing Drive Unit (Y)/(M)/(C)

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).
3) Open the Process Unit Inner Cover (Refer to page 4-131).
4) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).
5) Close the Process Unit Inner Cover [1].

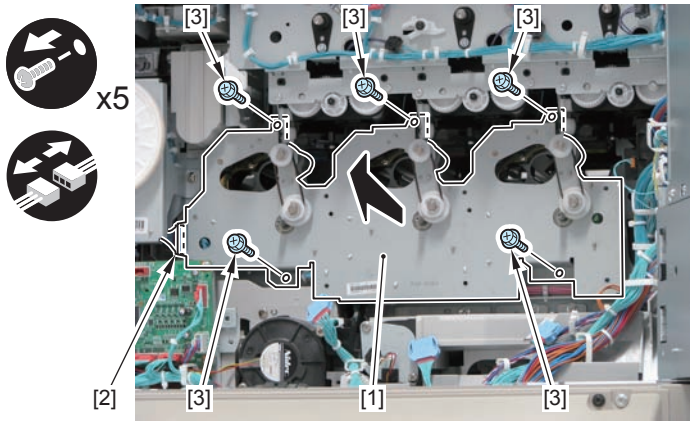


F-4-556

6) Pull out the ITB Unit (Refer to page 4-134).
7) Remove the Box Left Cover (Refer to page 4-343).
8) Remove the Box Upper Cover (Refer to page 4-343).
9) Open the Controller Box (Refer to page 4-108).
10) Remove the Drum Drive Unit (Y)/(M)/(C) (Refer to page 4-257).

Procedure

1) Remove the Developing Drive Unit (Y)/(M)/(C) [1].
- 1 Connector [2]
- 5 Screws [3]

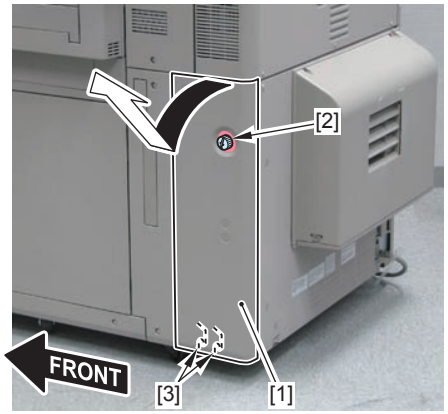


F-4-557

Removing the Waste Toner Container

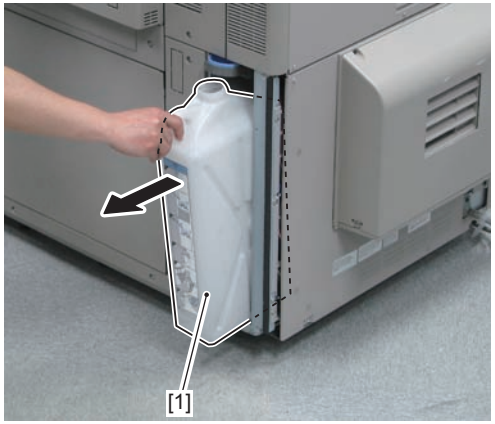
Procedure

1) Remove the Waste Toner Container Cover [1].
- 1 Finger Screw [2]
- 2 Hooks [3]



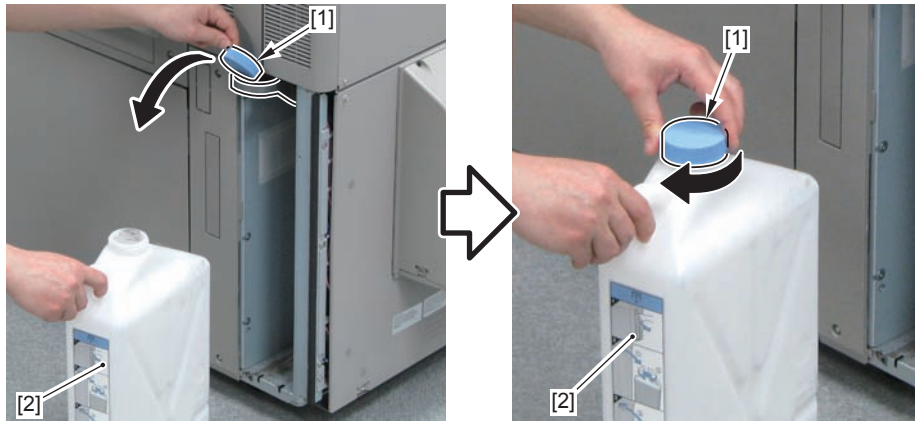
F-4-558

2) Pull out the Waste Toner Container [1].



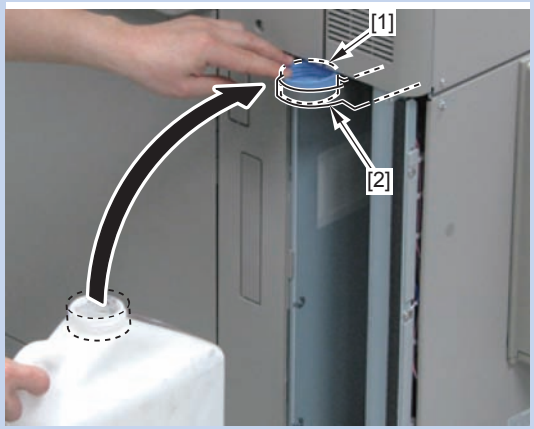
F-4-559

3) Take out the lid [1] from the Lid Storage of the host machine and use it to cover the old Waste Toner Container [2].



F-4-560

NOTE:
Set the lid [1] of a new Waste Toner Container to the Lid Storage [2] of the host machine.



F-4-561

Removing the Waste Toner Pipe (Waste Toner Primary Feed, Waste Toner Secondary Feed)

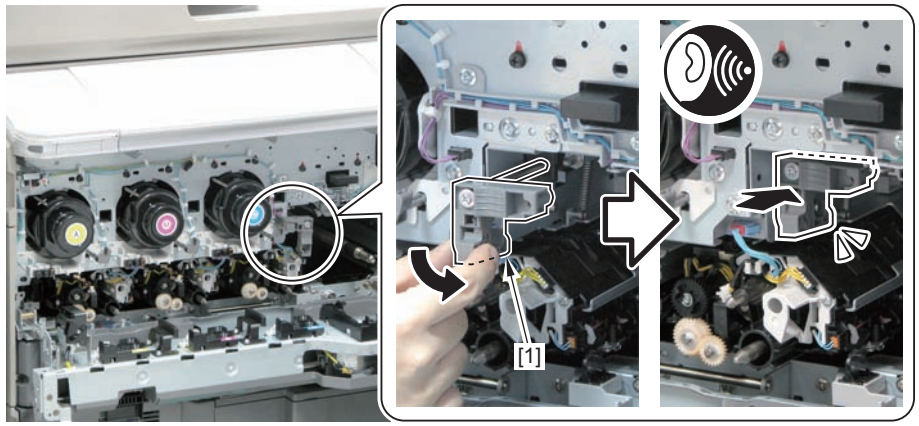
Preparation

CAUTION:

When delivery system options are installed, be sure to disconnect them from the host machine.

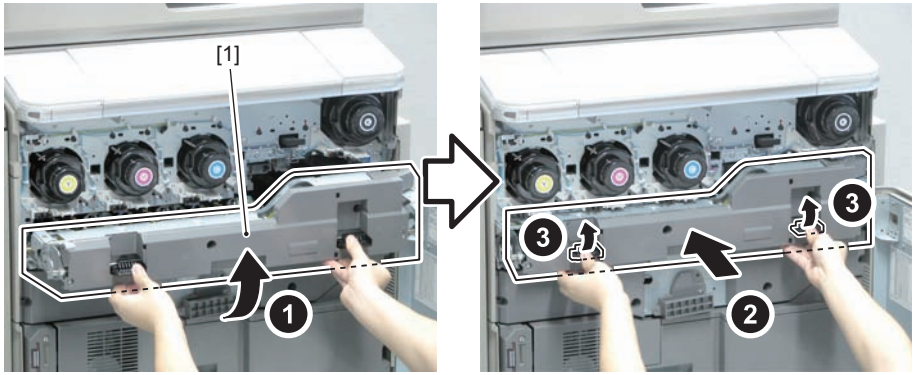
1) Open the Front Cover.
2) Remove the Upper Left Cover (Refer to page 4-344).
3) Remove the Left Middle Cover (Refer to page 4-345).
4) Remove the Lower Left Cover 3 (Refer to page 4-345).
5) Remove the Delivery Unit (Refer to page 4-330).
6) Pull out the Fixing Feed Unit (Refer to page 4-309).
7) Remove the Reverse Unit (Refer to page 4-331).
8) Pull out the ITB Unit (Refer to page 4-134).
9) Remove the ITB Unit (Refer to page 4-136).
10) Remove the ITB Frame (Refer to page 4-137).
11) Put the ITB Slide Rail back in the host machine.
12) Remove the Fixing Unit (Refer to page 4-285).
13) Remove the Fixing Feed Unit (Refer to page 4-310).
14) Store the Fixing Feed Unit Rail.
15) Remove the Multi-purpose Tray Pickup Unit (Refer to page 4-325).
16) Remove the Upper Right Cover 1 (Refer to page 4-341).
17) Remove the Multi Unit Inner Cover (Refer to page 4-341).
18) Remove the Upper Front Cover (Refer to page 4-339).
19) Open the Process Unit Inner Cover (Refer to page 4-131).
20) Remove the Process Unit (Y)/(M)/(C) (Refer to page 4-239).
21) Remove the Primary Charging Assembly (Refer to page 4-184).
22) Remove the Pre-transfer Charging Assembly (Refer to page 4-203).
23) Remove the Drum Unit (Bk) (Refer to page 4-214).
24) Remove the Patch Sensor Unit (Refer to page 4-164).

25) Push in the Black Developing Assembly Pressure Lever [1] to apply pressure.



F-4-562

26) Close the Process Unit Inner Cover [1].



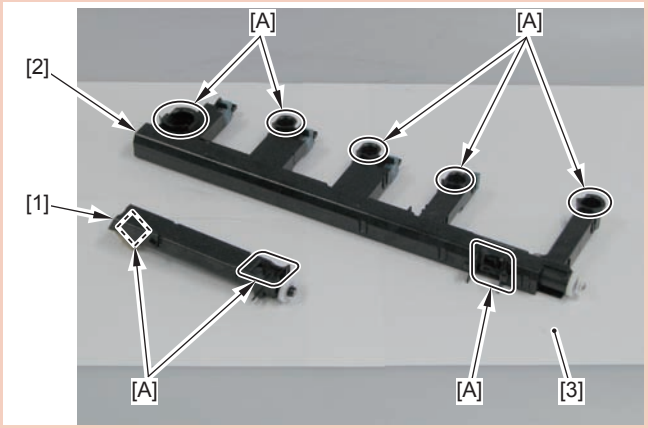
F-4-563

27) Remove the Lower Rear Cover (Refer to page 4-346).
28) Remove the Waste Toner Container (Refer to page 4-277).
29) Remove the Primary Charging High Voltage PCB Box (Refer to page 4-118).

Procedure

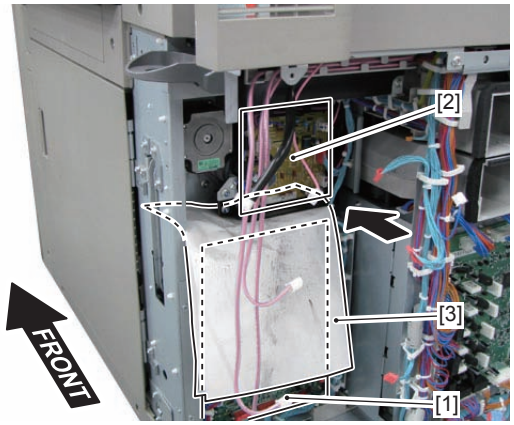
CAUTION:

- When disassembling/assembling the Waste Toner Secondary Feed Unit and the Waste Toner Primary Feed Unit, prepare a dedicated vacuum cleaner for toner because the toner may scatter around.
- Because the toner may spill out from the 8 Toner Collection Mouths [A] of the Waste Toner Secondary Feed Unit [1] and Waste Toner Primary Feed Unit [2], place them on a sheet of paper [3], etc. when disassembling/assembling.



F-4-564

1) Insert a sheet of paper to the clearance at the lower side of the Pre-transfer Charging High Voltage PCB (Bk) [2] to prevent the spring to be removed in step 3 from falling to the back side of the Pickup Feed Driver PCB [1].

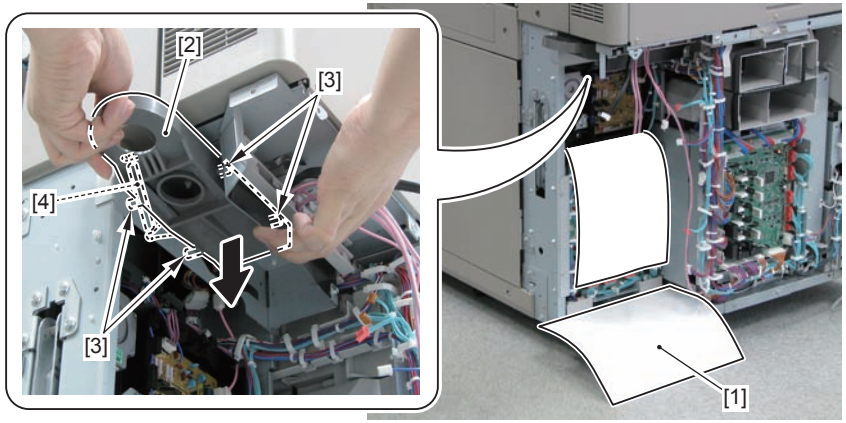


F-4-565

2) Place a sheet of paper [1] on the Waste Toner Bottle Base because toner may spill out.

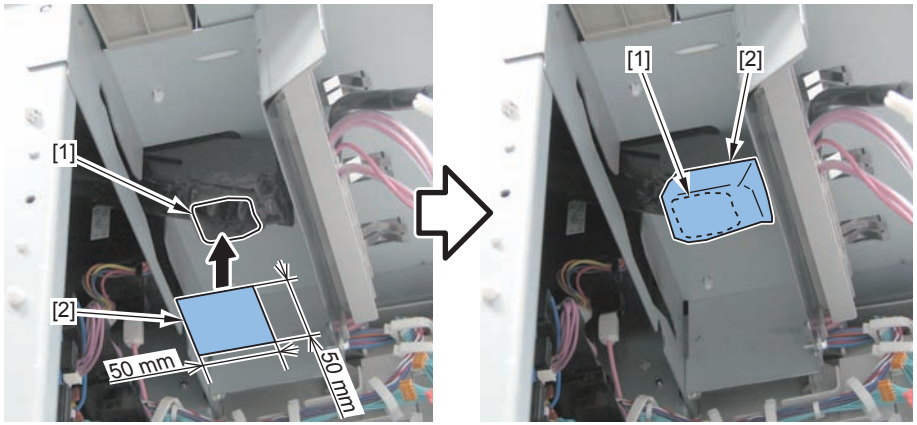
3) Remove the Waste Toner Cap Base [2].

- 4 Protrusions [3]
- 1 Spring [4]



F-4-566

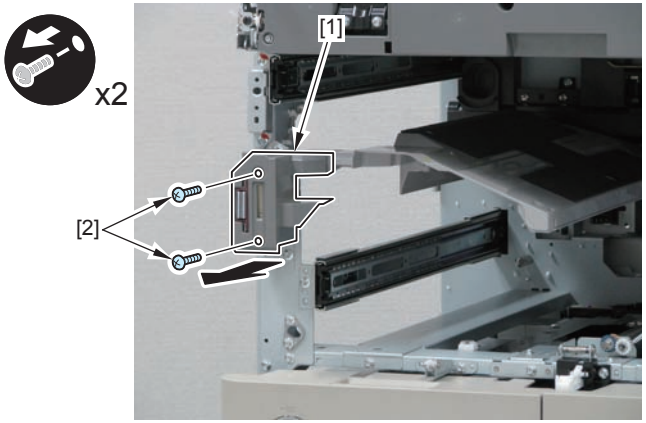
4) To avoid toner from spilling out, cover the Toner Collection Mouth [1] of the Waste Toner Secondary Feed Unit with a tape [2] measuring approx. 5 cm x 5 cm.



F-4-567

5) Remove the Front Door Switch Cover [1].

- 2 Screws [2]



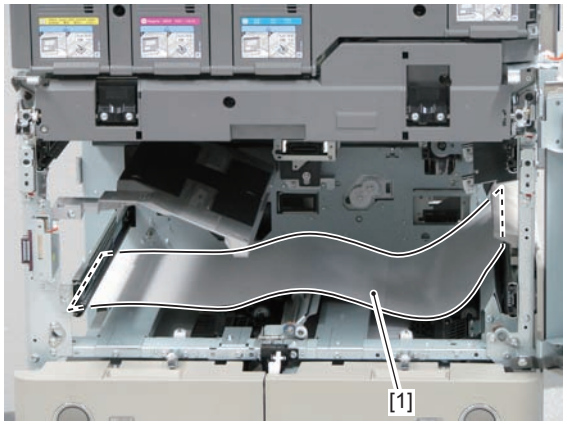
F-4-568

6) Place a sheet of paper [1] inside the host machine.

CAUTION:

Be sure to place a sheet of paper [1] inside the host machine during work.

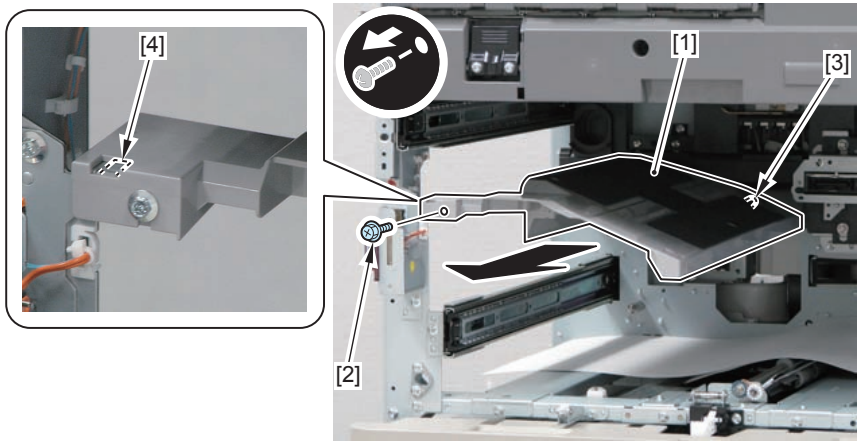
- This is to prevent the screws from falling off and becoming missing.
- This is because toner may spill out when the Waste Toner Secondary Feed Unit is removed.



F-4-569

7) Remove the Fixing Upper Duct [1].

- 1 Screw [2]
- 1 Boss [3]
- 1 Protrusion [4]



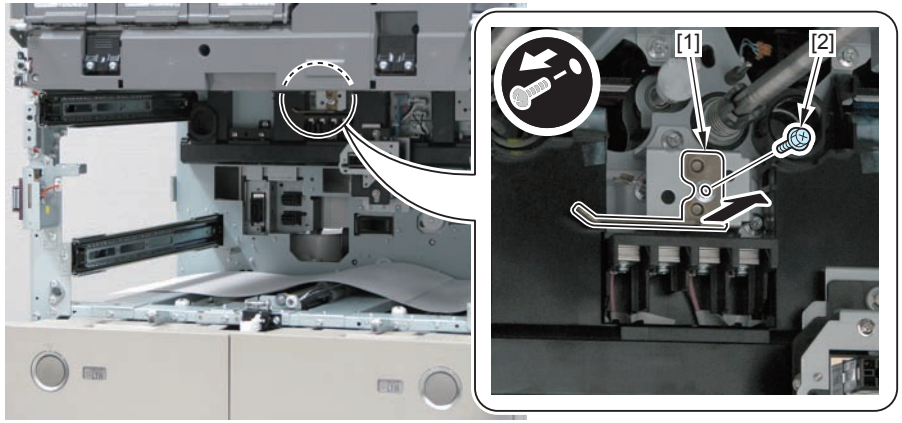
F-4-570

CAUTION:

When assembling, align the positioning boss of the Fixing Upper Duct with the hole of the host machine to install.

8) Remove the ITB Pressure Plate (Rear left) [1].

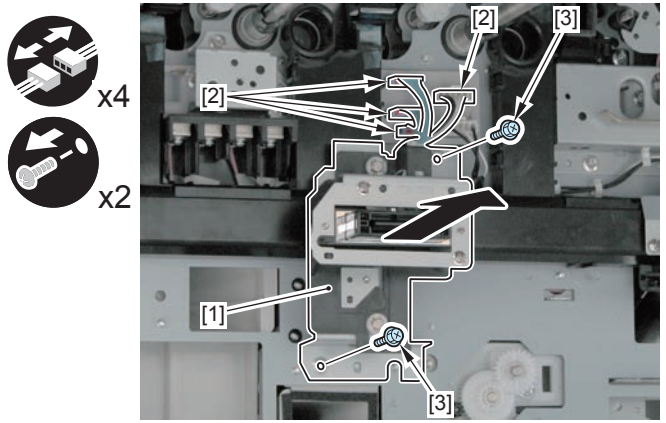
- 1 Screw [2]



F-4-571

9) Remove the ITB Drawer Base [1].

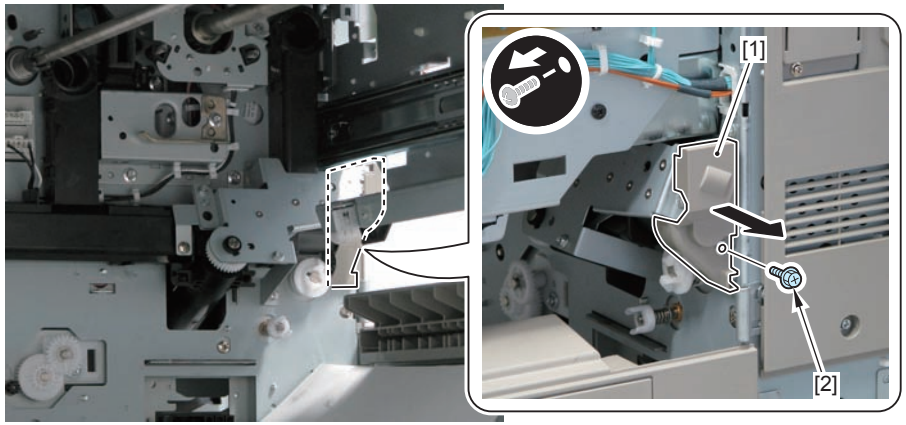
- 4 Connectors [2]
- 2 Screws [3]



F-4-572

10) Remove the Waste Toner Gear Cover [1].

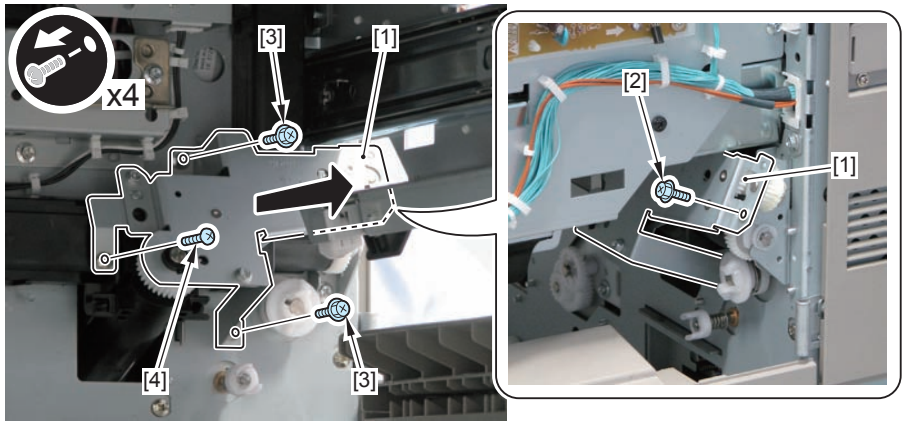
- 1 Screw [2]



F-4-573

11) Remove the Waste Toner Drive Gear Unit (2) [1].

- 1 Screw (RS M3) [2]
- 2 Screws (RS M4) [3]
- 1 Screw (Tapping) [4]

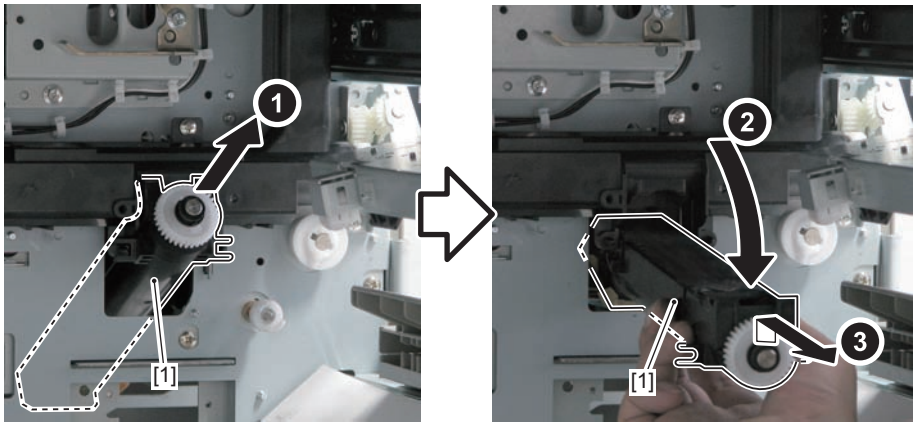


F-4-574

12) Remove the Waste Toner Secondary Feed Unit [1].

CAUTION:

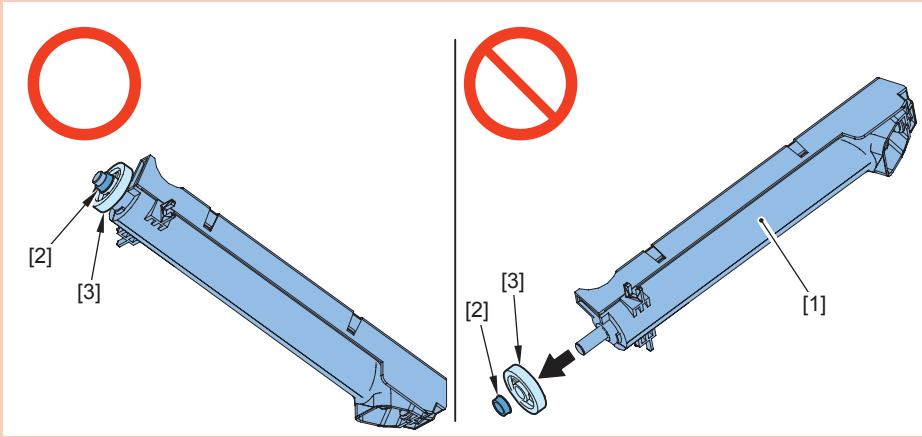
When installing/removing the Waste Toner Secondary Feed Unit [1], be careful not to spill toner.



F-4-575

CAUTION:

Be careful not to lose the bushing [2] and the gear [3] of the Waste Toner Secondary Feed Unit [1] when disassembling/assembling.

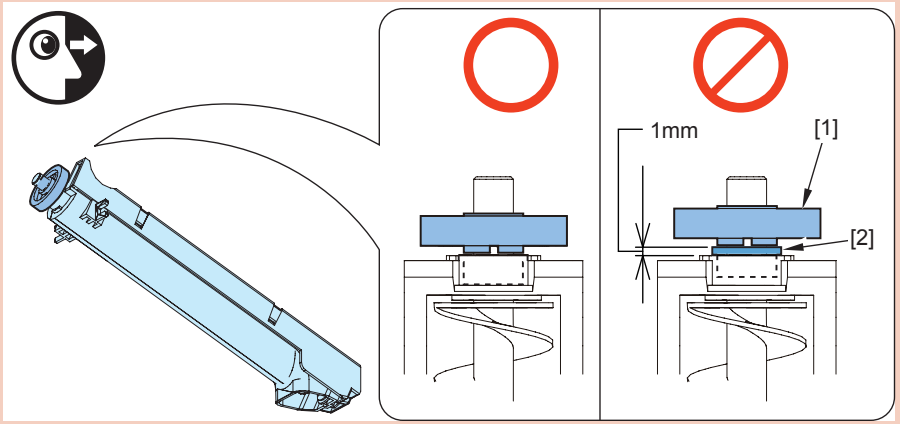


F-4-576

CAUTION:

When installing the Waste Toner Secondary Feed Unit, go through the following steps.

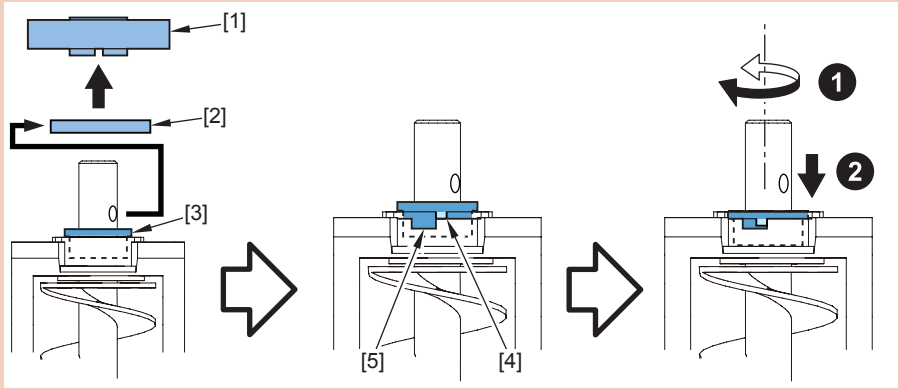
1) While the gear (white) [1] of the Waste Toner Secondary Feed Unit is at upper side, see the clearance between the gear (white) and the case to check whether the Shaft Support (8 mm diameter) [2] does not project approx. 1 mm from the case. If operating the machine while the Shaft Support (8 mm diameter) is projected from the case, sliding resistance between the end of the screw and the case is increased which may cause occurrence of E00013-0001. To prevent it occurs, perform steps 2 and 3.



F-4-577

CAUTION:

2) Remove the gear (white) [1] and the Parallel Pin [2], and hold and then turn the projection (turning stopper) [4] of the bushing (8 mm diameter) [3] to fit to the groove [5] of the case.



F-4-578

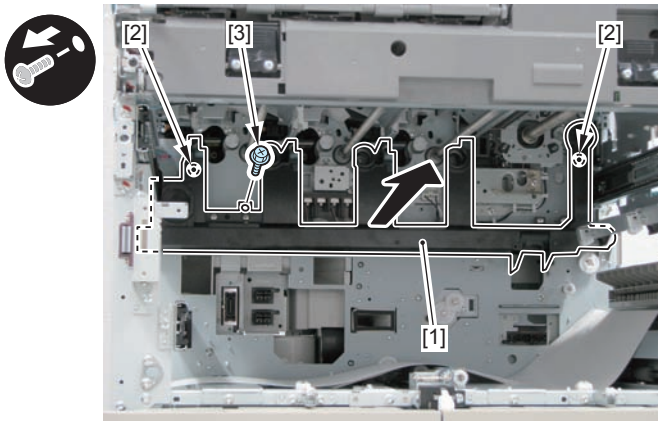
3) Reinstall the Parallel Pin and the gear (white), and check that the bushing (8 mm diameter) does not project from the case by seeing from end-on again.

13) Remove the Waste Toner Primary Feed Unit [1].

- 2 Bosses [2]
- 1 Screw [3]

CAUTION:

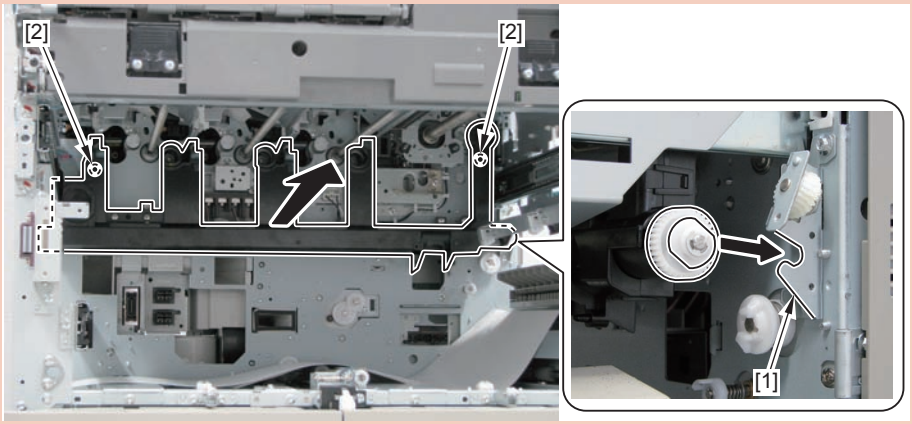
When installing/removing the Waste Toner Primary Feed Unit [1], be careful not to spill toner.



F-4-579

CAUTION:

When assembling, insert the leading edge into the U-shaped Plate [1], and fit the 2 Positioning Bosses [2] to the holes of the host machine to install it firmly into place.



F-4-580

Fixing System

Removing the Fixing Unit

Preparation

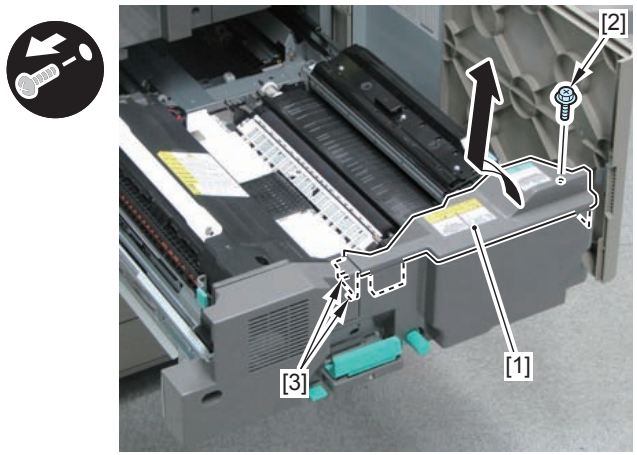
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).

Procedure

CAUTION:

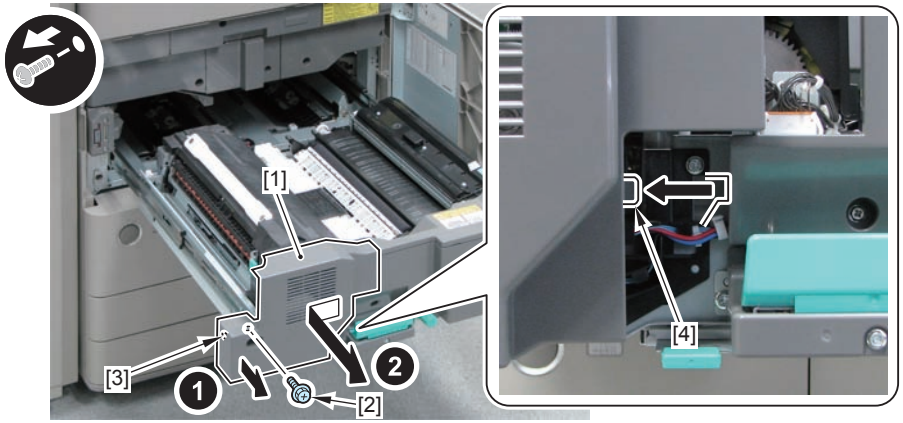
Because the Fixing Unit is hot, be sure to perform disassembly/assembly after it is cooled down.

1) Remove the Fixing Feed Right Upper Inner Cover [1].
- 1 Screw [2]
- 2 Hooks [3]



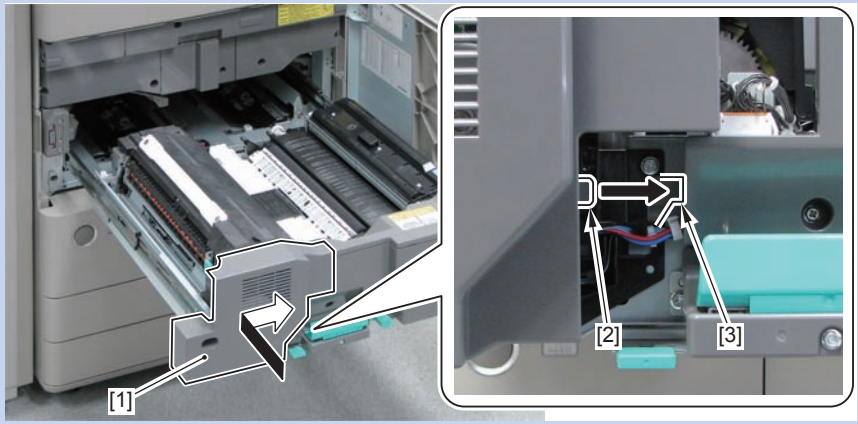
F-4-581

2) Remove the Fixing Feed Left Inner Cover [1].
- 1 Screw [2]
- 1 Boss [3]
- 1 Hook [4]



F-4-582

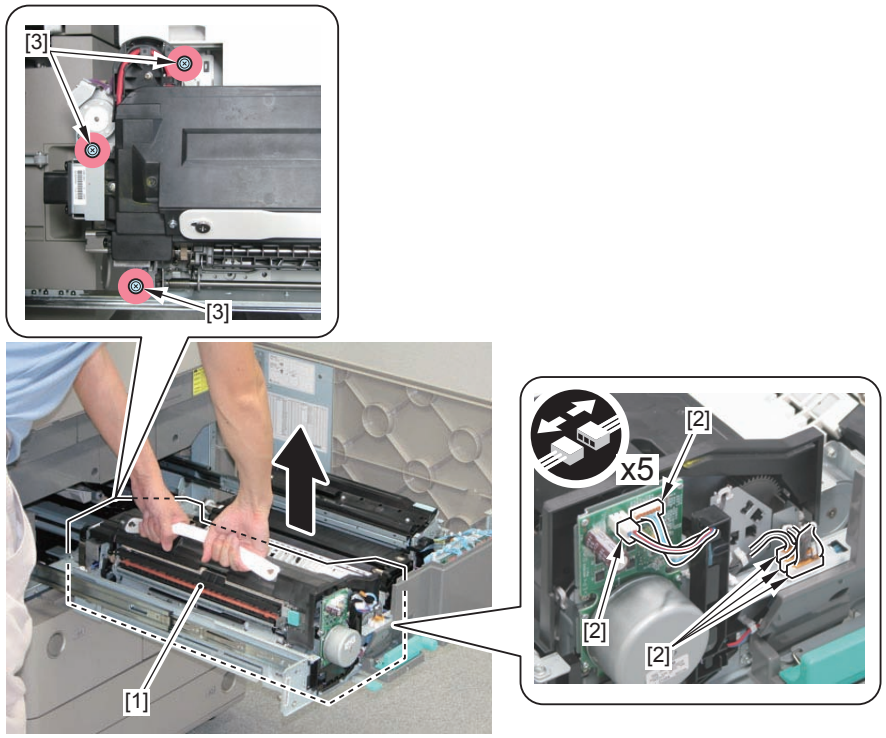
NOTE:
The Fixing Feed Right Upper Inner Cover [1] can be installed easily by fitting the hook [2] into the groove [3] of the Fixing Feed Unit in advance.



F-4-583

3)Remove the Fixing Unit [1].

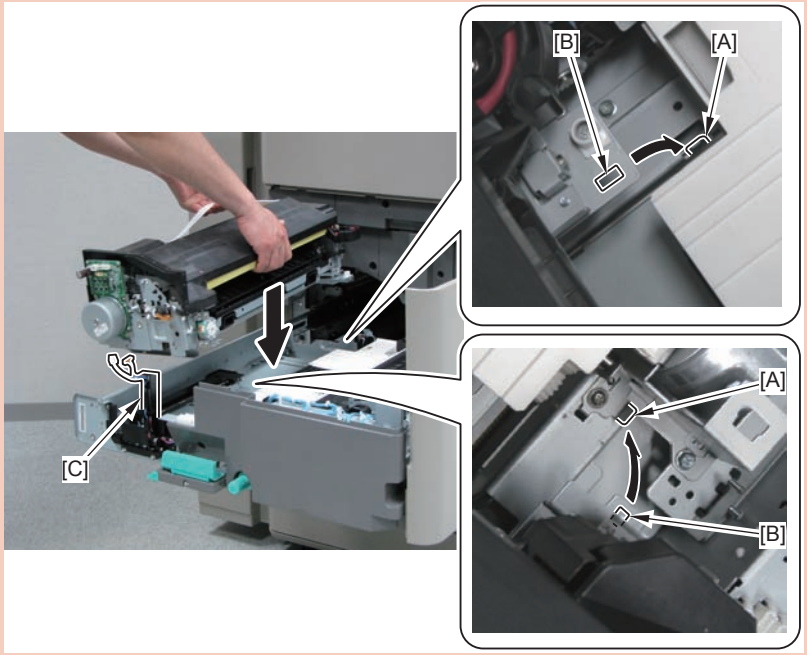
- 5 Connectors [2]
- 3 Screws [3] (to loosen)



F-4-584

CAUTION:

- Be sure to install the Fixing Fee Unit by fitting the 2 protrusions [A] of the Fixing Feed Unit to the 2 Positioning Holes [B] of the Fixing Unit.
- Do not hit the Fixing Unit against the Harness Guide [C] when removing/installing.



F-4-585

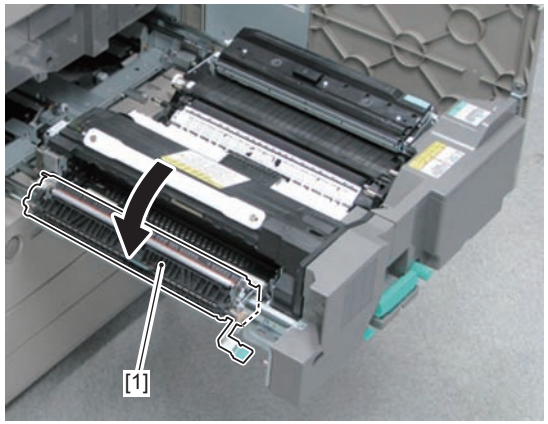
Removing the Fixing Web Unit

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).

Procedure

1) Open the Fixing Inner Delivery Unit [1].

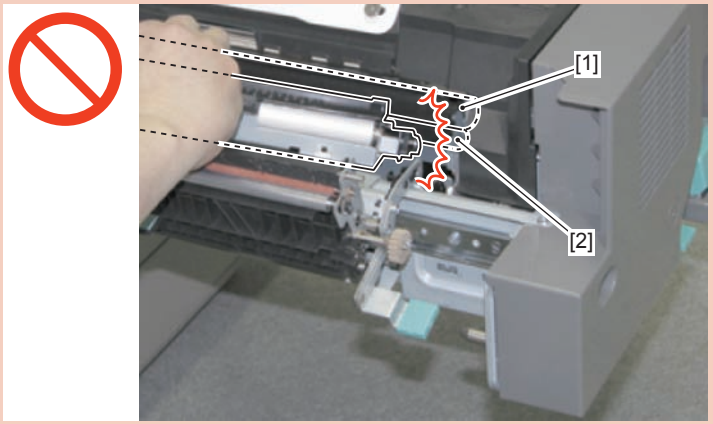


F-4-586

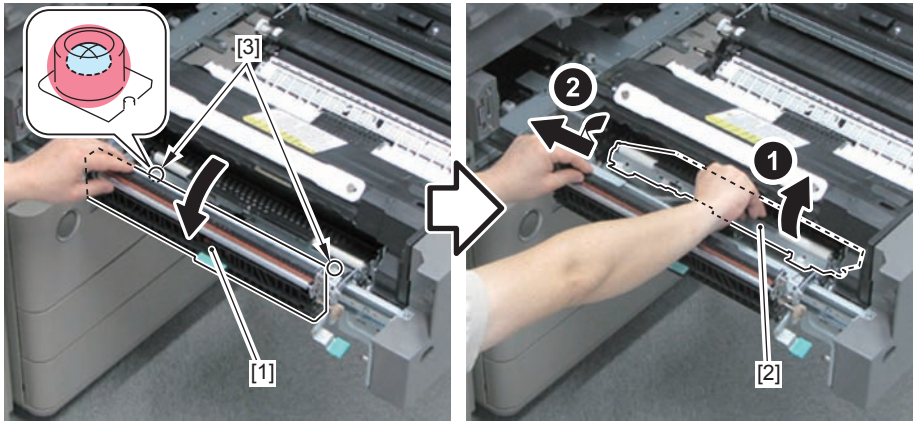
2) While holding the Fixing Inner Delivery Unit [1], remove the Fixing Web Unit [2].
- 2 Screws [3] (to loosen)

CAUTION:

Be careful not to damage the surface of the Fixing Pressure Roller [1] and the Fixing Heat Soaking Roller [2] when disassembling/assembling.



F-4-587



F-4-588

Replacing the Fixing Web

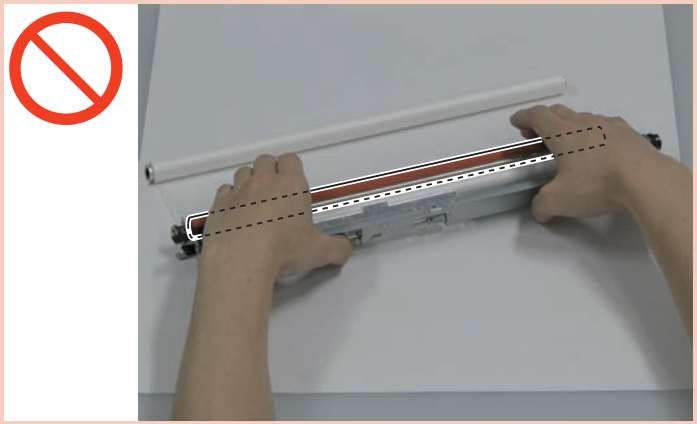
Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing Web Unit (Refer to page 4-287).

Disassembling Procedure

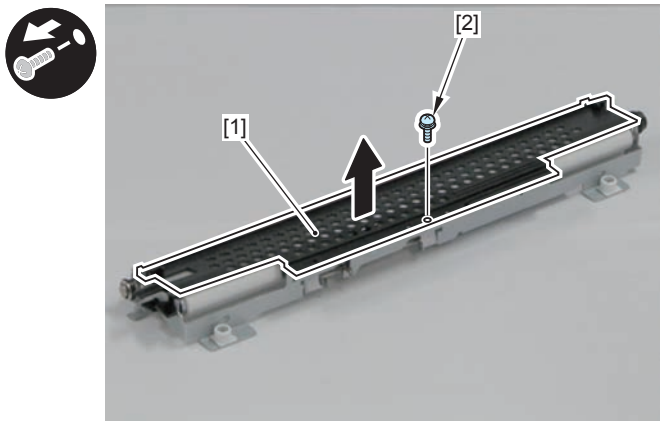
CAUTION:

Do not touch the surface of the Fixing Web Roller when replacing.



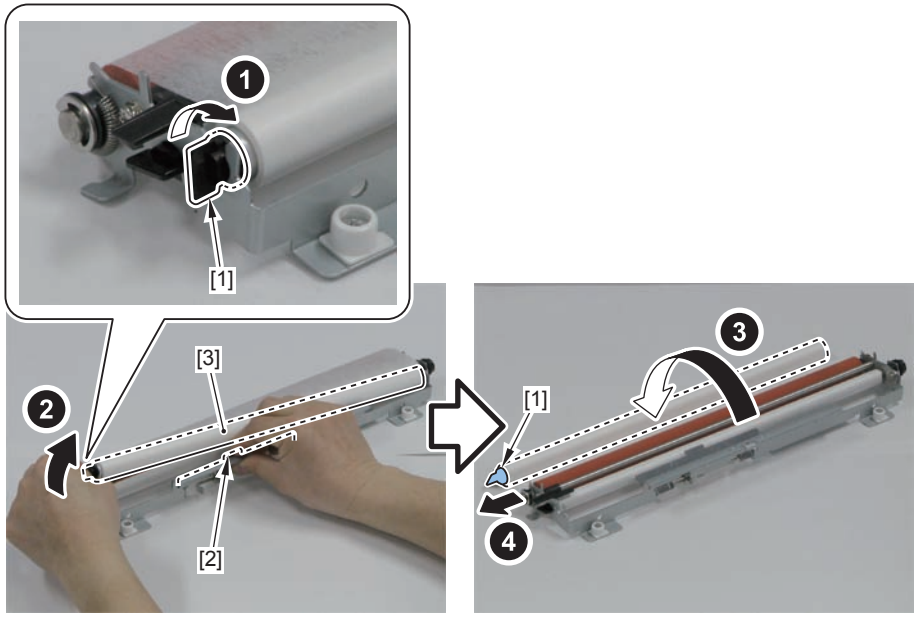
F-4-589

1) Remove the Fixing Web Guide [1].
- 1 Screw [2]



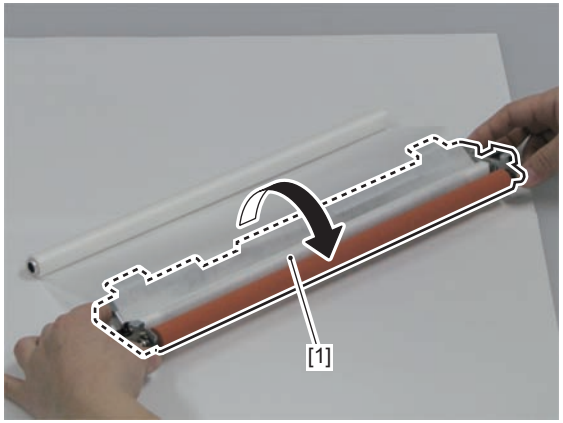
F-4-590

2) Turn the bushing [1], hold the Fixing Web Retainer Plate [2], and then remove the Fixing Web (roll-out side) [3].
3) Remove the bushing [1].



F-4-591

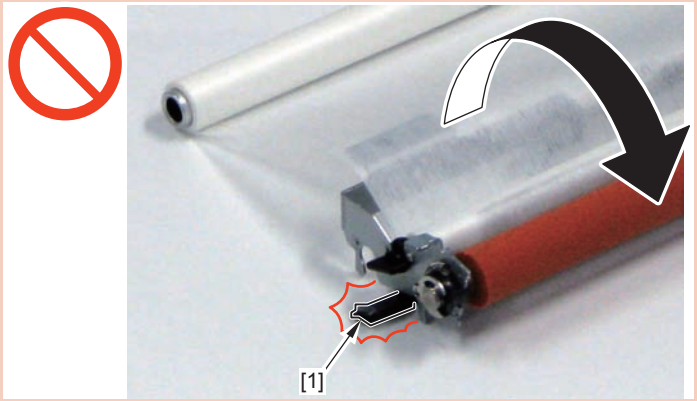
4)Turn over the Fixing Web Unit [1].



F-4-592

CAUTION:

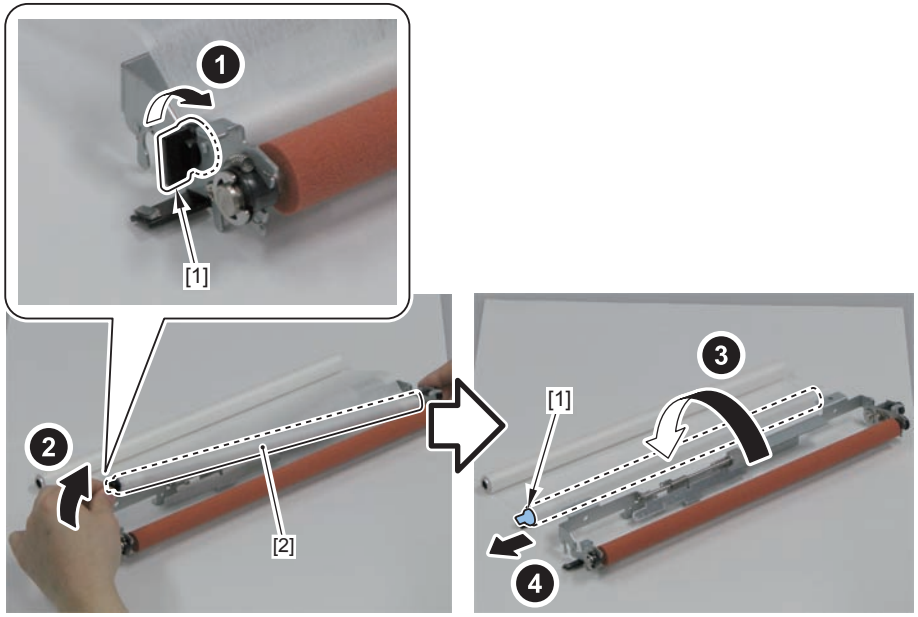
When turning over the Fixing Web Unit, be careful not to damage the Fixing Web Level Detection Flag [1].



F-4-593

5)Turn the bushing [1], and remove the Fixing Web (take-up side) [2].

6)Remove the bushing [1].



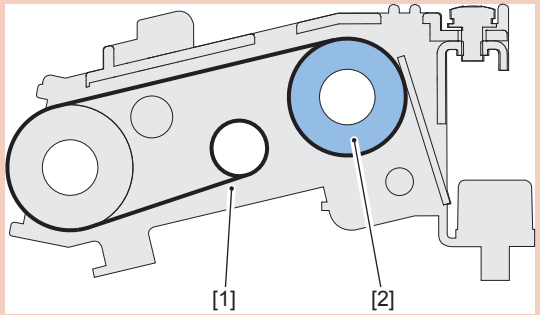
F-4-594

Assembling Procedure

CAUTION:

Because the Fixing Web needs to follow the direction to take up, be sure to install it in the direction as shown in the figure below.

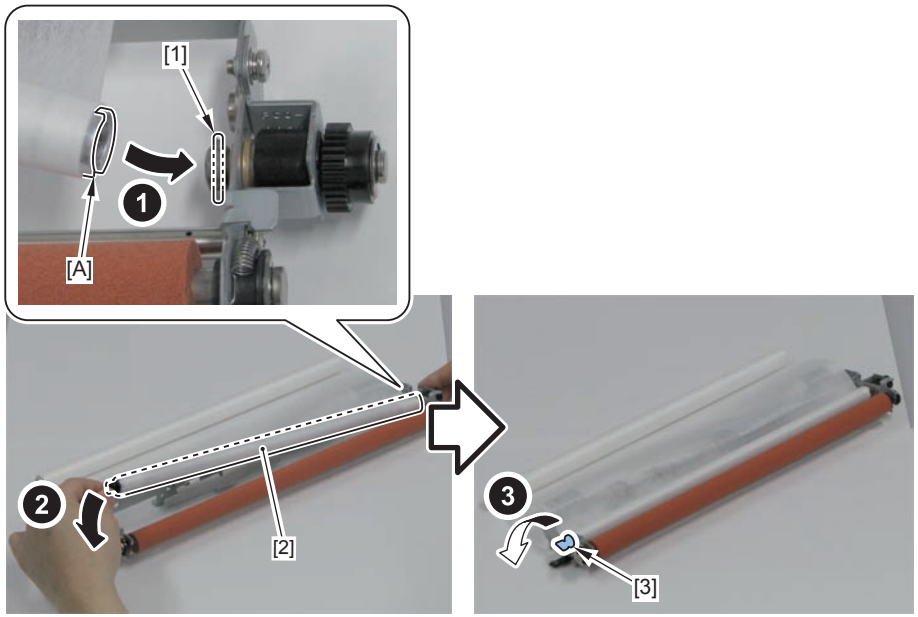
- Fixing Web (take-up side) [1]
- Fixing Web (roll-out side) [2]



F-4-595

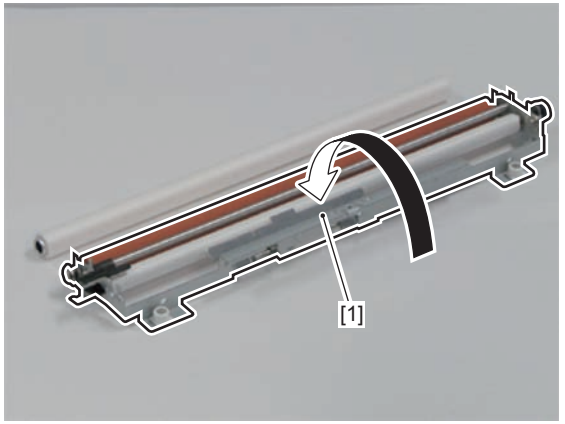
1) Align the cut-off [A] of the Fixing Web (take-up side) with the Pin [1] to install the Fixing Web (take-up side) [2].

- 1 Bushing [3]



F-4-596

2) Turn over the Fixing Web Unit [1].



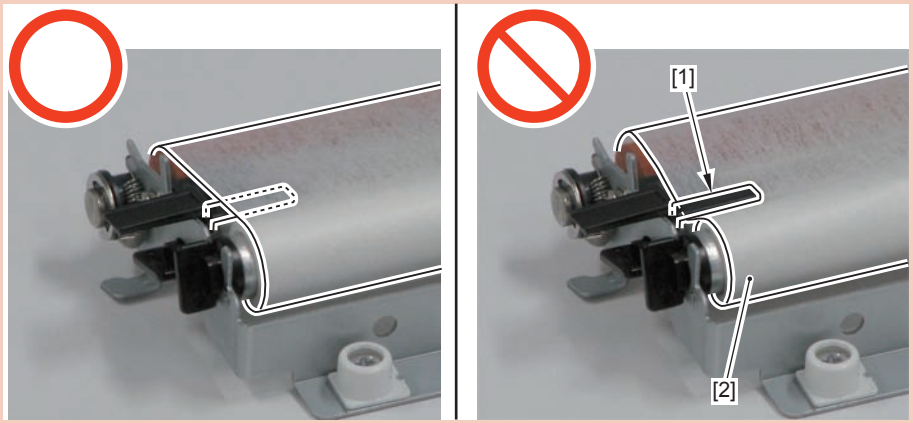
F-4-597

3) Hold the Fixing Web Retainer Plate [1], and install the Fixing Web (roll-out side) [2] by aligning it with the boss [3].

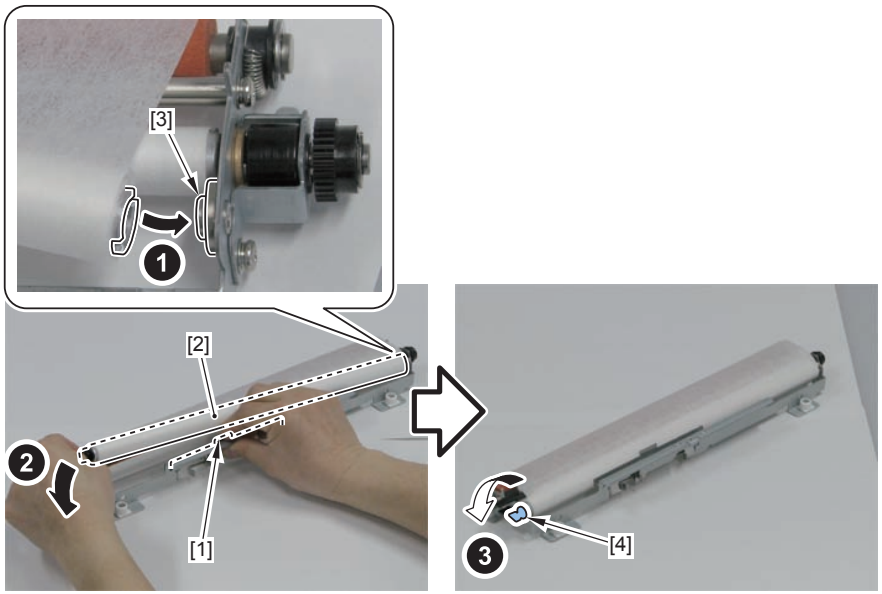
- 1 Bushing [4]

CAUTION:

Be sure to place the Fixing Web Level Detection Flag [1] inside the Fixing Web [2].

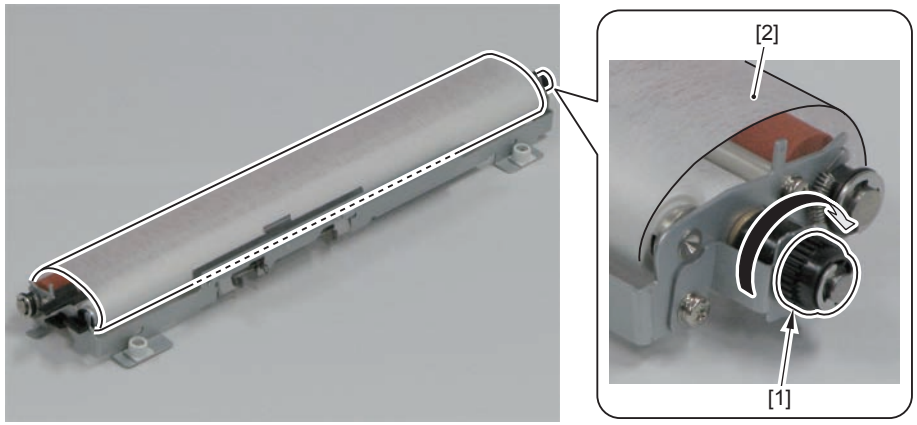


F-4-598



F-4-599

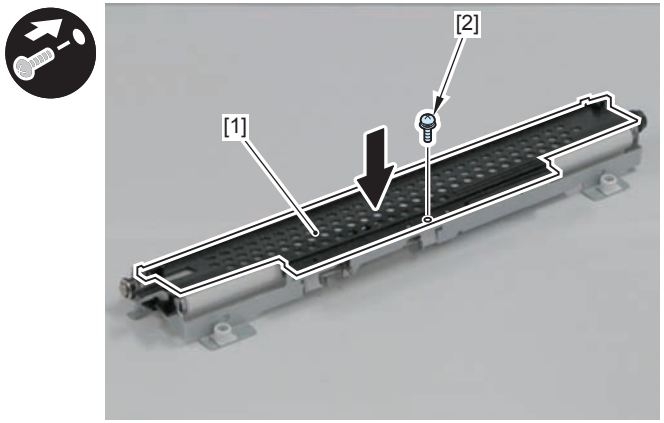
4) Make sure that there is no extra slack of the Fixing Web [2] by turning the gear [1] of the Fixing Web (take-up side) in the direction of the arrow.



F-4-600

5) Install the Fixing Web Guide [1].

- 1 Screw [2]



F-4-601

Removing the Fixing Web Roller

Preparation

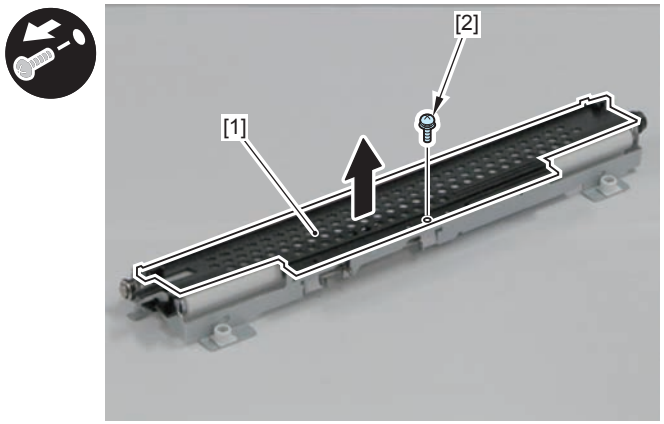
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing Web Unit (Refer to page 4-287).

Procedure

CAUTION:

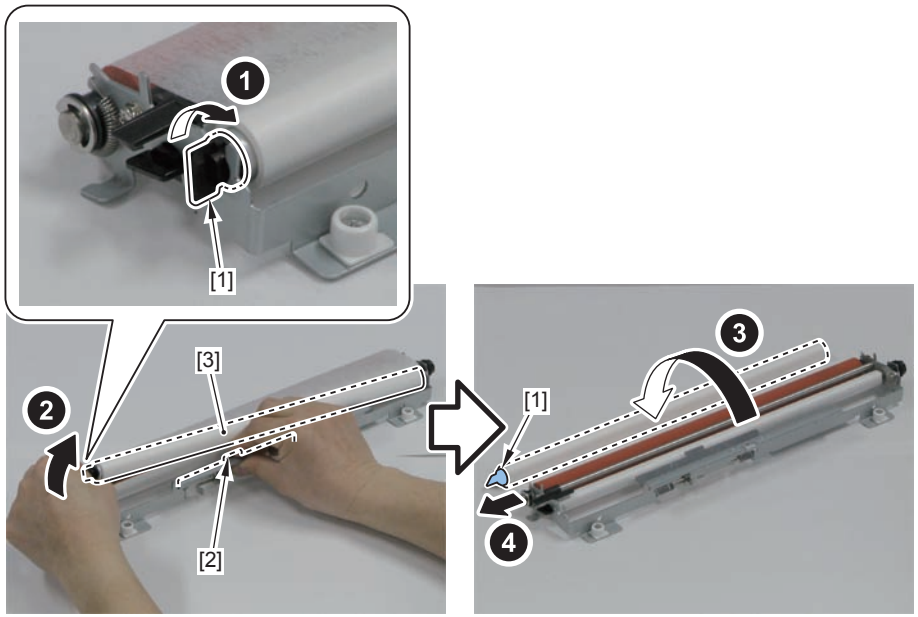
Be sure not to touch the surface of the roller when disassembling/assembling.

1) Remove the Fixing Web Guide [1].
- 1 Screw [2]



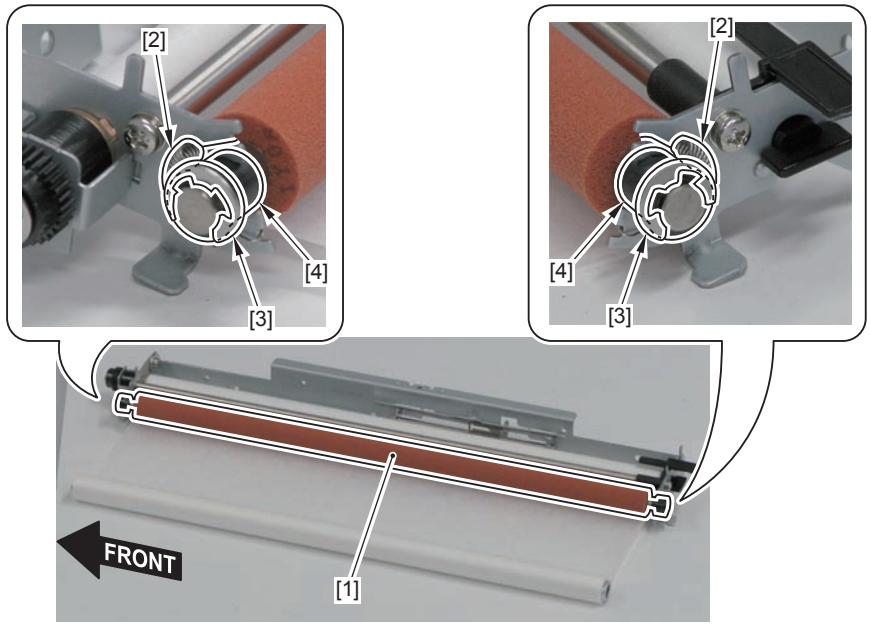
F-4-602

2) Turn the bushing [1], hold the Fixing Web Retainer Plate [2], and then remove the Fixing Web Roller (roll-out side) [3].
3) Remove the bushing [1].



F-4-603

4) Remove the Fixing Web Roller [1].
- 2 Springs [2]
- 2 E-rings [3]
- 2 Bushings [4]



F-4-604

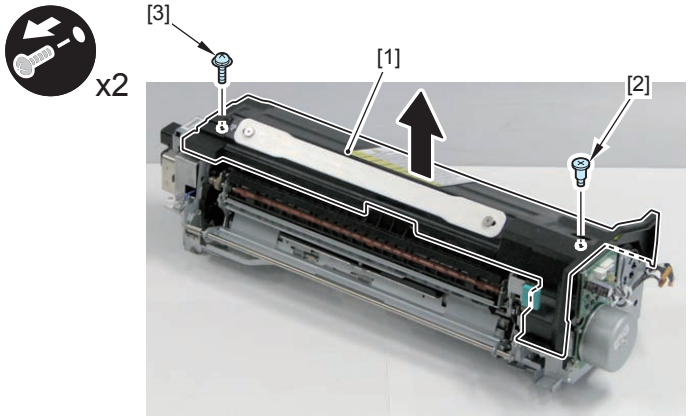
Removing the Fixing Inner Delivery Unit

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing Unit (Refer to page 4-285).

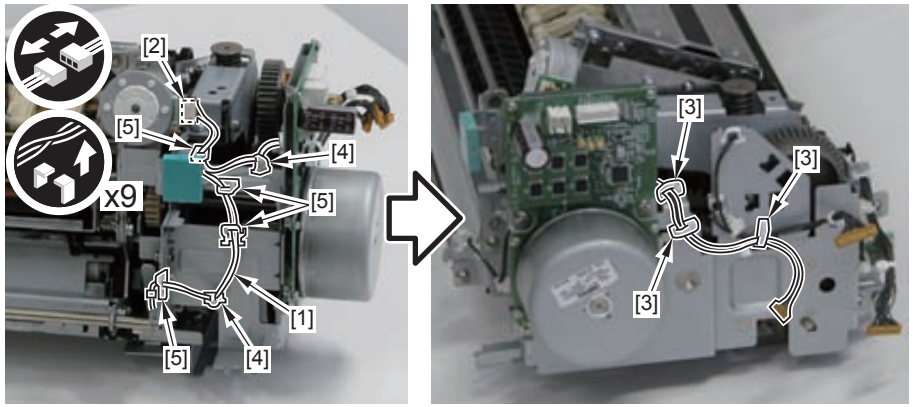
Procedure

1) Remove the Fixing Upper Cover [1].
- 1 Stepped Screw [2]
- 1 Screw (with washer) [3]



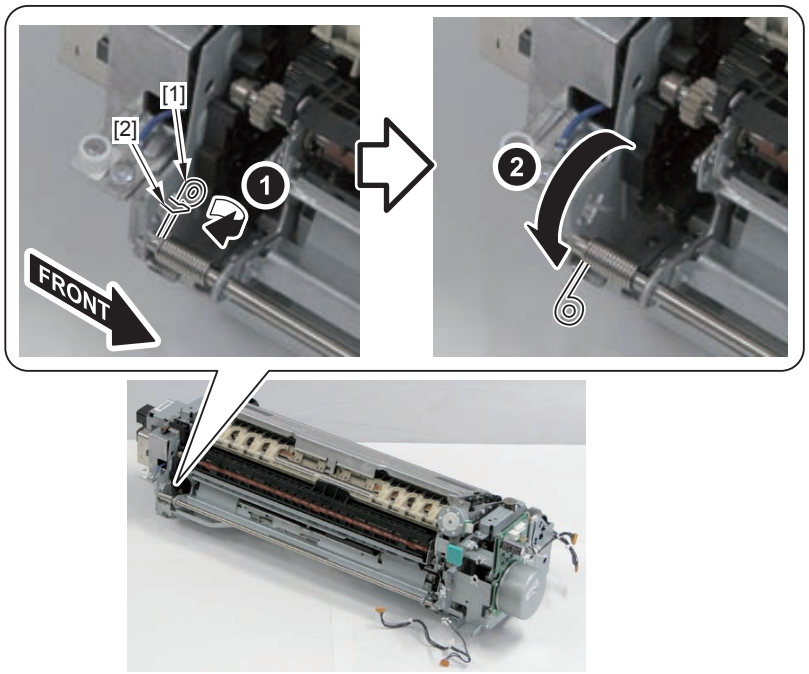
F-4-605

2) Free the harness [1].
- 1 Connector [2]
- 3 Wire Saddles [3]
- 2 Reuse Bands [4]
- 4 Edge Saddles [5]



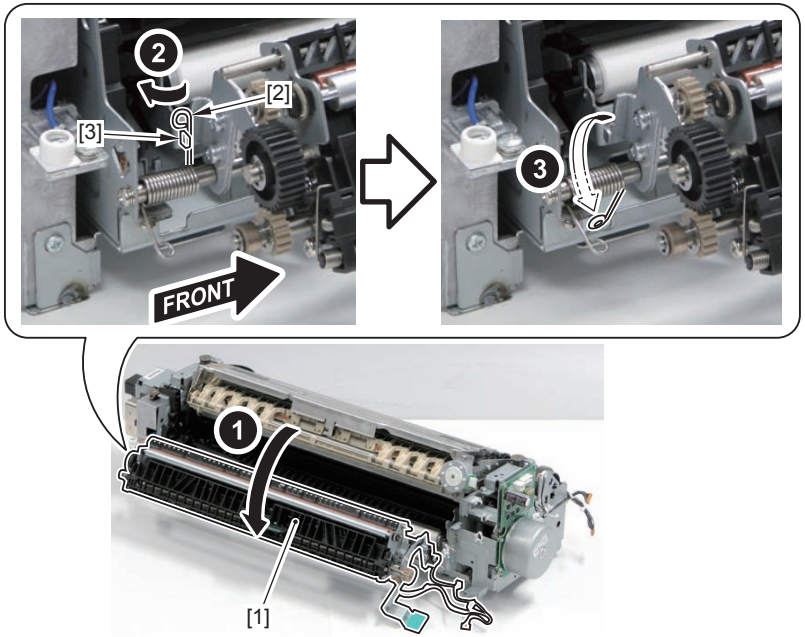
F-4-606

3) Remove the edge [1] of the spring on the Fixing Inner Delivery Unit from the hook [2] of the Fixing Rear Plate.



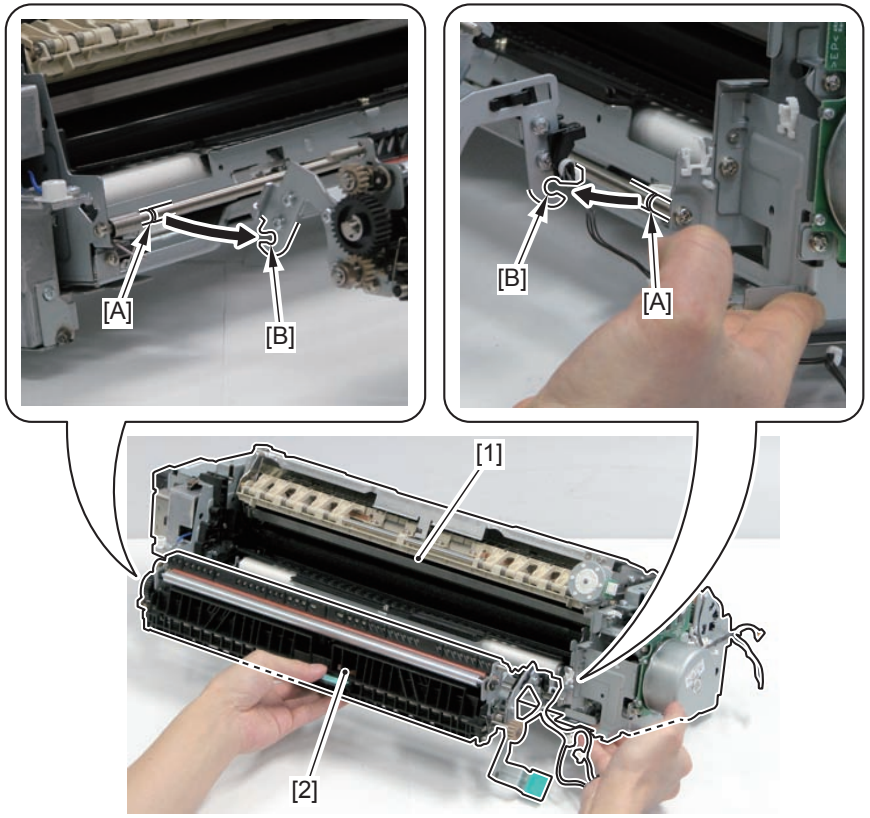
F-4-607

4) Open the Fixing Inner Delivery Unit [1], and remove the edge [2] of the spring on the Fixing Inner Delivery Unit from the hook [3] of the Fixing Inner Delivery Unit.



F-4-608

5) While lifting the Fixing Unit [1], align the D-cut [A] on the shaft with the hooks [B] of the Fixing Inner Delivery Unit to remove the Fixing Inner Delivery Unit [2].



F-4-609

Removing the Fixing IH Unit

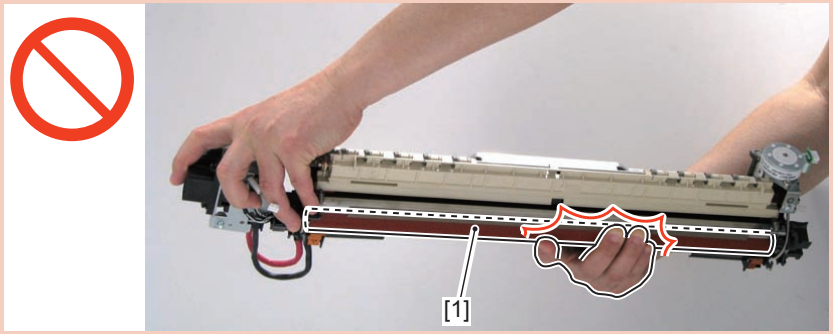
Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).

Procedure

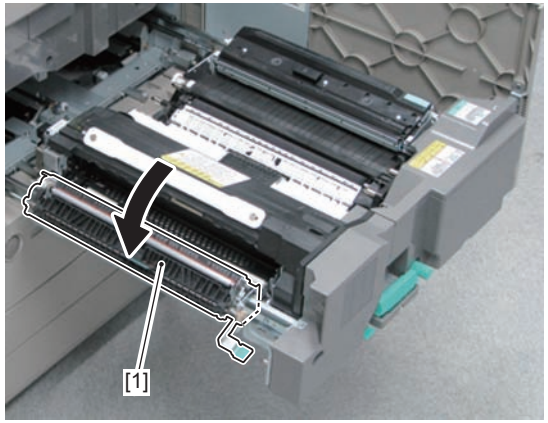
CAUTION:

Do not touch the surface [1] of the Fixing Film Unit when disassembling/assembling.



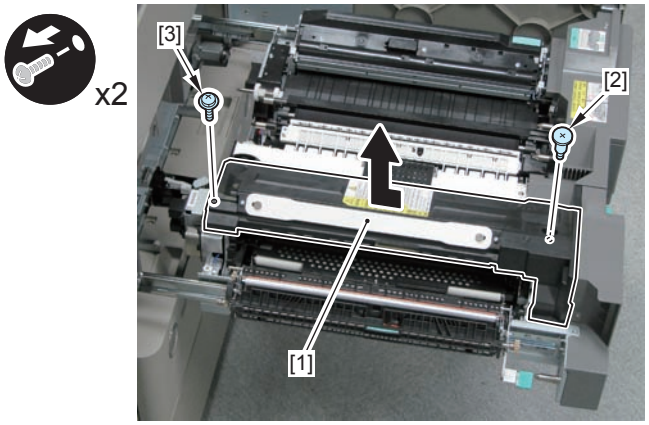
F-4-610

1) Open the Fixing Inner Delivery Unit.



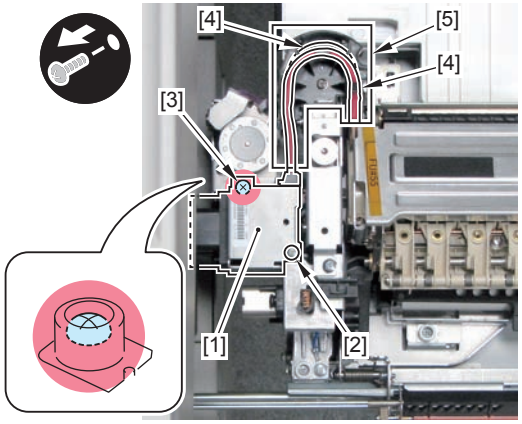
F-4-611

2) Remove the Fixing Upper Cover [1].
- 1 Stepped Screw [2]
- 1 Screw (with washer) [3]



F-4-612

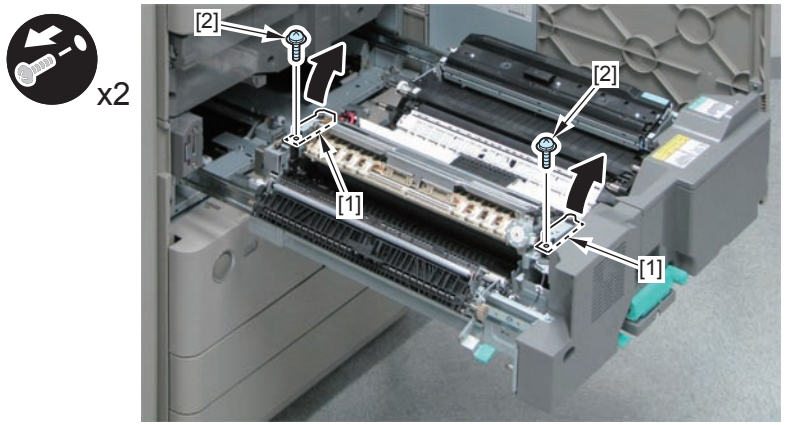
3) Remove the Fixing IH Drawer Connector Base [1].
- 1 Screw [2]
- 1 Screw [3] (to loosen)
- 2 High Voltage Harnesses [4]
- 1 Harness Guide [5]



F-4-613

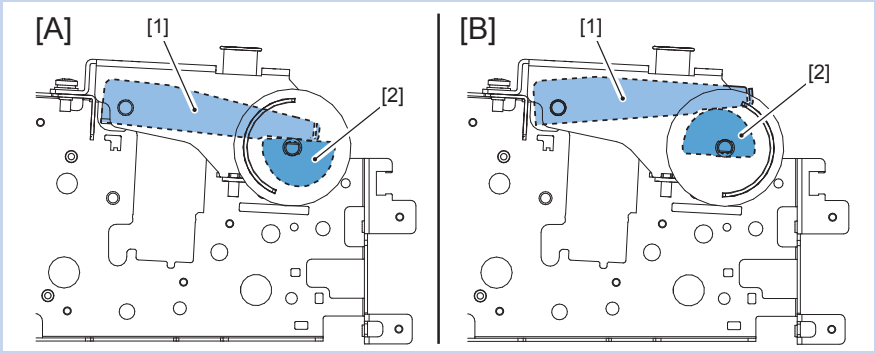
4) Open the Fixing Pressure Arm [1].

- 2 Screws [2]



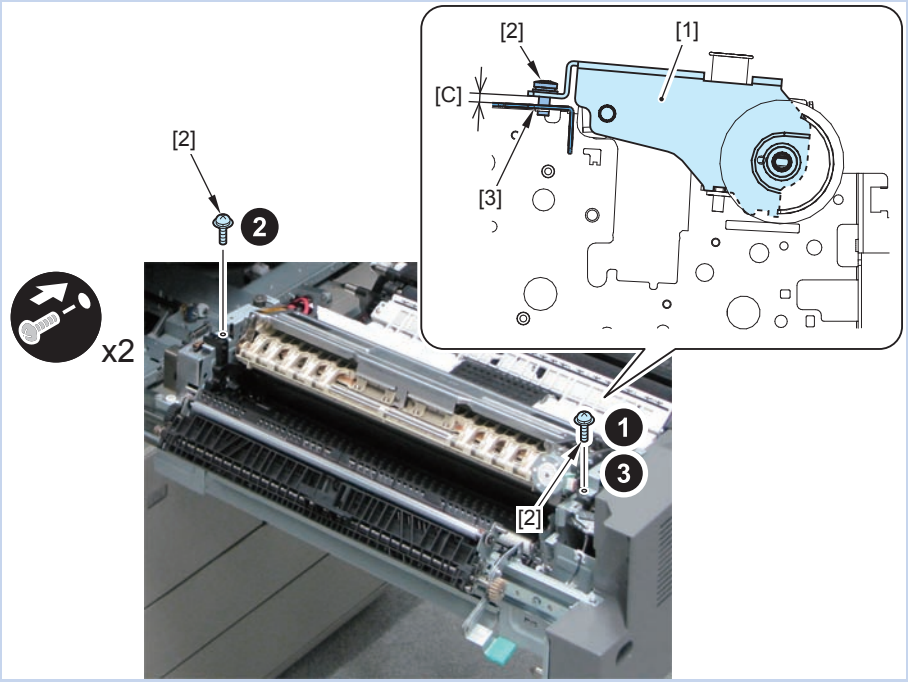
F-4-614

NOTE:
When opening/closing the Fixing Pressure Arm, there are 2 types of the states as shown in the figure below: the engaged state [A] and the disengaged state [B].



F-4-615

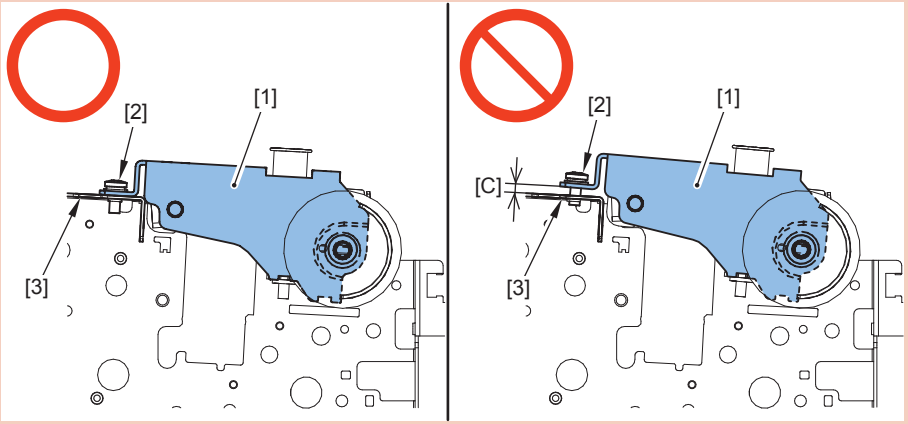
NOTE:
When removing the screws [2] securing the Fixing Pressure Arm [1] while in the engaged state, it causes a gap [C] between the Fixing Pressure Arm [1] and the Fixing Front/Rear Plate [3].
Pressure is applied when securing the Fixing Pressure Arm [1] with the screws [2]. Therefore, be sure to tighten one side (1) temporarily, then securely tighten the other side (2), and finally securely tighten the temporarily-tightened side (3).



F-4-616

CAUTION:

- When tightening the screws [2], be sure that there is no gap [C] between the Fixing Pressure Arm [1] and the Fixing Front/Rear Plate [3].
- Be sure that the screws [2] are securely tightened.



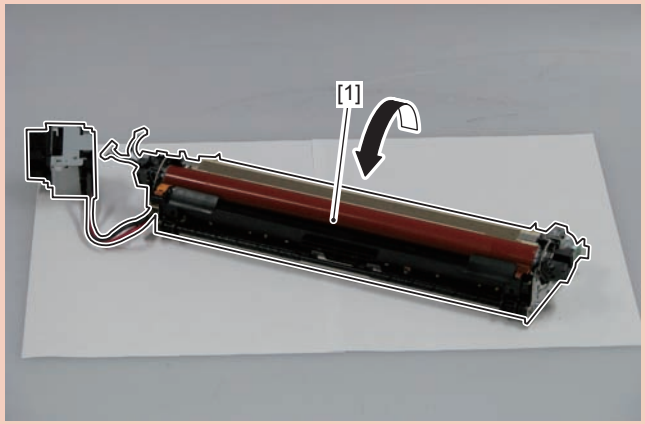
F-4-617

5) Remove the Fixing IH Unit [1].

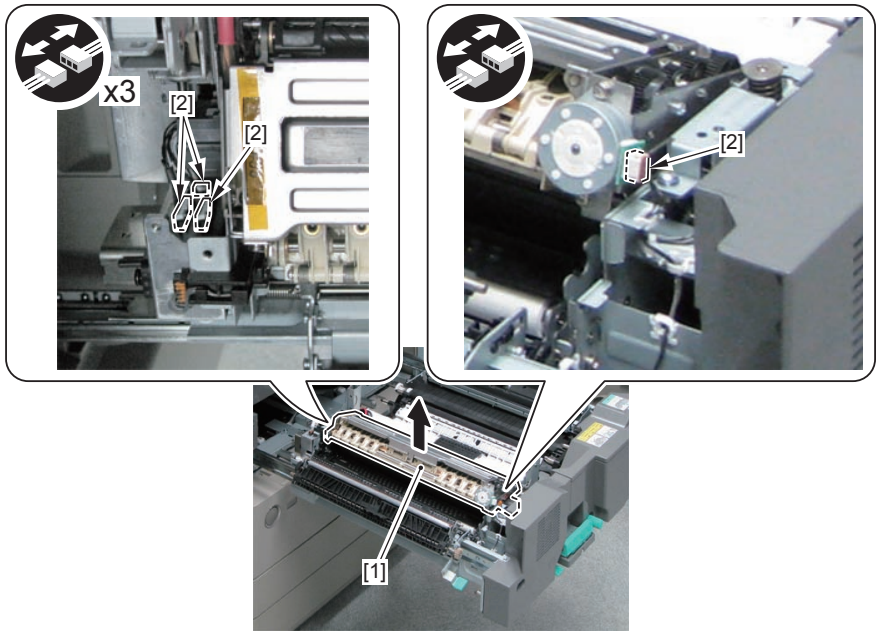
- 4 Connectors [2]

CAUTION:

Be sure to turn over the removed Fixing IH Unit [1] when placing it.



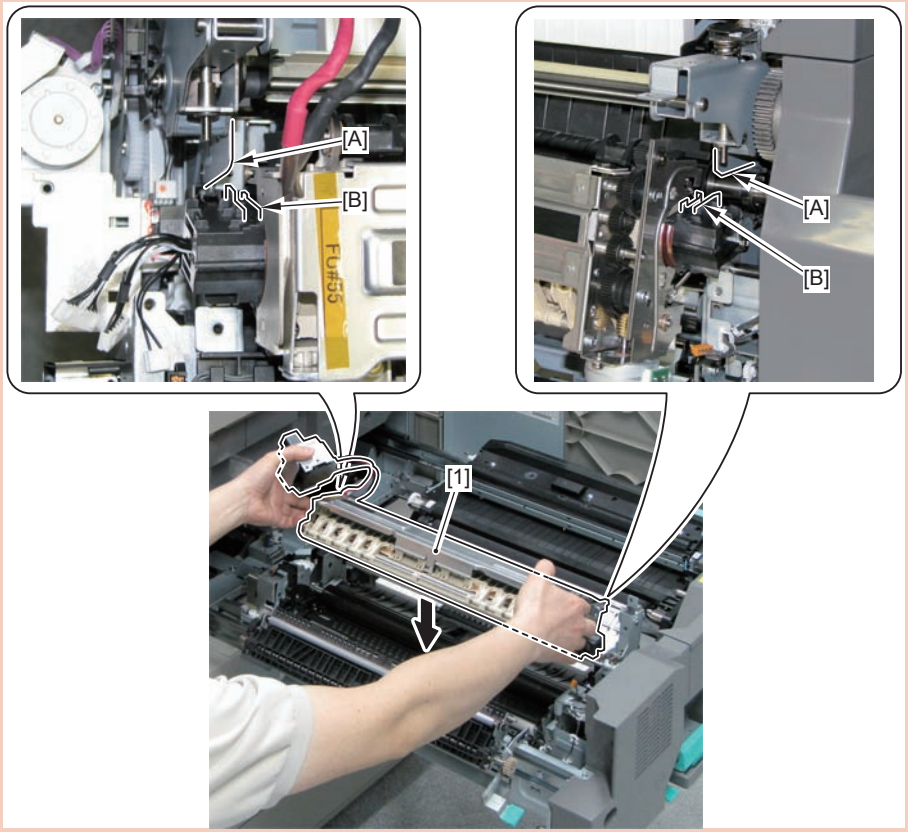
F-4-618



F-4-619

CAUTION:

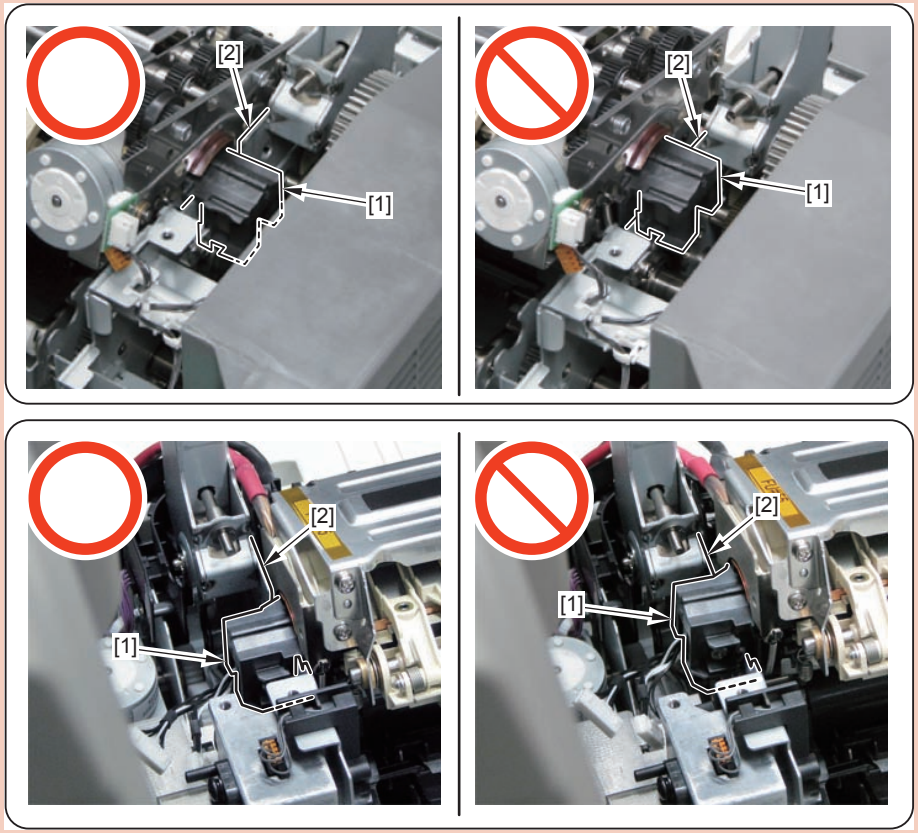
When installing the Fixing IH Unit [1], be sure to align the [A] parts of the Fixing Front Plate/Fixing Rear Plate with the guides [B] of the Fixing IH Unit.



F-4-620

CAUTION:

When securing the Fixing Pressure Arm, be sure to check the height of the Fixing IH Unit [1] and the Fixing Front Plate/Fixing Rear Plate [2].



F-4-621

Removing the Fixing Film Unit

Preparation

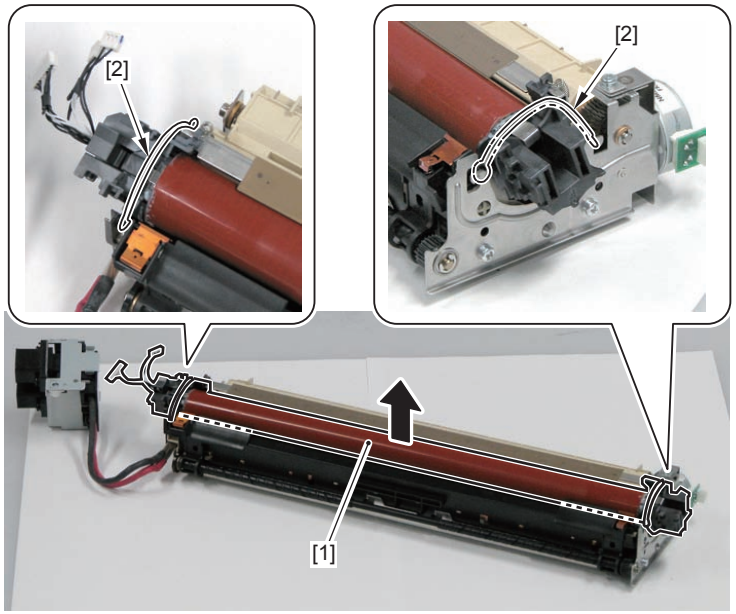
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing IH Unit (Refer to page 4-296).

Procedure

CAUTION:

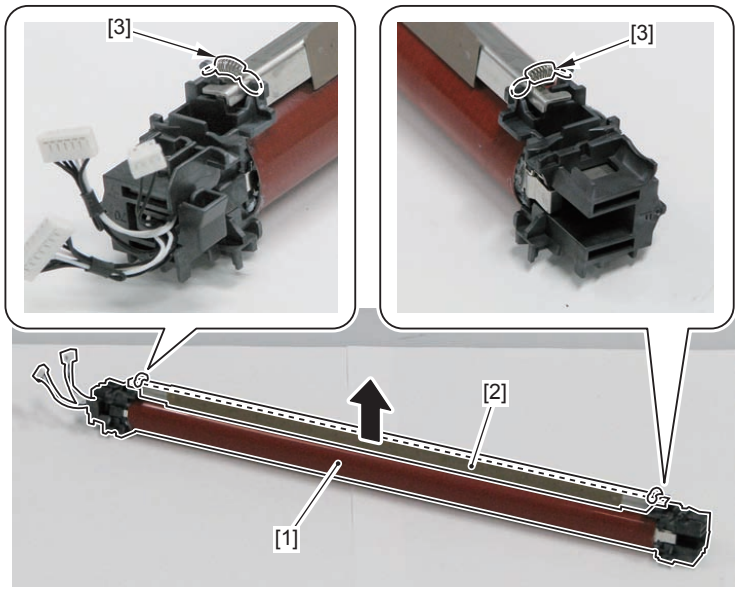
- Do not touch the surface of the Fixing Film Unit when disassembling/assembling.
- Be sure to Cleaning the Fixing Unit when removing the Fixing Film Unit.

1) Remove the Fixing Film Unit [1].
- 2 Springs [2]



F-4-622

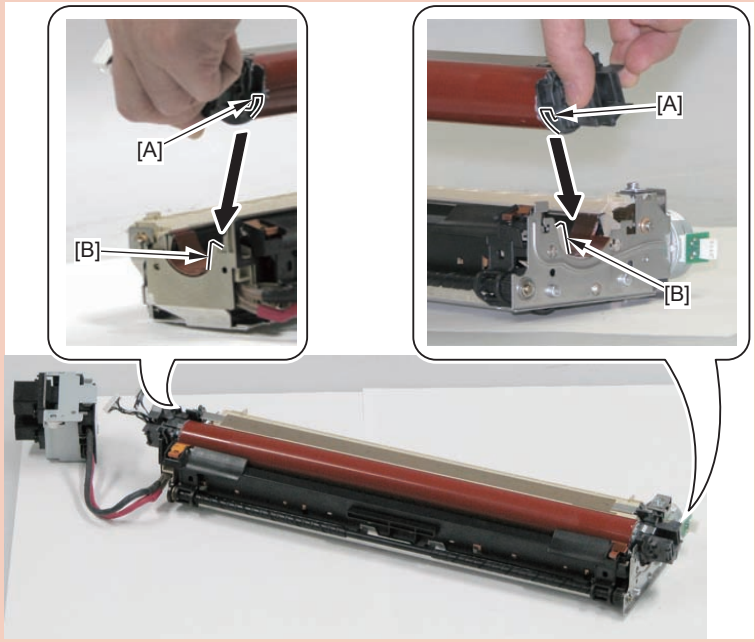
2) Remove the Separation Plate [2] from the Fixing Film Unit [1].
- 2 Springs [3]



F-4-623

CAUTION:

When installing the Fixing Film Unit, align the protrusions [B] of the Fixing IH Unit into the guides [A] of the Fixing Film Unit.



F-4-624

Removing the Fixing Pressure Roller Unit

Preparation

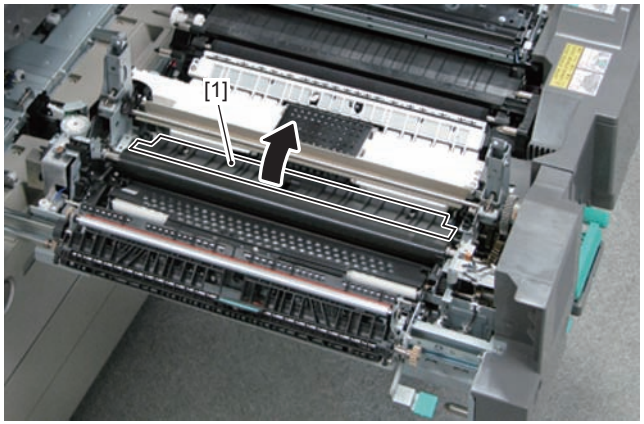
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing IH Unit (Refer to page 4-296).

Procedure

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling.

1) Open the Fixing Inlet Guide [1].

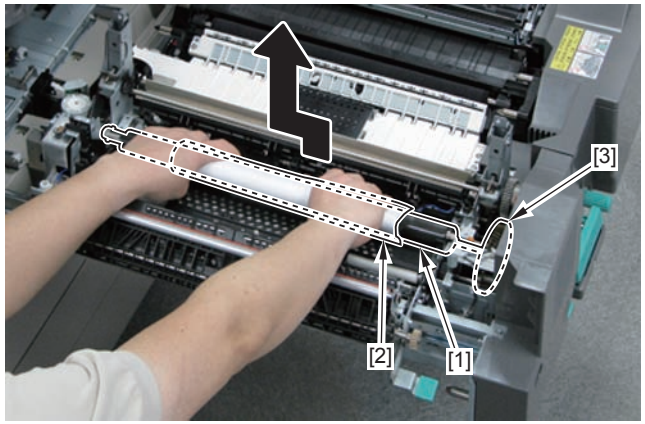


F-4-625

2) Remove the Fixing Pressure Roller Unit [1] by wrapping a sheet of paper [2] around it.

CAUTION:

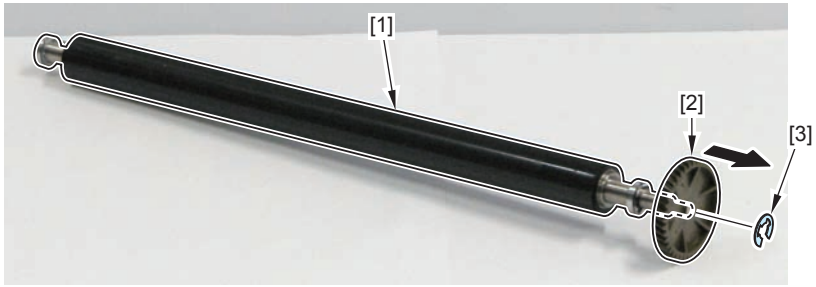
Be careful not to damage the gear [3] of the Fixing Roller Unit when installing/removing.



F-4-626

3) Remove the gear [2] from the Fixing Pressure Roller Unit [1].

- 1 E-ring [3]



F-4-627

Removing the Fixing Heat Soaking Roller/Bearing

Preparation

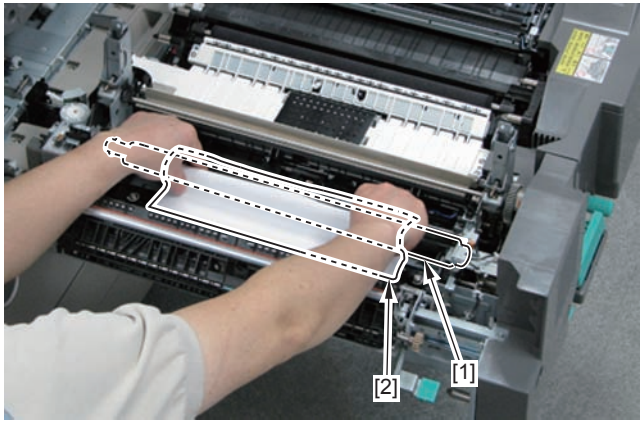
1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing IH Unit (Refer to page 4-296).
4) Remove the Fixing Pressure Roller Unit. (Refer to page 4-301)
5) Remove the Fixing Web Unit (Refer to page 4-287)..

Procedure

CAUTION:

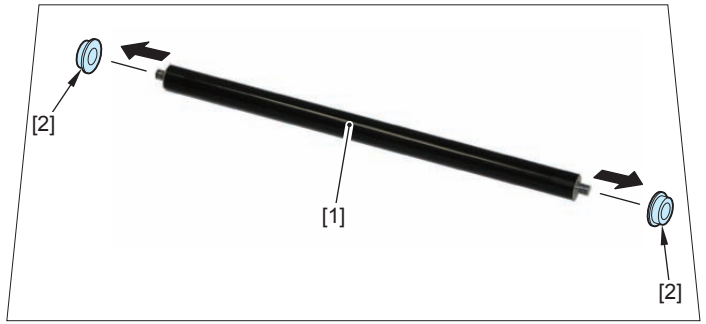
Be sure not to touch the surface of the roller when disassembling/assembling.

1) Remove the Fixing Heat Soaking Roller [1] by wrapping a sheet of paper [2] around it.



F-4-628

2) Remove the 2 bearings [2] from the Fixing Heat Soaking Roller [1].



F-4-629

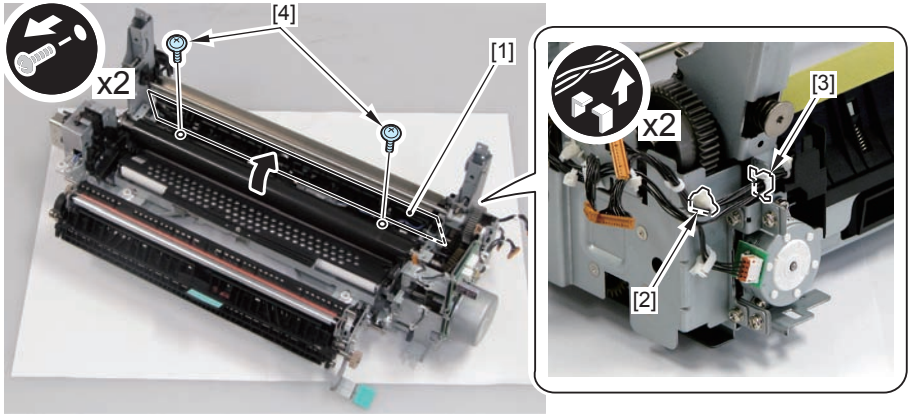
Removing the Fixing Thermistor

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing Unit (Refer to page 4-285).
4) Remove the Fixing IH Unit (Refer to page 4-296).

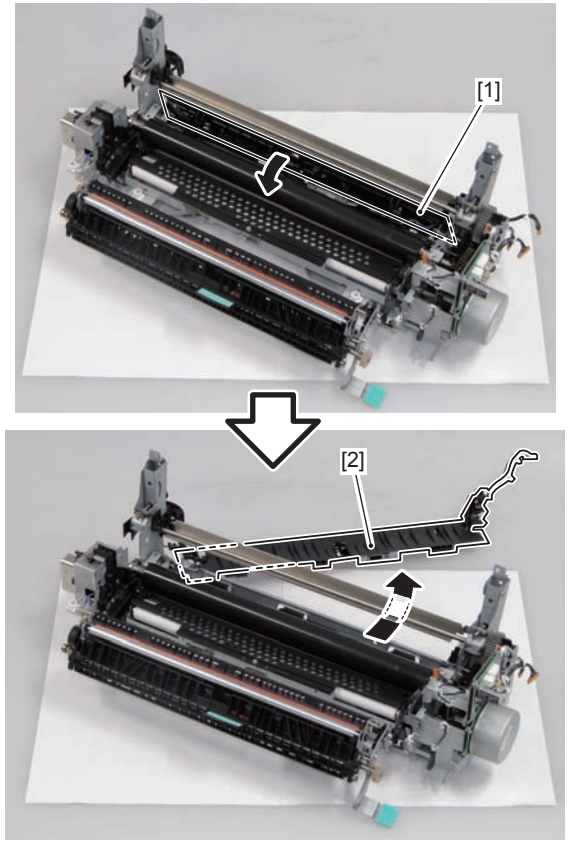
Procedure

1) Open the guide [1], free the harness from the Reuse Band [2] and the Edge Saddle [3], and remove the 2 screws [4].



F-4-630

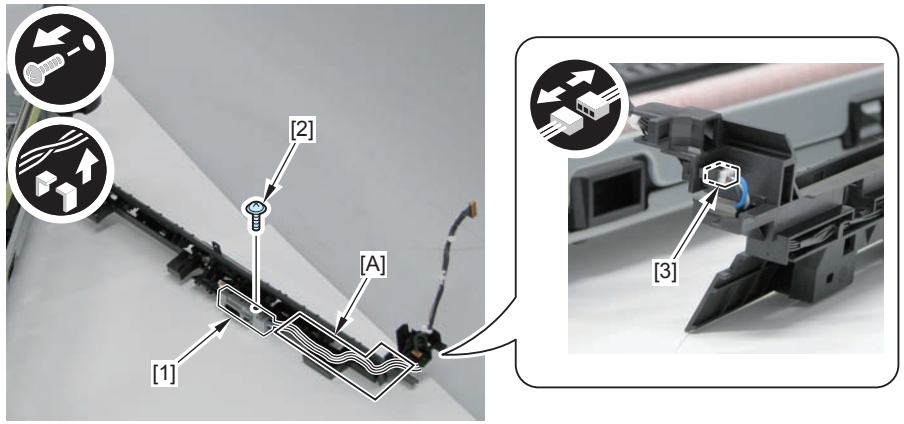
2) Close the guide [1] and move the Fixing Inlet Guide [2].



F-4-631

3) Remove the Fixing Thermistor [1].

- 1 Screw [2]
- Guide [A]
- 1 Connector [3]



F-4-632

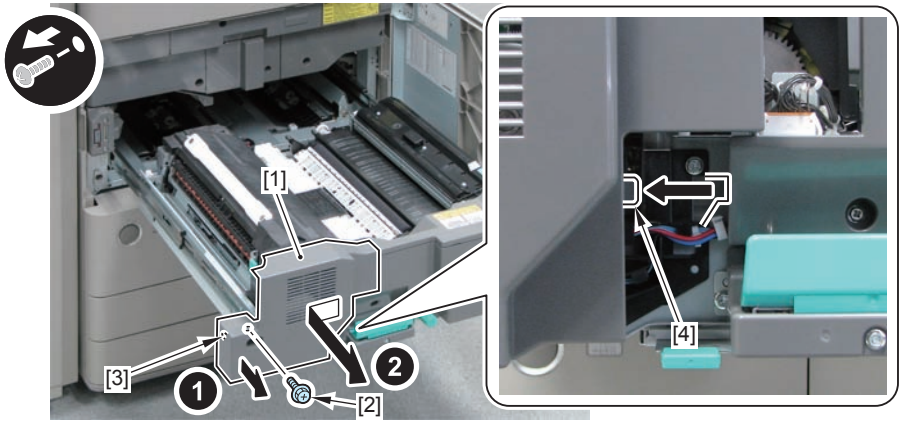
Removing the Fixing Motor

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).

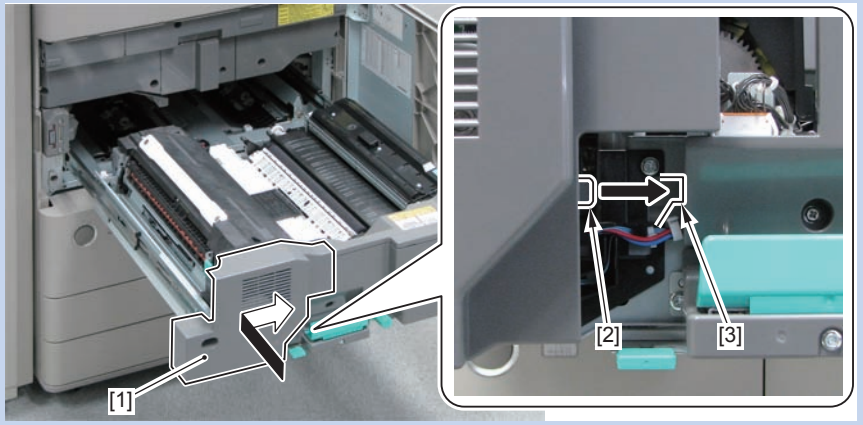
Procedure

1) Remove the Fixing Feed Left Inner Cover [1].
- 1 Screw [2]
- 1 Boss [3]
- 1 Hook [4]



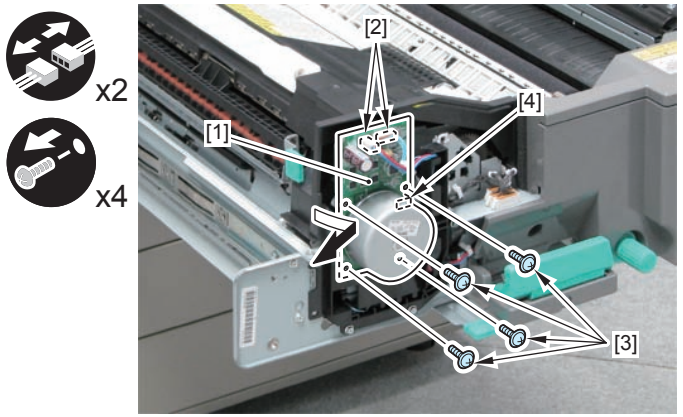
F-4-633

NOTE:
The Fixing Feed Right Upper Inner Cover [1] can be installed easily by fitting the hook [2] into the groove [3] of the Fixing Feed Unit in advance.



F-4-634

2) Remove the Fixing Drive Motor [1].
- 2 Connectors [2]
- 4 Screws [3]
- 1 Hook [4]



F-4-635

Cleaning the Fixing Unit

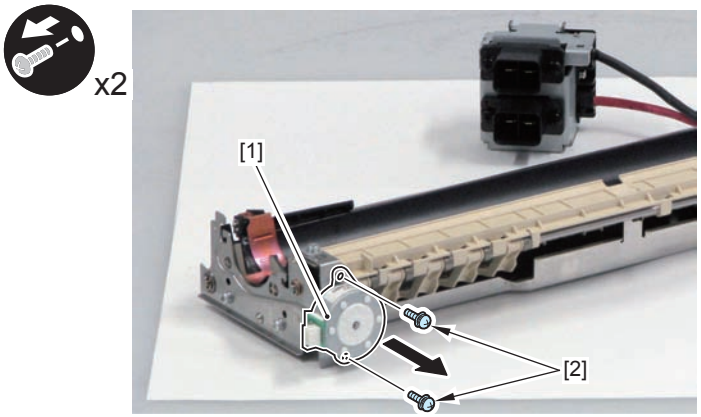
Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing IH Unit (Refer to page 4-296).
4) Remove the Fixing Film Unit (Refer to page 4-300).

Procedure

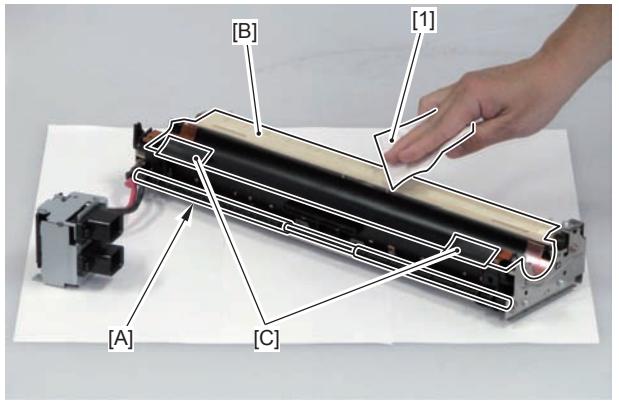
1) Remove the Core Shutter Motor [1] from the Fixing IH Unit.

- 2 Screws [2]



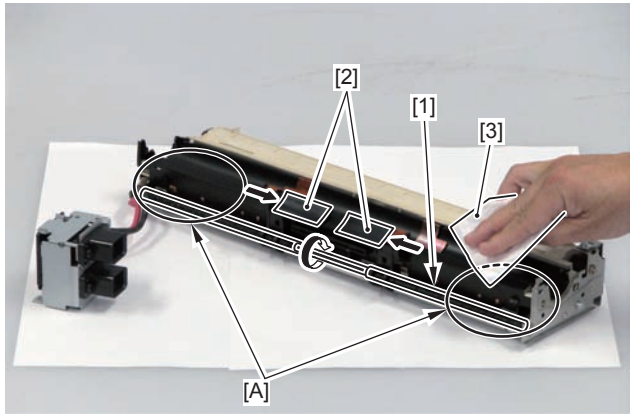
F-4-636

2) Clean the Slide Shaft [A] of the Fixing IH Unit, the [B] part of the IH Unit, and the [C] part of the slider with lint-free paper [1] moistened with alcohol.



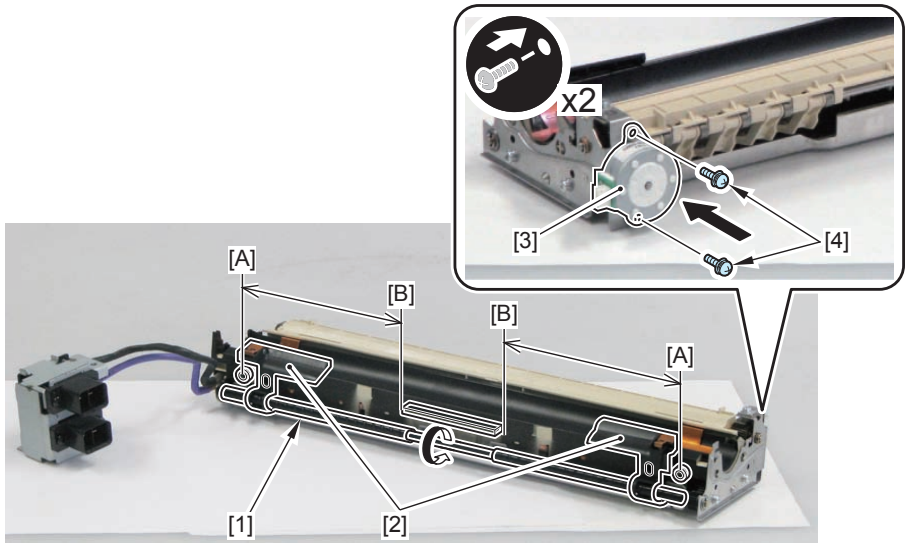
F-4-637

3) Move the slider [2] by rotating the Slide Shaft [1] of the Fixing IH Unit, and clean the [A] part being hidden with lint-free paper [3] moistened with alcohol.



F-4-638

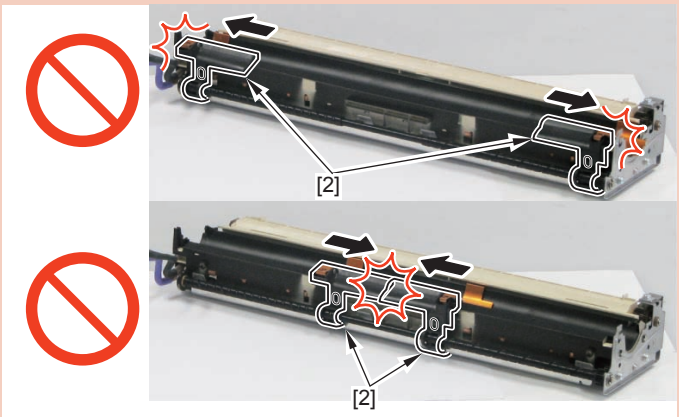
4) Rotate the Slide Shaft [1] of the Fixing IH Unit, and move the slider [2] somewhere between the hole [A] and the protrusion [B].
Then, install the Core Shutter Motor [3].
- 2 Screws [4]



F-4-639

CAUTION:

If it is installed while the slider [2] is too near the center or too near the edges, E840 may occur. As a result of that, reassembling will be needed.

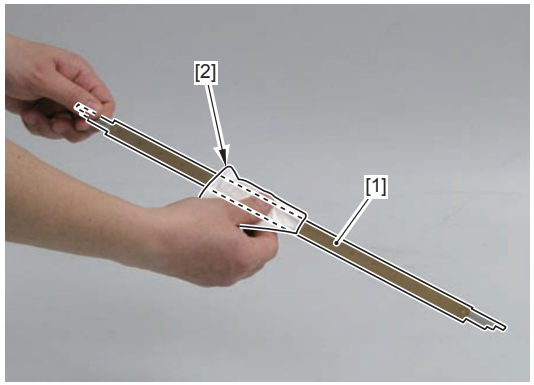


F-4-640

5) Clean the Separation Plate [1] with lint-free paper moistened with alcohol [2].

CAUTION:

When cleaning the Separation Plate [1], be careful not to deform it because it is thin.

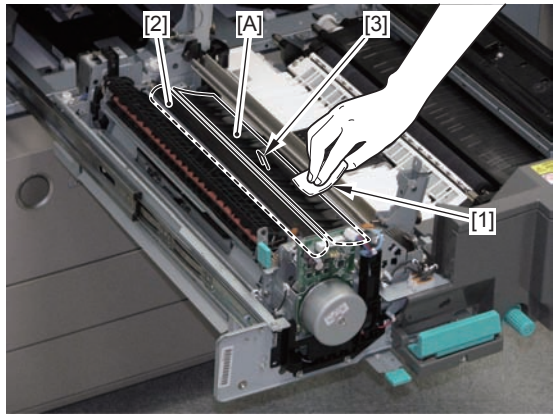


F-4-641

6) Clean the paper feed side [A] of the Fixing Inlet Guide with lint-free paper [1] moistened with alcohol.

CAUTION:

- Do not touch the surface of the Fixing Pressure Roller [2] when cleaning.
- Be careful not to damage the Sensor Flag [3] when cleaning.



F-4-642

7) Install the removed parts in reverse order.

- Install the Fixing Film Unit.
- Install the Fixing IH Unit.
- Put the Fixing Feed Unit back in the host machine.
- Close the Front Cover.

Pickup Feed System

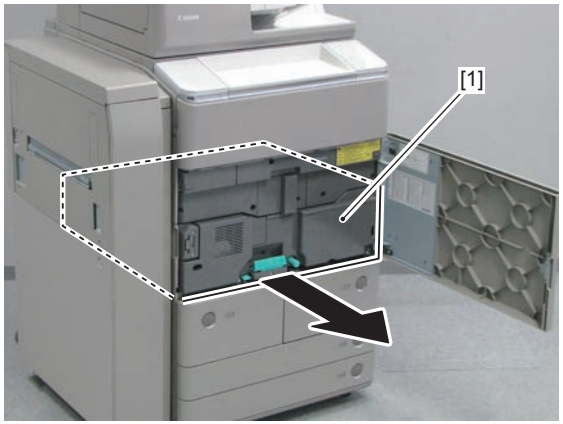
Pull out the Fixing Feed Unit.

Preparation

1) Open the Front Cover.

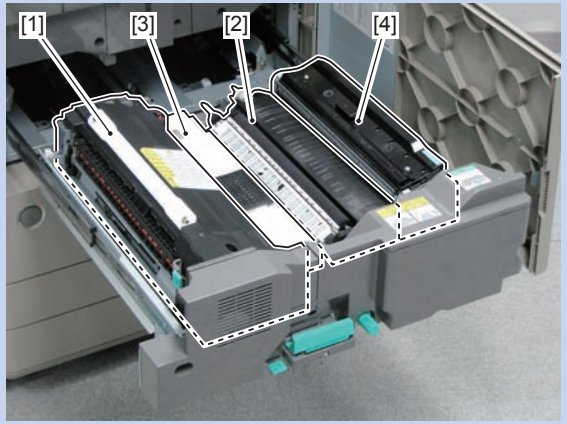
Procedure

1) Pull out the Fixing Feed Unit [1].



F-4-643

NOTE:
Perform step 2 as necessary when installing/removing the units (Fixing Unit [1], Secondary Transfer Outer Unit [2], Pre-fixing Feed Belt Unit [3], Registration Unit [4], etc.) installed in the Fixing Feed Unit.

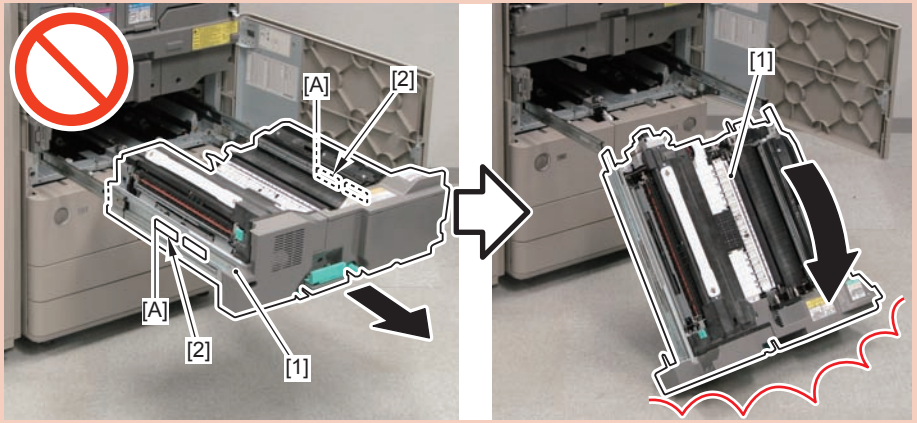


F-4-644

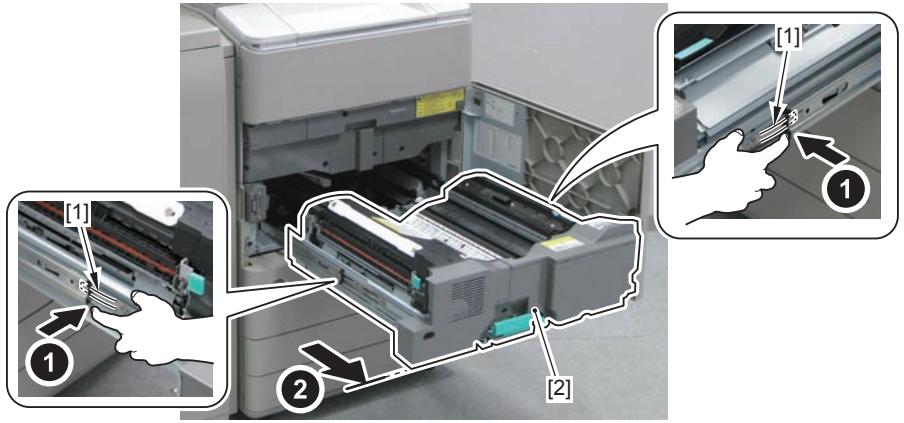
2) Press the 2 Release Springs [1] at both sides of the rail to release the locks, and further pull out the Fixing Feed Unit [2] until it stops.

CAUTION:

When pulling out the Fixing Feed Unit [1], pulling it out beyond the rear end [A] of the Release Springs [2] on the rear side may cause falling of the Fixing Feed Unit.



F-4-645



F-4-646

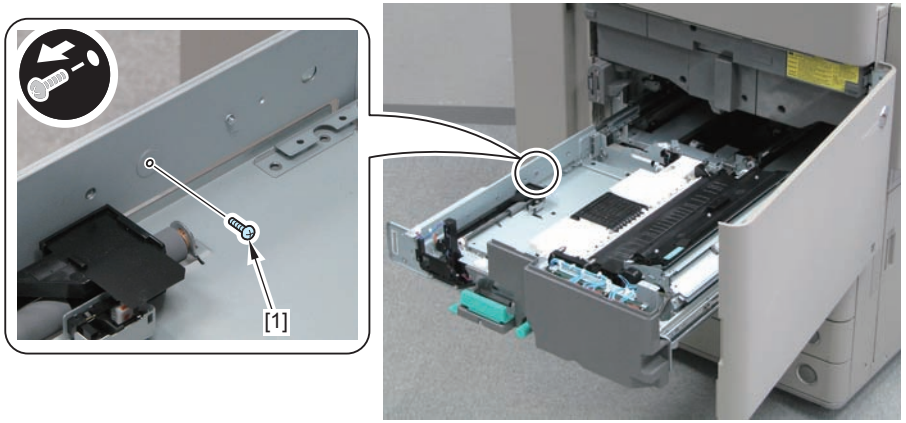
Removing the Fixing Feed Unit

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Fixing Unit (Refer to page 4-285).

Procedure

1) Remove the red screw [1] securing the Fixing Feed Unit Rail.

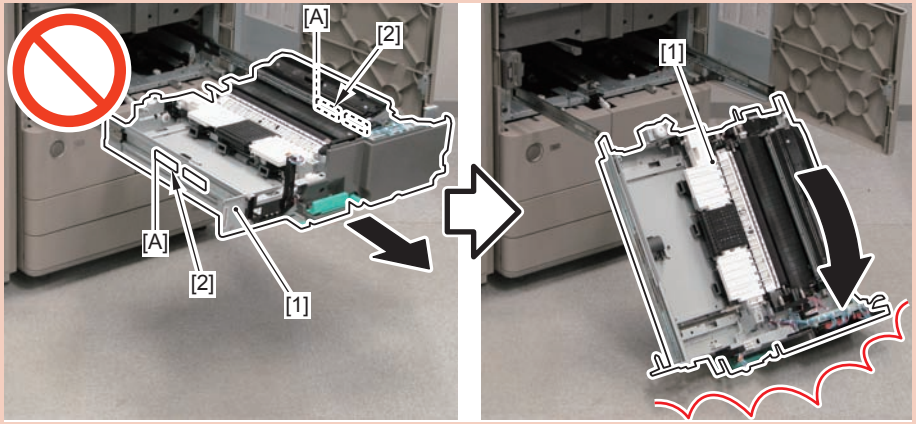


F-4-647

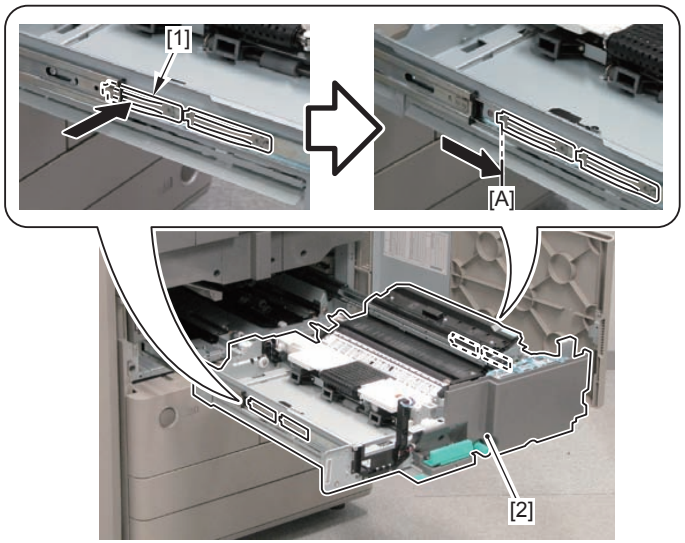
2) Push the 2 Release Springs [2] on the rear side of both sides of the Fixing Feed Unit [1] to release the locks, and then pull out the Fixing Feed Unit [1] to the rear end [A] of the Release Spring on the rear side.

CAUTION:

When pulling out the Fixing Feed Unit [1], pulling it out beyond the rear end [A] of the Release Springs [2] on the rear side may cause falling of the Fixing Feed Unit.

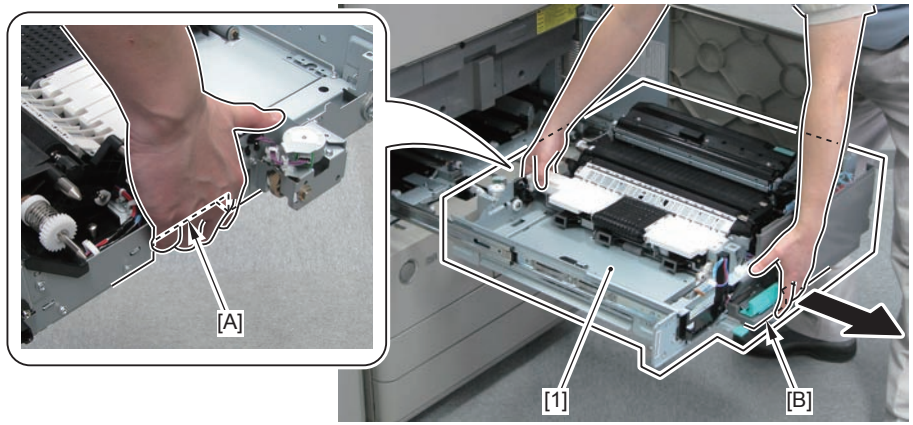


F-4-648



F-4-649

3) Hold the bottom side [A] on the rear side of the Fixing Feed Unit and the bottom side [B] on its front side, and remove the Fixing Feed Unit [1] by pulling it out toward the front.

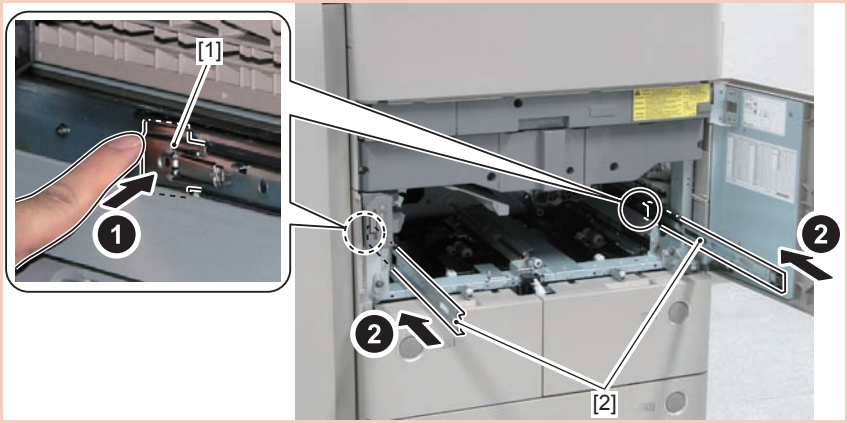


F-4-650

CAUTION:

Put the 2 rails [1] pulled out back in the host machine as needed.

- 2 Rail Lock Levers [2]



F-4-651

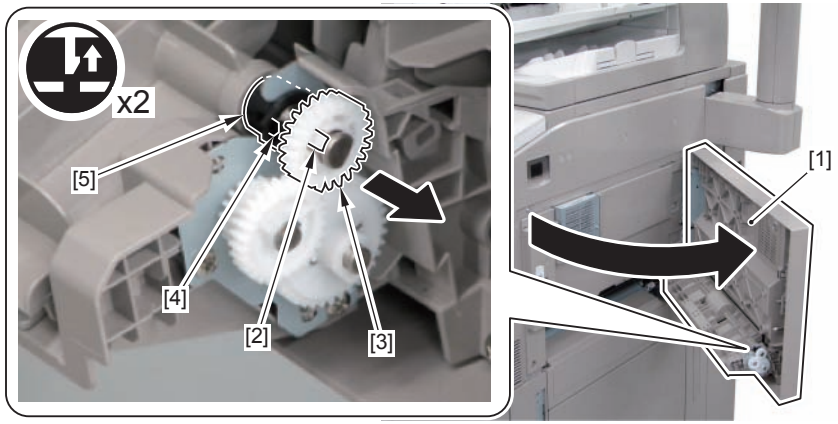
Removing the Multi-purpose Tray Roller

Procedure

CAUTION:

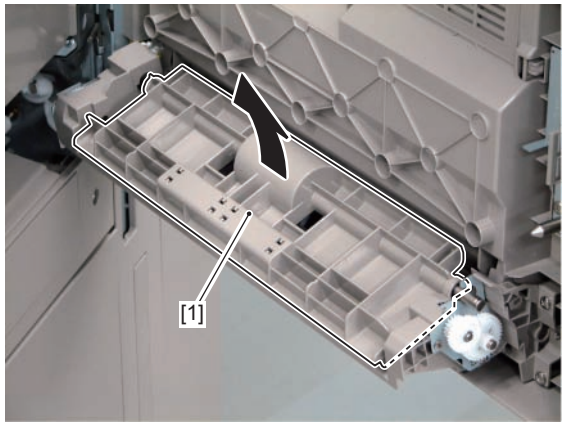
Be sure not to touch the surface of the roller when disassembling/assembling.

1) Open the Multi-purpose Tray Pickup Unit [1].
2) Release the claw [2] to remove the gear [3].
3) Release the claw [4] to remove the Shaft Support [5].



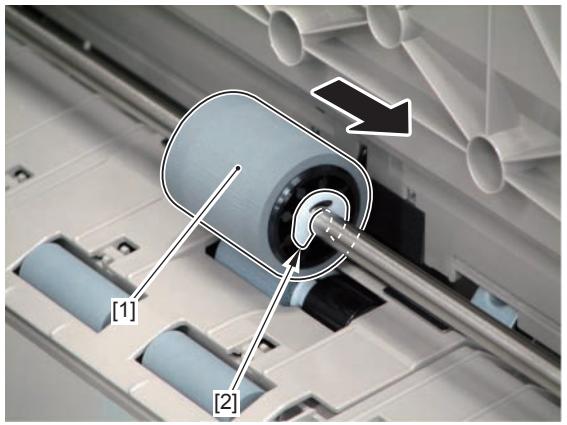
F-4-652

4) Remove the Feed Upper Cover [1].



F-4-653

5) Remove the Resin Ring [1], and remove the Feed Roller [2].



F-4-654

Removing the Multi-purpose Tray Separation Roller

Preparation

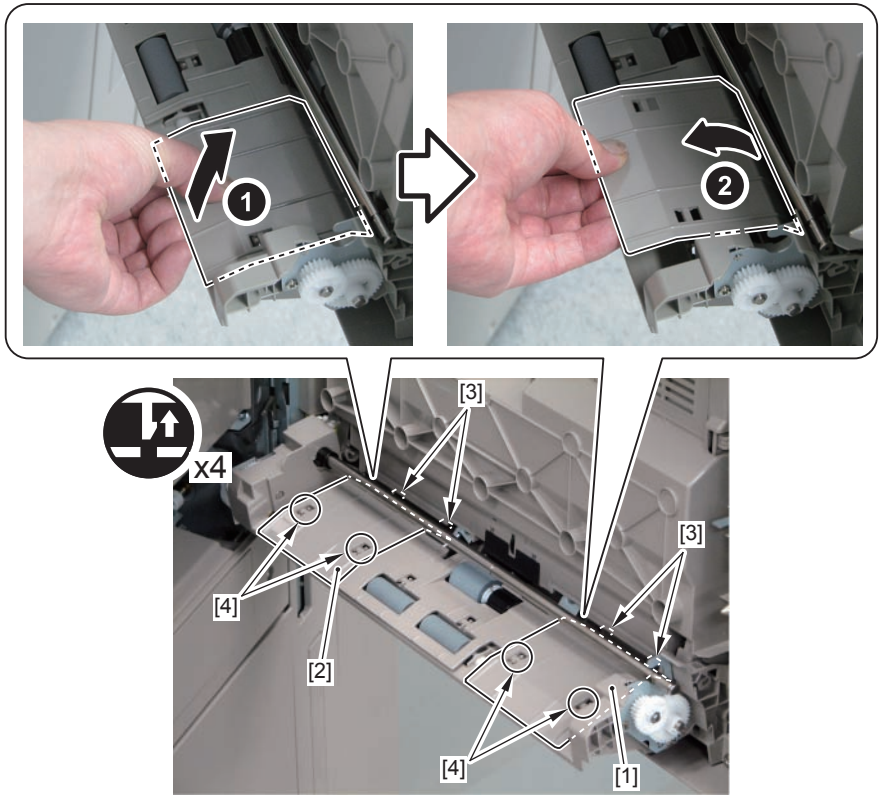
1) Remove the Multi-purpose Tray Feed Roller (Refer to page 4-312).

Procedure

CAUTION:

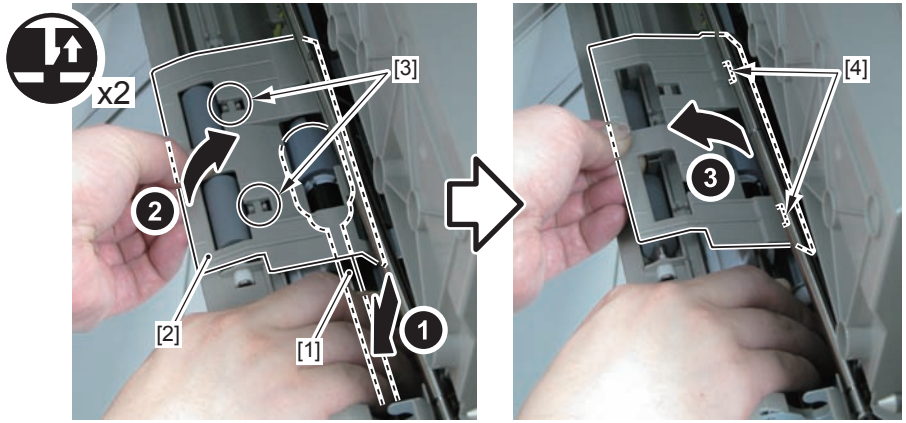
Be sure not to touch the surface of the roller when disassembling/assembling.

1) Remove the Paper Guide (Front) [1] and the Paper Guide (Rear) [2].
- 4 Claws [3]
- 4 Hooks [4]



F-4-655

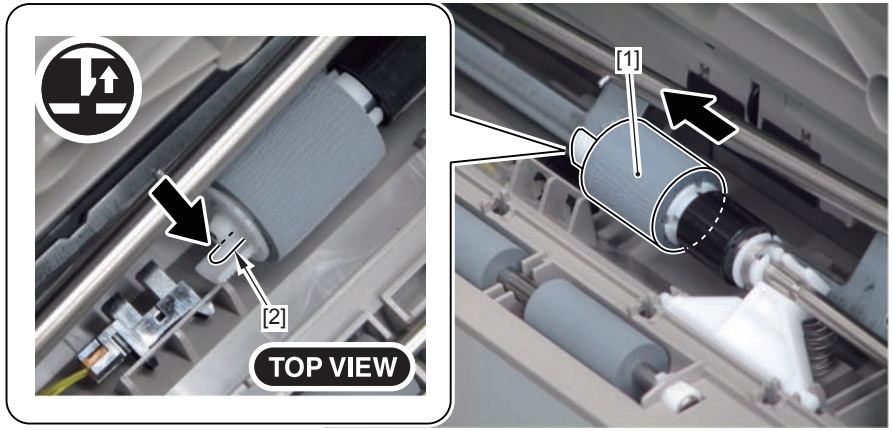
2) While holding the Multi-purpose Tray Separation Roller [1], remove the Paper Guide (Center) [2].
- 2 Hooks [3]
- 2 Claws [4]



F-4-656

NOTE:
When installing the Paper Guide (Center), pressing down the Separation Roller makes the work easy.

3) Remove the Separation Roller [1].
- 1 Claw [2]



F-4-657

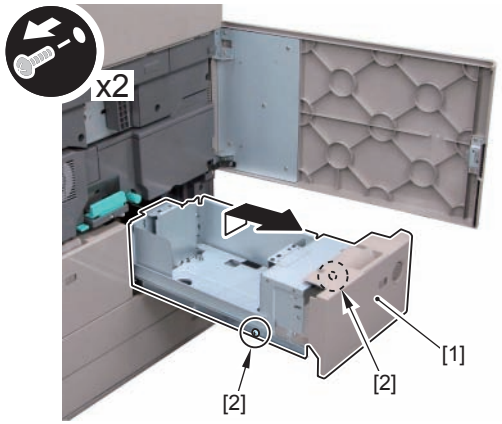
Removing the Right Deck

Preparation

1) Open the Front Cover.

Procedure

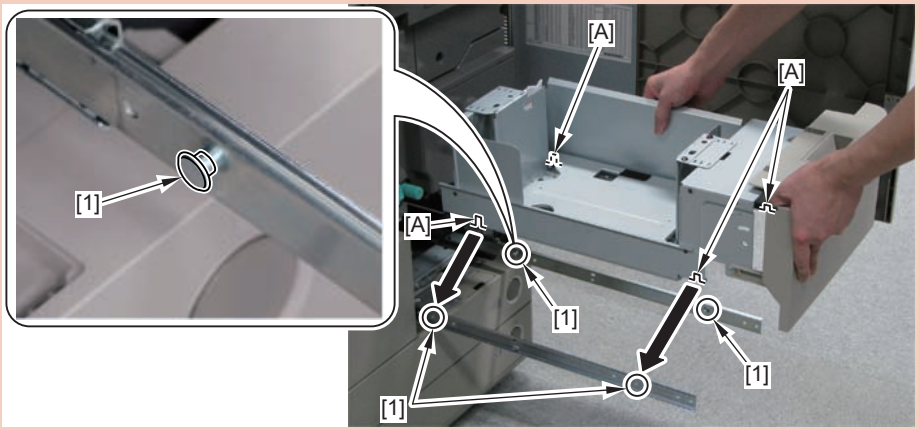
1) Pull out the Right Deck [1].
2) Remove the Right Deck [1].
- 2 Screws [2]



F-4-658

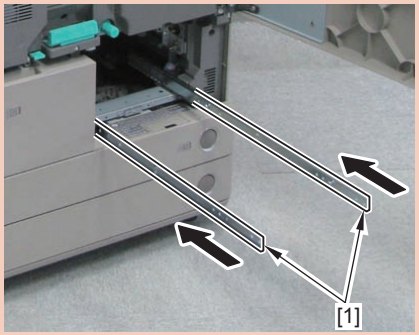
CAUTION:

- At installation, be sure to align the 4 pins [1] of the rail with the 4 grooves [A] of the Right Deck.



F-4-659

- Put the 2 rails [1] pulled out back in the host machine as needed.



F-4-660

Removing the Right Deck Pickup/Right Deck Feed/ Right Deck Separation Roller

Preparation

CAUTION:

When pickup system options are installed, be sure to disconnect them from the host machine.

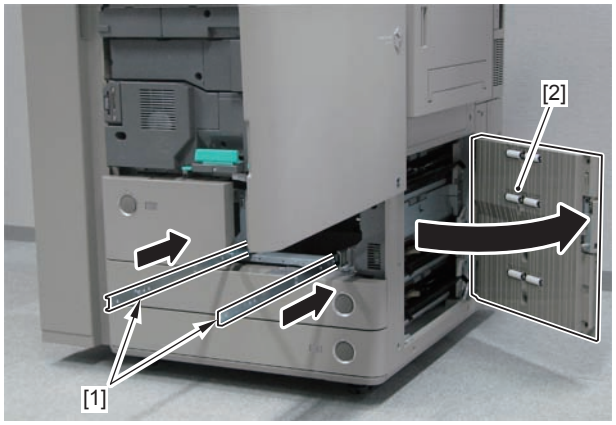
1) Open the Front Cover.
2) Remove the Right Deck (Refer to page 4-314).

Procedure

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling.

1) Store the 2 rails [1] of the Right Deck in the host machine.
2) Open the Vertical Path Unit [2].

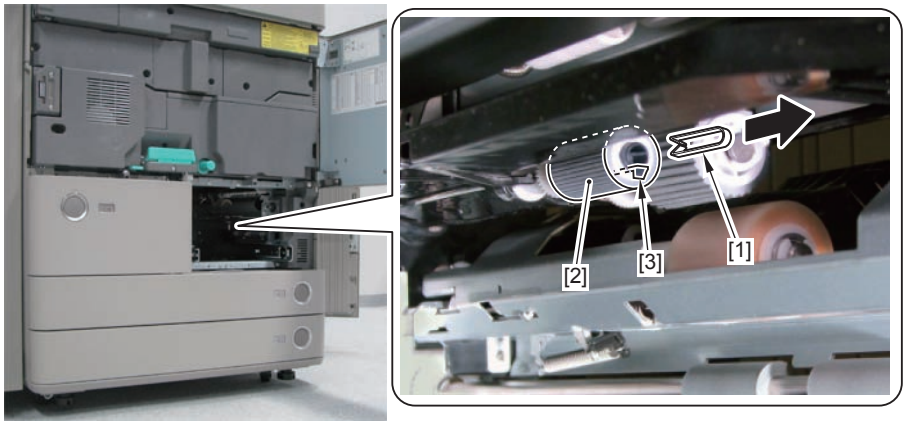


F-4-661

Removing the Right Deck Pickup Roller

3) Remove the Stopper Spring [1].
4) Remove the Right Deck Pickup Roller [2].

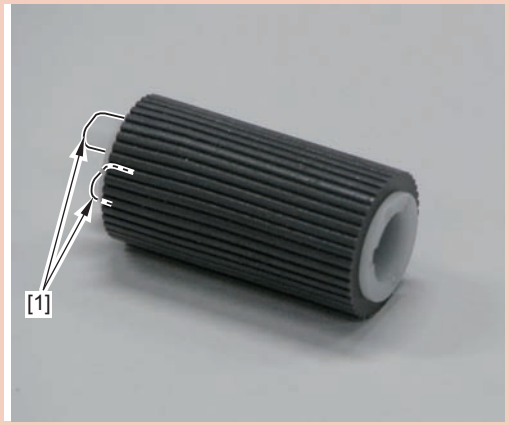
- 1 Hook [3]



F-4-662

CAUTION:

Be sure to install it with the protrusions [1] of the Pickup Roller facing the rear side of the host machine.

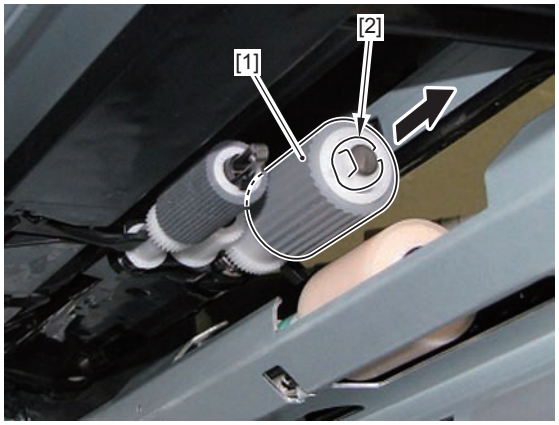


F-4-663

Removing the Right Deck Feed Roller

5) Remove the Right Deck Feed Roller [1].

- 1 Resin Ring [2]

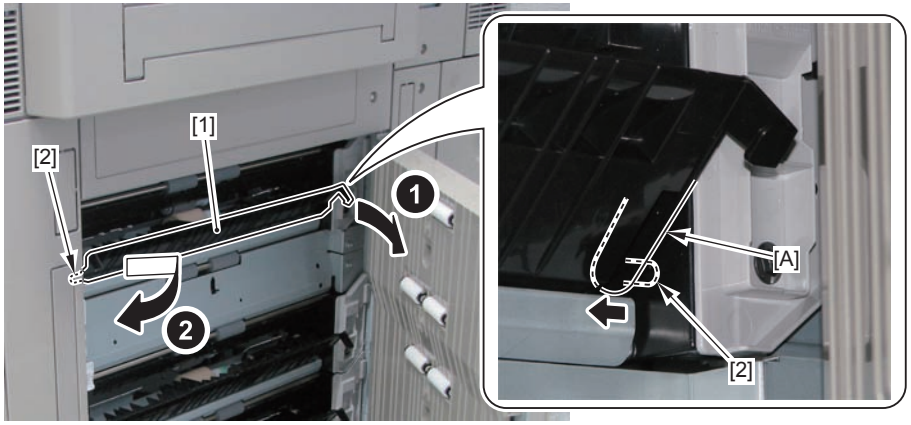


F-4-664

Removing the Right Deck Separation Roller

6) Remove the Feed Guide [1] while pressing the [A] part.

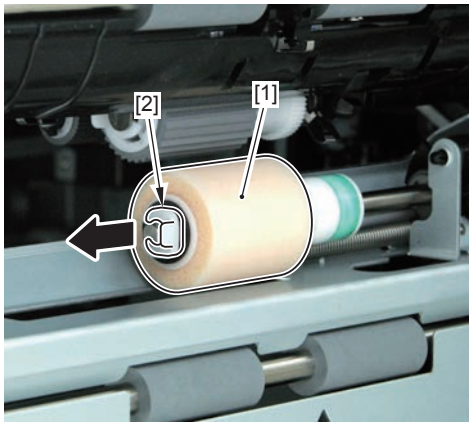
- 2 Bosses [2]



F-4-665

7) Remove the Right Deck Separation Roller [1].

- 1 Resin Ring [2]



F-4-666

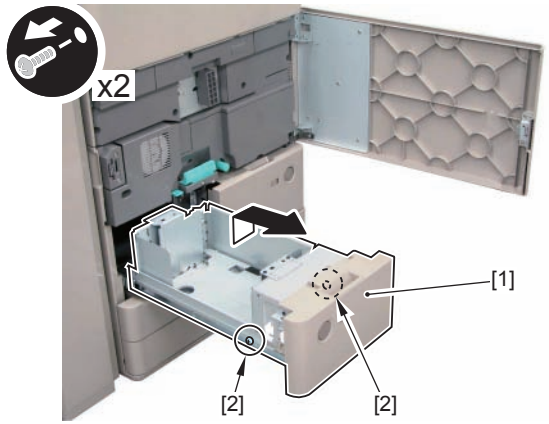
Removing the Left Deck

Preparation

1) Open the Front Cover.

Procedure

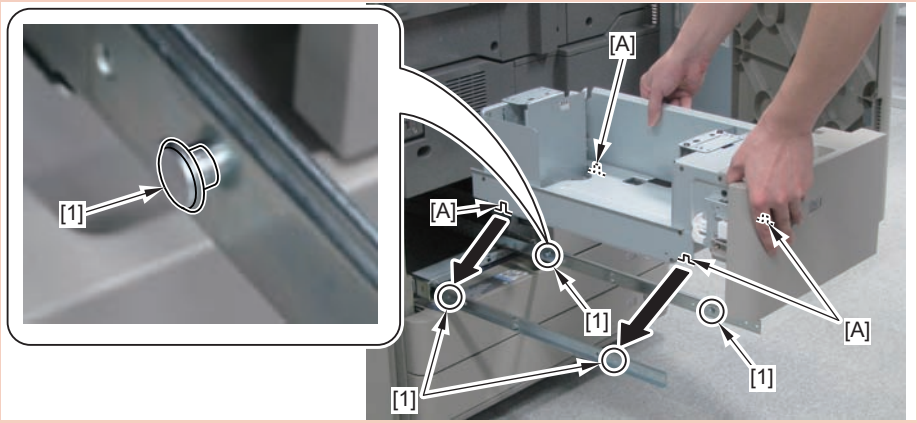
1) Pull out the Left Deck [1].
2) Remove the Left Deck [1].
- 2 Screws [2]



F-4-667

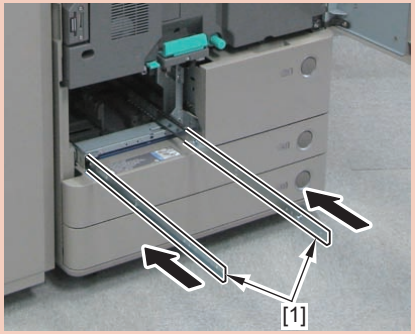
CAUTION:

- At installation, be sure to align the 4 pins [1] of the rail with the 4 grooves [A] of the Left Deck.



F-4-668

- Put the 2 rails [1] pulled out back in the host machine as needed.



F-4-669

Removing the Left Deck Pickup/Left Deck Feed/Left Deck Separation Roller

Preparation

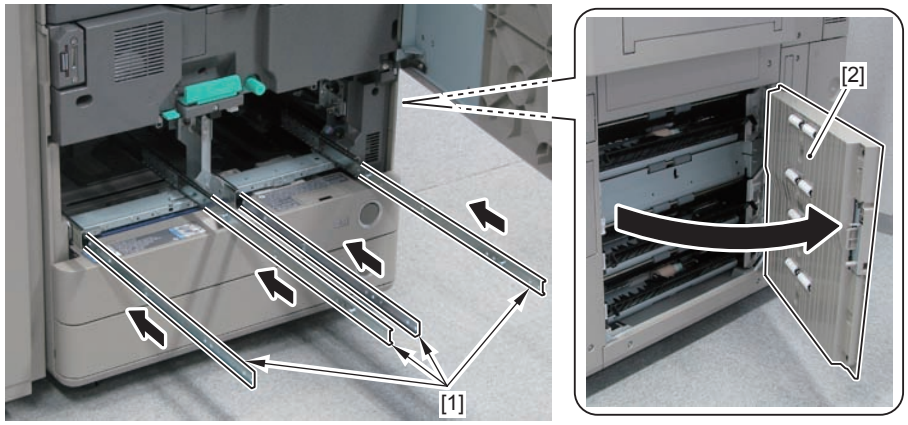
1) Open the Front Cover.
2) Remove the Right Deck (Refer to page 4-314).
3) Remove the Left Deck (Refer to page 4-317).

Procedure

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling.

1) Store the 4 rails [1] of the Right and Left Decks in the host machine.
2) Open the Vertical Path Unit [2].

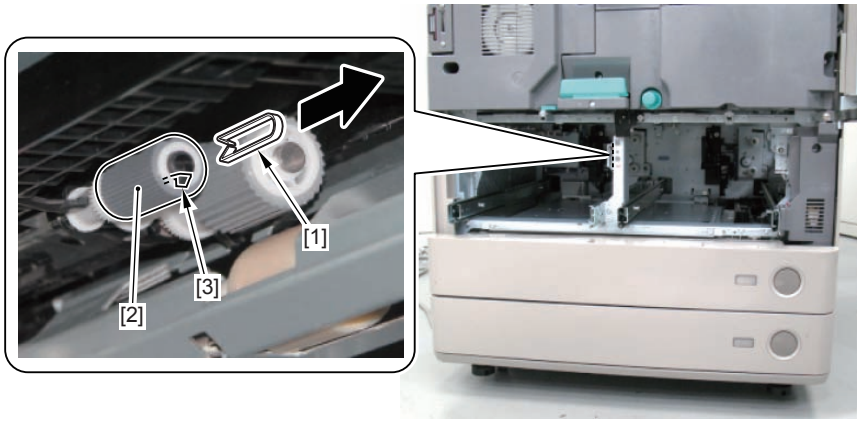


F-4-670

Removing the Left Deck Pickup Roller

3) Remove the Stopper Spring [1].
4) Remove the Left Deck Pickup Roller [2].

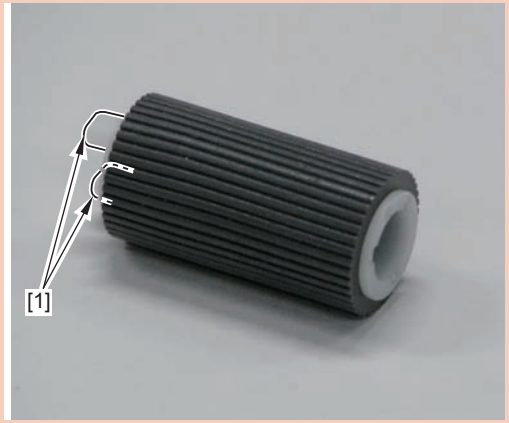
- 1 Hook [3]



F-4-671

CAUTION:

Be sure to install it with the protrusions [1] of the Pickup Roller facing the rear side of the host machine.

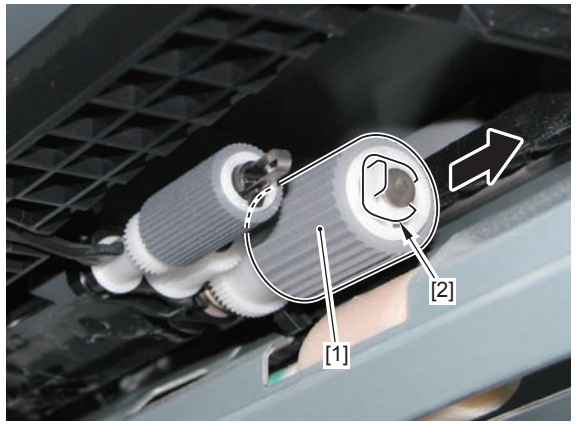


F-4-672

Removing the Left Deck Feed Roller

5) Remove the Left Deck Feed Roller [1].

- 1 Resin Ring [2]

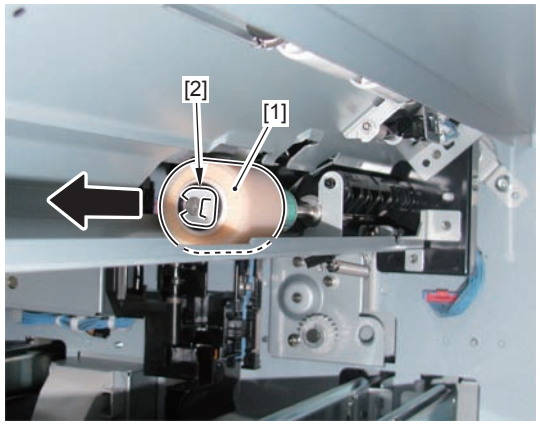


F-4-673

Removing the Left Deck Separation Roller

6) Remove the Left Deck Separation Roller [1].

- 1 Resin Ring [2]



F-4-674

Removing the Cassette 3

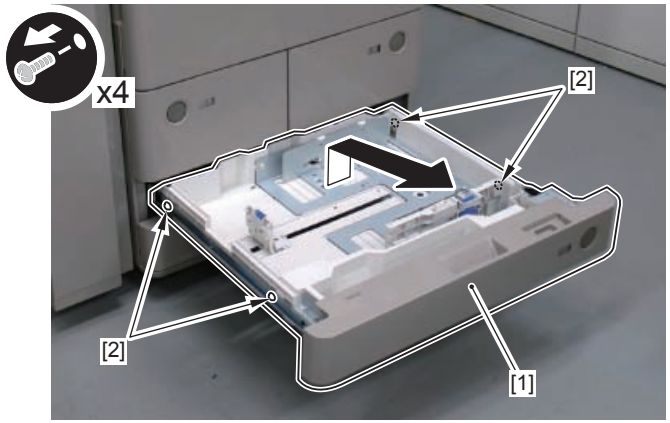
Preparation

1) Pull out the Cassette 3.

Procedure

1) Remove the Cassette 3 [1].

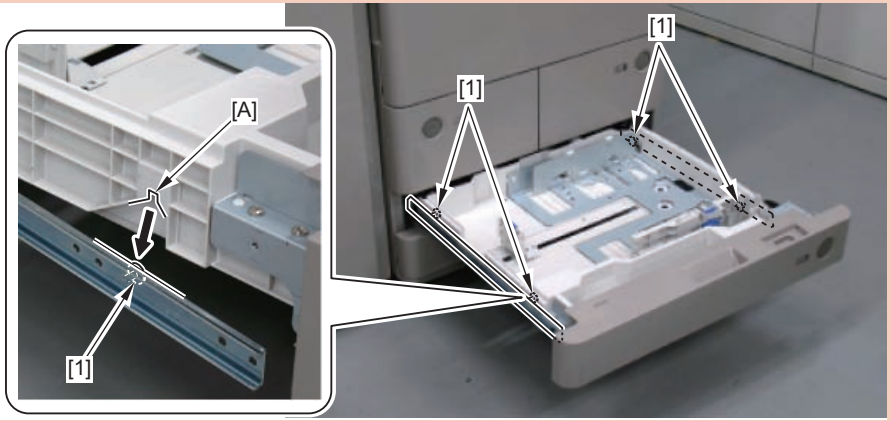
- 4 Screws [2]



F-4-675

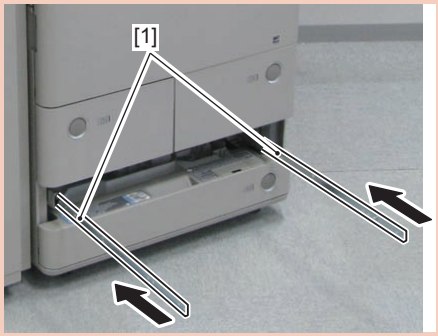
CAUTION:

- At installation, be sure to align the 4 pins [1] of the rail with the 4 grooves [A] of the cassette.



F-4-676

- Put the 2 rails [1] pulled out back in the host machine as needed.



F-4-677

Removing the Cassette 3 Pickup/Feed/Separation Roller

Preparation

CAUTION:

When pickup system options are installed, be sure to disconnect them from the host machine.

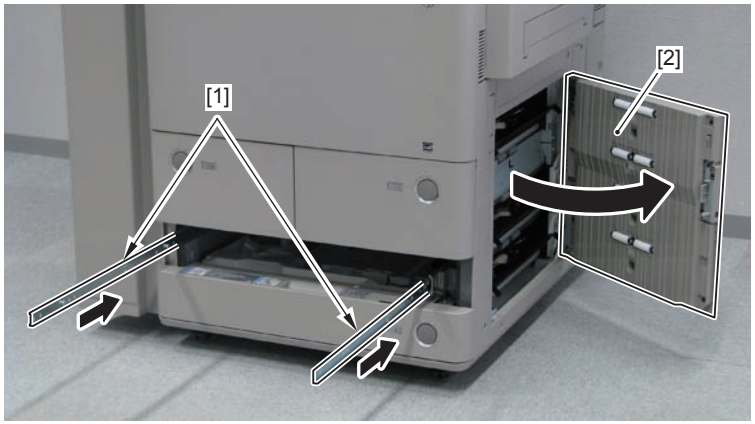
1) Pull out the Cassette 3.
2) Remove the Cassette 3 (Refer to page 4-319).

Procedure

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling.

1) Store the 2 rails [1] of the Cassette 3 in the host machine.
2) Open the Vertical Path Unit [2].



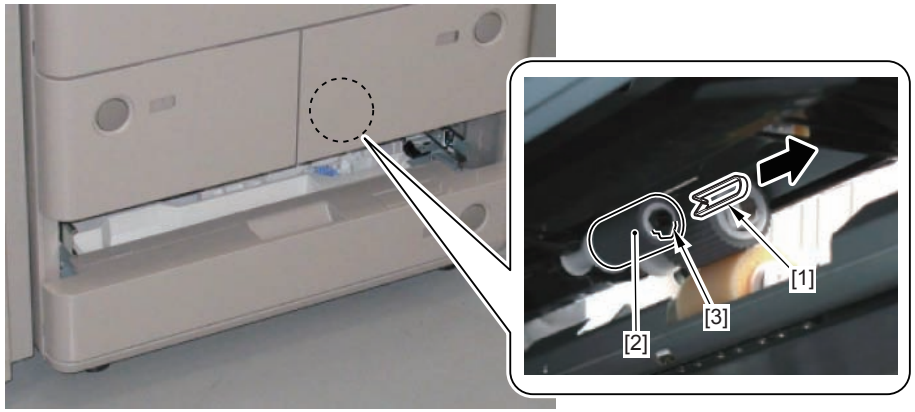
F-4-678

Removing the Cassette 3 Pickup Roller

3) Remove the Stopper Spring [1].

4) Remove the Cassette 3 Pickup Roller [2].

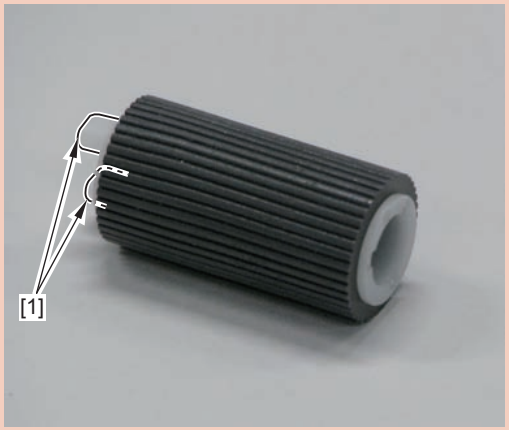
- 1 Hook [3]



F-4-679

CAUTION:

Be sure to install it with the protrusions [1] of the Pickup Roller facing the rear side of the host machine.

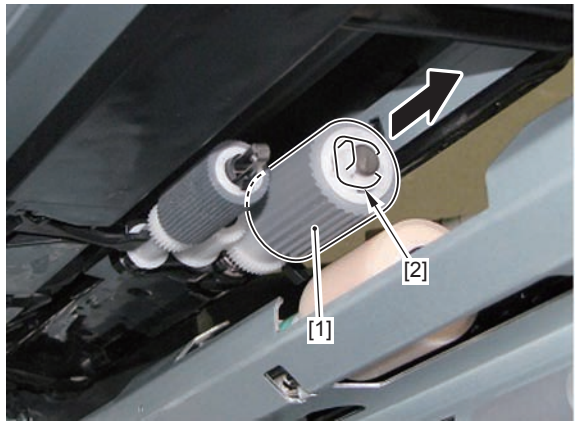


F-4-680

Removing the Cassette 3 Feed Roller

5) Remove the Cassette 3 Feed Roller [1].

- 1 Resin Ring [2]

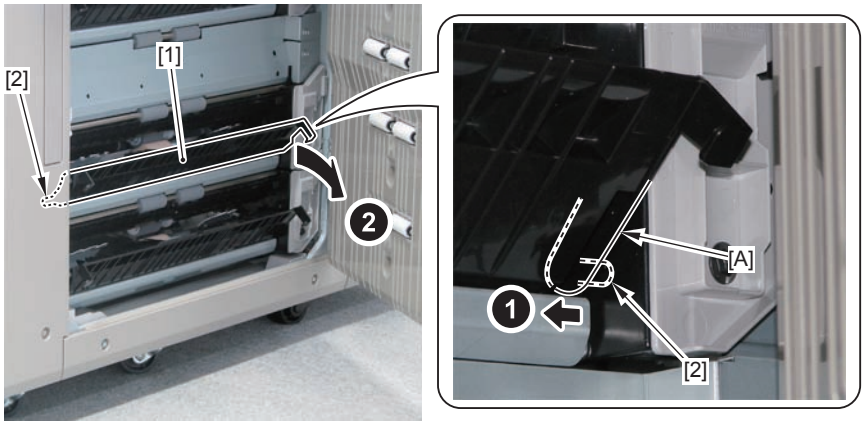


F-4-681

Removing the Cassette 3 Separation Roller

6) Remove the Feed Guide [1] while pressing the [A] part.

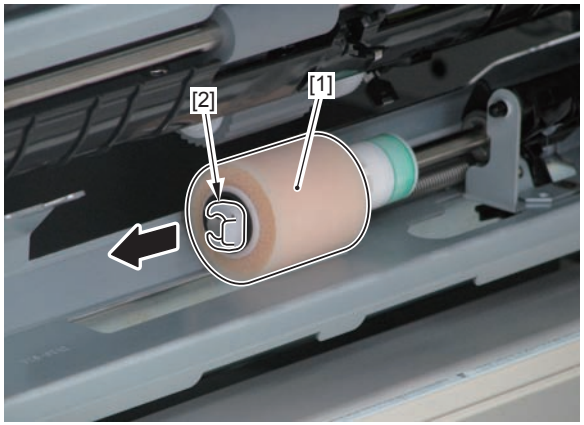
- 2 Bosses [2]



F-4-682

7) Remove the Cassette 3 Separation Roller [1].

- 1 Resin Ring [2]



F-4-683

Removing the Cassette 4

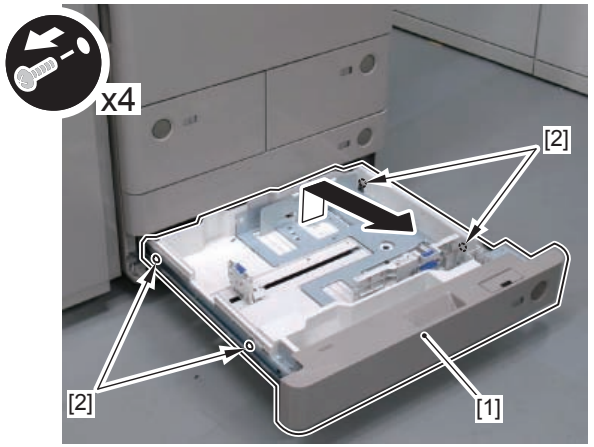
Preparation

1) Pull out the Cassette 4.

Procedure

1) Remove the Cassette 4 [1].

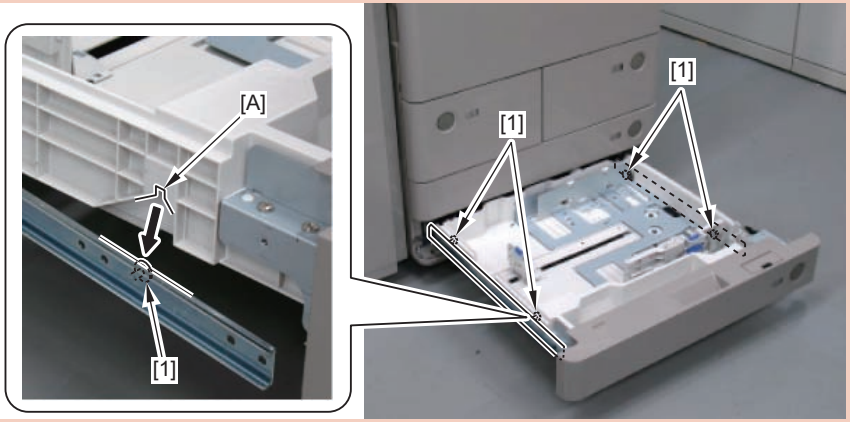
- 4 Screws [2]



F-4-684

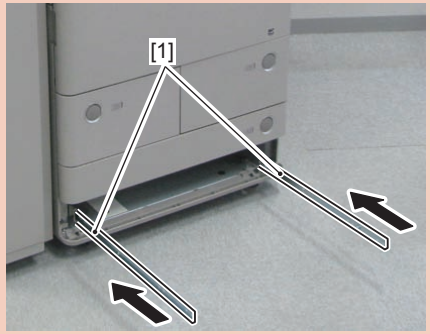
CAUTION:

- At installation, be sure to align the 4 pins [1] of the rail with the 4 grooves [A] of the cassette.



F-4-685

- Put the 2 rails [1] pulled out back in the host machine as needed.



F-4-686

Removing the Cassette 4 Pickup/Feed/Separation Roller

Preparation

CAUTION:

When pickup system options are installed, be sure to disconnect them from the host machine.

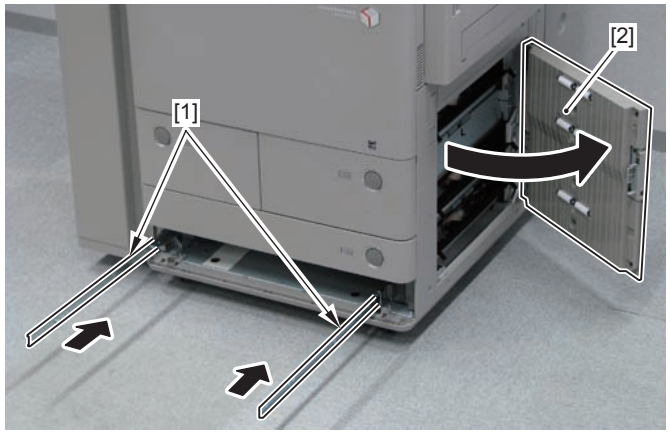
1) Pull out the Cassette 4.
2) Remove the Cassette 4 (Refer to page 4-322).

Procedure

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling..

1) Store the 2 rails [1] of the Cassette 4 in the host machine.
2) Open the Vertical Path Unit [2].



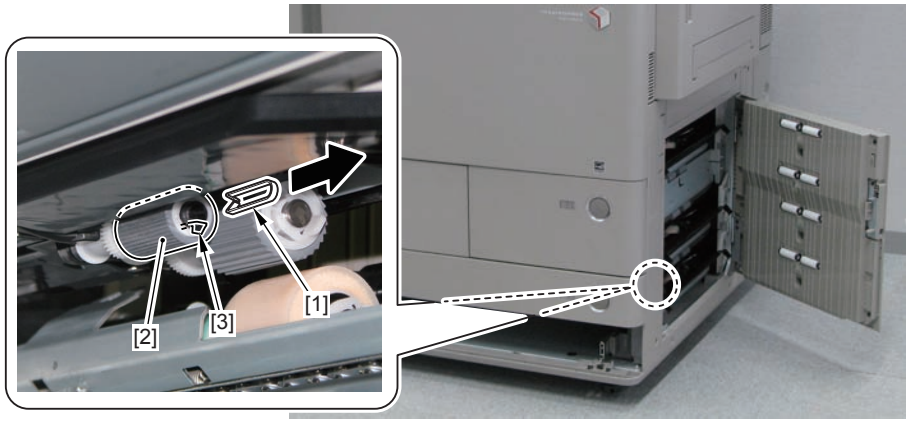
F-4-687

Removing the Cassette 4 Pickup Roller

3) Remove the Stopper Spring [1].

4) Remove the Cassette 4 Pickup Roller [2].

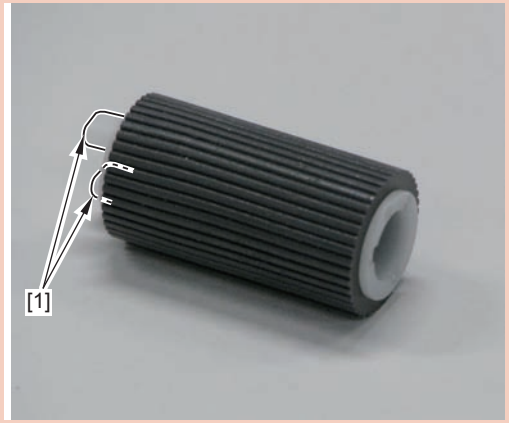
- 1 Hook [3]



F-4-688

CAUTION:

Be sure to install it with the protrusions [1] of the Pickup Roller facing the rear side of the host machine.

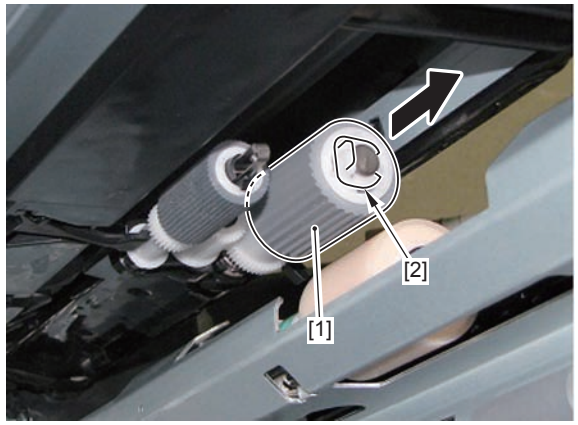


F-4-689

Removing the Cassette 4 Feed Roller

5) Remove the Cassette 4 Feed Roller [1].

- 1 Resin Ring [2]

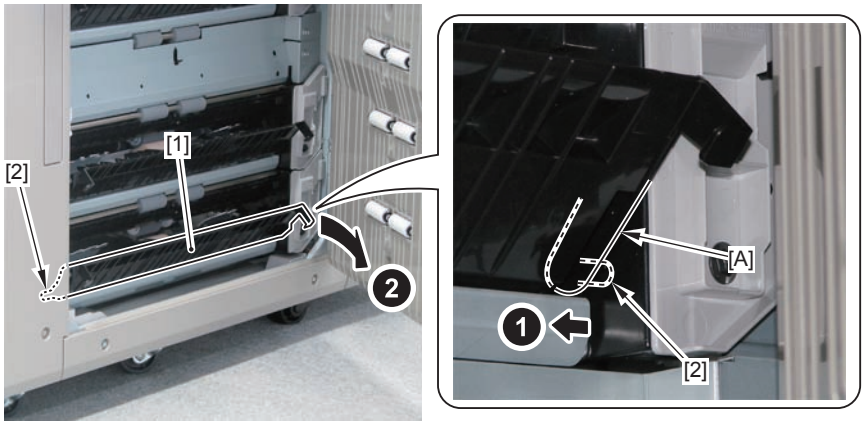


F-4-690

Removing the Cassette 4 Separation Roller

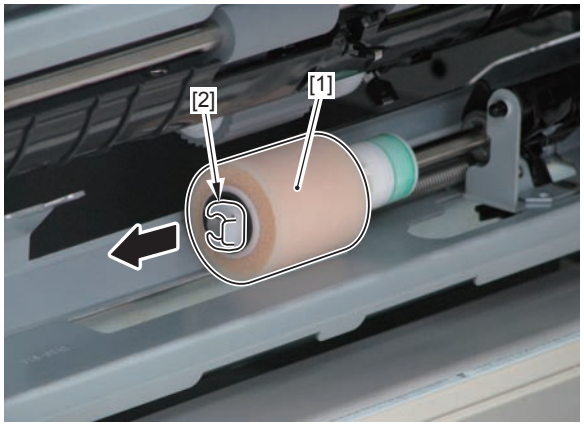
6) Remove the Feed Guide [1] while pressing the [A] part.

- 2 Bosses [2]



F-4-691

7) Remove the Cassette 4 Separation Roller [1].
- 1 Resin Ring [2]

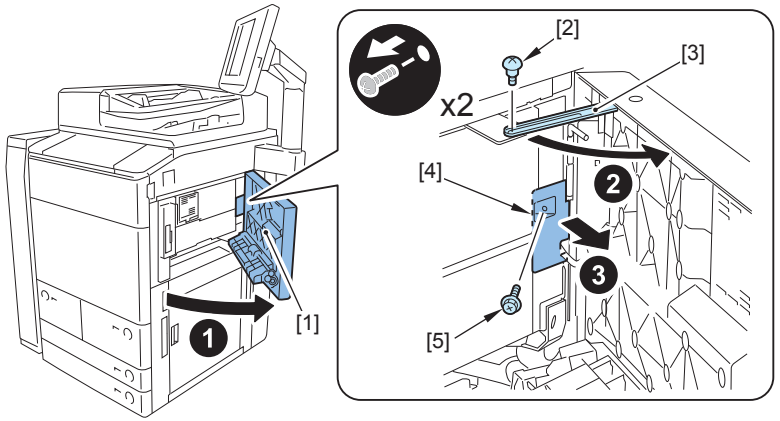


F-4-692

Removing the Multi-purpose Tray Pickup Unit

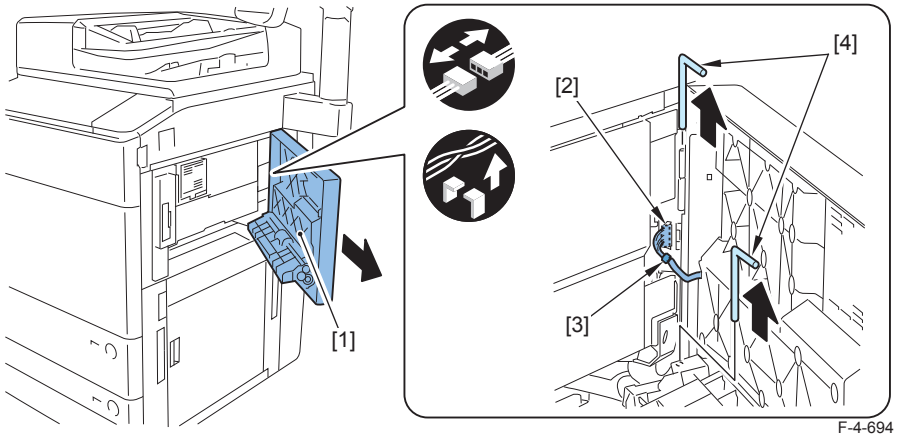
Procedure

1) Open the Multi-purpose Tray Pickup Unit [1].
2) Remove the Stepped Screw [2] and store the slider [3] in the Multi-purpose Tray Pickup Unit [1].
3) Remove the Connector Cover [4].
- 1 Screw [5]



F-4-693

4) Remove the Multi-purpose Tray Pickup Unit [1].
- 1 Connector [2]
- 1 Reuse Band [3]
- 2 Hinge Pins [4]



F-4-694

Removing the Vertical Path Unit

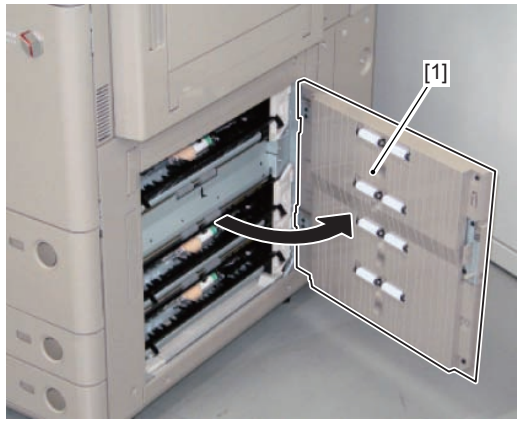
Preparation

CAUTION:

When pickup system options are installed, be sure to disconnect them from the host machine.

Procedure

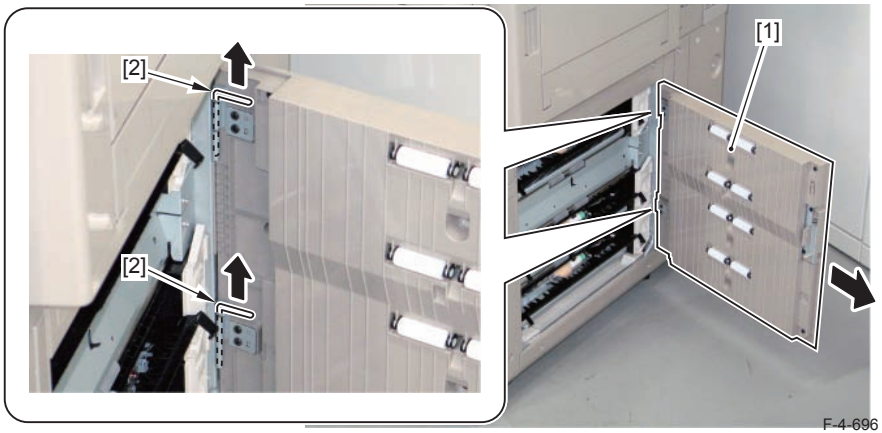
1) Open the Vertical Path Unit [1].



F-4-695

2) Remove the Vertical Path Unit [1].

- 2 Hinge Pins [2]



F-4-696

Removing the Cassette 3 Pickup Unit, Cassette 4 Pickup Unit, and Right Deck Pickup Unit

Preparation

CAUTION:

When pickup system options are installed, be sure to disconnect them from the host machine.

1) Remove the Vertical Path Unit (Refer to page 4-326).
2) Pull out the Cassette 3, the Cassette 4 and the Right Deck.

Procedure

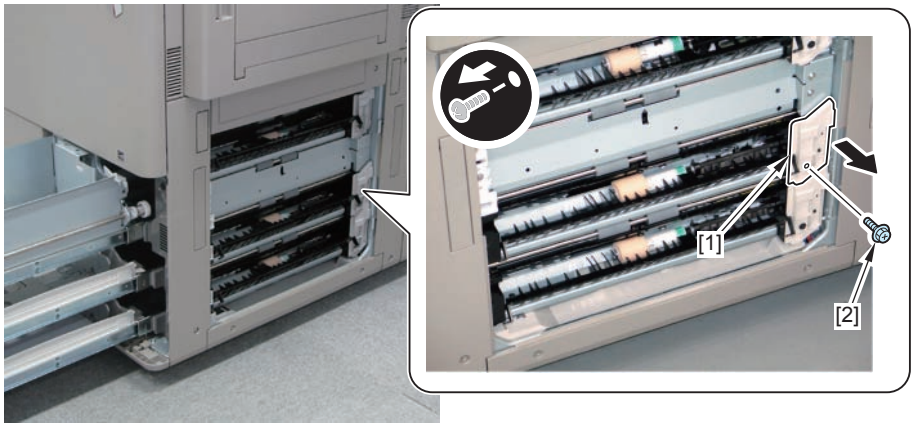
NOTE:
This procedure explains the case for Cassette 3 Pickup Unit.
Perform the same procedure also for the Cassette 4 Pickup Unit and Right Deck Pickup Unit.

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling.

1) Remove the Connector Cover [1].

- 1 Screw [2]



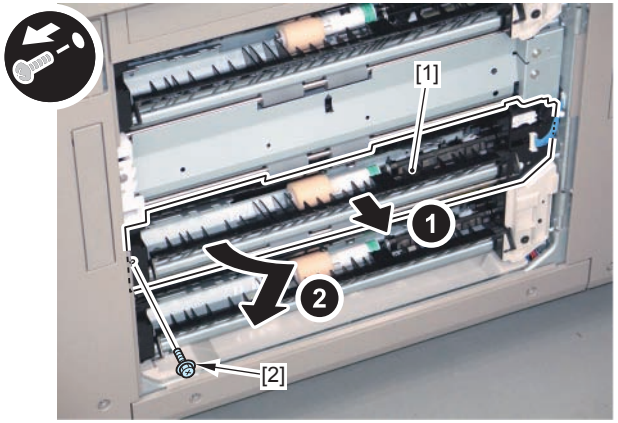
F-4-697

2) Disconnect the connector [1].

F-4-698

3) Remove the Pickup Unit [1].

- 1 Screw [2]



F-4-699

Removing the Left Deck Pickup Uni

Preparation

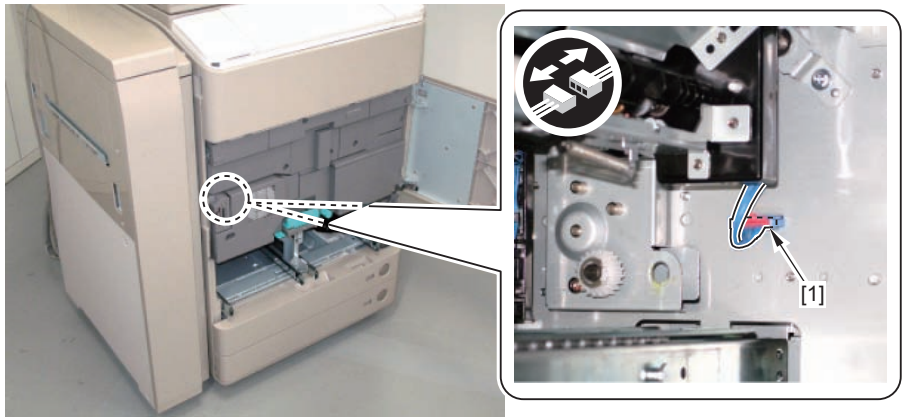
1) Open the Front Cover.
2) Remove the Right Deck (Refer to page 4-314).
3) Remove the Left Deck (Refer to page 4-317).

Procedure

CAUTION:

Be sure not to touch the surface of the roller when disassembling/assembling.

1) Disconnect the connector [1].



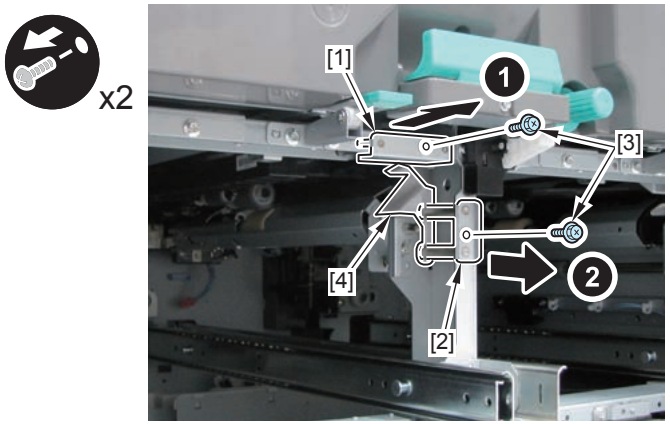
F-4-700

2) Remove the Pickup Unit Fixation Plate (Upper) [1] and the Pickup Unit Fixation Plate (Right) [2].

- 2 Screws [3]
- 1 Protector [4]

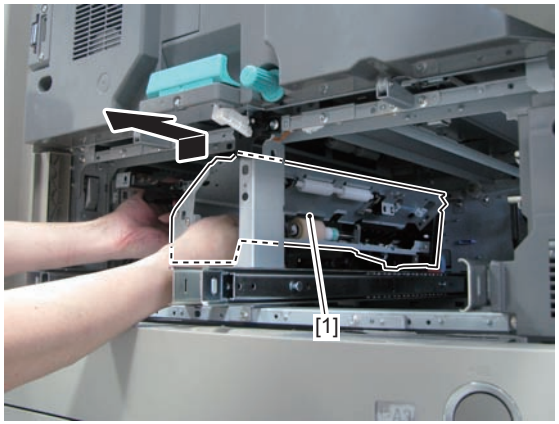
CAUTION:

When removing the Fixation Plate, hold the Pickup Unit to prevent it from falling down.



F-4-701

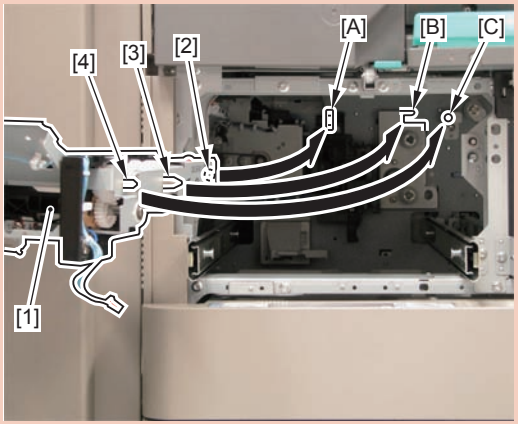
3) Holding the [A] part and the [B] part of the Pickup Unit, remove the Pickup Unit [1].



F-4-702

CAUTION:

When installing the Left Deck Pickup Unit, align the bosses [2], [3] and [4] of the Left Deck Pickup Unit [1] with the grooves [A] and [B], and the hole [C] of the host machine.



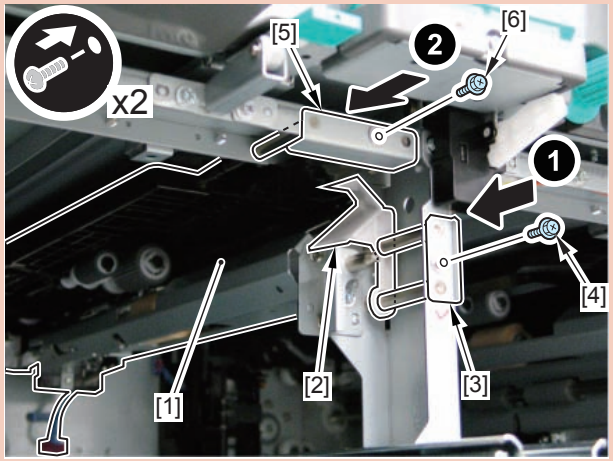
F-4-703

CAUTION:

When securing the Left Deck Pickup Unit, perform the following steps.

1) Install the Left Deck Pickup Unit [1] to the host machine.
2) Install the Protector [2] and the Pickup Unit Fixation Plate (Right) [3] with the screw [4].
3) Install the Pickup Unit Fixation Plate (Upper) [5] with the screw [6].

If the Pickup Unit Fixing Plate (Upper) [5] is installed first, the Left Deck Pickup Unit may not be secured properly, resulting in jam.



F-4-704

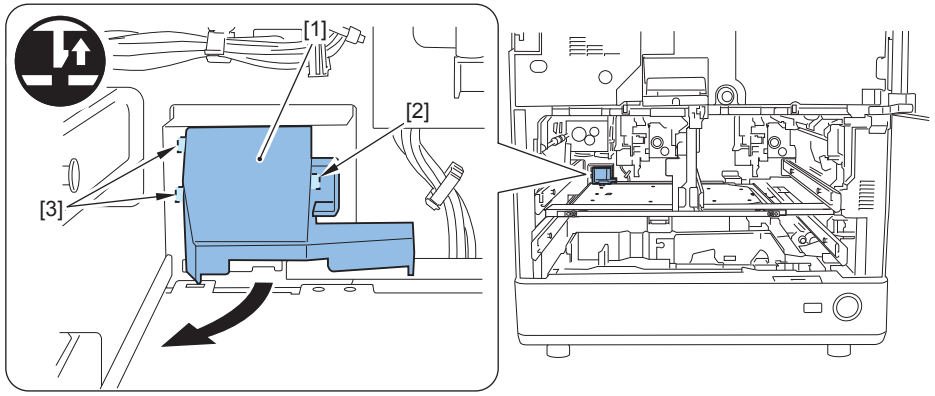
Removing the Cassette Heater Unit

Preparation

1) Open the Front Cover.
2) Remove the Right Deck (Refer to page 4-314).
3) Remove the Left Deck (Refer to page 4-317).
4) Remove the Cassette 3 (Refer to page 4-319).

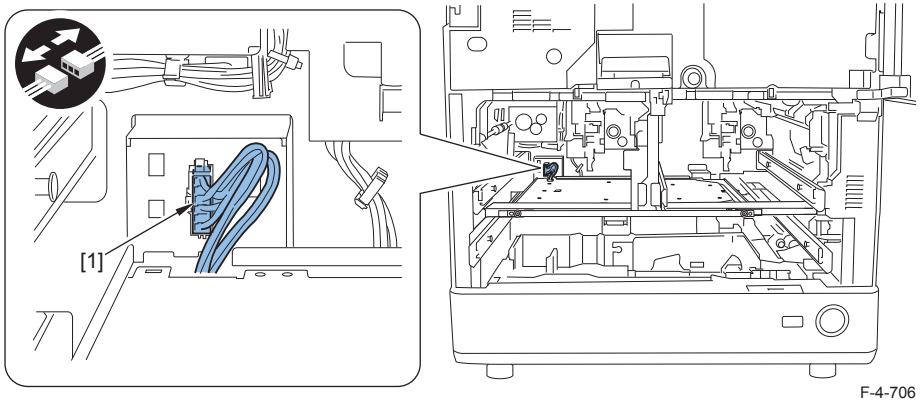
Procedure

1) Remove the Connector Cover [1].
- 1 Claw [2]
- 2 Protrusions [3]



F-4-705

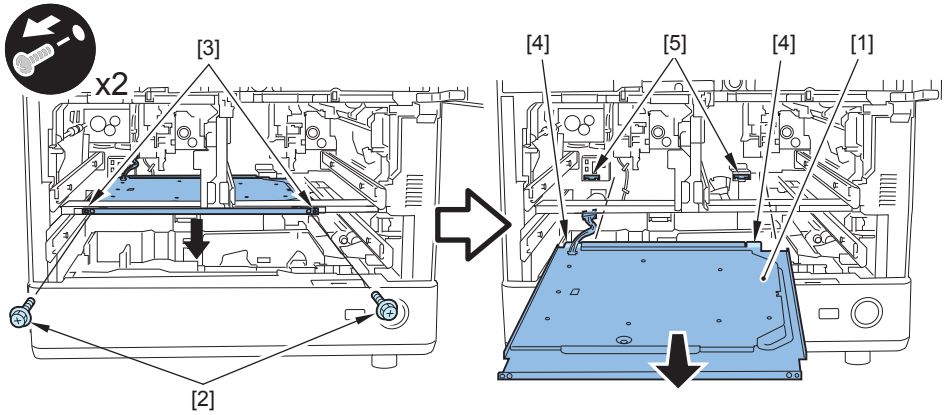
2) Disconnect the connector [1].



F-4-706

3) Remove the Cassette Heater Unit [1].
- 2 Screws [2]
- 2 Bosses [3]
- 2 Protrusions [4]
- 2 Holes [5]

CAUTION:
- At assembly, align the 2 protrusions [4] with the 2 holes [5] of the Rear Plate.
- When securing the Cassette Heater Unit, secure it with the 2 screws [2] with the 2 bosses [3] in the correct positions.



F-4-707

Removing the Delivery Unit

Preparation

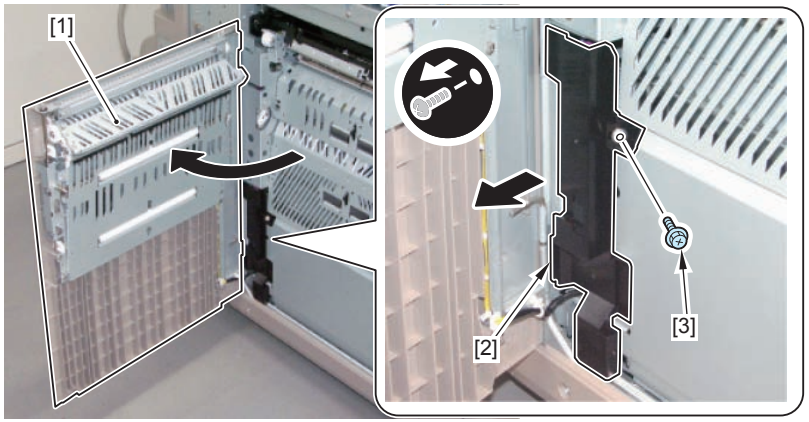
CAUTION:

When the delivery system options are installed, be sure to disconnect them from the host machine.

1) Remove the Upper Left Cover (Refer to page 4-344).
2) Remove the Left Middle Cover (Refer to page 4-345).
3) Remove the Lower Left Cover 3 (Refer to page 4-345).

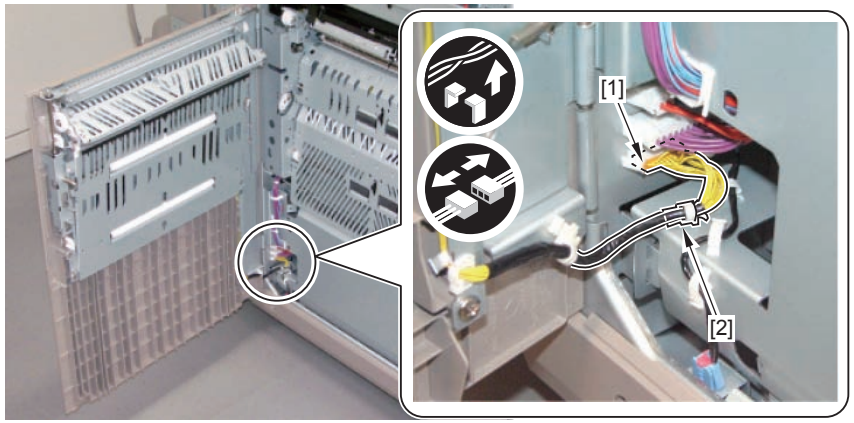
Procedure

1) Open the Delivery Unit [1], and remove the Connector Cover [2].
- 1 Screw [3]



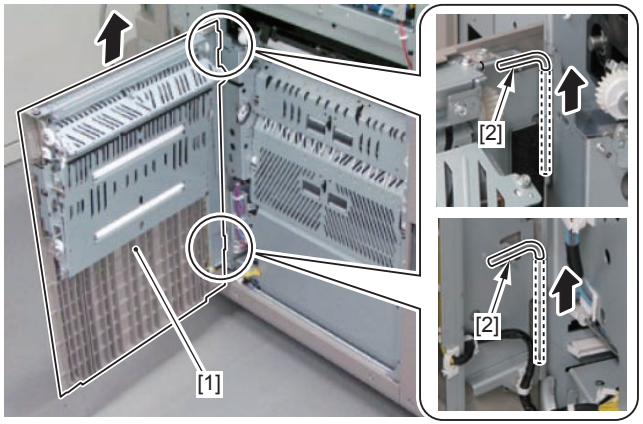
F-4-708

2) Disconnect the connector [1].
- 1 Reuse Band [2]



F-4-709

3) Remove the Delivery Unit [1].
- 2 Pins [2]



F-4-710

Removing the Reverse Unit

Preparation

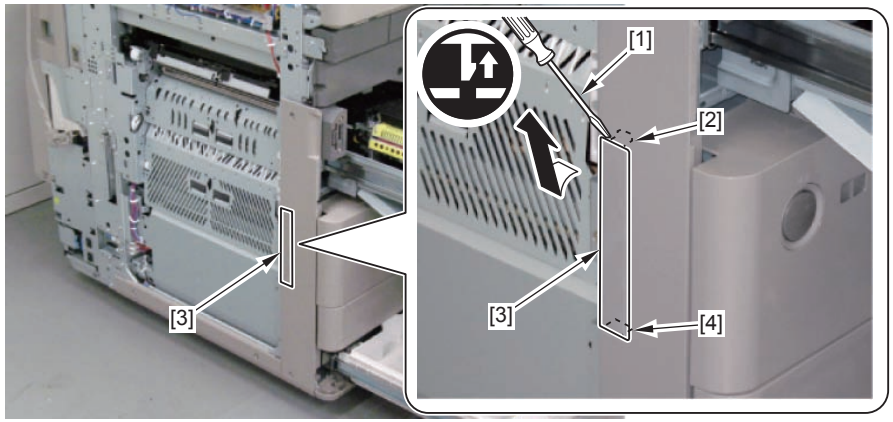
CAUTION:

When the delivery system options are installed, be sure to disconnect them from the host machine.

1) Remove the Upper Left Cover (Refer to page 4-344).
2) Remove the Left Middle Cover (Refer to page 4-345).
3) Remove the Lower Left Cover 3 (Refer to page 4-345).
4) Remove the Delivery Unit (Refer to page 4-330).
5) Pull out the Fixing Feed Unit (Refer to page 4-309).

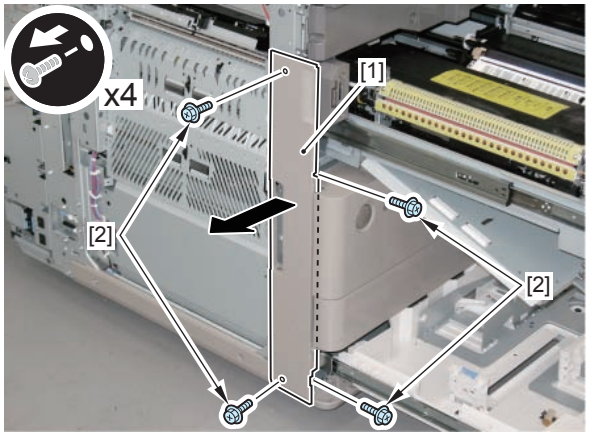
Procedure

1) Pull out the Cassette 4.
2) Use a flat-blade screwdriver [1], etc. to release the claw [2] and remove the Handle Cover [3].
- 1 Hook [4]



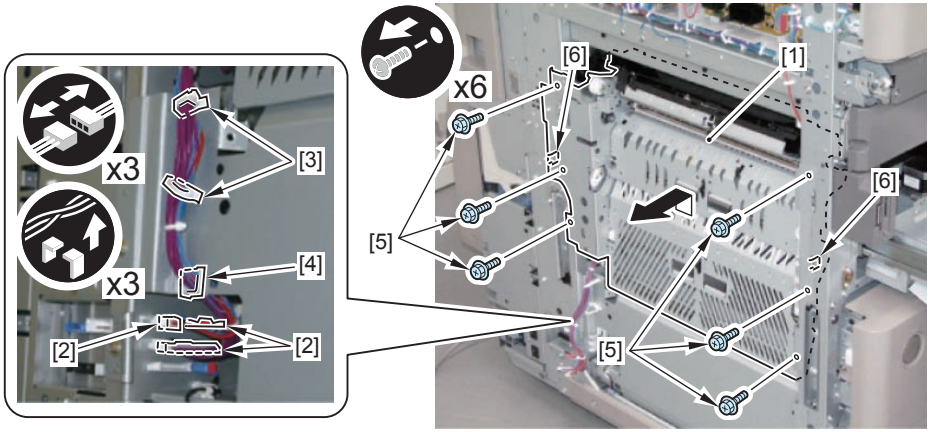
F-4-711

3) Remove the Lower Left Cover [1].
- 4 Screws [2]



F-4-712

4) Store the Cassette 4.
5) Remove the Reverse Unit [1].
- 3 Connectors [2]
- 2 Wire Saddles [3]
- 1 Edge Saddle [4]
- 6 Screws [5]
- 2 Hooks [6]



F-4-713

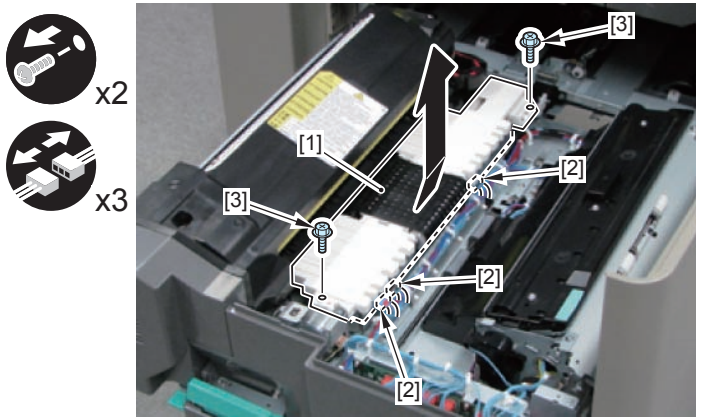
Removing the Pre-fixing Feed Belt Unit

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).

Procedure

1) Remove the Fixing Feed Belt Unit [1].
- 3 Connectors [2]
- 2 Screws (RS) [3]



F-4-714

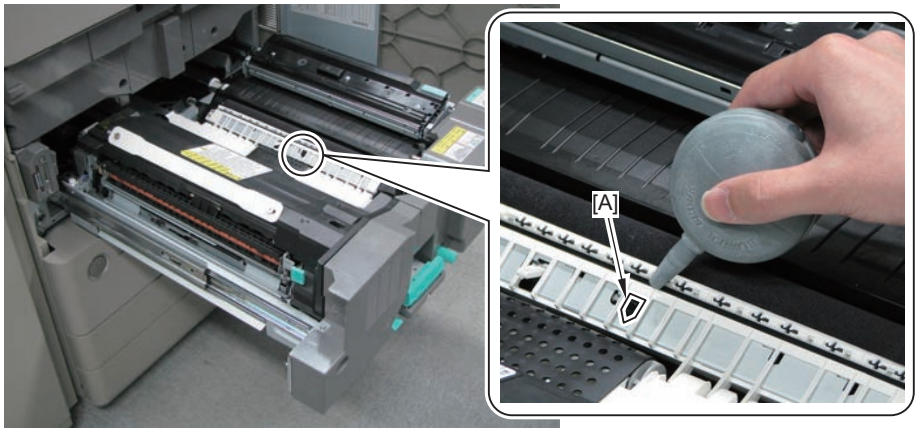
Cleaning the Post-secondary Transfer Sensor and the Pre-fixing Feed Belt

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).

Procedure

1) Use a blower to clean the soiling on the surface of the Post-secondary Transfer Sensor from the hole [A] of the Guide.

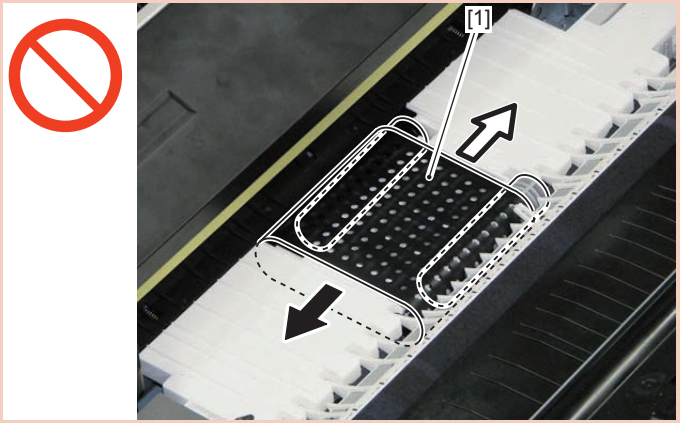


F-4-715

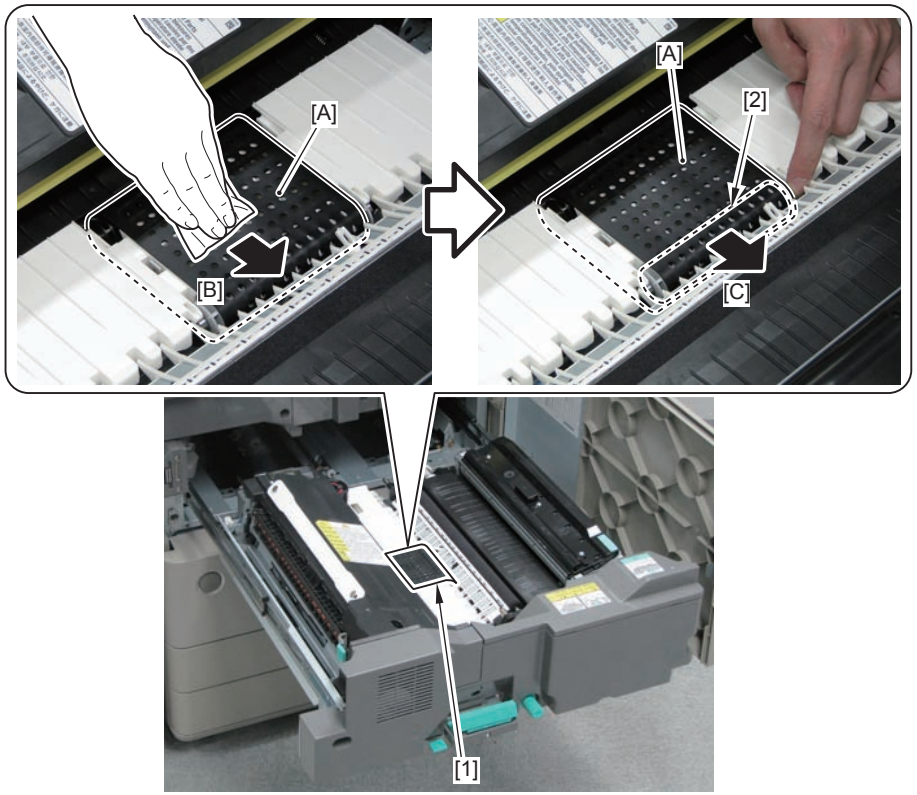
2) Clean the surface [A] of the Fixing Feed Belt [1] with lint-free paper moistened with alcohol.
- Move the lint-free paper in the direction of [B] to wipe it.
- Rotate the Belt Roller [2] in the direction of [C] to clean the whole circumference of the surface [A] of the belt.

CAUTION:

Do not move the Fixing Feed Belt [1] toward the front/rear.



F-4-716



F-4-717

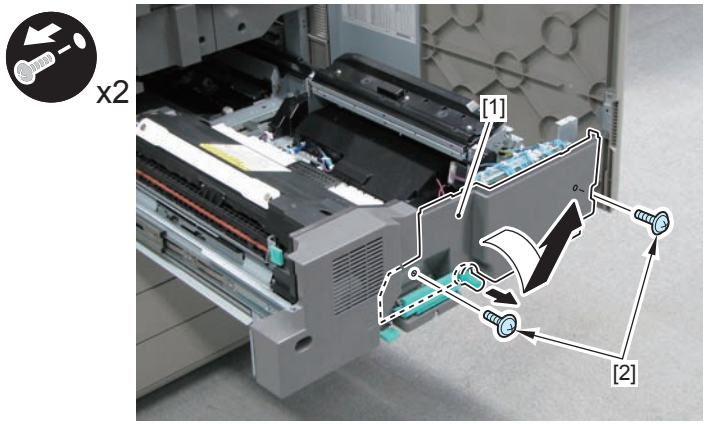
Removing the Registration Unit

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).
3) Remove the Secondary Transfer Outer Unit (Refer to page 4-168).

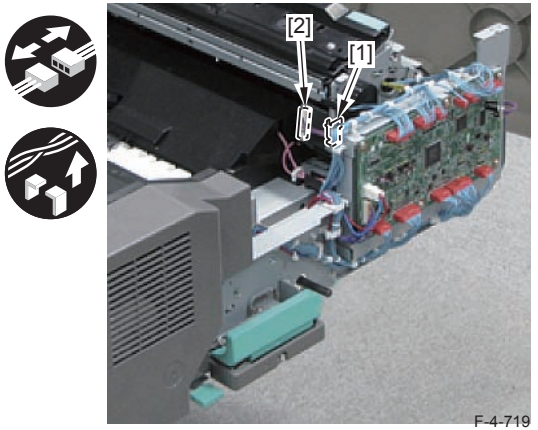
Procedure

1) Remove the Fixing Feed Right Lower Inner Cover [1].
- 2 Screws [2]
- 1 Knob [3]



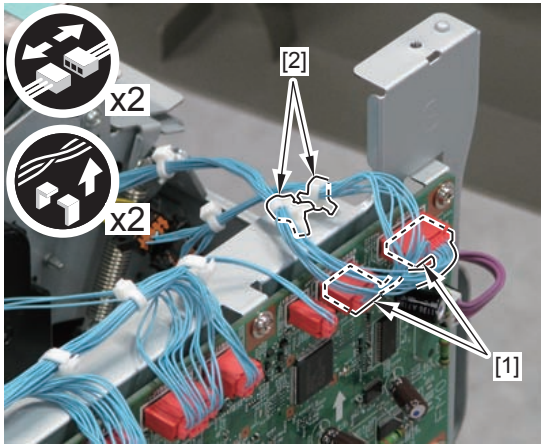
F-4-718

2) Open the Edge Saddle [1], and disconnect the connector [2].



F-4-719

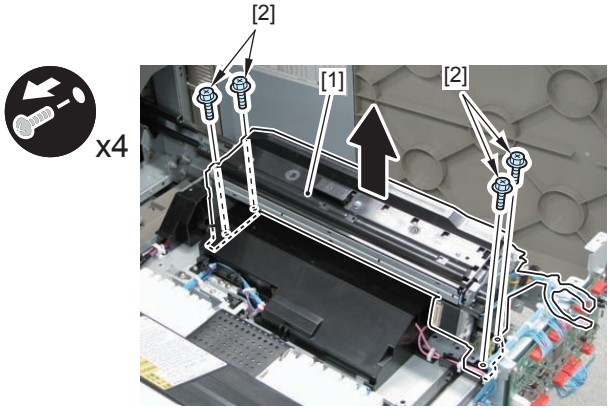
3) Disconnect the 2 connectors [1] and remove the 2 Reuse Bands [2].



F-4-720

4) Remove the Registration Unit [1].

- 4 Screws [2]



F-4-721

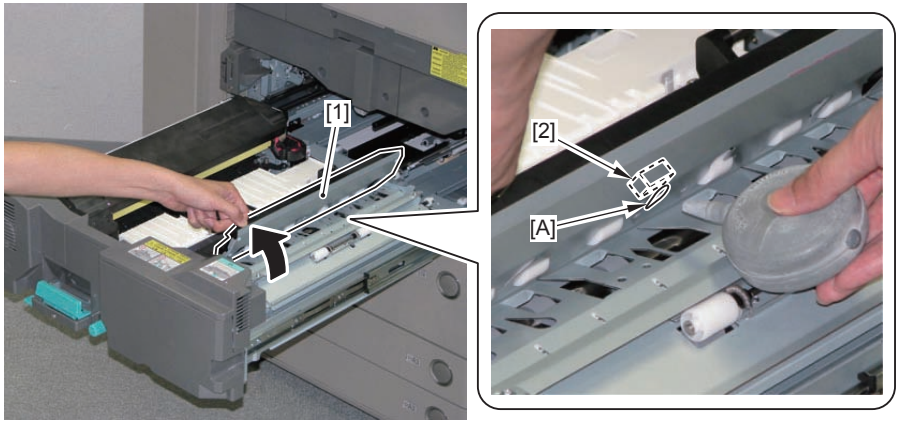
Cleaning the Transparency Sensor/ Registration Sensor / Original Size Sensor

Preparation

1) Open the Front Cover.
2) Pull out the Fixing Feed Unit (Refer to page 4-309).

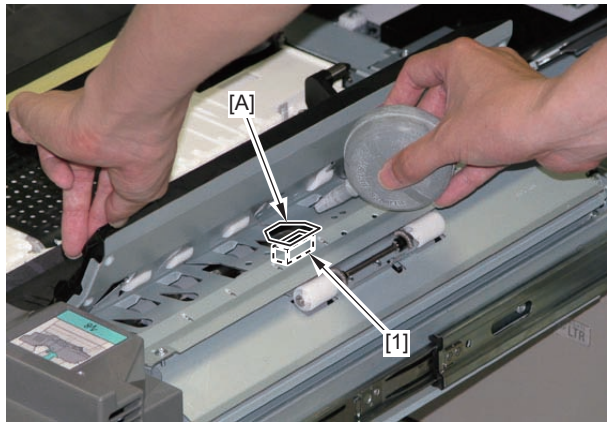
Procedure

1) Open the Upper Cover [1] of the Registration Unit, and direct the edge of the blower toward the hole [A] of the Guide to clean the soiling on the Transparency Sensor [2].



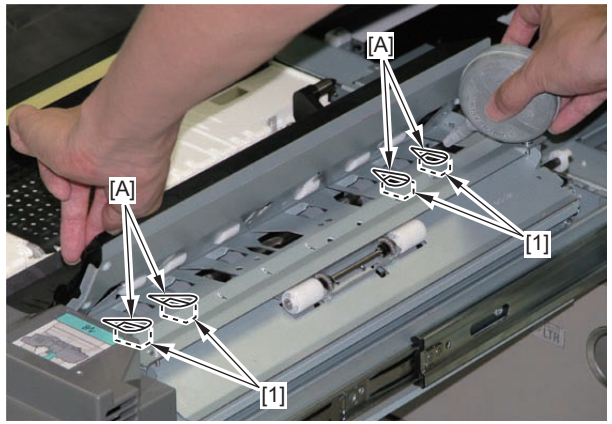
F-4-722

2) Direct the edge of the blower toward the hole [A] of the guide to clean the soiling on the Registration Sensor [1].



F-4-723

3) Direct the edge of the blower toward the 4 holes [A] of the guide to clean the soiling on the Original Size Sensor [1].



F-4-724

Removing the Cassette Size Detection Unit

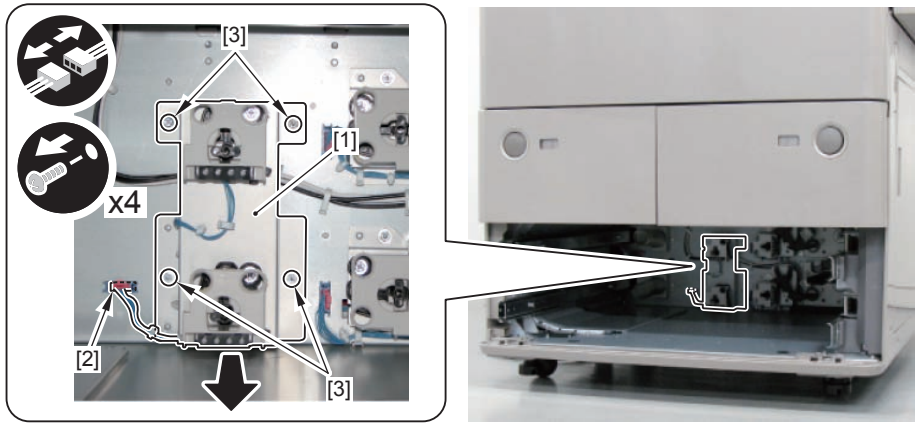
Preparation

1) Pull out the Cassette 3.
2) Remove the Cassette 3 (Refer to page 4-319).
3) Pull out the Cassette 4.
4) Remove the Cassette 4 (Refer to page 4-322).

Procedure

1) Remove the Cassette Size Detection Unit [1].

- 1 Connector [2]
- 4 Screws [3]



F-4-725

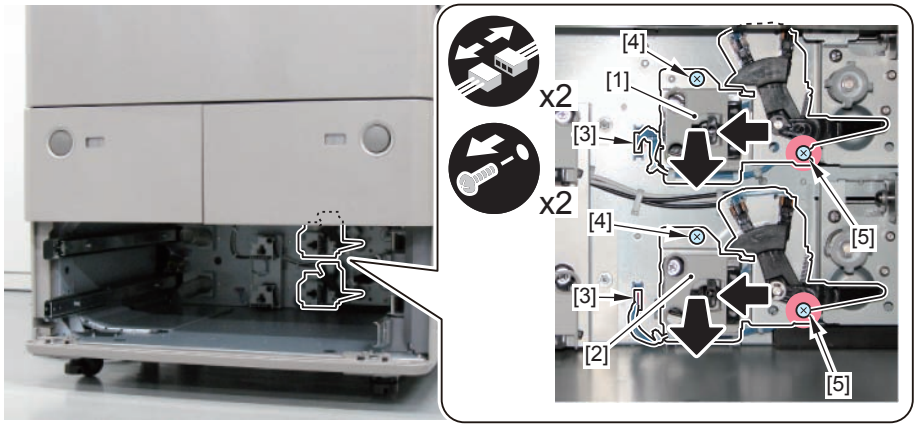
Removing the Cassette 3 and 4 Paper Level Detection Units

Preparation

1) Pull out the Cassette 3.
2) Remove the Cassette 3 (Refer to page 4-319).
3) Pull out the Cassette 4.
4) Remove the Cassette 4 (Refer to page 4-322).

Procedure

1) Remove the Cassette 3 Paper Level Detection Unit [1] and the Cassette 4 Paper Level Detection Unit [2].
- 2 Connectors [3]
- 2 Screws [4] (to remove)
- 2 Screws [5] (to loosen)



F-4-726

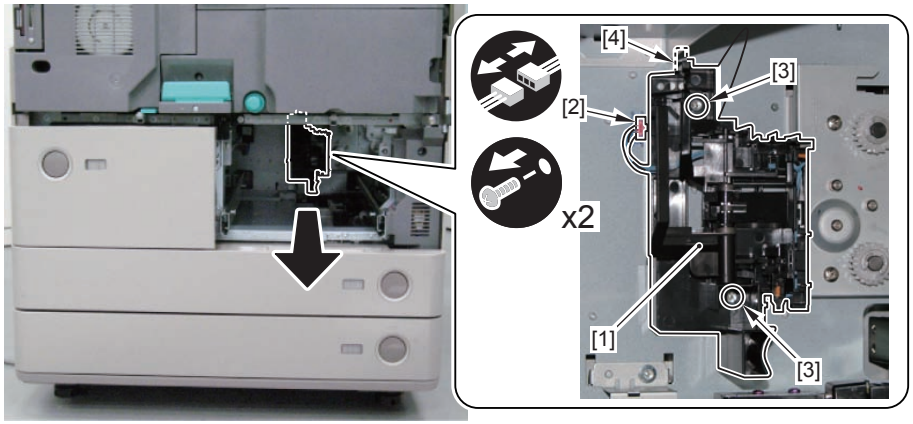
Removing the Right Deck Paper Level Detection Unit

Preparation

1) Open the Front Cover.
2) Pull out the Right Deck.
3) Remove the Right Deck (Refer to page 4-314).
4) Remove the Vertical Path Unit (Refer to page 4-326).
5) Remove the Right Deck Pickup Unit (Refer to page 4-326).

Procedure

1) Remove the Right Deck Paper Level Detection Unit [1].
- 1 Connector [2]
- 2 Screws [3]
- 1 Hook [4]



F-4-727

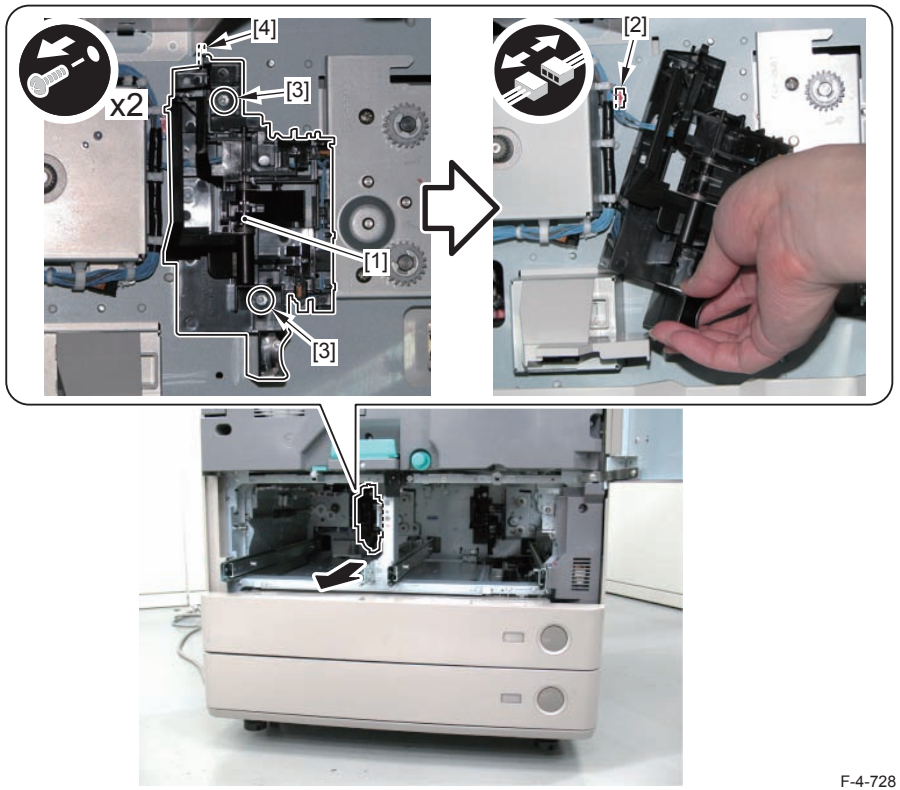
Removing the Left Deck Paper Level Detection Unit

Preparation

1) Open the Front Cover.
2) Pull out the Right Deck.
3) Remove the Right Deck (Refer to page 4-314).
4) Pull out the Left Deck.
5) Remove the Left Deck (Refer to page 4-317).
6) Remove the Left Deck Pickup Unit(Refer to page 4-327).

Procedure

1) Remove the Left Deck Paper Level Detection Unit [1].
- 1 Connector [2]
- 2 Screws [3]
- 1 Hook [4]



F-4-728

External Auxiliary System

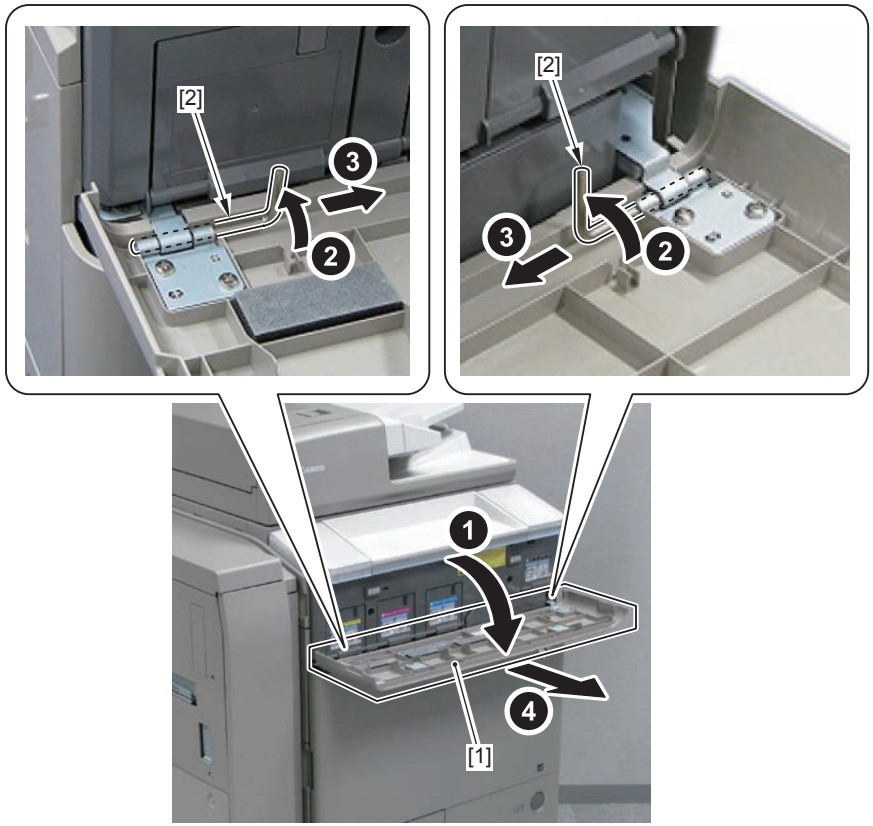
Removing the Upper Front Cover

Preparation

1) Open the Front Cover.

Procedure

1) Remove the Upper Front Cover [1].
- 2 Hinge Pins



F-4-729

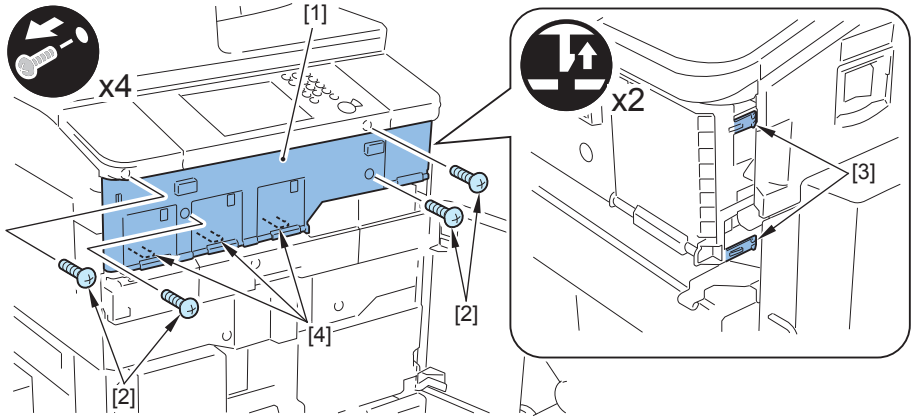
Removing the Toner Container Replacement Unit Inner Cover

Preparation

1) Open the Front Cover.
2) Remove the Upper Front Cover (Refer to page 4-339).

Procedure

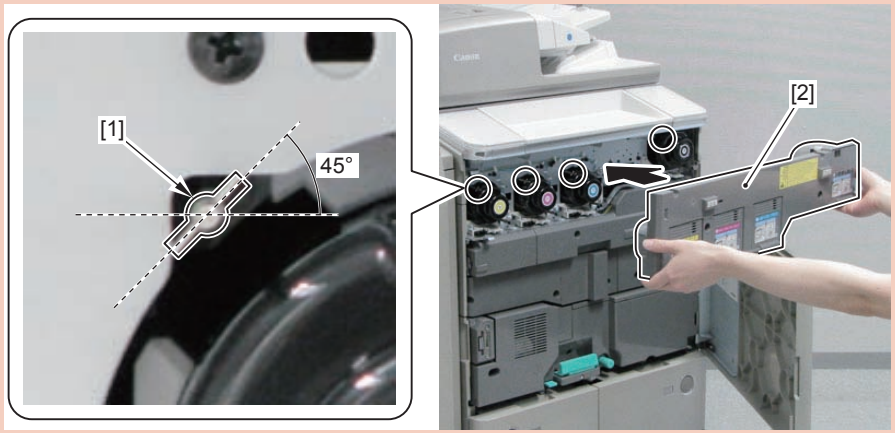
1) Remove the Toner Container Replacement Unit Inner Cover [1].
- 4 Screws [2]
- 2 Claws [3]
- 4 Protrusions [4]



F-4-730

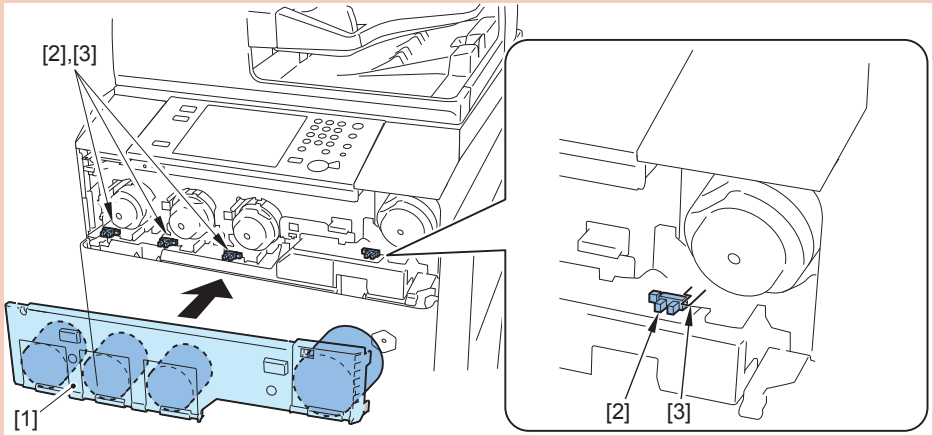
CAUTION:

- When installing, be sure to install the Toner Container Replacement Unit Inner Cover [2] after tilting the 4 Parallel Pins [1] of the Inner Door Link Shaft at an angle of approx. 45 degrees.



F-4-731

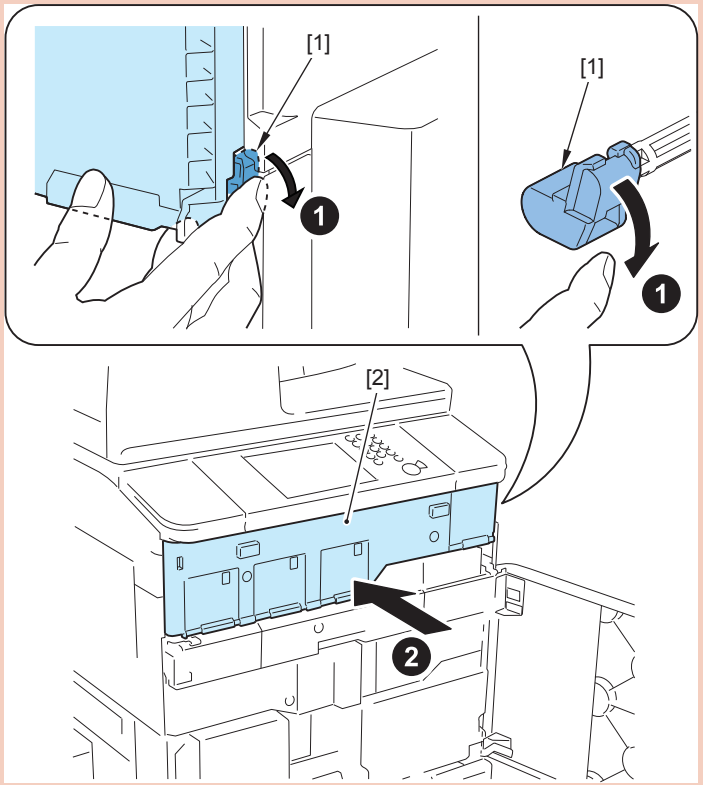
- When installing the Toner Container Replacement Unit Inner Cover [1], be sure to prevent the cover from interfering with and damaging the 4 Toner Insertion Inlet Cover Open/Close Sensors [2] and the 4 Grounding Wires [3] on the upper side of the sensors.



F-4-732

CAUTION:

If the Toner Container (Bk) is not installed, be sure to install the Toner Container Replacement Unit Inner Cover [2] while opening the Lock Lever [1] of the Toner Container (Bk).

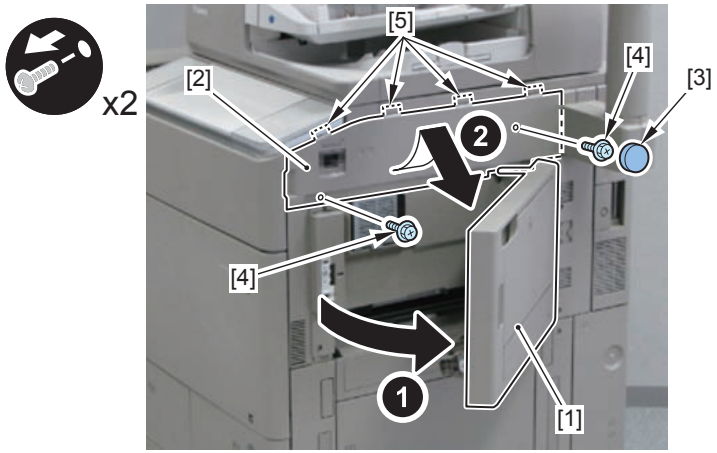


F-4-733

Removing the Upper Right Cover 1

Procedure

1) Open the Multi-purpose Tray Cover [1].
2) Remove the Upper Right Cover 1 [2].
- 1 Rubber Cap [3]
- 2 Screws [4]
- 4 Hooks [5]



F-4-734

Removing the Multi Unit Inner Cover

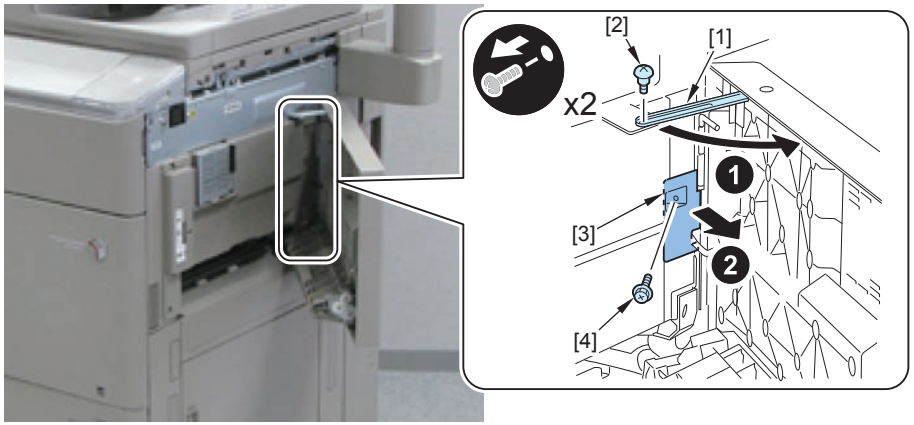
Preparation

1) Remove the Upper Right Cover 1 (Refer to page 4-341).

Procedure

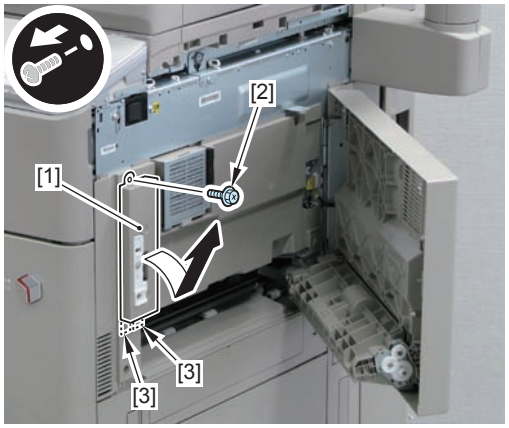
1) Remove the link [1] of the Multi-purpose Tray Cover.
- 1 Stepped Screw [2]

2) Remove the Connector Cover [3].
- 1 Screw [4]



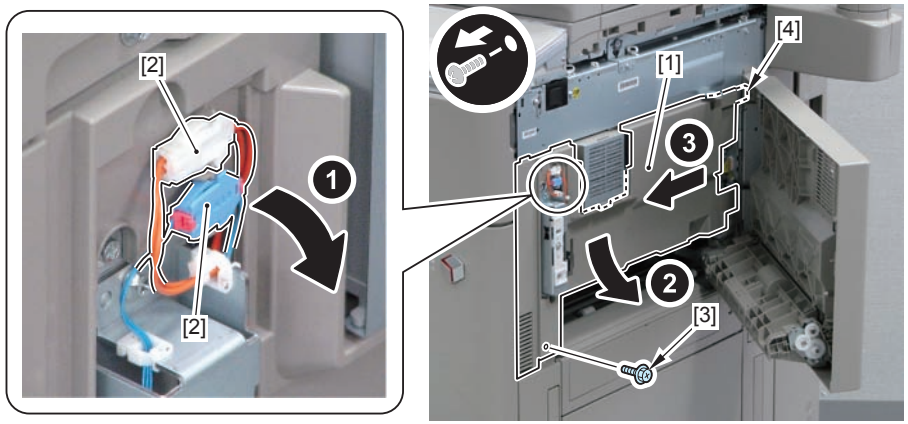
F-4-735

2) Remove the Multi Door Switch Cover [1].
- 1 Screw [2]
- 2 Protrusions [3]



F-4-736

3) Remove the Multi Unit Inner Cover [1].
- 2 Relay Connectors [2]
- 1 Screw [3]
- 1 Protrusion [4]

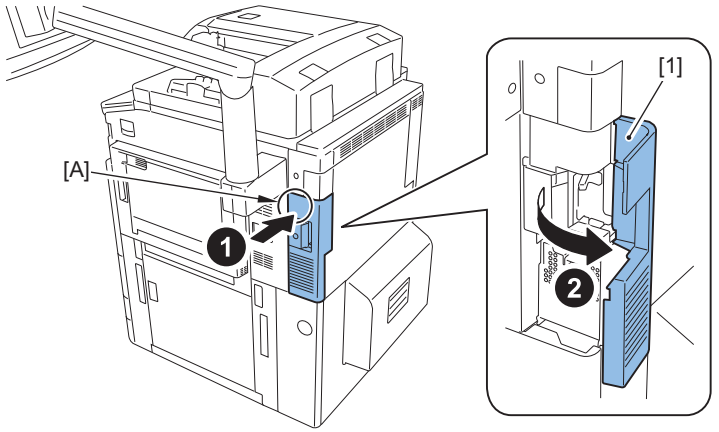


F-4-737

Removing the Box Right Cover

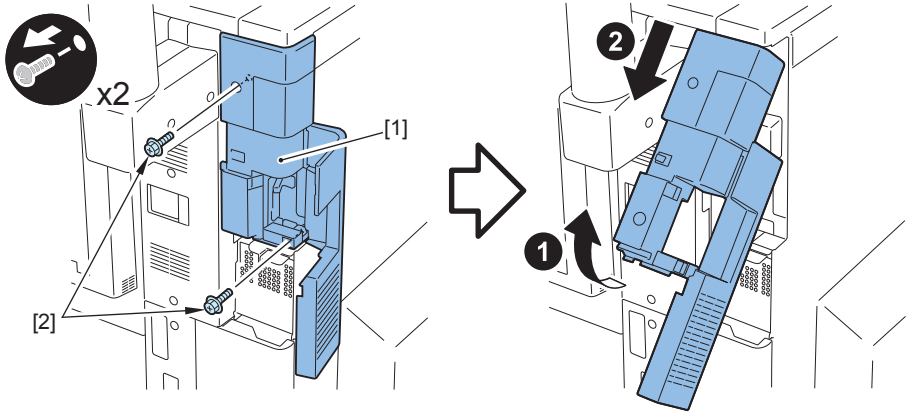
Procedure

1) Push [A] part to open the HDD Cover [1].



F-4-738

2) Remove the Box Right Cover [1].
- 2 Screws [2]

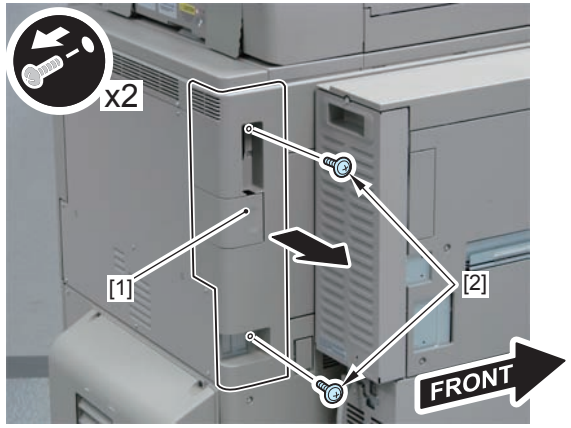


F-4-739

Removing the Box Left Cover

Procedure

1) Remove the Box Left Cover [1].
- 2 Screws [2]



F-4-740

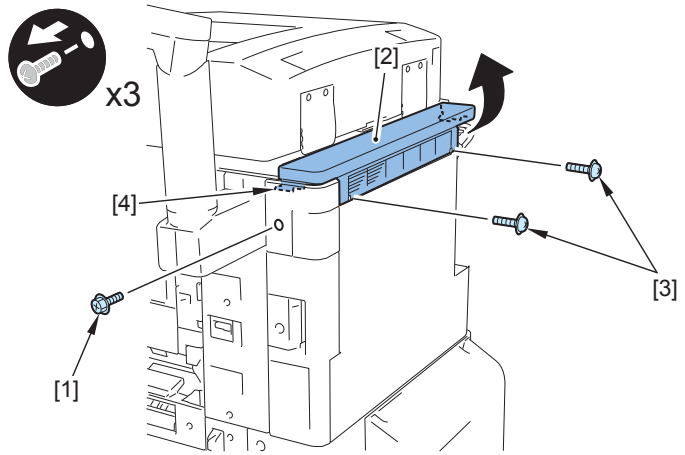
Removing the Box Upper Cover

Preparation

1) Remove the Box Left Cover (Refer to page 4-343).

Procedure

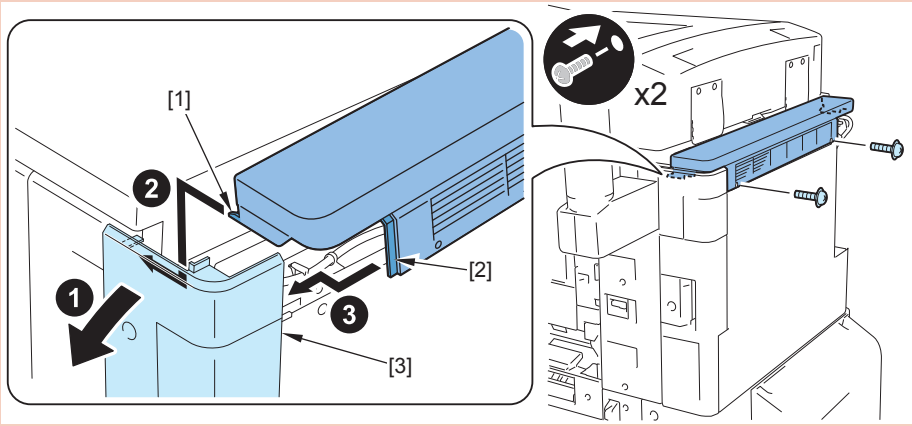
1) Remove the screw [1] of the Box Right Cover, and remove the Box Upper Cover [2].
- 2 Screws [3]
- 1 Protrusion [4]



F-4-741

CAUTION:

When installing, be sure to put the protrusion [1] and the rib [2] of the Box Upper Cover inside the Box Right Cover [3].



F-4-742

Removing the Upper Left Cover

Preparation

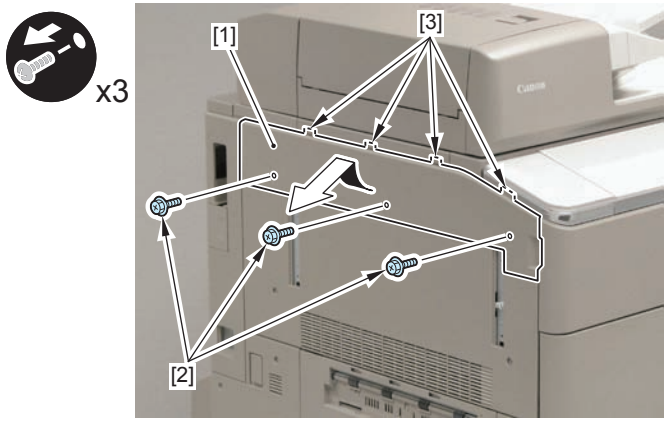
CAUTION:

When the delivery system options are installed, be sure to disconnect them from the host machine.

Procedure

1) Remove the Upper Left Cover [1].

- 3 Screws [2]
- 4 Protrusions [3]



F-4-743

Removing the Left Middle Cover

Preparation

CAUTION:

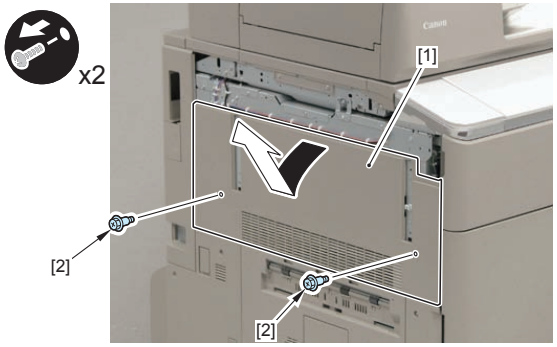
When the delivery system options are installed, be sure to disconnect them from the host machine.

1) Remove the Upper Left Cover (Refer to page 4-344).

Procedure

1) Remove the Left Middle Cover [1].

- 2 Screws [2]



F-4-744

Removing the Lower Left Cover 3

Preparation

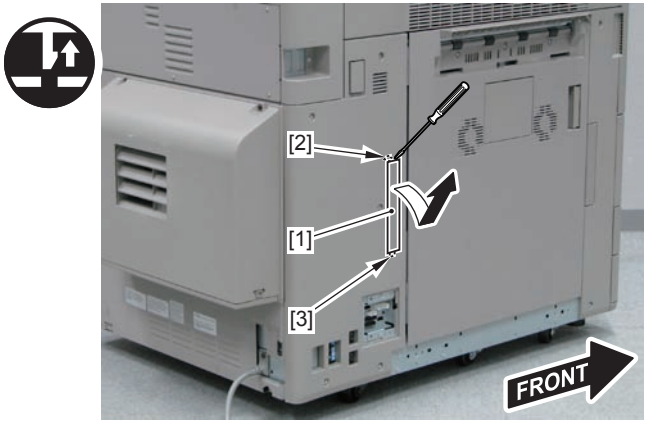
CAUTION:

When the delivery system options are installed, be sure to disconnect them from the host machine.

Procedure

1) Remove the Handle Cover [1].

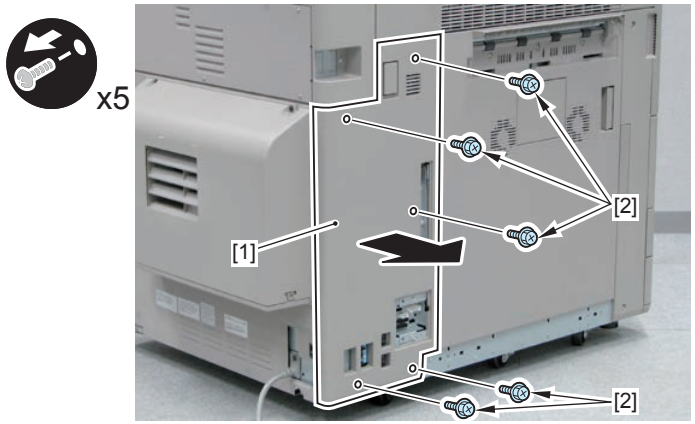
- 1 Claw [2]
- 1 Hook [3]



F-4-745

2) Remove the Lower Left Cover 3 [1].

- 5 Screws [2]

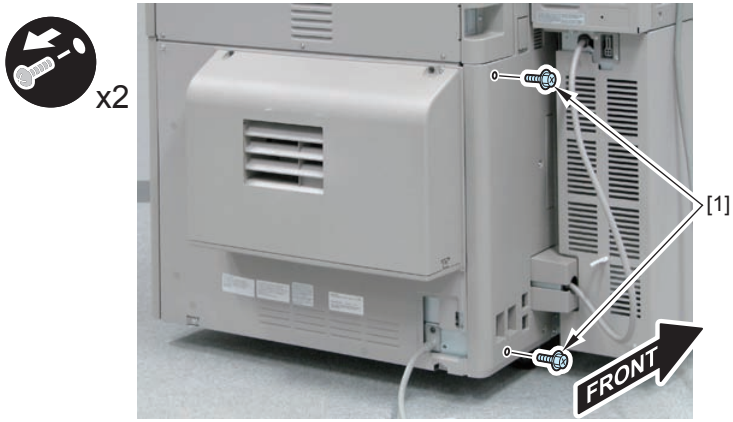


F-4-746

Removing the Lower Rear Cover

Procedure

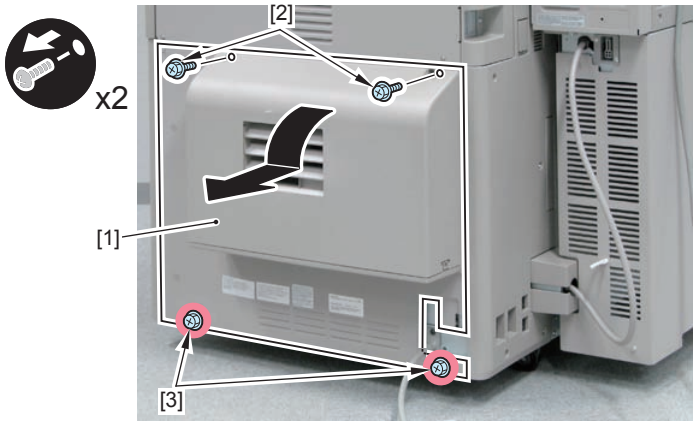
1) Remove the 2 screws [1] of the Lower Left Cover.



F-4-747

2) Remove the Lower Rear Cover [1].

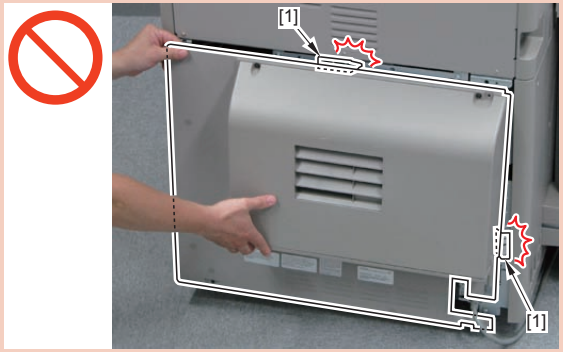
- 2 Screws [2]
- 2 Screws [3] (to loosen)



F-4-748

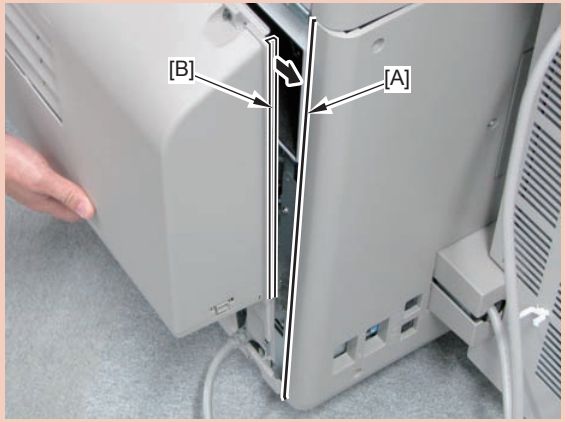
CAUTION:

- When disassembling/assembling, do not deform the Grounding Plate [1].



F-4-749

- When assembling, be sure to insert the edge [A] of the Lower Left Cover in the groove [B] of the Lower Rear Cover.

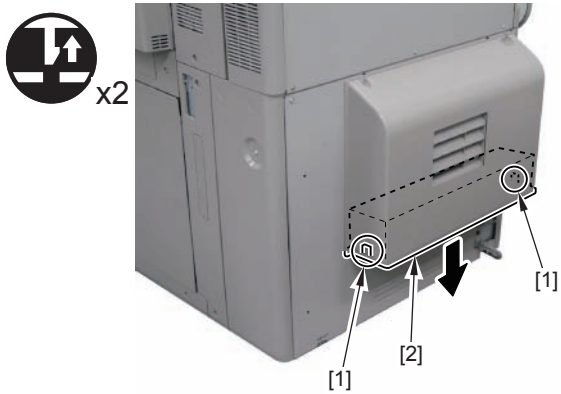


F-4-750

Removing the Fixing Dustproof Filter and the Ozone Filter

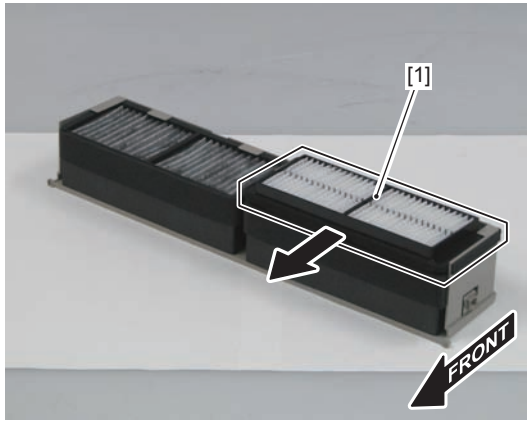
Procedure

1) Remove the Noise Reduction Duct Filter Unit [2] while pressing the 2 claws [2] on both sides.



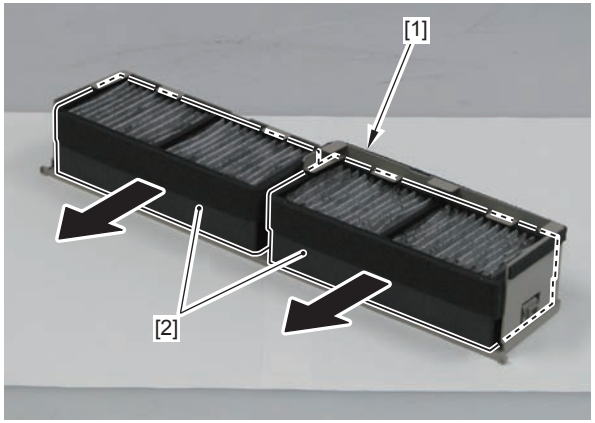
F-4-751

2) Remove the Fixing Dustproof Filter [1].



F-4-752

3) Remove the 2 Ozone Filters [2] from the Filter Case [1].

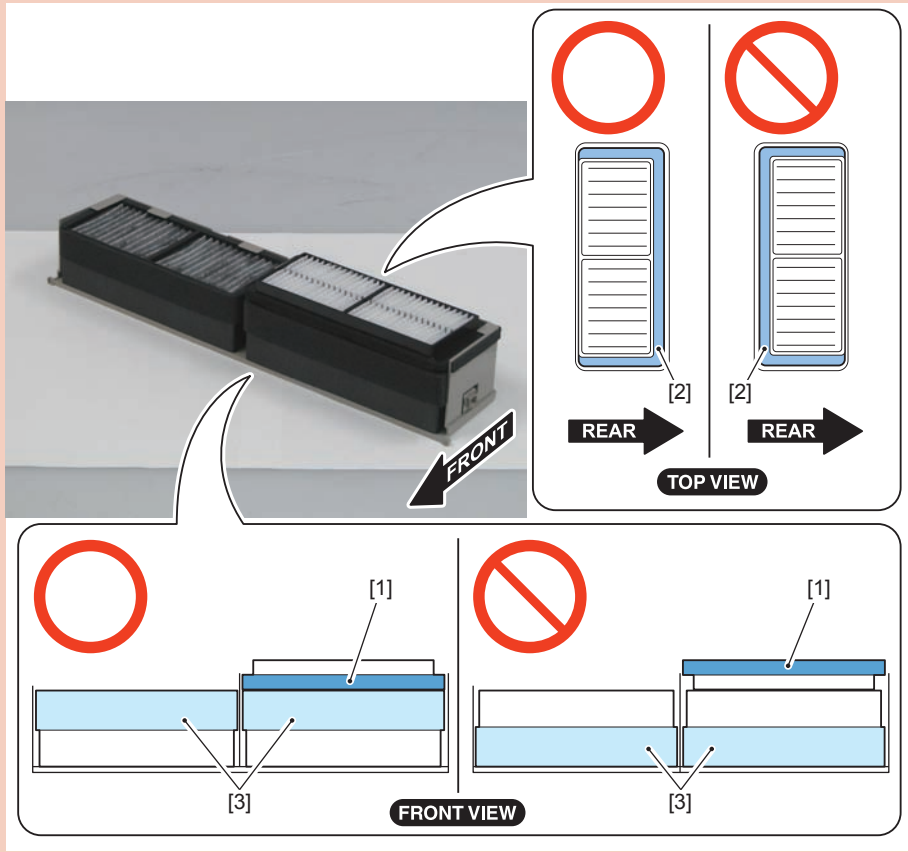


F-4-753

CAUTION:

Be sure to pay attention to the direction of installing the filters.

- Be sure to install the Fixing Dustproof Filter with its sponge [1] on the lower side and the rib [2] on the rear side.
- Be sure to install the Ozone Filter with its sponge [3] on the upper side.



F-4-754

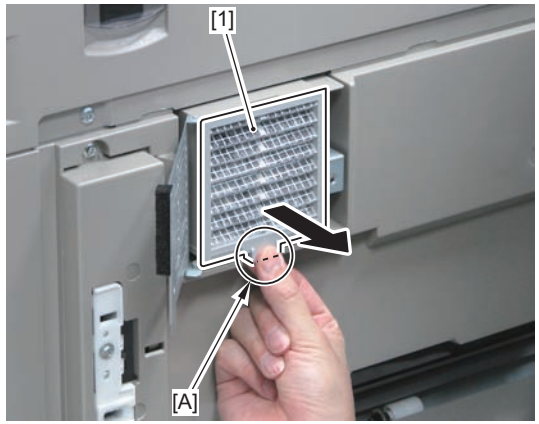
Removing the Primary Charging Dustproof Filter

Procedure

1) Open the Multi-purpose Tray Cover [1].
2) Remove the Filter Cover [2].
- 1 Screw [3]

F-4-755

3) Hold the grip [A] to remove the Primary Charging Dustproof Filter [1].



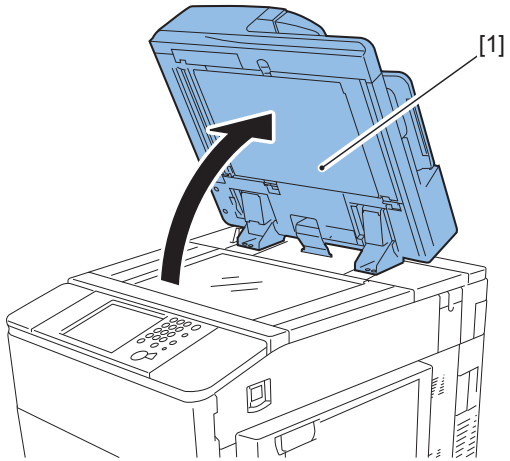
F-4-756

Options

Removing the DADF Unit

Procedure

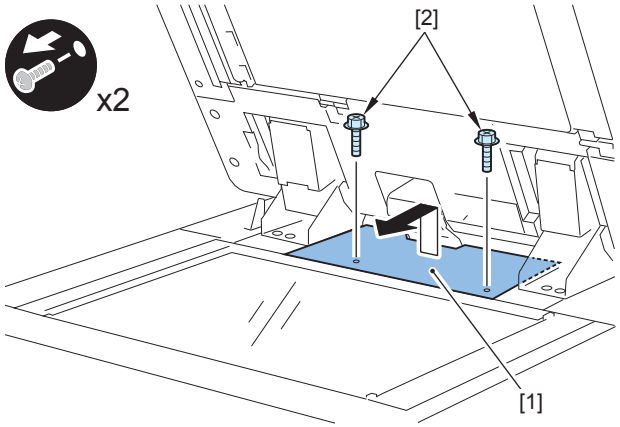
1) Open the DADF [1].



F-4-757

2) Remove the PCB Cover [1].

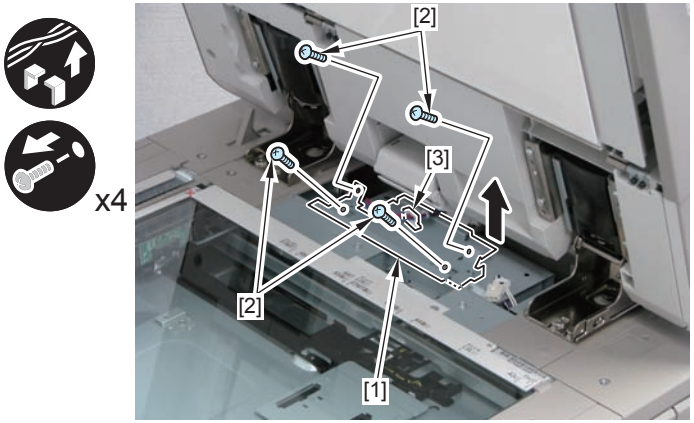
- 2 Screws [2]



F-4-758

3) Remove the Inner Plate [1].

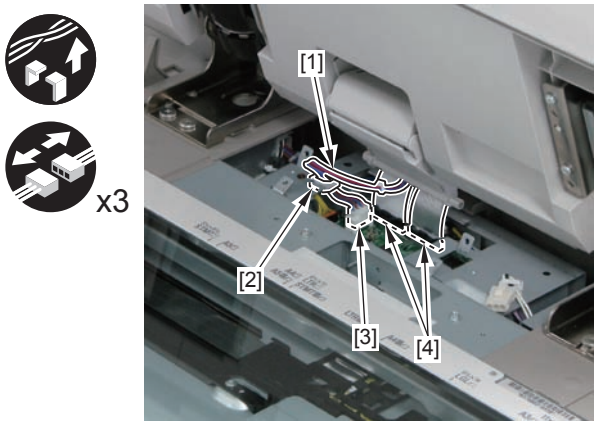
- 4 Screws [2]
- 1 Wire Saddle [3]



F-4-759

4) Disconnect the Power Supply Cable [1].

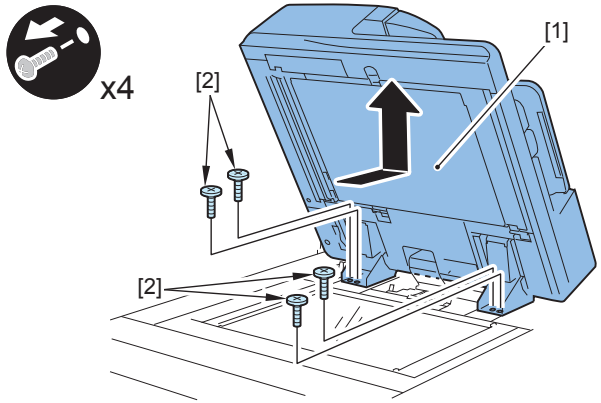
- 1 Edge Saddle [2]
- 1 Connector [3]
- 2 Flat Cables [4]



F-4-760

5) Remove the DADF [1].

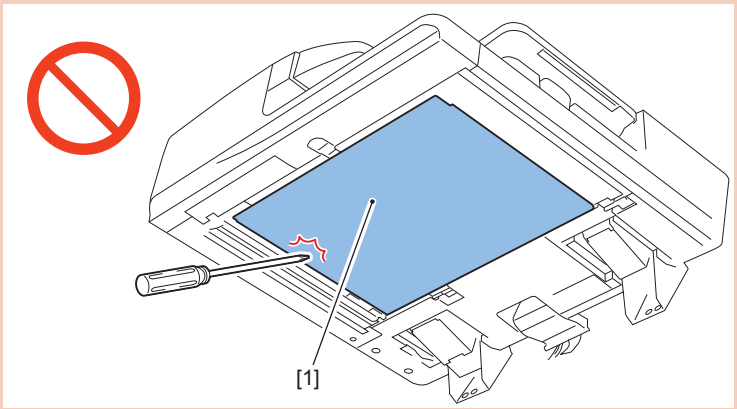
- 4 Screws [2]



F-4-761

CAUTION:

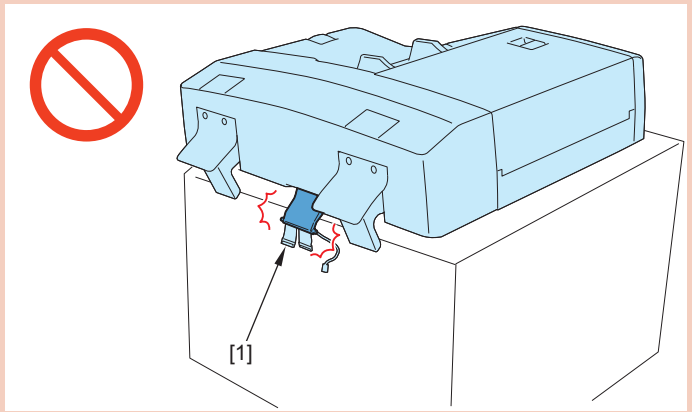
Be careful not to damage the white sheet [1] of the removed DADF.



F-4-762

CAUTION:

Be careful not to damage the Reader Communication Cable Guide [1] of the removed DADF.



F-4-763

Removing the DADF Unit + Reader Unit

Preparation

CAUTION:

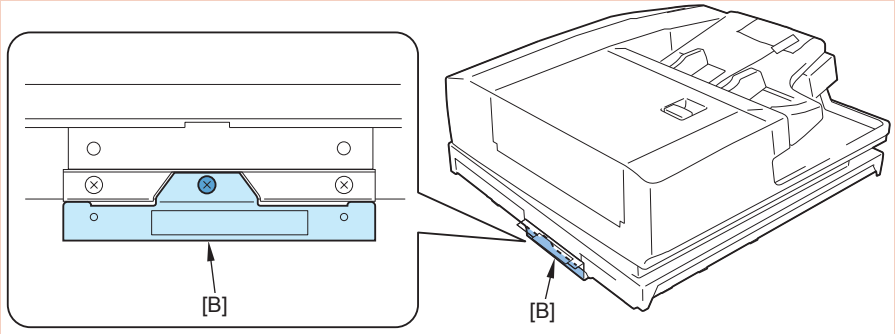
When the delivery system options are installed, be sure to disconnect them from the host machine.

1) Remove the Box Right Cover (Refer to page 4-342).
2) Remove the Box Left Cover (Refer to page 4-343).
3) Remove the Box Upper Cover (Refer to page 4-343).
4) Remove the Upper Right Cover 1 (Refer to page 4-341).
5) Close the Multi-purpose Tray Cover.
6) Remove the Upper Left Cover (Refer to page 4-344).

Procedure

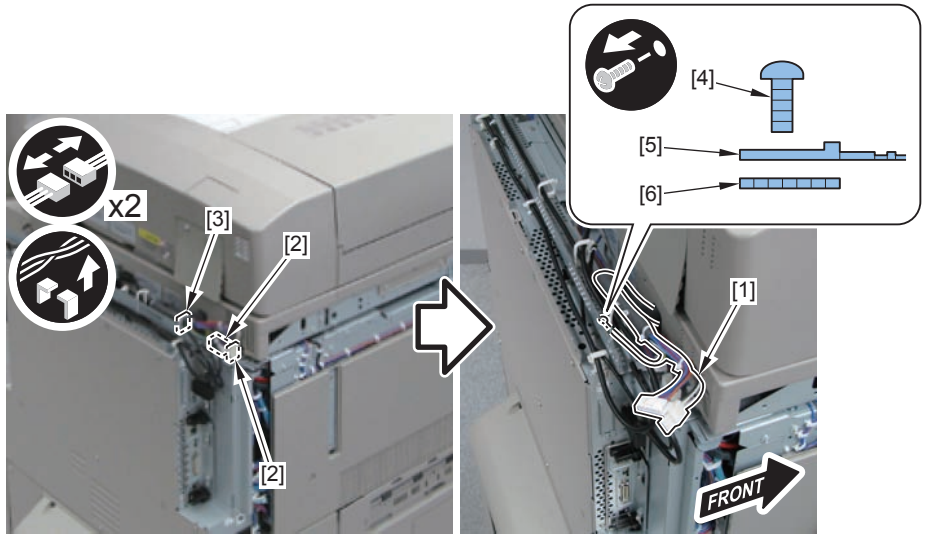
⚠ CAUTION:

- Because the weight of the equipment is approx. 40 kg, be sure to work with 2 or more people when lifting it up/down. Also, be sure to lift the equipment horizontally.
- To prevent deformation of the bottom of the Reader Unit, be sure that the Reader Support Plate [B] is installed when placing it on the floor.



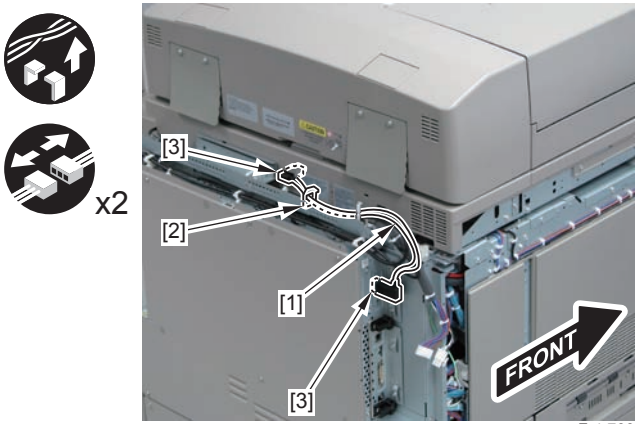
F-4-764

1) Disconnect the Reader Power Supply Cable [1].
- 2 Connectors [2]
- 1 Wire Saddle [3]
- 1 Screw [4]
- 1 Round Shape Terminal [5]
- 1 Toothed Washer [6]



F-4-765

2) Disconnect the Reader Communication Cable [1].
- 1 Wire Saddle [2]
- 2 Connectors [3]



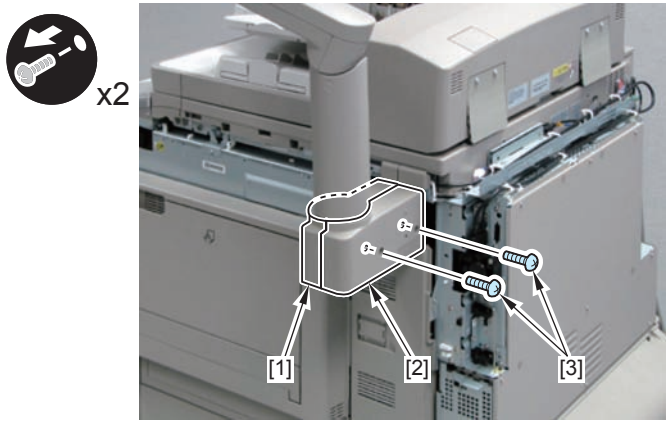
F-4-766

NOTE:
Be sure to refer to the correct steps according to the following instruction since the steps differ between the Upright Control Panel model and the Flat Control Panel model.

- For Upright Control Panel model, refer to steps 3, 4-1, and 5-1.
- For Flat Control Panel model, refer to steps 4-2, and 5-2.

3) Remove the Base Cover (Front) [1] and the Base Cover (Rear) [2] (Upright Control Panel model).

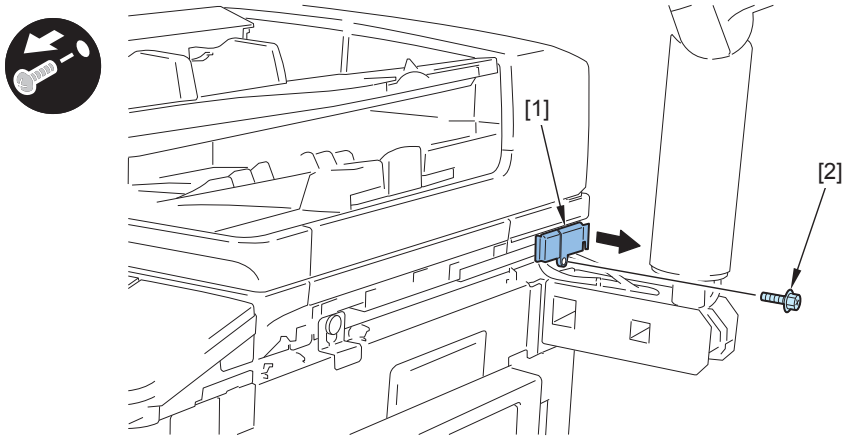
- 2 Screws [3]



F-4-767

4-1) Remove the Upper Right Cover 2 [1] (Upright Control Panel model).

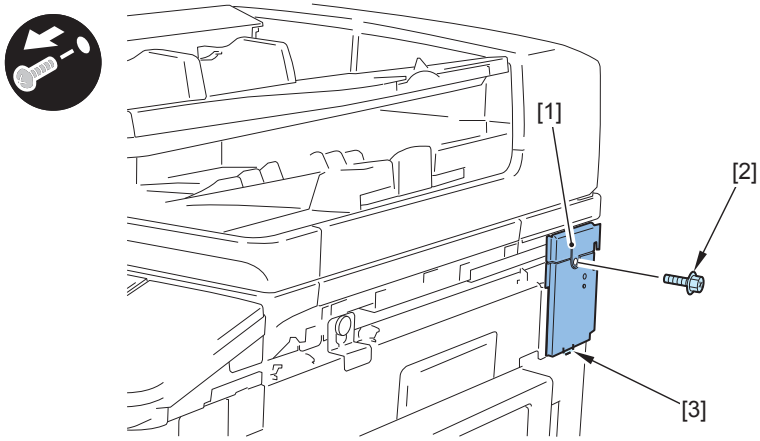
- 1 Screw [2]



F-4-768

4-2) Remove the Upper Right Cover 2 [1] (Flat Control Panel model).

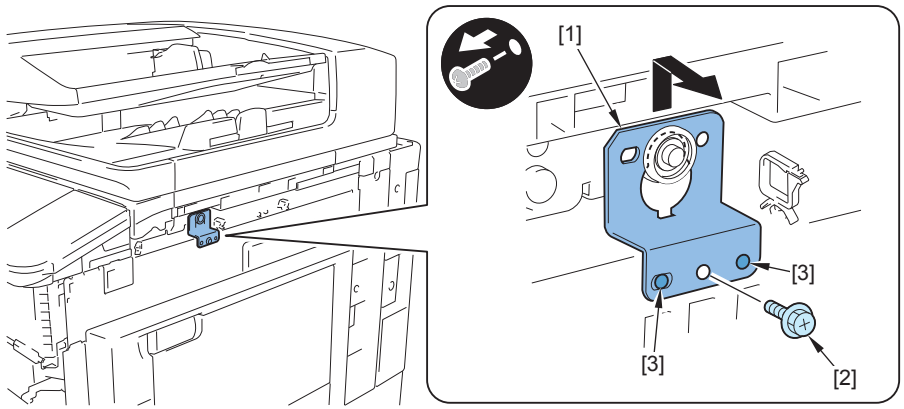
- 1 Screw [2]
- 1 Protrusion [3]



F-4-769

5-1) Remove the Reader Fixation Plate (R) [1] (Upright Control Panel model).

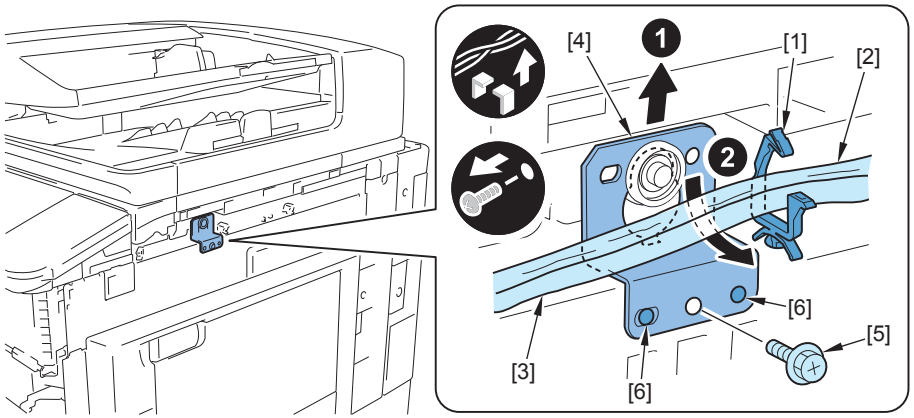
- 1 Screw [2]
- 2 Bosses [3]



F-4-770

5-2) Open the Wire Saddle [1], lift the Control Panel Cable [2] and the Power Supply Cable [3], and then remove the Reader Fixation Plate (R) [4] (Flat Control Panel model).

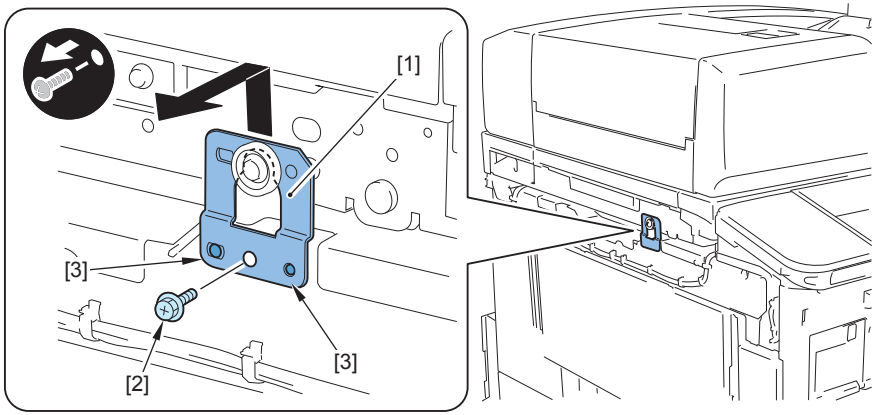
- 1 Screw [5]
- 2 Bosses [6]



F-4-771

6) Remove the Reader Fixation Plate (L) [1].

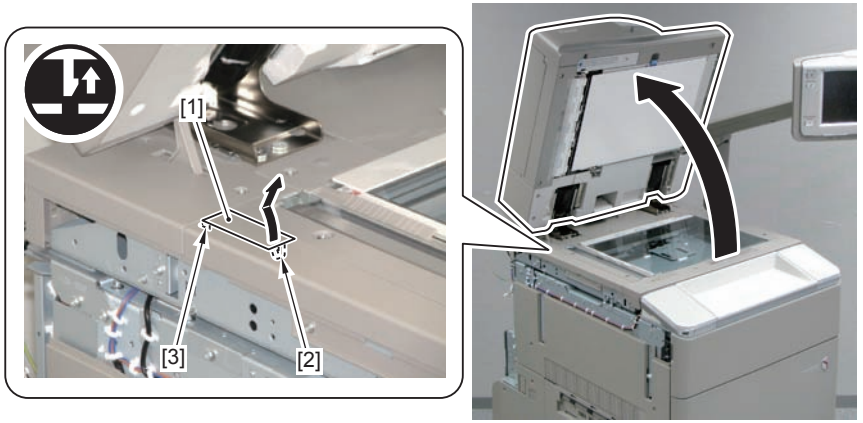
- 1 Screw [2]
- 2 Bosses [3]



F-4-772

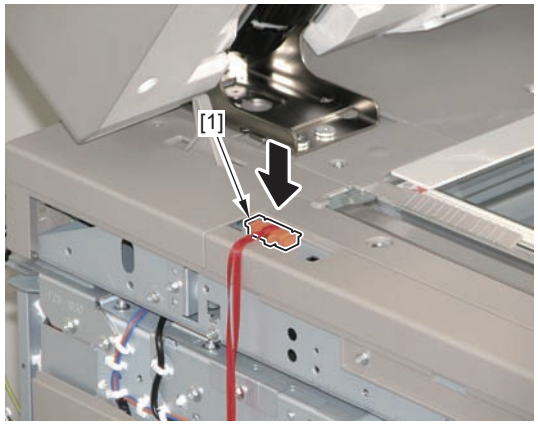
7) Open the DADF, and remove the Left Upper Small Cover.

- 1 Claw [2]
- 1 Hook [3]



F-4-773

8) Install the Scanner System Fixation Tool [1] that has been kept in a safe place since installation.

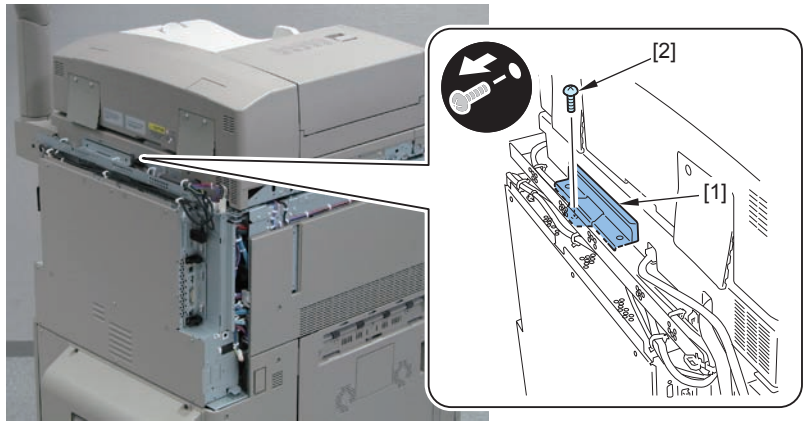


F-4-774

9) Close the DADF.

10) Remove the Reader Support Plate [1].

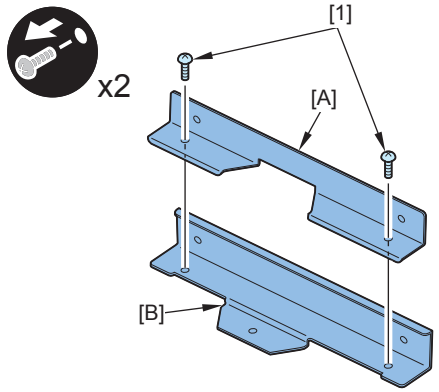
- 1 Screw [2]



F-4-775

11) Remove the Reader Support Plate [A] from the Reader Support Plate [B].

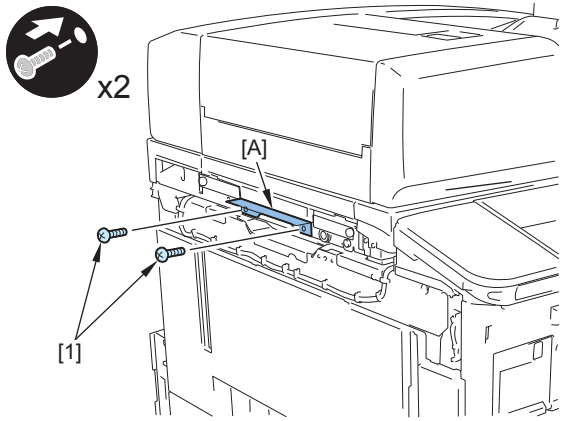
- 2 Screws [1]



F-4-776

12) Install the Reader Support Plate [A].

- 2 Screws [1]

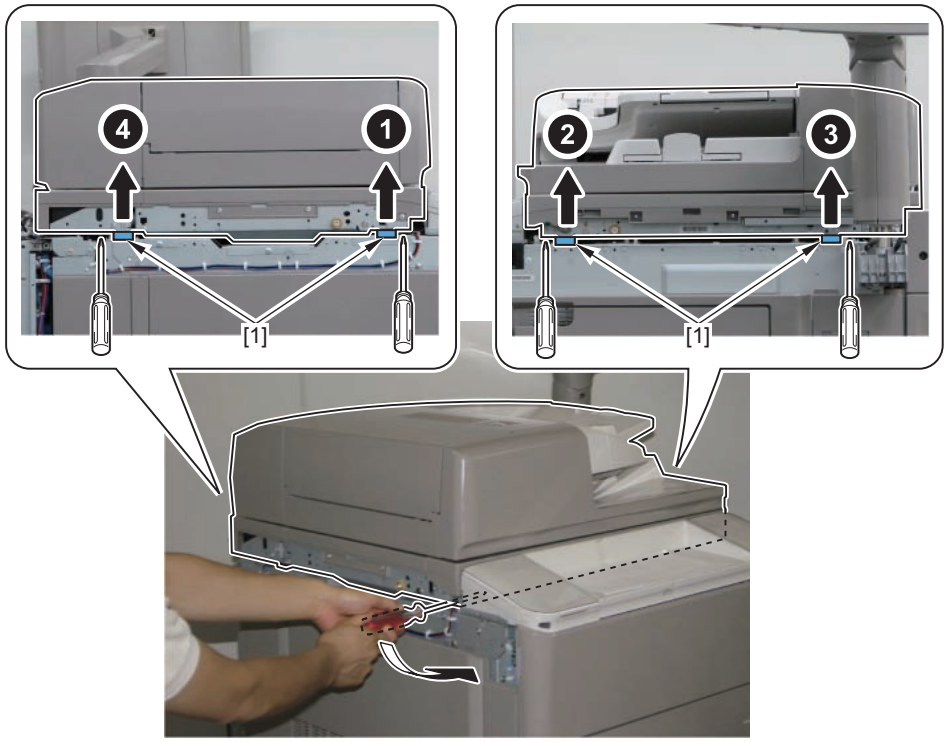


F-4-777

13) Lift up the DADF + Reader Unit slightly with a screwdriver by applying the principle of leverage, and remove the 4 Rubber Plates [1] from the host machine (printer).

⚠ CAUTION:

- When attempting to lift up the DADF + Reader Unit fully without first removing the 4 Rubber Plates, force is generated when the Rubber Plates are removed, which may cause the DADF + Reader Unit to fall.
- To make the work easier, remove the Rubber Plates in the front side first.
- Do not use a long screwdriver. Otherwise, it may be bent.



F-4-778

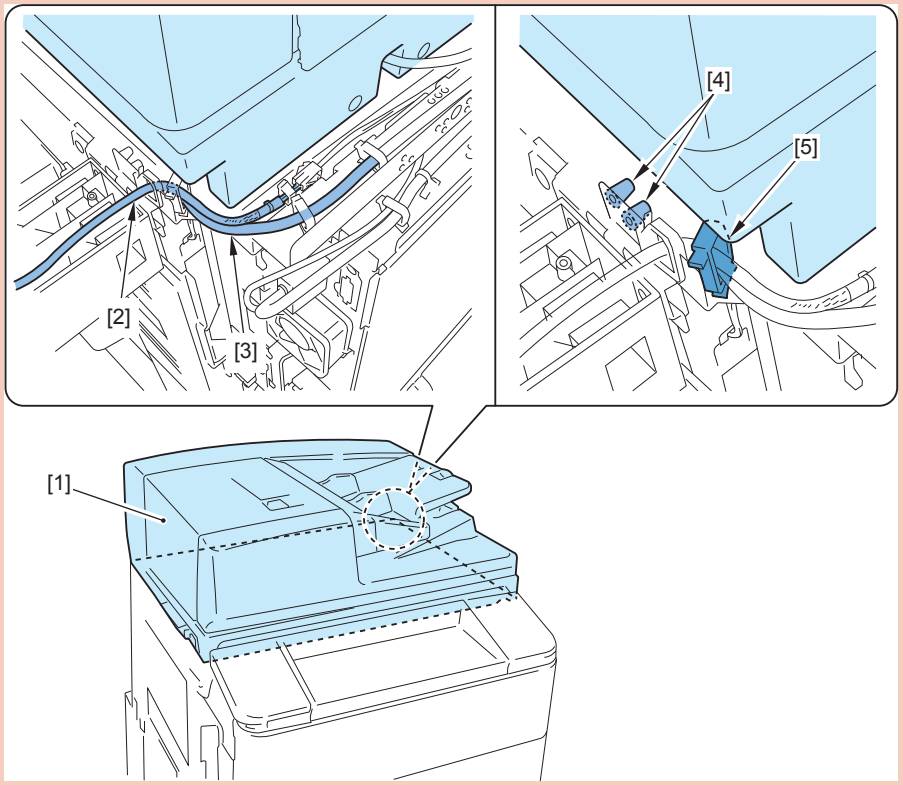
⚠ CAUTION:

- Because the weight of the equipment is approx. 40 kg, be sure to work with 2 or more people when lifting it up/down. Also, be sure to lift the equipment horizontally.
- When lifting up/down the DADF + Reader Unit, be careful not to get the cables and fingers caught.

CAUTION:

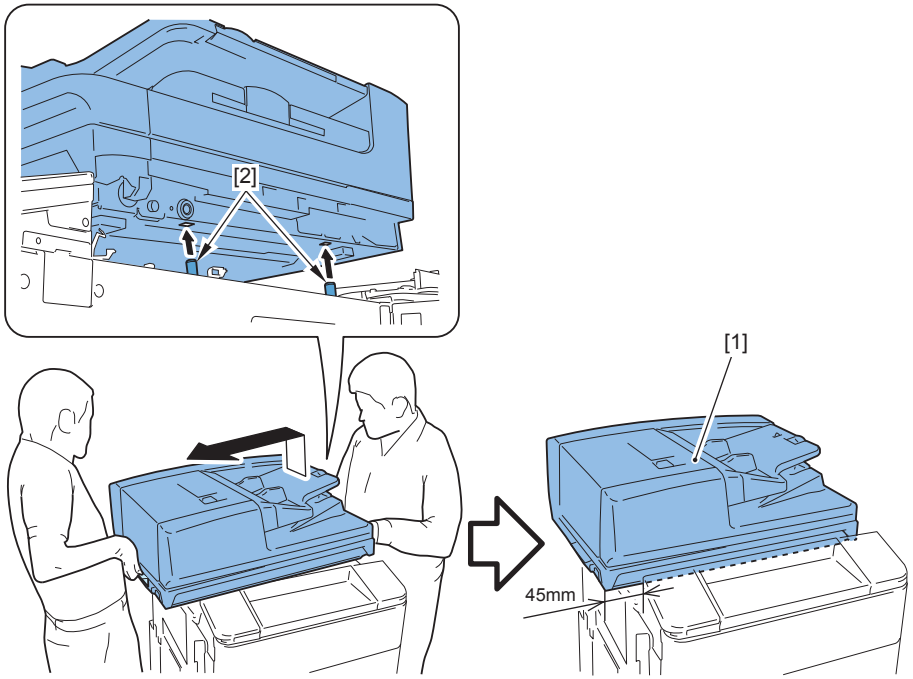
Points to note when installing/removing the DADF + Reader Unit

- Do not trap the Reader Power Supply Cable [2] and the Reader Communication Cable [3].
- Be careful not to break the 2 Dust Collection Cups [4].
- Be careful not to break the Wire Saddle [5].



F-4-779

14) Remove the DADF + Reader Unit [1] from the 2 pins [2] of the host machine, and place it temporarily while being shifted for approx. 45 mm toward left side of the host machine.



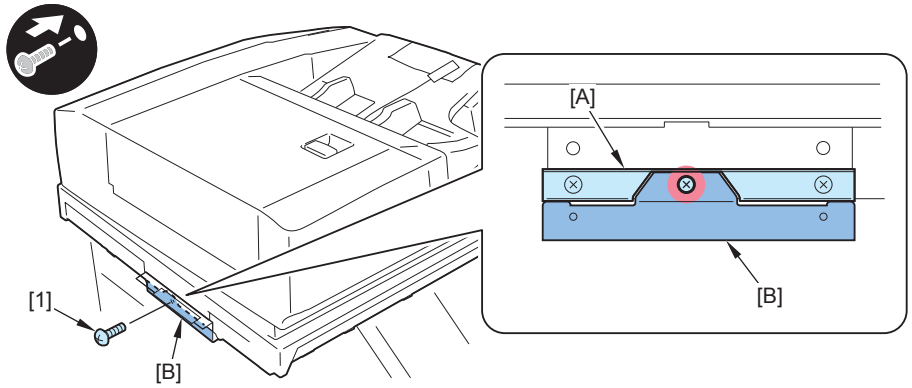
F-4-780

15) Install the Reader Support Plate [B].

- 1 Screw [1]

CAUTION:

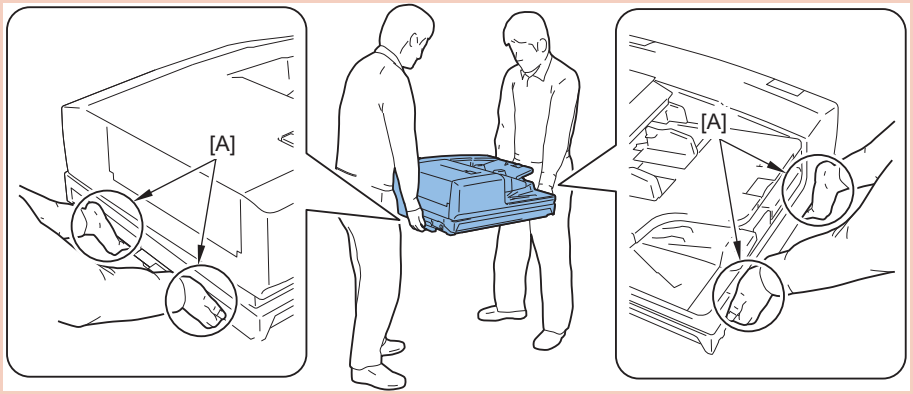
When lifting down the DADF + Reader Unit from the host machine, be sure to install the Reader Support Plate [B] to the DADF + Reader Unit before lifting it down. This is to prevent deformation of the bottom of the Reader Unit.



F-4-781

CAUTION:

When lifting up/down the DADF + Reader Unit, be sure to hold the position [A] shown in the figure.

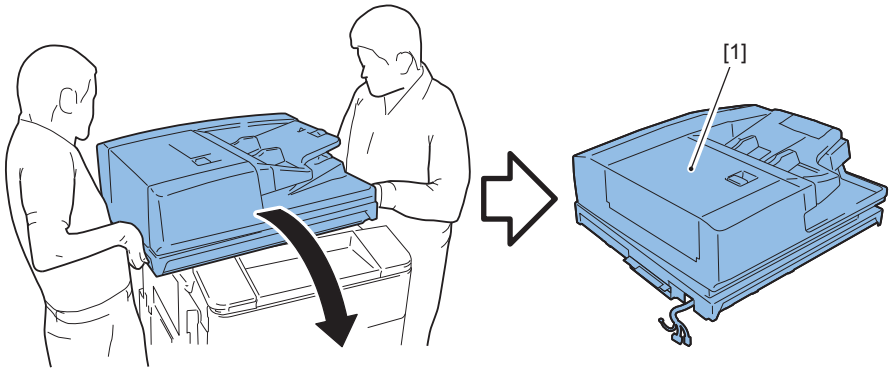


F-4-782

16) Lift the DADF + Reader Unit [1] with 2 or more people, and remove it by passing over the front side of the host machine.

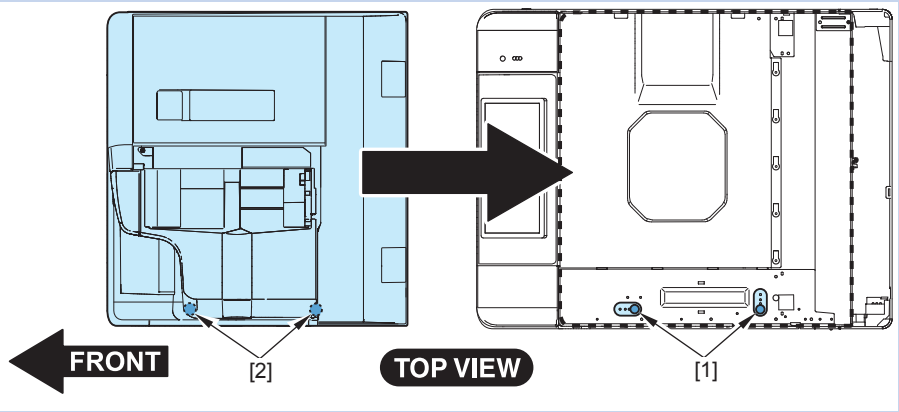
CAUTION:

Because the center of gravity of the equipment is at the rear, be careful not to drop it when lifting it.



F-4-783

NOTE:
Installation to the host machine
Place the DADF + Reader Unit temporarily on the floor with the 2 pins [1] of the host machine and the 2 holes of the DADF + Reader Unit located as shown in the figure. Then, place the DADF + Reader Unit on the host machine from the front side of the machine.



F-4-784

Removing the the Printer Cover

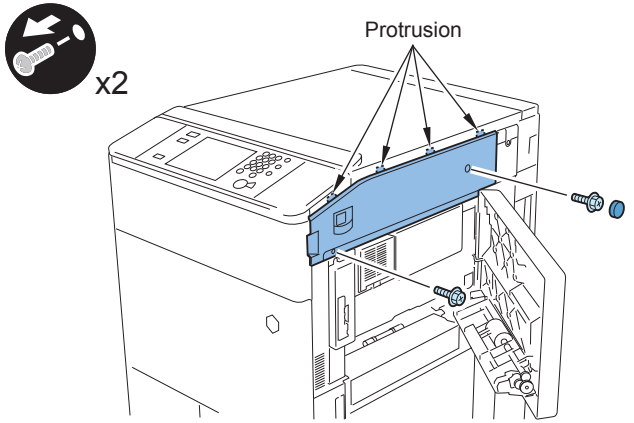
Preparation

CAUTION:

When the delivery system options are installed, be sure to disconnect them from the host machine.

Procedure

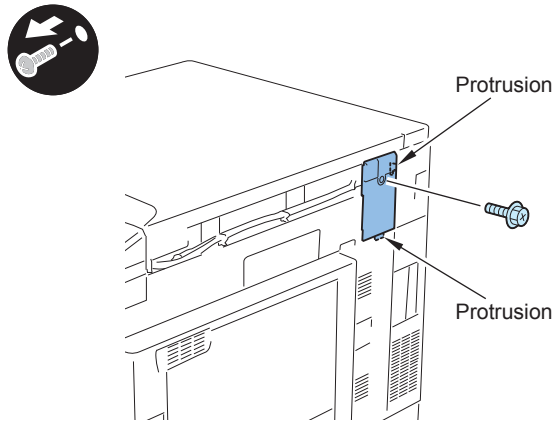
1) Open the Multi-purpose Tray Cover.
2) Remove the Right Upper Cover 1.
- 1 Rubber Cap
- 2 Screws
- 4 Protrusions



F-4-785

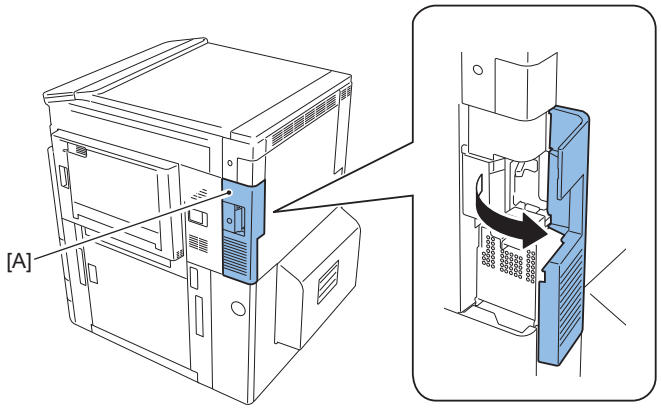
3) Close the Multi-purp.

4) Remove the Right Upper Cover 2.
- 1 Screw
- 2 Protrusions



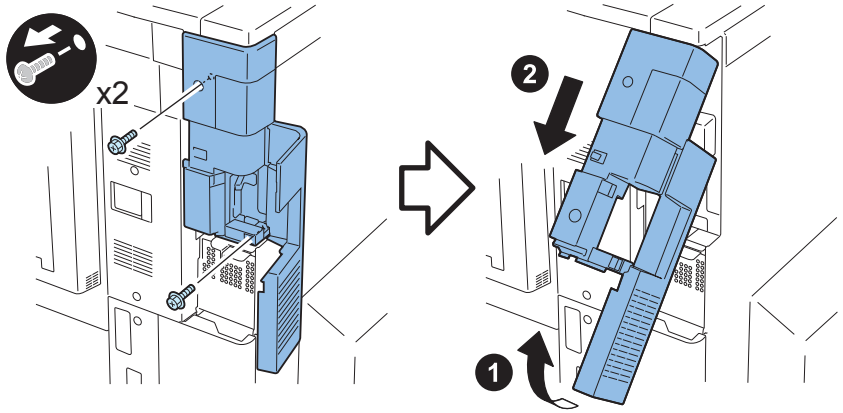
F-4-786

5) Push [A] area to open the HDD Cover.



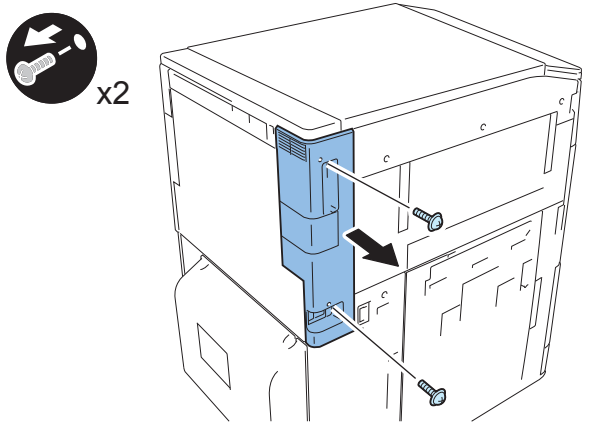
F-4-787

6) Remove the Main Controller Right Cover Unit.
- 2 Screws



F-4-788

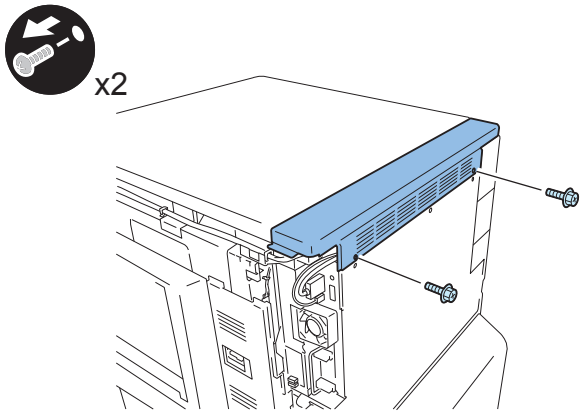
7) Remove the Box Left Cover.
- 2 Screws



F-4-789

8)Remove the Box Upper Cover.

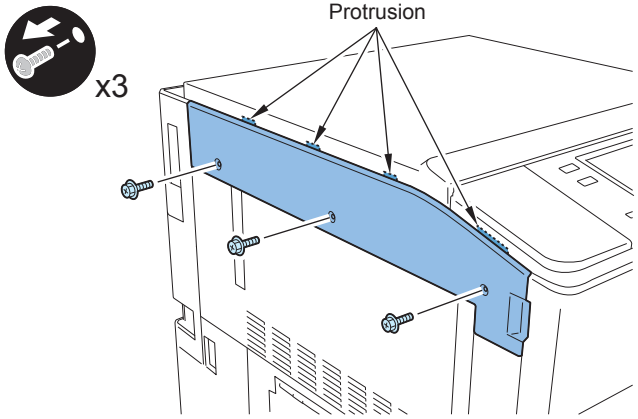
- 2 Screws



F-4-790

9) Remove the Left Upper Cover.

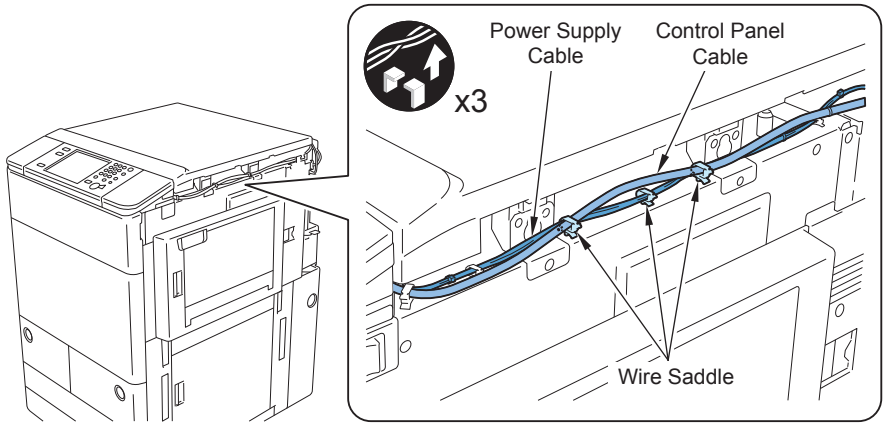
- 3 Screws
- 4 Protrusions



F-4-791

10) Free the Control Panel Cable and the Power Supply Cable from the 3 Wire Saddles.

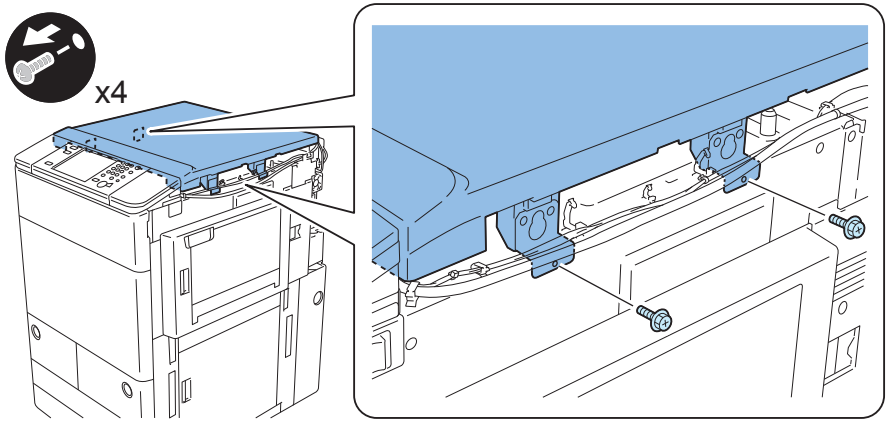
NOTE:
Allow flexibility of the cables so that the Printer Cover can be easily removed.



F-4-792

11) Remove the Printer Cover.

- 4 Screws



F-4-793

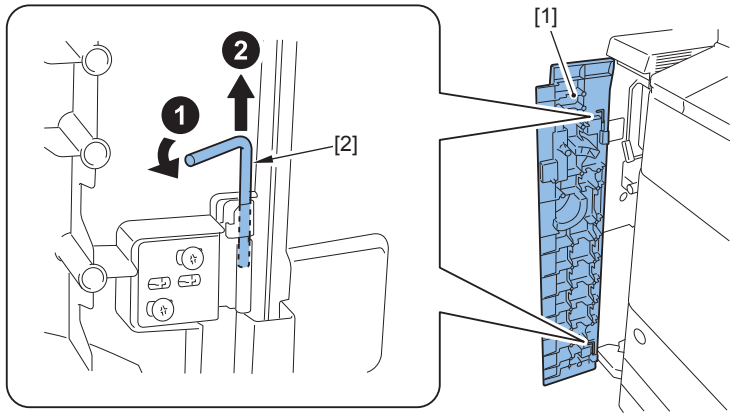
Removing the Buffer Path Unit

Preparation

NOTE:
When removing the Buffer Path Unit from the host machine, be sure to remove the delivery system options in advance.

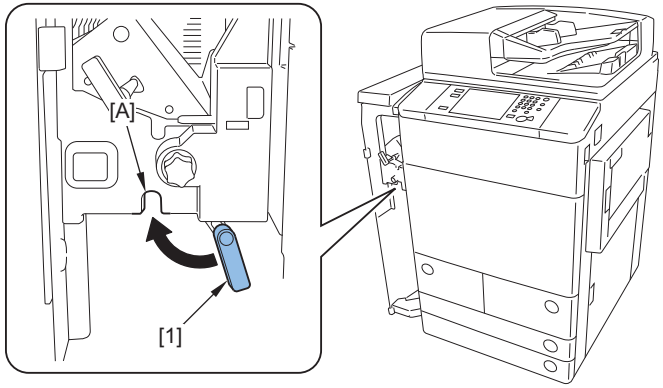
Procedure

1) Open the Buffer Front Cover [1], and remove the Hinge Shaft [2].



F-4-794

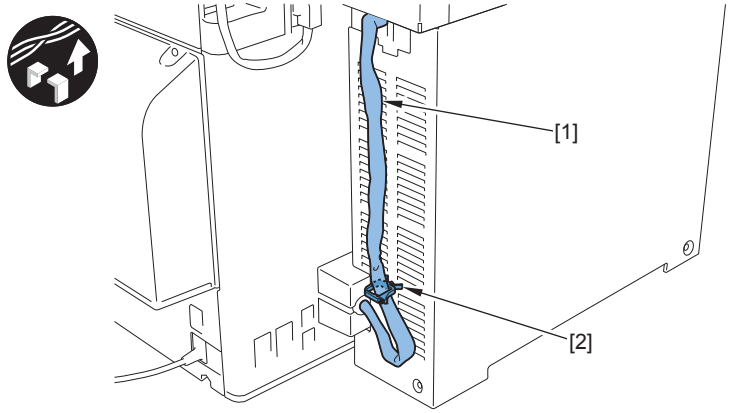
2) Turn the Jam Removal Lever [1], and push it against the grove [A].



F-4-795

3) Disconnect the Buffer Cable [1].

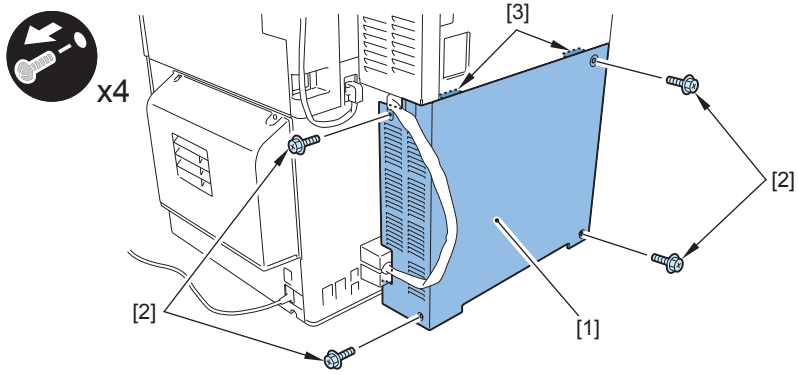
- 1 Wire Saddle [2]



F-4-796

4) Remove the Buffer Left Lower Cover [1].

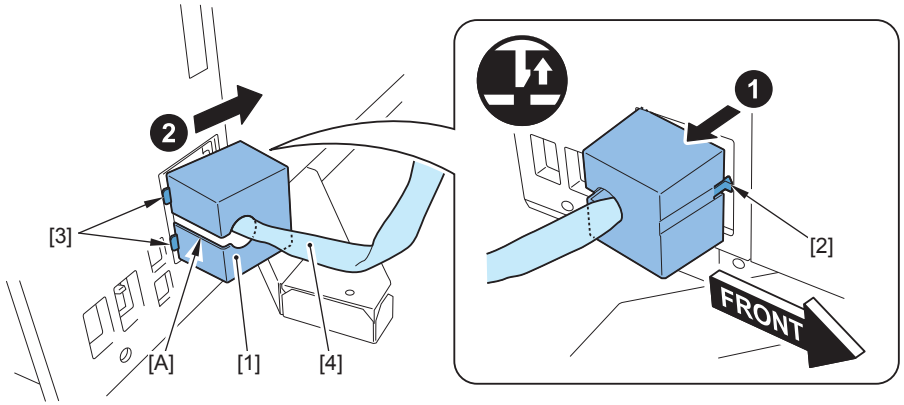
- 4 Screws [2]
- 2 Protrusions [3]



F-4-797

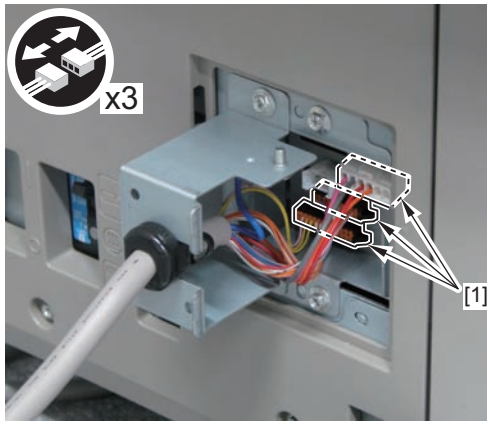
5) Remove the Connecting Harness Cover [1] from the host machine.
- 1 Claw [2]
- 2 Protrusions [3]

6) Disconnect the Buffer Cable [4] from the groove [A] of the Connecting Harness Cover.



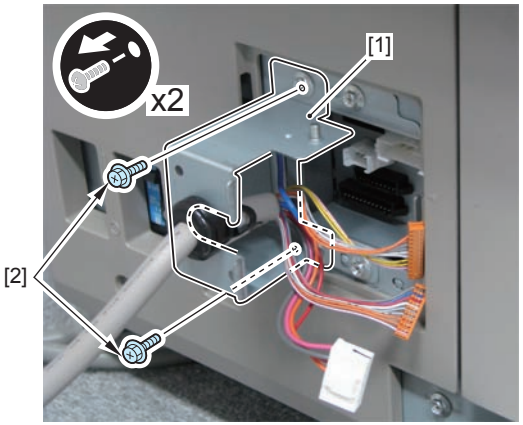
F-4-798

7) Disconnect the 3 connectors [1] from the host machine.



F-4-799

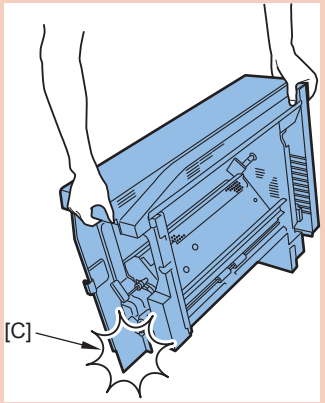
8) Remove the Connecting Harness Stopping Plate [1].
- 2 Screws [2]



F-4-800

CAUTION:

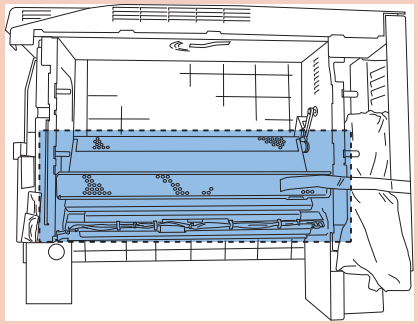
Do not place the unit on the floor while being tilted; otherwise the [C] part may be deformed.



F-4-801

CAUTION:

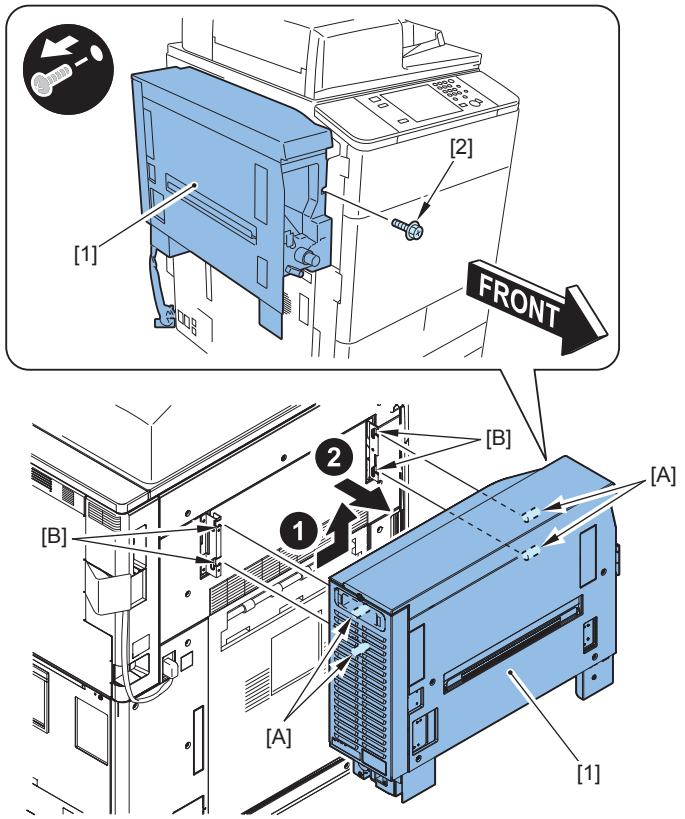
Do not hold the area inside the dotted line of the figure; otherwise the Paper Path Guide may be deformed.



F-4-802

9) Remove the 4 shafts [A] of the Buffer Path Unit from the 4 U-shaped grooves [B] of the host machine, and remove the Buffer Path Unit [1].

- 1 Screw [2]

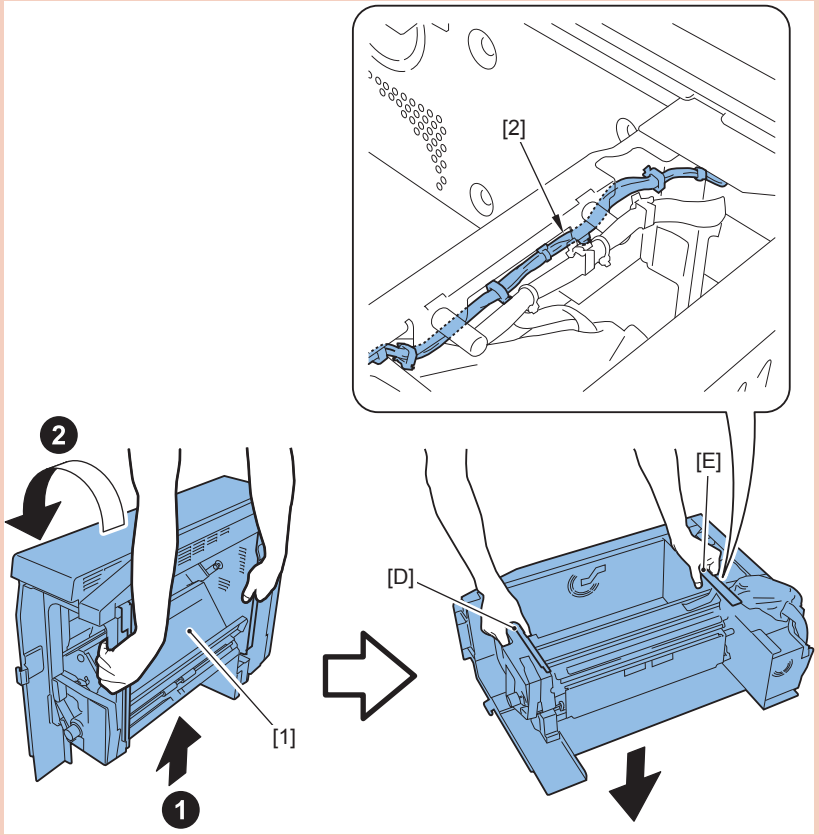


F-4-803

CAUTION:

When placing the Buffer Path Unit horizontally

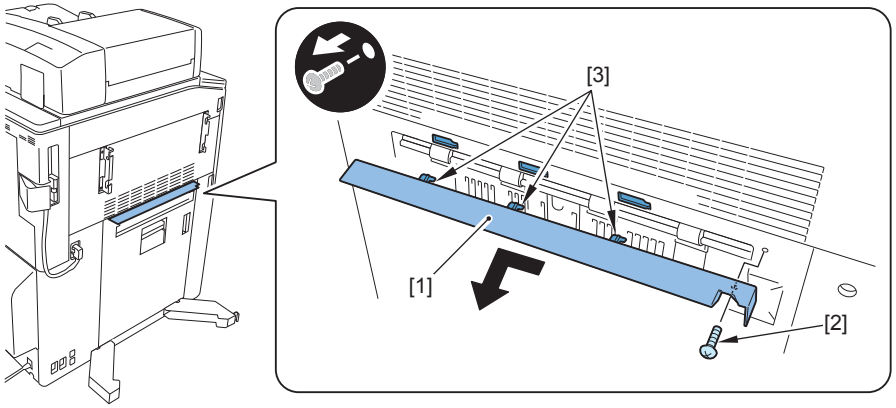
Be sure to hold the frame [D] and the frame [E] of the Buffer Path Unit [1]. Be sure to avoid the harness [2] when holding the frame [E]; otherwise the harness [2] may get damaged.



F-4-804

10) Remove the Delivery Outlet Upper Guide [1].

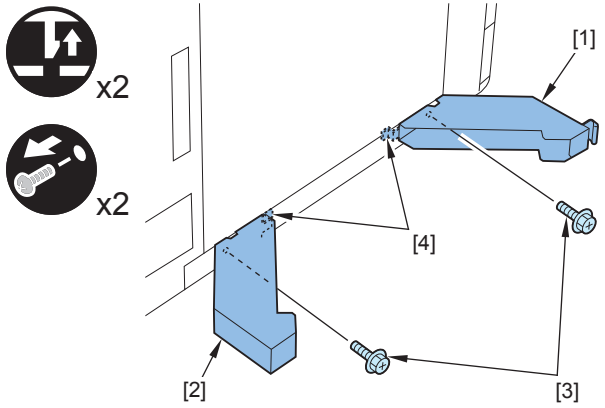
- 1 Screw [2]
- 3 Hooks [3]



F-4-805

11) Remove the Cover Support Plate (Front) [1] and the Cover Support Plate (Rear) [2].

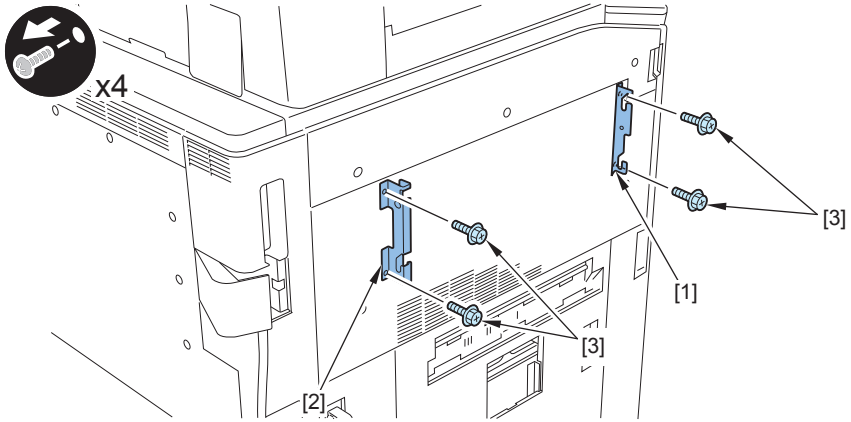
- 2 Screws [3]
- 2 Hooks [4]



F-4-806

12) Remove the Buffer Mounting Plate (Front) [1] and the Buffer Mounting Plate (Rear) [2].

- 4 Screws [3]



F-4-807

Adjustment

- Overview
- When replacing parts
- When clearing RAM

Overview

In this chapter, measures of adjustment when replacing parts in servicing operation are mentioned. Parts to be replaced are categorized into 5 blocks based on their related technology as shown below.

Main Controller System	HDD	(Refer to page 5-2)
	Main Controller PCB 1	(Refer to page 5-4)
	Main Controller PCB 2	(Refer to page 5-4)
	DC Controller PCB	(Refer to page 5-5)
	TPM PCB	(Refer to page 5-5)
Laser Exposure System	Laser Scanner Unit	(Refer to page 5-5)
Image Formation System	Primary Charging Wire	(Refer to page 5-6)
	Grid Plate	(Refer to page 5-6)
	Primary Charging Assembly	(Refer to page 5-6)
	Pre-Primary Transfer Charging Wire	(Refer to page 5-7)
	Pre-Primary Transfer Charging Assembly	(Refer to page 5-7)
	Drum Unit	(Refer to page 5-7)
	Developing Assembly	(Refer to page 5-7)
	Potential Sensor	(Refer to page 5-8)
	ITB Cleaning Blade Unit	(Refer to page 5-11)
	ITB	(Refer to page 5-12)
	Primary Transfer Roller	(Refer to page 5-12)
	Patch Sensor Unit	(Refer to page 5-12)
Fixing System	Fixing assembly	(Refer to page 5-13)
	Fixing Film Unit	(Refer to page 5-13)
	Fixing Pressure Roller Unit	(Refer to page 5-13)
	Fixing Heat Soaking Roller	(Refer to page 5-13)
	Fixing Web	(Refer to page 5-13)

T-5-1

When replacing parts

Main Controller

HDD

How to Replace the Parts	see Chapter 4, "Removing the HDD."

Before Replacing	1) Backup of data Remote UI Settings/Registration > Management Settings > Data Management > Back Up Target data: • Mail Box • Memory RX Inbox • Confidential Fax Inbox • Advanced Box • Form for Composition *Cannot back up Advanced Box data to the SMB server when an optional HDD (except 160 GB) is installed. 2)Export of settings Remote UI Settings/Registration > Management Settings > Data Management > Export Target data: • Settings/Registration Basic Information • Paper Type Management Settings • Forwarding Settings • Box Settings • Department ID Management Settings • Main Menu Settings • Web Access Settings • Favorite Settings • Address Book • User Access Control for Advanced Box • Quick Menu Settings • MEAP Application Setting Information • User Setting Information • iW Function Flow Settings • Service Mode Settings *When exporting "Service Mode Settings", select Copier > Option > USER > SMD-EXPT > 1. SMD-EXPT cannot be exported, therefore the settings need to be made every time the HDD is replaced. 3)Backup of MEAP Target data: SST(Meapback) • MEAP application(SMS) • User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H) *Meapback.bin can be restored after replacement or initialization of the HDD. [CAUTION] When the following service mode is executed, Meapback.bin cannot be restored. COPIER > FUNCTION > SYSTEM > CHK-TYPE > 7 COPIER > FUNCTION > SYSTEM > HD-CLEAR 4) TPM Check User TMP back up.

Aftter Replacement	1) Format the HDD. 1-1) Start the machine in safe mode (turn ON the main power switch while simultaneously pressing 2+8 keys). 1-2) Execute Formatting All Partitions using SST. 2) Download the system software 2-1) Download the system software (system/LANG/RUI, etc.) using SST. 3) Initialize the key/certificate/CA certificate. (Lv.2) COPIER > FUNCTION > CLEAR > CA-KEY 4)Turn OFF and then ON the power 5) Restore the backup data. 5-1) Backup of data Remote UI Settings/Registration > Management Settings > Data Management > Restore 5-2) Export of settings Remote UI Settings/Registration > Management Settings > Data Management > Import 5-3) Backup of MEAP SST(Meapback) 5-4) TPM TPM setup Backup data of the TPM key can be used only when replacing the TPM PCB. When replacing the HDD, perform backup with TPM [ON] again. 5-5) Service mode setting values (DC-CON) Since the backup data cannot be saved to a location outside of the device, it is recommended to perform backup again after replacing the HDD. When the DC Controller PCB needs to be replaced, in order to update the data to the latest one, perform backup again immediately before replacing the PCB. 5-6) Service mode setting values (R-CON) Since the backup data cannot be saved to a location outside of the device, it is recommended to perform backup again after replacing the HDD. When the Reader Controller PCB needs to be replaced, in order to update the data to the latest one, perform backup again immediately before replacing the PCB. 6) When an encryption key/certificate/CA certificate has been generated or added by the user, ask the user to execute regeneration. 7) Execute auto gradation adjustment (full adjust). Settings/Registration mode: Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation

When using the Card Reader and imageWARE Accounting Manager	1) Go to COPIER > FUNCTION> INSTALL > CARD and enter the numerical value of the leading card which is used for Department ID. Then, press “OK” button. (e.g.: If No.1 to No.1000 cards are used for Department ID, enter “1” of the leading card.) 2) After turning OFF and ON the main power switch, perform the following operations from Settings/Registration mode. • In Management Settings > User Management > Department ID Management > Page Totals, be sure that “ID00000001” to “ID00001000” are created. • Set the following: Preferences > Network > TCP / IP Settings > IPv4 Settings>IP Address Settings > IP Address, Gateway Address, Subnet Mask • In Management Settings > User Management> System Manager Information Settings> System Manager ID and System PIN, register any number for them. Then, turn OFF and ON the main power switch. If “System Manager ID” and “System PIN” are not registered, “card registration to device” cannot be executed for the imageWARE Accounting Manager setting operation. 3) Download the card ID from imageWARE Accounting Manager to the Main Body again. 4) After downloading is completed, go to Management Settings > User Management > Department ID Management > Page Totals. Be sure that only the downloaded card ID is displayed. 5) Print using the user card registered from imageWARE Accounting Manager. Be sure that the card information used for the target devices of imageWARE Accounting Manager is collected. Points to Note when Using the System Software-installed HDD When using the HDD which was installed the system software of the other machine (different serial number), be sure to format the HDD after the installation. If the HDD is not formatted, the operation cannot be guaranteed.
Points to note when using an HDD with system software already installed	Use of an HDD in which the system software of another machine (a machine of a different serial number) is installed for a troubleshooting is possible if it is an HDD of a model of iR-ADV C5255 series and later. However, be sure to format it after installing it. Operation is not guaranteed if it is continued to be used as is. In addition, an HDD used in iR-ADV C5255 series and later cannot be accessed from a PC due to enhanced security.

T-5-2

■ Main controller PCB 1

How to Replace the Parts	see Chapter 4, "Removing the Main Controller PCB 1."
Operation at Replacement	Transferring the parts from old PCB to new PCB • Flash PCB • TPM PCB Resetting/registering the data is not necessary after Main Controller PCB 1 is replaced.

T-5-3

■ Main controller PCB 2

How to Replace the Parts	see Chapter 4, "Removing the Main Controller PCB 2."
Before Replacement	Be sure to gain agreement from the user in advance to execute the following work. 1)»Backup the Settings/Registration data Data in SRAM on the Main Controller PCB 2 can be backed up to a USB memory device or an HDD from download mode. * However, if the HDD Encryption Board is installed, backup to an HDD is not possible. It is therefore recommended to perform backup to an USB memory device. Operation method: COPIER > FUNCTION > SYSTEM > DOWNLOAD then, Download Menu > Backup > SRAM(HDD/USB) Note: Download Menu is not intended for the "Settings/Registration > Paper Type Management Settings". You need back up from: Remote UI Settings/Registration > Management Settings > Data Management > Export
At replacement	Replace the part from the old PCB to the new PCB. • Option SDRAMs • Bypass PCB • Memory PCB
Aftter Replacement	1. Specify and register the data again of the Main Controller PCB 2. 1) While pressing 2 + 8 keys at the same time, turn ON the Main Power Switch. 2) The restore of backup data: When Download Menu is displayed, connect USB memory to the main body. Download Menu 2 > Restore 3) Specify and register the data again. Import from: Remote UI Settings/Registration > Management Settings > Data Management > Import 4) When an encryption key/certificate/CA certificate has been generated or added by the user, ask the user to execute reinstallation.
Points to Note	If mismatch between the box management information included in the SRAM data and box data on the HDD occurs, which is caused by starting the machine normally without restoring SRAM data after replacing the Main Controller 2 PCB, the box management information is initialized. As a result, box documents on the HDD are deleted. Therefore, be sure to back up the box documents on remote UI.
Restrictions	Do not transfer the following parts to another machine (a machine of a different serial number). The machine will not start up normally, and may become unrecoverable in some cases. • Main Controller PCB 2 (with the Memory PCB unremoved) • Memory PCB

T-5-4

■ DC controller PCB

How to Replace the Parts	see Chapter 4, "Removing the DC Controller PCB."
Before Replacing	Backup of DC Controller PCB SRAM COPIER > FUNCTION > SYSTEM > DSRAMBUP (LEVEL2) “ACTIVE” is displayed and then “OK!” is displayed about 2 minutes later. Turn OFF the main power when the above work is complete.
Aftter Replacing	Restoration of DC Controller PCB SRAM COPIER > FUNCTION > SYSTEM > DSRAMRES (LEVEL2) “ACTIVE” is displayed at execution and then “OK!” is displayed about 2 minutes later. Restoration is complete.
Prohibited Operation	• When replacing the DC Controller PCB, be sure to use a new one. Do not use the DC Controller PCB which was used with another machine.

T-5-5

■ TPM PCB

How to Replace the Parts	see Chapter 2, "TPM PCB."

* Be sure to perform the installation work by referring to the procedure above.

T-5-6

Laser Exposure System

■ Laser Scanner Unit

Procedure of parts replacement	see Chapter 4, "Removing the Laser Scanner Unit."
Procedure of adjustment	1) Execute the initial position adjustment of the Skew Correction Motor. (COPIER > FUNCTION > LASER > LD-ADJ-Y/M/C) 2) Execute the color displacement correction. (Additional Functions (Setup/Register) > Adjustment/Maintenance > Image Adjustment > Color Displacement Correction)

T-5-7

Image Formation System

Primary Charging Wire

Procedure of parts replacement	see Chapter 4, "Replacing the Primary Charging Wire."
Procedure of adjustment	1) Execute cleaning of the Charging Wire. (COPIER > FUNCTION > CLEANING > WIRE-EX) 2) Execute the potential control. (COPIER > FUNCTION > DPC > DPC)

T-5-8

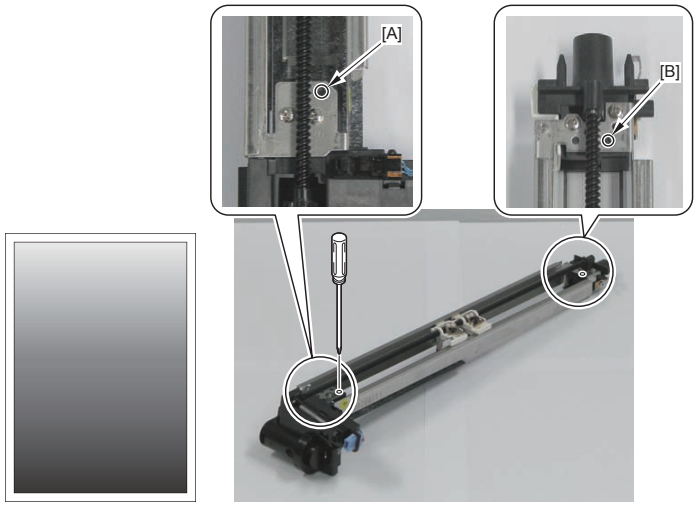
Grid Plate

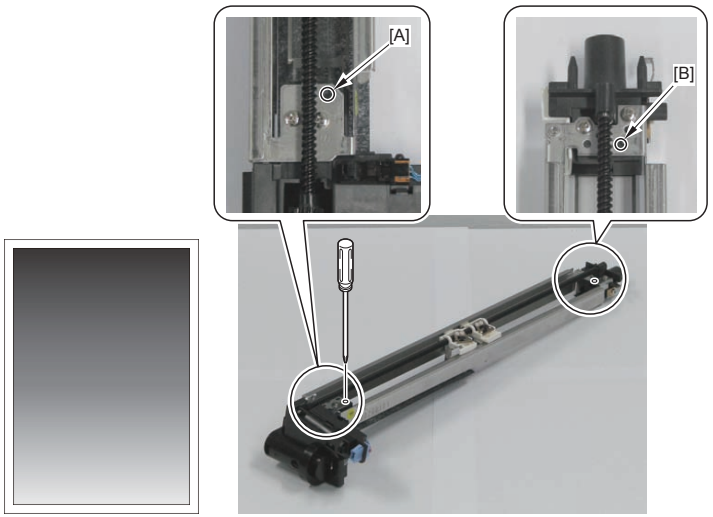
Procedure of parts replacement	see Chapter 4, "Removing the Grid Plate."
Procedure of adjustment	1) Execute cleaning of the Charging Wire. (COPIERER > FUNCTION > CLEANING > WIR E-EX) 2) Execute the Potential Control. (COPIER > FUNCTION > DPC > DPC)

T-5-9

Primary Charging Assembly

Procedure of parts replacement	see Chapter 4, "Removing the Primary Charging Assembly."
Procedure of adjustment	1) Output the Bk halftone image in Service Mode. (TEST > PG > TYPE: 5) (TEST > PG > COLOR-Y/M/C: 0) (TEST > PG > COLOR-K: 1) 2) In the case of density difference between the front and the rear on the test print image with the dark image on the front side of the test print, go to step 3-1) to make adjustments. With the dark image on the rear side of the test print, go to step 4-1) to make adjustments. If there is no density unevenness, execute the work in step 5) and later.

Procedure of adjustment	3) Adjust the Primary Charging Assembly (in the case of dark image at the front side on the test print). NOTE : • In the case of dark image at the front side of the test print [1], execute step 3-1) through 3-3) below until the density gets even. Then, if there is no density unevenness, execute the work in step 5) and later. • Turning the adjustment screw counterclockwise moves down the Charging Wire (the gap between the grid and the charging wire gets narrower), resulting in lighter output image density. Turning the adjustment screw clockwise moves up the Charging Wire (the gap between the grid and the charging wire gets wider), resulting in darker output image density.  3-1) Turn the plastic screw [A] counterclockwise to make a full round. Refer to the replacement procedure of the Primary Charging Assembly to install the Primary Charging Assembly to the Host Machine, and then output the test print to check the image. 3-2) If the image at the front side of test print image is still dark, turn the plastic screw [A] counterclockwise to make another full round. Refer to the replacement procedure of the Primary Charging Assembly to install the Primary Charging Assembly to the Host Machine, and then output the test print to check the image. 3-3) If the image at the front side of the test print is still dark, turn the plastic screw [B] clockwise to make a half round. Refer to the replacement procedure of the Primary Charging Assembly to install the Primary Charging Assembly to the Host Machine, and then output the test print to check the image.

Procedure of adjustment	4) Adjust the Primary Charging Assembly (in the case of dark image at the rear side on the test print). NOTE : • In the case of dark image at the rear side of the test print [2], execute step 4-1) through 4-3) below until the density gets even. Then, if there is no density unevenness, execute the work in step 5) and later. • Turning the adjustment screw counterclockwise moves down the Charging Wire (the gap between the grid and the charging wire gets narrower), resulting in lighter output image density. Turning the adjustment screw clockwise moves up the Charging Wire (the gap between the grid and the charging wire gets wider), resulting in darker output image density.  4-1) Turn the plastic screw [B] counterclockwise to make a full round. Refer to the replacement procedure of the Primary Charging Assembly to install the Primary Charging Assembly to the Host Machine, and then output the test print to check the image. 4-2) If the image at the rear side of the test print is still dark, turn the plastic screw [B] counterclockwise to make another full round. Refer to the replacement procedure of the Primary Charging Assembly to install the Primary Charging Assembly to the Host Machine, and then output the test print to check the image. 4-3) If the image at the rear side of the test print is still dark, turn the plastic screw [A] clockwise to make a half turn. Refer to the replacement procedure of the Primary Charging Assembly to install the Primary Charging Assembly to the Host Machine, and then output the test print to check the image.

Procedure of adjustment	5) Execute cleaning of the Charging wire in Service Mode (FUNCTION > CLAENING > WIRE-CLN) Duration: approx. 30 sec. 6) Execute the potential control in Service Mode (COPIER > FUNCTION > DPC > DPC) Duration: approx. 30 sec. 7) Execute the density unevenness correction in User Mode Execute Density Unevenness Correction ([Setting/Register)] > [Adjustment/ Maintenance] > [Adjust Image Quality] > [Correct shading])

T-5-10

■ Pre-Primary Transfer Charging Wire

Procedure of parts replacement	see Chapter 4, "Replacing the Pre-transfer Charging Wire."
Procedure of adjustment	1) Execute cleaning of the Charging Wire. (COPIER > FUNCTION > CLEANING > WIRE-EX)

T-5-11

■ Pre-Primary Transfer Charging Assembly

Procedure of parts replacement	see Chapter 4, "Removing the Pre-transfer Charging Assembly."
Procedure of adjustment	1) Execute cleaning of the Charging Wire. (COPIER > FUNCTION > CLEANING > WIRE-EX)

T-5-12

■ Drum Unit

Procedure of parts replacement	see Chapter 4, "Removing the Drum (Bk)." see Chapter 4, "Separating the Developing Assembly (Y)/(M)/(C) from the Drum Unit (Y)/(M)/(C)."
Procedure of adjustment	1) Disable (OFF) the warm-up rotation. (COPIER>FUNCTION>INSTALL>AINR-OFF) 2) Turn OFF the main power switch. (Replace the Drum.) 3) Turn ON the main power switch. 4) Forcible execution of Drum replacement mode (COPIER>FUNCTION>DPC>DRMRSETY/M/C/K) 5) Enable (ON) the warm-up rotation. (COPIER>FUNCTION>INSTALL>AINR-OFF)

T-5-13

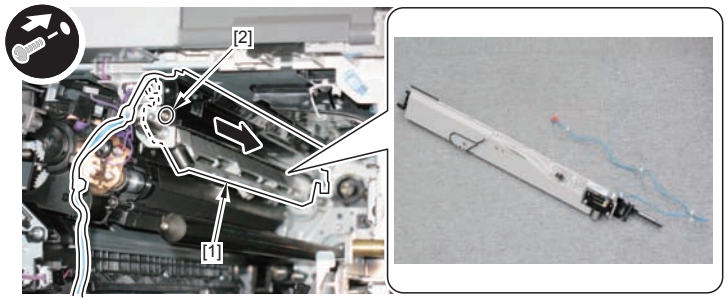
■ Developing Assembly

Procedure of parts replacement	see Chapter 4, "Removing the Developing Assembly (Bk)." see Chapter 4, "Separating the Developing Assembly (Y)/(M)/(C) from the Drum Unit (Y)/(M)/(C)."
Procedure of adjustment	1) Disable (OFF) the warm-up rotation. (COPIER>FUNCTION>INSTALL>AINR-OFF) 2) Execution of initial installation mode for Developing Assembly (COPIER>FUNCTION>INSTALL>INISET-Y/M/C/K

T-5-14

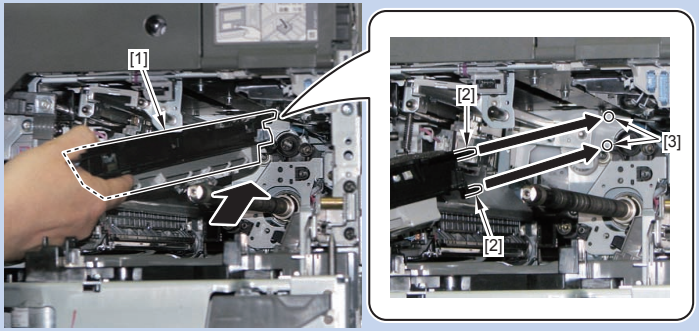
■ Potential Sensor

Procedure of parts replacement	see Chapter 4, "Removing the Potential Control PCB Unit (including Potential Sensor and Potential Control PCB)."
Procedure of adjustment	1) Install the Primary Charging Rail [1] with the Potential Sensor removed to the host machine. • 1 Screw [2]



F-5-1

NOTE:
When installing, insert the Primary Charging Rail [1] at the angle as shown in the figure, and then insert the 2 bosses [2] in the boss holes [3] of the host machine.



F-5-2

2) Install the ITB Unit to the host machine.

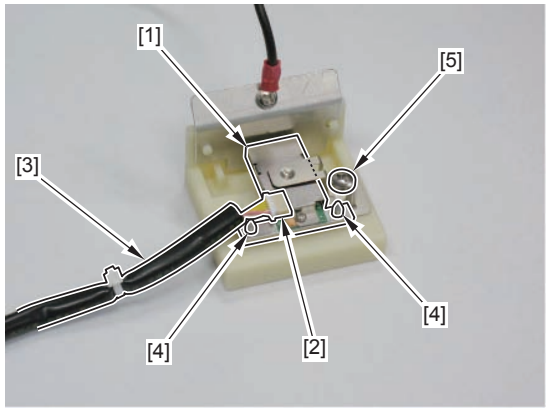
NOTE:
Purpose to remove the ITB Unit in this procedure is to prevent the ITB from a damage caused by dropping a part.

T-5-15

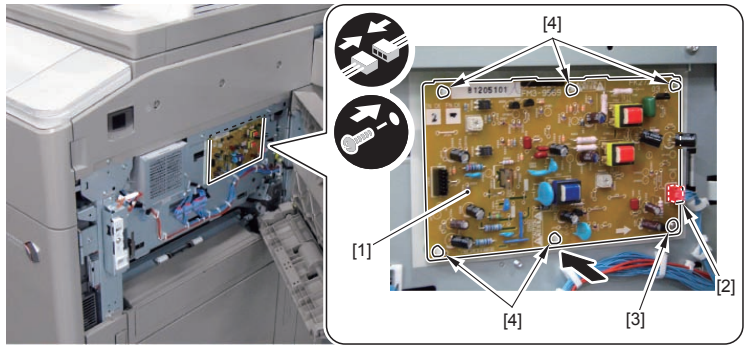
Procedure of adjustment	3) Connect a new cable [3] to the connector [2] of a new Potential Sensor [1]. 4) Install the Potential Sensor [1] to the 2 pin electrodes [4] for checking the Potential Sensor. • 1 Connector [2] • 1 Screw [5]

CAUTION:

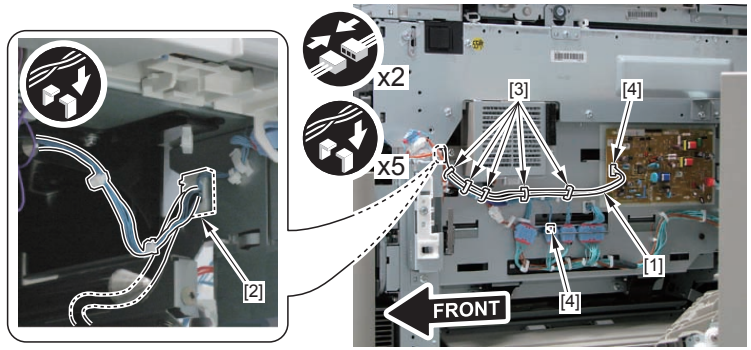
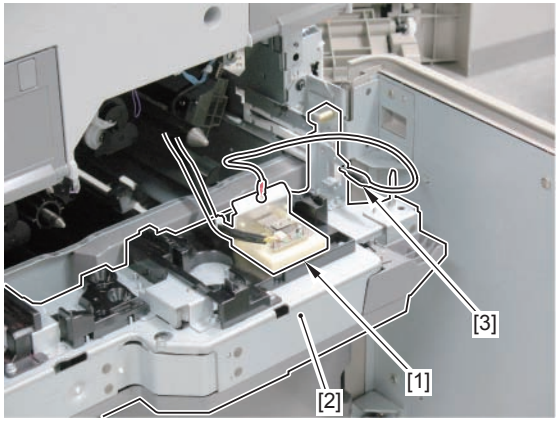
Secure the screw firmly so that the Potential Sensor is not removed.



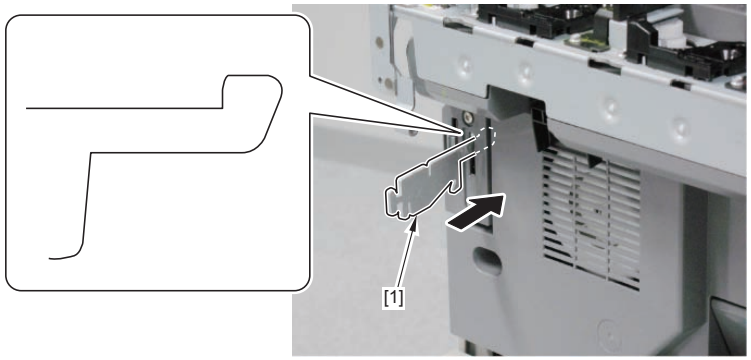
5) Install a new Potential Control PCB [1].
• 1 Connector [2]
• 1 Screw [3]
• 5 PCB Supports [4]



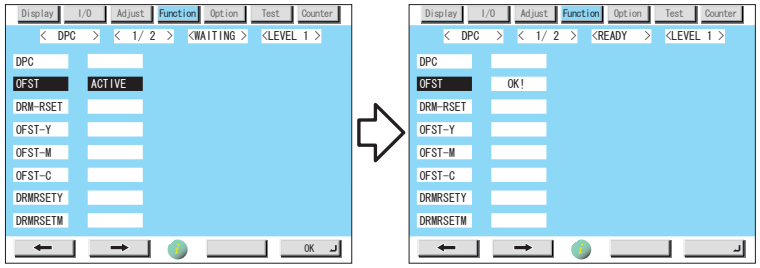
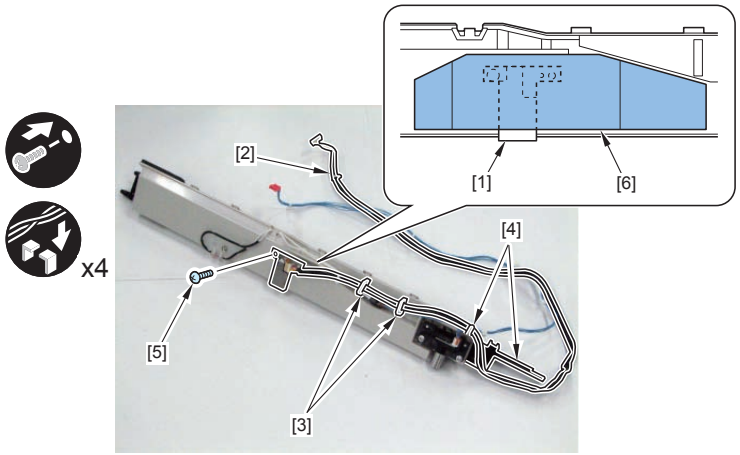
T-5-16

Procedure of adjustment	6) Pass the harness [1] of the Primary Charging Rail and the electrode for checking the Potential Sensor from the Edge Saddle [2] of the Right Side Plate of the host machine, and connect the 5 Wire Saddles [3] and the 2 connectors [4].  7) Place the electrode [1] for checking the Potential Sensor on the Process Unit Inner Cover [2], and use the Electrode Clip [3] to pinch the plate of the hinge to ground. CAUTION: Be careful not to drop the electrode for checking the Potential Sensor. 

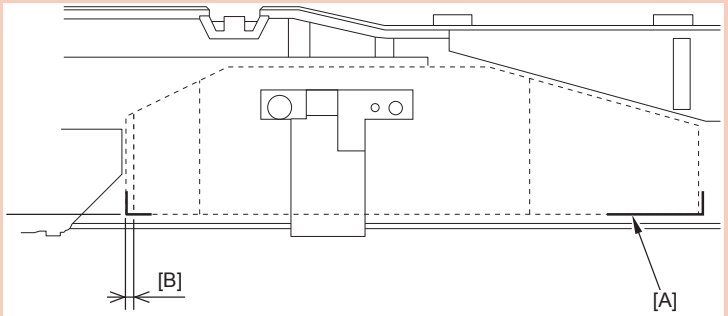
T-5-17

Procedure of adjustment	8) Close the Multi-purpose Tray Pickup Unit. CAUTION: Be careful not to trap the cable. 9) Turn ON the main power switch. 10) Disable the warm-up rotation in service mode immediately after turning ON the main power switch. Set the service mode > COPIER > FUNCTION > INSTALL > AINR-OFF to 1. 11) Use a dedicated tool [1] to deactivate the Front Door Switch.  12) When the screen [A] displays [READY] in the service mode, adjust the Potential Sensor. Service mode > COPIER > FUNCTION > DPC > OFST 

T-5-18

Procedure of adjustment	13) Press [OK] on the indicator and the display changes from [ACTIVE] to [OK!].  F-5-3 14) Enable the warm-up rotation in the service mode. Set the service mode > COPIER > FUNCTION > INSTALL > AINR-OFF to 0. 15) Turn OFF the main power switch. 16) Install a new Potential Sensor [1] to the Primary Charging Rail. • 1 Harness [2] • 2 Wire Saddles [3] • 2 Harness Guides [4] • 1 Screw [5] 17) Install a new Potential Sensor Protection Sheet [6].  F-5-4

T-5-19

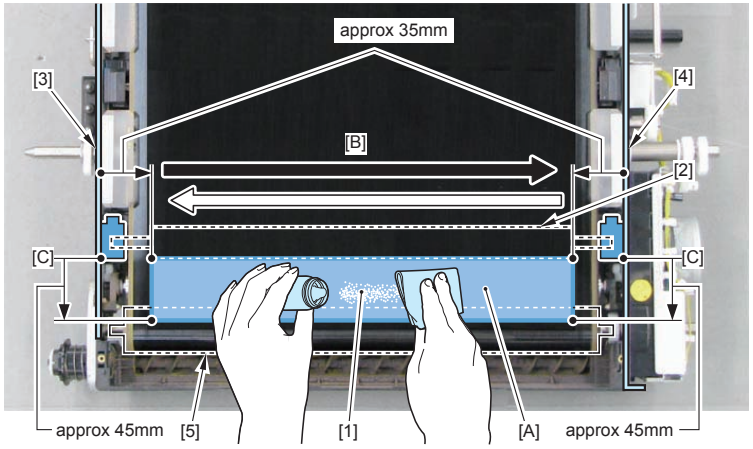
Procedure of adjustment	CAUTION: When installing, remove the release paper, and align the Potential Sensor Protection Sheet with the marking line [A] to affix it (be sure that the gap [B] between the marking line and the release paper is less than 0.5 mm).  F-5-5 18) Install the Primary Charging Rail to the host machine. 19) Install the removed parts in reverse order.

T-5-20

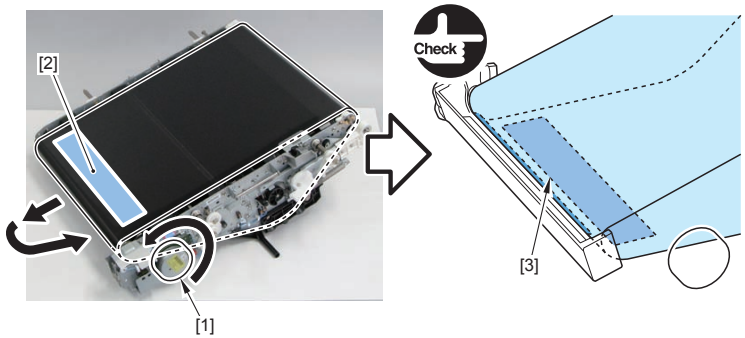
■ ITB Cleaning Blade Unit

Procedure of parts replacement	see Chapter 4, "Removing the ITB Cleaning Blade Unit." CAUTION: Replacing the ITB Cleaning Unit, ITB, Primary Transfer Roller, Secondary Transfer Inner Roller, etc. is accompanied by removal of the ITB Cleaning Blade Unit, so be sure to see this procedure and make an adjustment "After Removing the ITB Cleaning Blade Unit".
Procedure of adjustment	1) After installing the ITB Cleaning Unit to the ITB Unit, apply lubricant [1] (FY9-6007-000) to the application area [A] on the ITB surface in the longitudinal direction [B] (1 reciprocation). (Execute this step without the ITB Cleaning Blade Unit being installed.) CAUTION: Target application area is to be the area surrounded by the application width as shown below. • Application area Application width in the longitudinal direction [B] is shorter than the width of the Primary Transfer Roller (Y) [2]. Be careful not to apply lubricant to the outside of the Primary Transfer Roller (Y) [2] width. • Target: Between the point approx. 35 mm inside the ITB Unit Rear Plate [3] and the point approx. 35 mm inside the ITB Unit Front Plate [4]. The application width in the belt's rotation direction is between the Primary Transfer Roller (Y) [2] and the ITB Driver Roller [5]. Target: Between the point of the Primary Transfer Roller (Y) [2] Shaft Support (Front/Rear) Cover edge [C] and the point approx. 45 mm below the edge.

T-5-21

Procedure of adjustment	CAUTION: Points to Note when Applying Lubricant (FY9-6007-000) [1] • Be careful not to apply lubricant to the outside of the application width in the longitudinal direction [B]. • When lubricant [1] is applied outside the application area, be sure to wipe with lint-free paper. 

T-5-22

Procedure of adjustment	2) Rotate the ITB Drive Motor [1] with hand counterclockwise, and then rotate the ITB until the lubricant [2] applied to the ITB is hidden in the Scoop-up Sheet [3] of the ITB Cleaning Unit. (The applied lubricant [2] passes through the Scoop-up Sheet [3] of the ITB Cleaning Unit.) CAUTION: Be sure to turn the ITB Drive Motor [1] counterclockwise only and be careful not to turn it clockwise.  3) Install the ITB Cleaning Blade Unit to the ITB Unit.

T-5-23

■ ITB

Procedure of parts replacement	see Chapter 4, "Removing the ITB Unit."
Procedure of adjustment	CAUTION: Be sure to execute “Operation after ITB replacement” when releasing the ITB pressure.

T-5-24

■ Primary Transfer Roller

Procedure of parts replacement	see Chapter 4, "Removing the Primary Transfer Roller."
Procedure of adjustment	1) Execute the Primary Transfer ATVC. (COPIER > FUNCTION > MISC-P> 1ATVC-EX)

T-5-25

■ Patch Sensor Unit

Procedure of parts replacement	see Chapter 4, "Removing the Patch Sensor Unit."
Procedure of adjustment	1) Enter the Patch Sensor Alpha Value. (COPIER > ADJUST > DENS > ALF-C) 2) Adjust the Patch Sensor Light Intensity. (COPIER > FUNCTION >MISC-P > PT-LPADJ)

T-5-26

Fixing System

Fixing assembly

Procedure of parts replacement	see Chapter 4, "Removing the Fixing Unit."
Procedure of adjustment	1) Clear the counter. COPIER > COUNTER > FIXING > FX-CNT (Lv1) NOTE: When the foregoing counter clear is executed, the following item is cleared. • COPIER> DISPLAY> FIXING> KIN-HP • COPIER> DISPLAY> FIXING> CORE-DST • COPIER> DISPLAY> FIXING> RCPR-HP • COPIER> DISPLAY> FIXING> PRS-HP • COPIER> COUNTER> DRBL-1> FX-BLT-U (Lv1) • COPIER> COUNTER> DRBL-1> FX-L (Lv1) • COPIER> COUNTER> DRBL-1> FX-KIN (Lv1) • COPIER> COUNTER> DRBL-1> FX-WEB (Lv1)

T-5-27

Fixing Film Unit

Procedure of parts replacement	see Chapter 4, "Removing the Fixing Film Unit."
Procedure of adjustment	1) Clear the counter. COPIER > COUNTER > DRBL-1 > FX-BLT-U (Lv1) NOTE: When the foregoing counter clear is executed, the following item is cleared. • COPIER > DISPLAY > FIXING > BLT-TM1~8(Lv2) • COPIER > DISPLAY > FIXING > BLT2-TM1~8(Lv2) • COPIER > DISPLAY > FIXING > BLT-TM(Lv2)

T-5-28

Fixing Pressure Roller Unit

Procedure of parts replacement	see Chapter 4, "Removing the Fixing Pressure Roller Unit."
Procedure of adjustment	1) Clear the counter. COPIER > COUNTER > DRBL-1 > FX-L (Lv1) NOTE: When the foregoing counter clear is executed, the following item is cleared. • COPIER > DISPLAY > FIXING > FX-L-TM1~8 (Lv2)

T-5-29

Fixing Heat Soaking Roller

Procedure of parts replacement	see Chapter 4, "Removing the Fixing Heat Soaking Roller/Bearing."
Procedure of adjustment	1) Clear the counter. COPIER > COUNTER > DRBL-1 > FX-KIN (Lv1) NOTE: When the foregoing counter clear is executed, the following item is cleared. • COPIER > DISPLAY > FIXING > KIN-TM1~8 (Lv2)

T-5-30

Fixing Web Unit

Procedure of parts replacement	see Chapter 4, "Replacing the Fixing Web."
Procedure of adjustment	1) Clear the counter. • COPIER > COUNTER > DRBL-1 > FX-WEB1~4 (Lv1) • COPIER > COUNTER > MISC > FX-WEB (Lv1)

T-5-31

When clearing RAM

DC controller PCB

How to Replace the Parts	see Chapter 4, "Removing the DC Controller PCB."
Before Replacing	Backup of DC Controller PCB SRAM COPIER > FUNCTION > SYSTEM > DSRAMBUP (LEVEL2) “ACTIVE” is displayed and then “OK!” is displayed about 2 minutes later. Turn OFF the main power when the above work is complete.
Aftter Replacing	Restoration of DC Controller PCB SRAM COPIER > FUNCTION > SYSTEM > DSRAMRES (LEVEL2) “ACTIVE” is displayed at execution and then “OK!” is displayed about 2 minutes later. Restoration is complete.
Prohibited Operation	• When replacing the DC Controller PCB, be sure to use a new one. Do not use the DC Controller PCB which was used with another machine.

T-5-32

6 Troubleshooting

- Making Initial Checks
- Test Print
- Image Faults
- Error Code
- Alarm Code
- Version upgrade
- Controller Self Diagnosis
- Debug log

Making Initial Checks

List of Initial Check Items

Item	No.	Detail	Check
Site Environment	1	The voltage of the power supply is as rated (±10%).	
	2	The site is not a high temperature / humidity environment (near a water faucet, water boiler, humidifi er), and it is not in a cold place. The machine is not near a source of fire or dust.	
	3	The site is not subject to ammonium gas.	
	4	The site is not exposed to direct rays of the sun. (Otherwise, provide curtains.)	
	5	The site is well ventilated, and the floor keeps the machine level.	
	6	The machine's power plug remains connected to the power outlet.	
Checking the Paper	7	The paper is of a recommended type.	
	8	The paper is not moist. Try paper fresh out of package.	
Checking the Placement of Paper	9	Check the cassette and the manual feed tray to see if the paper is not in excess of a specific level.	
	10	If a transparency is used, check to make sure that it is placed in the correct orientation in the manual feed tray.	
Checking the Durables	11	Check the table of durables to see if any has reached the end of its life.	
Checking the Periodically Replaced Parts	12	Check the scheduled servicing table and the periodically replaced parts table, and replace any part that has reached the time of replacement.	

T-6-1

Test Print

Overview

This machine has several test print types shown in the table below. A circle in each image check item shows the availability to check the different type of image faults. If the faulty image shown in the output does not appear in the appropriate test print type, the cause may lie in PDL input or the reader

PG TYPE	TYPE Pattern	Items										Originator
		Gradation	Fogging	Transfer Fault	Black line	White line	Uneven Density	Uneven Density at the Front / Rear	Color displacement	Right Angle	Straight Lines	
0	Normal copy / print											----
1 to 3	(For R&D)											----
4	16-Gradation	Yes	Yes			Yes		Yes				Main controller PCB
5	Full Area Half Tone			Yes	Yes	Yes	Yes					Main controller PCB
6	Grid									Yes	Yes	Main controller PCB
10	MCYBk Horizontal Line					Yes		Yes				Main controller PCB
12	64-Gradation	Yes										Main controller PCB
14	Full Color 16-gradation	Yes	Yes									Main controller PCB

T-6-2

Selecting Test Print TYPE

1) Set the copy count, paper size, and pickup mode (single-sided or double-sided).
2) Make the following selections in service mode: COPIER > TEST > PG.
3) Make the following selections: COPIER > TEST > PG > TYPE.
4) Enter the appropriate TYPE No. using the keypad, and press the OK key.
5) Set the density using DENS-K (valid only if TYPE=5).
6) Set the image mode by TXPH
7) Press the start key.

How to check test print

■ 16-Gradation (TYPE=4)

This test print can mainly check gradation performance, image fogging, white line, and density unevenness at the rear/front.

F-6-1

(1) Gradation

If there is no 16-step density gradation, it may be caused by fault of drum unit or laser scanning system.

(2) Foggy image

If there is foggy image only at the white area as shown in the figure below, it may be caused by fault of drum unit or laser scanning system.

(3) Vertical white/black line

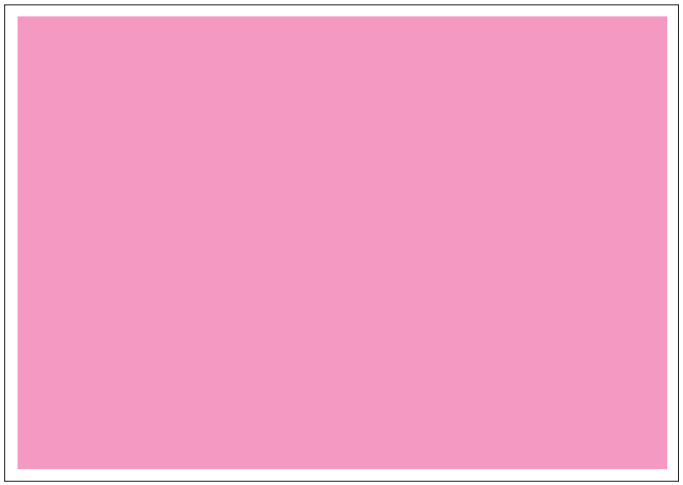
If there is white line in the image, it may be caused by fault of developing system.

(4) Density unevenness at the rear/front

If there is density unevenness at the rear/front, it may be caused by fault of drum unit, laser scanning system or transfer unit.

■ Full Area Half Tone (TYPE=5)

This test print can mainly check transfer failure, black line, white line, and pitch unevenness.



COLOR-M=1, COLOR-Y/C/K=0

F-6-2

NOTE:
- Output by every developing color is available by specifying the developing color COLOR-Y/M/C/K in the following service mode: COPIER>TEST>PG
- In the case of changing density of the test print, execute followings in service mode for density setting: TEST>PG>DENS-Y/M/C/K

(1) Transfer failure

If there is transfer failure, it may be caused by fault of transfer (intermediate transfer/secondary transfer) unit.

(2) Horizontal unevenness

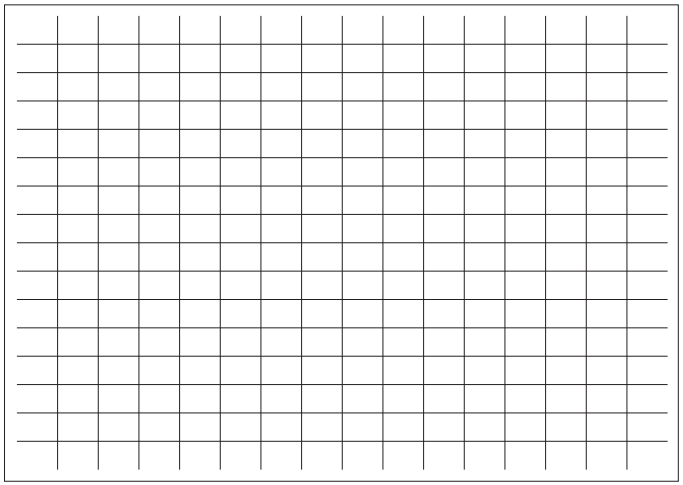
If there is horizontal unevenness, it may be caused by fault of photosensitive drum drive unit, drum ITB motor, or drum unit.

(3) Vertical unevenness

If there is vertical unevenness, it may be caused by soiled LDE lens, fault of drum unit, or deterioration of intermediate transfer belt.

■ Grid (TYPE=6)

This test print can mainly check color displacement, right angle accuracy and linearity.



F-6-3

(1) Color displacement

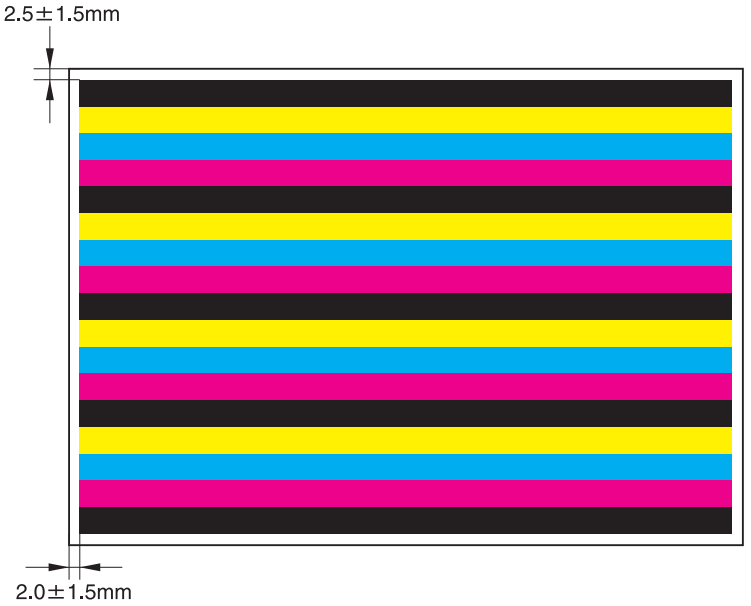
If there is color displacement, it may be caused by fault of each laser scanning system, transfer (intermediate transfer/secondary transfer) unit or photosensitive drum drive unit.

(2) Right angle accuracy and linearity

If there is fault of right angle accuracy or linearity, it may be caused by fault of laser scanning system, or defective shape of registration (upper/lower) roller or the secondary transfer outer roller.

■ MCYBk Horizontal Line (TYPE=10)

This test print can mainly check the dark area density of each color, balance among each color and white line by developing.



F-6-4

(1) Solid density of each color and balance among each color.

- Density is not extremely light.
- In the case of light density with a certain color, it may be caused by the developer of the color in question, or fault of primary transfer roller, laser scanning system or high voltage system.

(2) White/black line

If there is white/black line with a certain color, it may be caused by fault of the drum unit of the color in question, or soiled laser light path.

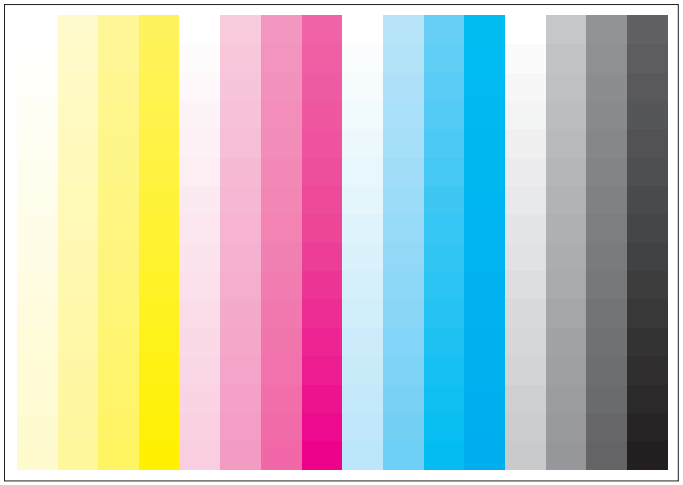
(3) Density unevenness at the rear/front

If there is density unevenness with a certain color, it may be caused by fault of drum unit, laser scanning system or transfer (intermediate transfer/secondary transfer) unit.

If there is density unevenness with all colors, it may be caused by deterioration of intermediate transfer unit.

■ 64-Gradation (TYPE=12)

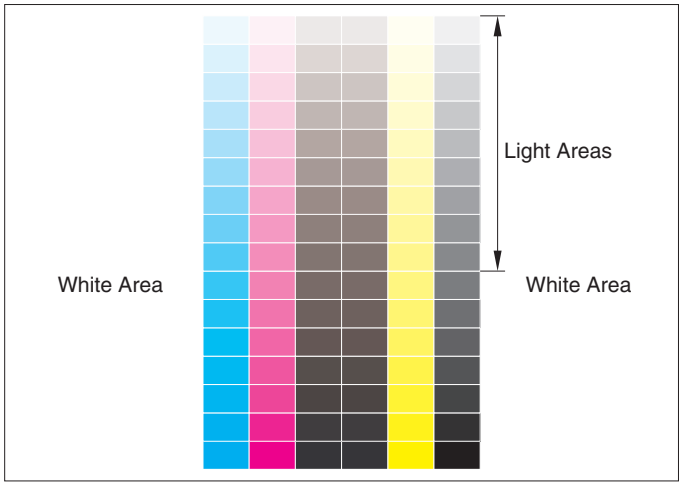
YMCBk64 gradation test print can mainly check gradation performance of each color (YMBCk) at one time.



F-6-5

■ Full Color 16-gradation (TYPE=14)

Full color 16-gradation test print can mainly check gray balance, gradation performance of each color (YMCBk) and foggy image.



F-6-6

(1) Gray balance

Check to see if the output comes with even density of each color at gray scale area.

(2) Gradation performance

Check gradation performance and density difference of each color (YMCBk)

(3) Foggy image

If there is foggy image at the white area, it may be caused by fault of developing system or photosensitive drum, or correction fault of laser scanning system.

Image Faults

Developing Sleeve Ghost

[Location of Failure]
Developing Sleeve

[Cause]
It is caused by increase of the low tribo toner adhered on the Sleeve due to low transition of toner charge (tribo).

[Occurrence Condition]
At end of life of the Developer

[Field Remedy]
Solve the phenomenon by reducing the T/D ratio in the Developing Assembly with service mode.
1) Adjust the target value of ATR patch density for the color with which the phenomenon occurs.
Select COPIER > ADJUST > DENS > P-TG-* (corresponding color) (Level 2), and set the setting value to “-1”. (Default: 0)

2) Turn OFF/ON the main power switch.

3) Print 50-sheet of image with 10% image ratio for 4 times. (e.g, COPIER > TEST > PG > TYPE: “16”, COPIER > TEST > PG > COLOR-* (corresponding color): “1”)

4) Execute the Full Adjust by selecting Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation > Full Adjust.

5) Print the original with which the phenomenon occurred, and check if the phenomenon is disappeared.
If the phenomenon is disappeared, finish the work.
If the phenomenon is not disappeared, select COPIER > ADJUST > DENS > P-TG-* (corresponding color) (Level 2) and set the setting value to “-2”. Then execute step 2 through 5.
If the phenomenon still appears, execute step 6 and later steps.

6) Adjust the upper limit of the density correction of the Toner Density Sensor for the color with which the phenomenon occurs.
Select COPIER > ADJUST > DENS > HLMT-PT* (corresponding color) (Level 2), and set the setting value to “-1”. (Default: 0)

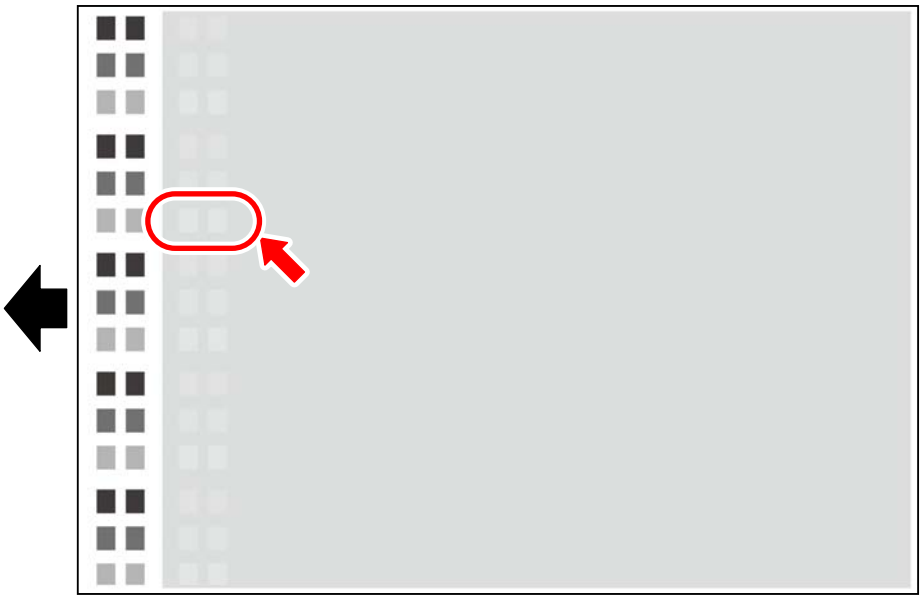
7) Execute step 3 through 5.
If the phenomenon is disappeared, finish the work.
If the phenomenon is not disappeared, select COPIER > ADJUST > DENS > HLMT-PT* (corresponding color) (Level 2) and set the setting value to “-2”. Then execute step 2 through 5.
If the phenomenon still appears, execute step 8.

8) Select COPIER > ADJUST > DENS > P-TG-* / HLMT-PT* (corresponding color) (Level 2), and return the setting value to the default “0”. Then, replace the Developing Assembly.

NOTE:
To make the T/D ration in the Developing Assembly to the set value, the toner should be consumed; therefore, it is required to execute step 3..

[Points to Note about Field Remedy]
As the setting value of COPIER > ADJUST > DENS > P-TG-*/HLMT-PT* become smaller, carrier adhesion tends to be occurred (A phenomenon that carrier is developed.)

[Sample Image]



F-6-7

Uneven vertical lines on a halftone image due to the soiled Charging Roller

[Location of Failure]
Soiled Charging Roller

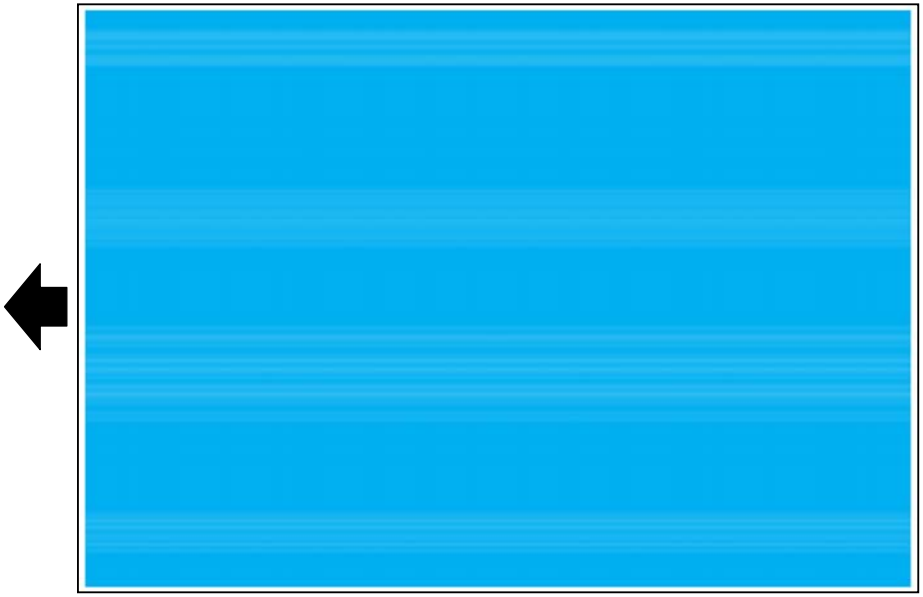
[Cause]
Soiled Charging Roller caused by degradation of cleaning performance due to durability of the Cleaning Roller.

[Occurrence Condition]
At end of life of the Drum Unit

[Field Remedy]
1) Replace the Drum Unit for the corresponding color with which the uneven vertical lines occur.

[Points to Note about Field Remedy]
None.

[Sample Image]



F-6-8

Toner Drops in the Developing Assembly

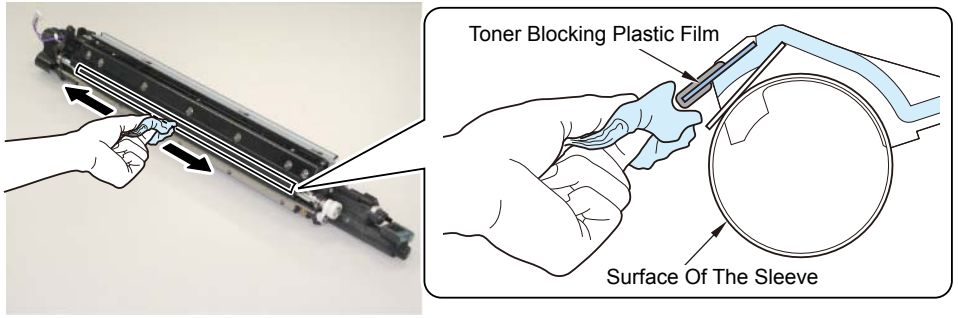
[Location of Failure]
Developing Assembly (Toner Blocking Plastic Film)

[Cause]
Due to dropping the toner accumulated on the Developing Assembly Upper Cover (the Toner Blocking Plastic Film) onto the drum.

[Occurrence Condition]
It tends to occur with the following conditions: a high temperature/high humidity environment, and high average image Duty.

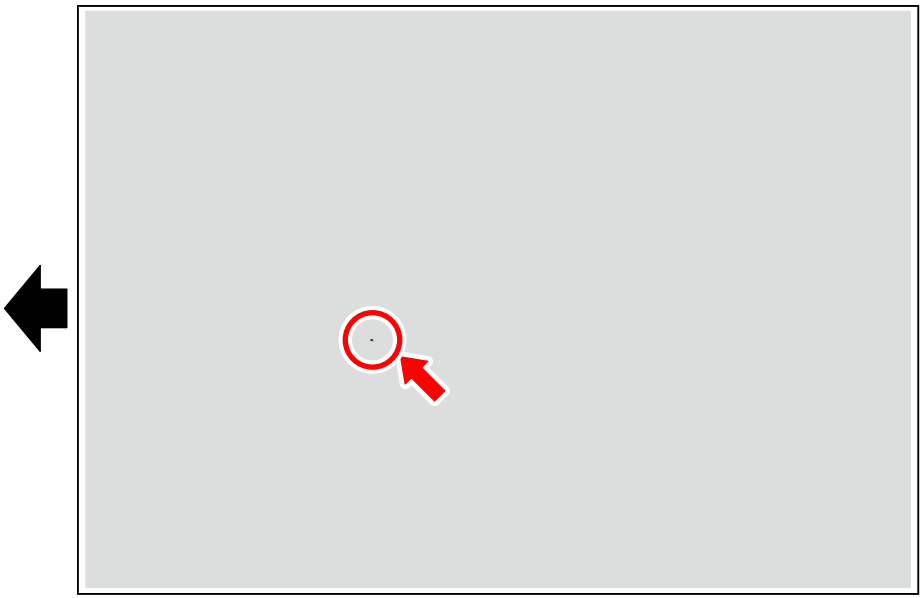
[Field Remedy]
1) Clean inside of the Toner Blocking Plastic Film in the Developing Assembly with lint-free paper.

[Points to Note about Field Remedy]
- Be sure not to touch the surface of the Sleeve when cleaning.
- Be careful not to leave toner on the urethane sheet.



F-6-9

[Sample Image]



F-6-10

Transfer failure on the trailing edge of the 2nd side of coated paper

[Location of Failure]
Secondary Transfer Assembly

[Cause]
It is due to the occurrence of gap voltage between the ITB and a paper at the Secondary Transfer nip due to upward curl on the trailing edge of the 2nd side.

[Occurrence Condition]
At duplex printing with coated paper from the Multi-purpose Tray

[Field Remedy]
1. Ask user to use papers to which “curl straightening” is performed. (For the details, refer to the Users Manual).
[For curled papers, be sure to flatten them before use. (Degree of curl: paper: 10mm or less, heavy paper: 5mm or less) Paper may not be fed depending on the paper quality.]
If the phenomenon still occurs, execute the following.

2. Adjust the Secondary Transfer bias by selecting User Mode > Tail End White Patch Correction.
1)Select COPIER> OPTION> DSPLY-SW> IMAC-ADJ, and set the item to “1”.

2)Select Settings/Registration > Preferences > Paper Settings > Paper Type Management Settings, and select the corresponding paper (with which the phenomenon occurred).

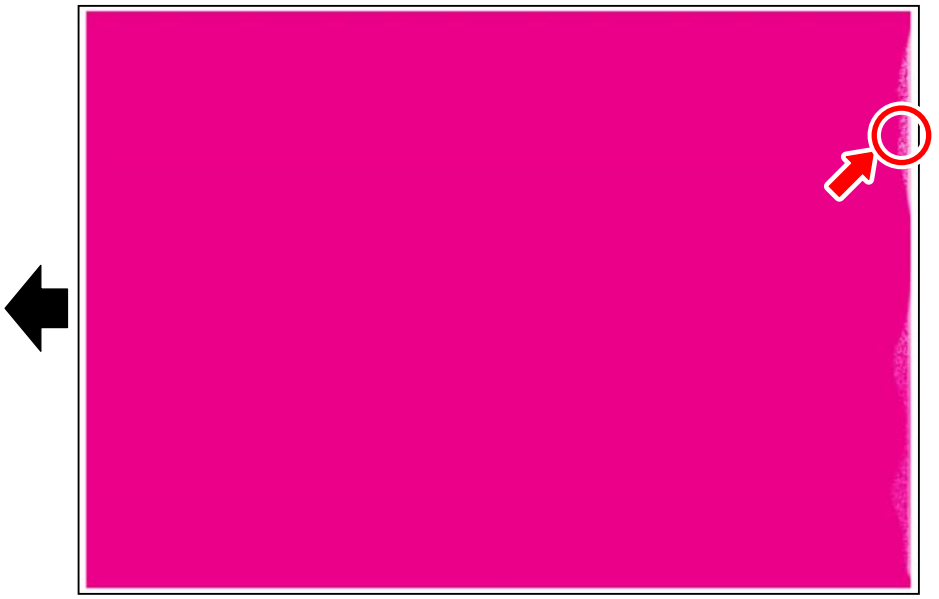
NOTE:
To select “Paper Type Management Settings”, it is required to login to “System Management Mode”.

3)Select Details/ Edit > Tail End White Patch Correction > Back Side.
Correction level: increase the value in stages until the white patch disappeared.
Degree of correction: enter the range where the white patch occurs. (Distance from the trailing edge: mm)

NOTE:
1. The setting of “Tail End White Patch Correction” can be changed only for the paper that is duplicated and then registered.
2. With “Tail End White Patch Correction”, the Secondary Transfer bias is adjusted.
Changing the value in a positive direction: increase the Secondary Transfer bias
Changing the value in a negative direction: decrease the Secondary Transfer bias

[Points to Note about Field Remedy]
None.

[Sample Image]



F-6-11

Calibration for color difference on front and back sides

When significant color difference appears between the scanned images by Front Side Scanner Unit and by the Back Side Scanner Unit, execute the adjustment.

NOTE:
This adjustment is only effective for the models that are equipped with the 2 Scanner Units (inside the Reader and inside the DADF).

1) Check that A4 paper (plain) is set to the deck or the cassette.

2) Output a correction chart from (Lv.1) COPIER > TEST > PG.
<Setting>
TXPH=1 (low screen ruling), THRU=0 (Pascal gamma applied), TYPE=58

NOTE:
Before outputting a correction chart, it is recommended to print out the documents with high screen ruling to stabilize the engine.

3) Display the screen of (Lv.1) COPIER > FUNCTION > MISC-R and specify the reference side in the following item.
- 1PCLBSET (Setting of the reference side for DADF 2-sides color difference correction)
<Setting value>
0: None (default), 1: Adjust the back side to the front, 2: Adjust the front side to the back

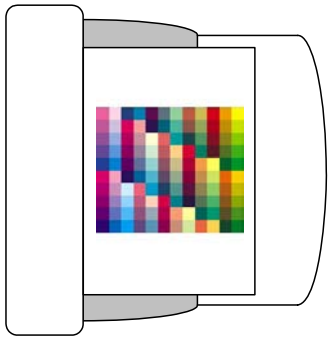
CAUTION:
- It is not possible to execute the adjustment when “0” is specified in this setting.
- If adjustment is not made, be sure to set this item to "0".

CAUTION:
- Make sure to place the correction chart in the indicated direction in step 4) and 5).
- If placing it in a wrong direction, “NG!” is displayed in each service mode and retry is required.

NOTE:
Even though the correction chart is placed correctly in step 4) and 5), “NG!” may be displayed. So repeat the steps several times.

4) Place the outputted correction chart on the Original Pickup Tray with face-up, select the following item and press OK key.
- 1PSCLB_A (Execution of DADF 2-sides color difference correction (front side))

CAUTION:
Make sure to place the correction chart with the printed side facing-up and also the corner blue patch is positioned in the front left.



F-6-12

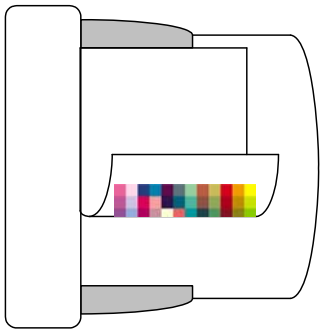
NOTE:
When exiting the MISC-R screen during scanning, the scanned value is cleared.

5) Place the outputted correction chart on the Original Pickup Tray with face-down, select the following item and press OK key.

- 1PSCLB_B (Execution of DADF 2-sided color difference correction (back side))

CAUTION:

Make sure to place the correction chart with the printed side facing-down and also the corner blue patch is positioned in the rear left.



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NOTE:
When exiting the MISC-R screen during scanning, the scanned value is cleared and processing will be canceled.

6) Make sure that “OK!” is displayed on 1PSCLB_A & 1PSCLB_B and turn OFF/ON the power.

7) Depending on the correction result, execute the step a to c as necessary.

a. When resetting the correction result.
Specify “0” in the following item and turn OFF/ON the power.

- 1PCLBSET (Setting of reference side for DADF 2-sides color difference correction)

b. If the color that was not displaced before correction is displaced and wants to correct.
Specify “1” in the following item and return to the step 3).

- 1PCLBUDR (Setting of DADF 2-sides color correction lower limit level)
<Setting value>
0: OFF (default), 1: ON

c. If there is a color that is extremely displaced after correction.
Specify “1” or “2” in the following item and return to the step 3).

- 1PCLBOVR (Setting of DADF 2-sides color correction upper limit level)
<Setting value>
0: No control amount (default), 1: Control amount low, 2: Control amount high

Vertical Lines

1. Analysis Case

a. Cause

Dust is adhered on the following places.

- Copyboard Glass/Stream Reading Glass/Reading Glass
- Standard White Plate
- Turndown Mirror
- Scanner Unit Reflection Light Inlet

b. Field Remedy

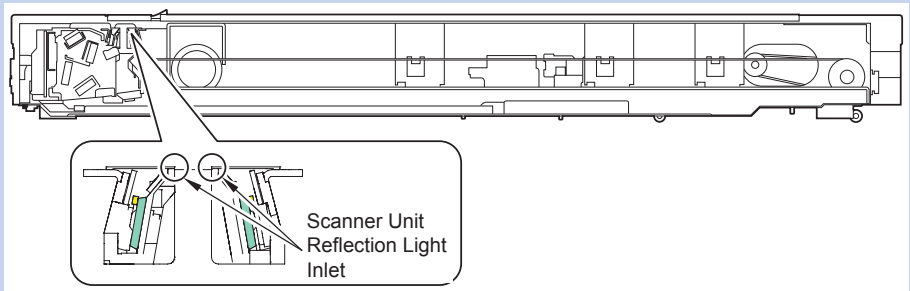
- Clean the Copyboard Glass/Stream Reading Glass/Reading Glass.

- Clean the Standard White Plate with lint-free paper moistened with alcohol.

- Dry wipe the Scanner Unit Reflection Light Inlet with lint-free paper.
  If dust is not removed even cleaning the Scanner Unit Reflection Light Inlet with lint-free paper, remove the dust with tweezers.

- Clean the Turndown Mirror.

NOTE: Cleaning the Scanner Unit Reflection Light Inlet
If dust larger than 1mm adheres on the Scanner Unit Reflection Light Inlet, it may block the light path.
Because dust is more likely to adhere to near the sheet affixed to cover the light source of the Scanner Unit, inspect visually and remove the dust.
Predict the location of dust from the location of vertical lines on the copied image.
- Reader



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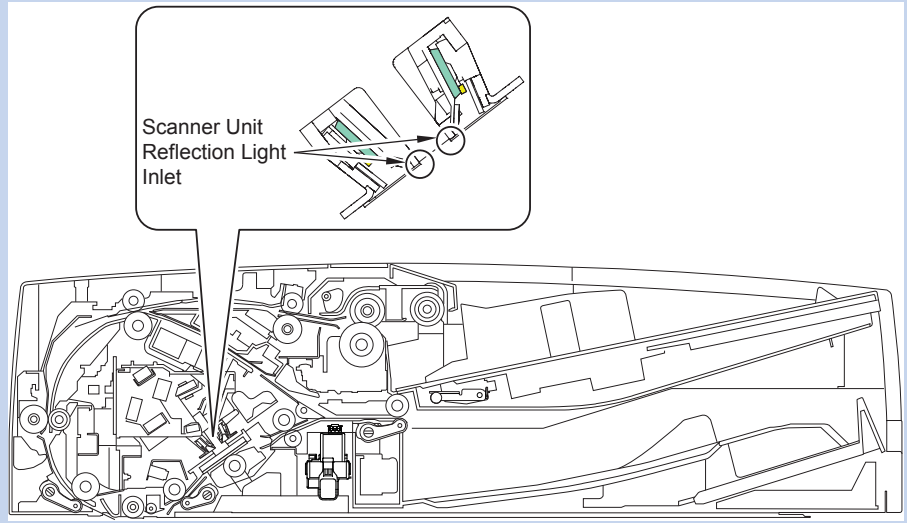
- DADF



F-6-15

Error Code

E021-xxx due to mismatched phase between the screw of color Developing Assembly and coupling of main body

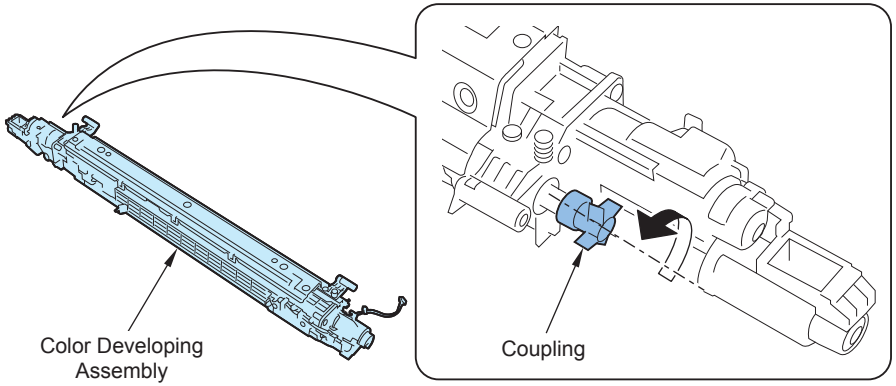
[Location of Failure]
Screw of color Developing Assembly (and coupling of main body)

[Cause]
Mismatched phase between the screw of color Developing Assembly and coupling of main body

[Condition]
Mismatched phase between the screw of color Developing Assembly and coupling of main body

[Field Remedy]
In case of E201, be sure to perform the following procedures in order to match the phase between the screw of color Developing Assembly and coupling of main body.

1) Remove the color Developing Assembly where the error occurs and make the coupling of the Sleeve rotate 1/4 turn in the direction of the arrow (clockwise).



F-6-16

[Points to note about field remedy]
Do not turn the Developing Sleeve in the reverse direction.

By rotating it in the reverse direction, toner clots on the Sleeve may damage the Toner Blocking Sheet on the cylinder.

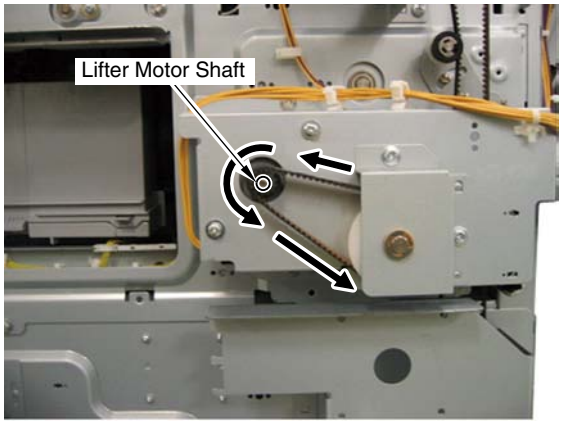
Alarm Code

How to clear 04-3042, 04-3142 and 04-3242:

When the Lifter Plate of the Multi Deck is at the upper limit position (when the Lifter Upper Limit Sensor is ON) for some reasons, the Lifter Plate does not restore even after stopping the lifting operation of the Lifter Plate, and turning OFF and then ON the power supply. Move down the Lifter Plate from the upper limit position, according to the procedure shown below.

[Field Remedy]

1) Turn OFF the power supply of the main body.
2) Remove the Rear Cover of the Multi Deck.
3) While closing the receptacle where the Lifter Plate does not operate, turn the belt of the Lifter Motor counter-clockwise until the shaft of the Lifter Motor revolves 5 times.
   The Lifter Motor is released from the upper limit position.



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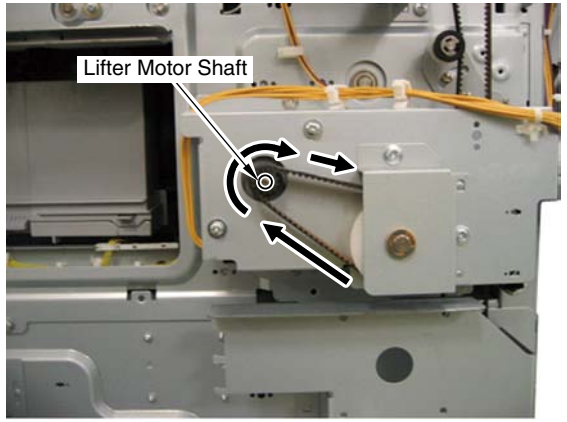
4) Turn ON the power supply of the main body.
   The Lifter Plate can operate now.

How to clear 04-3043, 04-3143 and 04-3243:

When the Lifter Plate of the Multi Deck is at the lower limit position (when the Lifter Lower Limit Sensor is ON) for some reasons, the Lifter Plate does not restore even after stopping the lifting operation of the Lifter Plate, and turning OFF and then ON the power supply. Move up the Lifter Plate from the lower limit position, according to the procedure shown below.

[Field Remedy]

1) Turn OFF the power supply of the main body.
2) Remove the Rear Cover of the Multi Deck.
3) While closing the receptacle where the lifter does not operate, turn the belt of the Lifter Motor clockwise until the shaft of the Lifter Motor revolves 5 times.
   The Lifter Motor is released from the lower limit position.



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4) Turn ON the power supply of the main body.
   The Lifter Plate can operate now.

Version upgrade

Overview

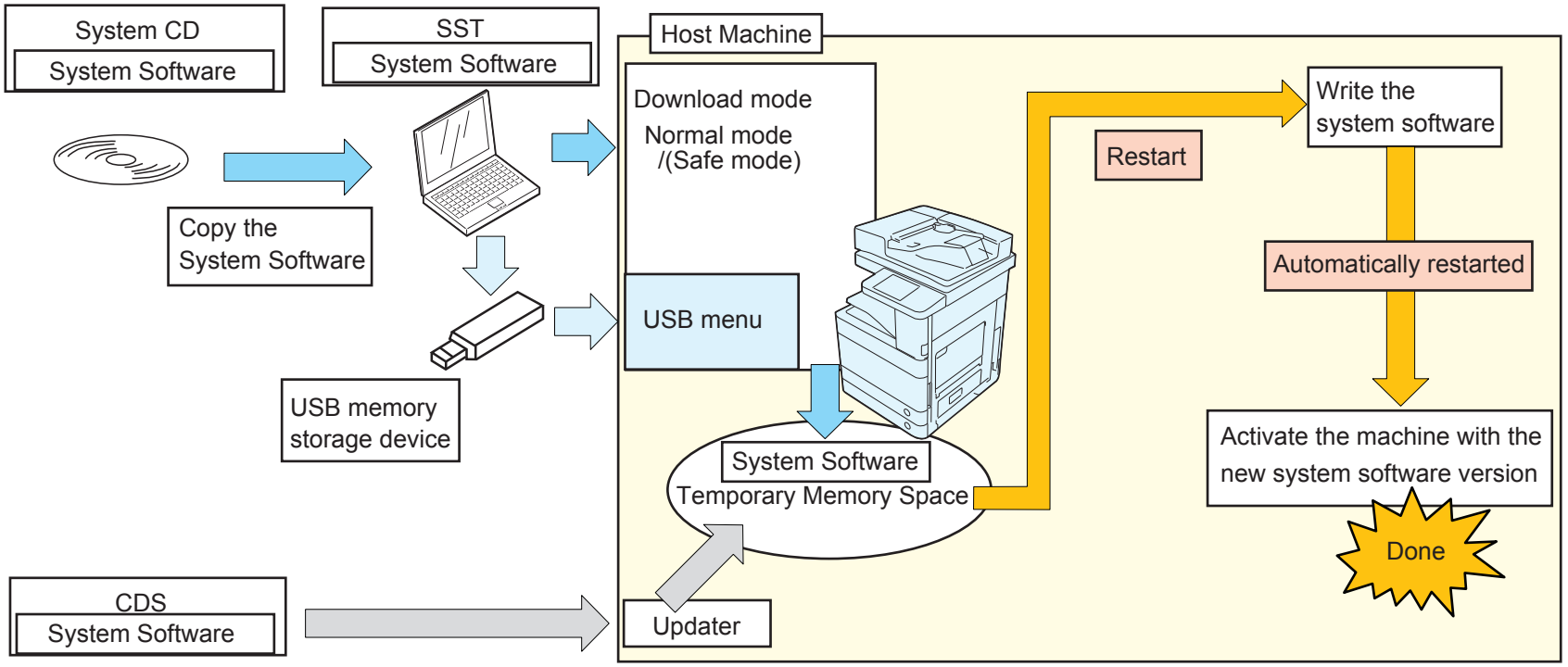
Overview of Version Upgrade

The system software version is upgraded in 2 steps, downloading and writing the new version of the system software.

Downloading System Software

This machine supports the following 3 downloading methods.

1. Download via the service support tool (hereinafter “SST”)
   Connect this machine to the PC by the cross cable to download the system software using SST installed in the PC.
2. Download using the USB memory storage device
   Insert the USB memory storage device storage device to the slot of the machine and download the system software stored in the device.
3. Download via Contents Delivery System (hereinafter “CDS”)
   Access to CDS via Internet to download the system software directly to the machine.



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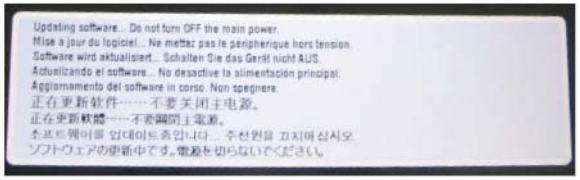
Writing System Software

The system software downloaded in either of the above-mentioned methods is stored in the temporary memory space.
After the system software is successfully downloaded, restart the machine to write the software in the machine.
In case the main power switch is turned OFF during the writing process, the machine may not be started.
This machine supports the remote version upgrade via CDS. When upgrading the system software via CDS, the warning message is shown on the control panel to alert the user not to turn OFF the power switch.



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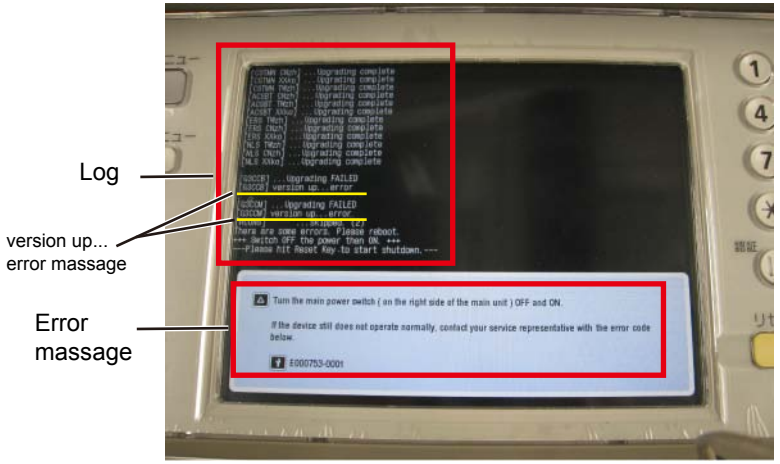
When the system software is successfully written, the machine is automatically restarted to activate the downloaded system software.
If any error occurs during the writing process, the error code, E753-0001, is shown.
The name of the system software component is shown to the left of the error log message, “version up…..error”. Check the name if the software is for the option not attached to the machine. If so, turn OFF / ON the machine to recover the error (see Troubleshooting for details).



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Download Mode

When the version is upgraded via SST or with the USB memory storage device storage device, start the machine in Download mode. This machine has the following 2 Download modes similarly with other iR-series models.

Normal mode(recommend):

- Start from Copier > FUNCTION > SYSTEM > Download.
- Conventionally, the main power switch of this machine was turned ON while pressing 1 and 7 keys. However, the procedure above automatically assigns a static IP address and enables the download same as before.
- You can obtain the version information and avoid unnecessary download and errors.

NOTE :
When entering Download mode, be sure to go into Service mode after all items of main menu have been displayed.
This machine reads the version information of system software when it starts. You must start Download mode after the version information has been obtained.

Safe mode:

- Press 2 and 8 keys simultaneously on the numeric keypad when turning on the power.
  * Be sure to use "Single mode" when using SST. SST "Assist mode" cannot be used in safe mode. Any mode can be used when using USB.

■ System Software Components

The table below shows the system software components for this machine.

Software to be upgraded		Display on SST		How to upgrade versions			Remarks
		Registered name of product	Name of system software	SST	USB memory	Others	
Host Machine	Main Controller	iAC7260	SYSTEM	○	○	-	
	Language Module		LANGUAGE	○	○	-	
	Remote UI Contents		RUI	○	○	-	
	RUI portal		RPTL	○	○	-	
	Accessibility		ACSBT	○	○	-	
	UI-BOX		BOX	○	○	-	
	UI-COPY		COPY	○	○	-	
	UI-Intro		INTRO	○	○	-	
	UI-SEND		SEND	○	○	-	
	MEAP Libraly		MEAP	○	○	-	
	Paper Type Information File		MEDIA	○	○	-	
	Service Mode Contents		SMCNT	○	○	-	
	DC Controller		DCON	○	○	-	
	Box Checker		BCT	○	○	-	
	WebDAV Contents		WEBDAV	○	○	-	
	Custom Menu Application		CSTMN	○	○	-	
	Error Recovery System		ERS	○	○	-	
	Job Hold Application		HOLD	○	○	-	
	NLS Application		NLS	○	○	-	
	Image Analysis Board		TSP	○	○	-	
	WDS-SCAN (JAVA UI)		WSDS	○	○	-	
	Key/Certificatefor Encrypted Communication	iAXXXX	KEY	○	○	-	
ADF	ADF Controller	DADF-R1	RCOND	○	-	-	
Staple Finisher – L1/Saddle Stitch Finisher – L1	Finisher Controller	FIN_L1	FIN_CON	○	○	-	Staple Finisher – L1/Saddle Stitch Finisher – L1
			SDL_CON	○	○	-	
Staple Finisher – K1/Saddle Stitch Finisher – K1	Finisher Controller	FIN_K1	FIN_CON	○	○	-	Staple Finisher – K1/Saddle Stitch Finisher – K1
			SLD_CON	○	○	-	
			FLD_CON	○	○	-	
			IST_CON	○	○	-	
			TRM_CON	○	○	-	
Interface Conttroller		PUI_B1	PUI_CON	○	○	-	
Extensions System Option	Voice Synthesis Dictionary	iAC7260	TTS	○	○	-	
	Voice Recognition Dictionary		ASR	○	○	-	
	Resources for Web Browser		BROWSER	○	○	-	
	OCR Libraly	iAXXXX	CDICT	○	○	-	
	G3FAX	iAC7260	G3CCB	○	○	-	
			G3CCM	○	○	-	

T-6-3

This machine holds the increased number of system software components compared to conventional iR machines to meet vastly extended functionality.

The Image Reader for this machine consists of 2-sided Single Pass and 2-sided Double Pass, requiring specific system software for each.

- The name of the system software for the 2-sided Single Pass Image Reader (Duplex Color Image Reader Unit – B1): RCOND
- The name of the system software for the 2-sided Double Pass Image Reader (Color Image Reader Unit – B1): RCONS

The finisher for this machine supports version upgrade via the host machine in any of the above-mentioned methods, i.e., via SST, USB memory storage device storage device or CDS. Note that the External 2-hole Puncher B1 does not support version upgrade via the host machine. To upgrade versions, connect the option with the PC using the downloader PCB to download the system software via SST.

Note on Download Process

CAUTION: Never turn OFF the power during the download / writing process.

Turning off the power during the download / writing process may cause a failure of machine start-up at power-on.

If this occurs, start the machine in Safe mode (by pressing 2 and 8 keys simultaneously on the numeric keypad).

When the machine is successfully started in Safe mode, execute formatting of BOOTDEV partition, retry downloading the system software.

CAUTION:

Be sure to use normal mode when using download mode except in a case where it is not possible to start this machine and enter service mode.

In safe mode, version information of SYSTEM, MEAPCONT, LANGUAGE, RUI, and SDICT can be obtained, but version information of other system software such as DCON and RCON cannot be obtained. Therefore the following points to note are required when downloading in safe mode.

[RCON]

The version is not upgraded except in a case where Single mode of SST is used or when "Overwrite all" of USB download menu is used.

[DCON and others]

The following symptoms occur when SST (Single mode) or USB download menu (Auto) is used.

- The time for download/write becomes longer because the software is overwritten even when system software of the same version is being written.
- A confirmation message is not displayed when a lower version is going to be downloaded.

CAUTION: error code E753-0001

When an error occurs during writing process of the system software downloaded using SST or USB memory, error code E753-0001 is displayed.

Check if the target option is properly installed and see if the software to download is for the correct target option, and then execute downloading again.

Version Upgrade via SST

Overview

The system software can be downloaded either of the two modes below via SST.

- Assist mode (recommended)
- Single mode

Assist mode provides the following features.

- Attached option types are automatically recognized.
- The new versions of the system software for attached option types are automatically searched.
- The set of system software with interactive behavior confirmed is automatically downloaded.
- The accessories attached to the host machine are automatically recognized to download the system software for each accessory.

This machine holds a number of system software components that mutually interacts during operation. Behaviors of such system software should be confirmed when these are downloaded as the set. Thus, Assist mode is basically recommended to download the system software for this machine.

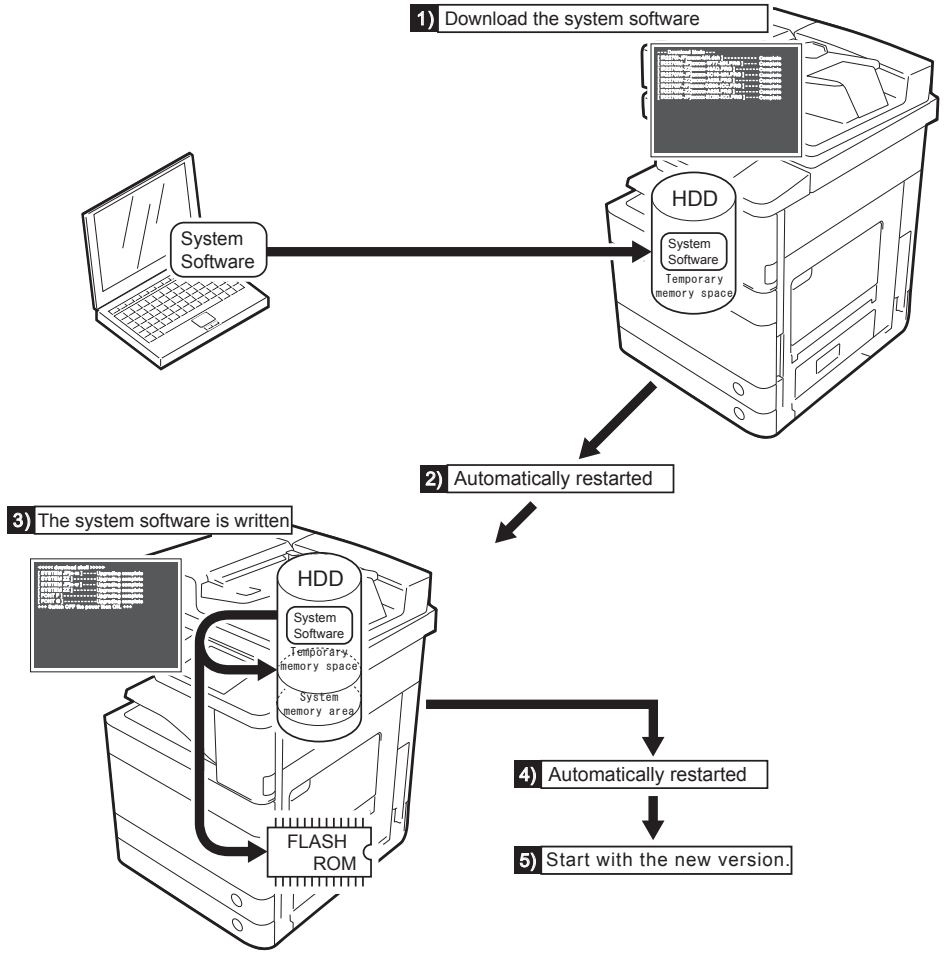
NOTE :
Use Single mode only when any of the following conditions is met.

- When downloading some the system software components, i.e. DCON, RCON or options.
- When reloading the system software after HDD is formatted.

Downloading System Software

System software is saved in the temporary storage area on HDD after downloaded with SST. Restart the machine after download so that it will be written to the system area, and the flash ROM.

After the writing has been completed normally, this machine automatically restarts with the new system software.



F-6-22

■ Copying System Software

● System CD to SST

Copy the system software stored in the system CD to SST.

NOTE:
The system software is compressed if the file size exceeds the CD memory capacity.
If the above is the case, decompress the file before copying it to SST.

Preparation

Requirements:

- PC with SST Ver.4.41 or later installed
- The system CD for this machine

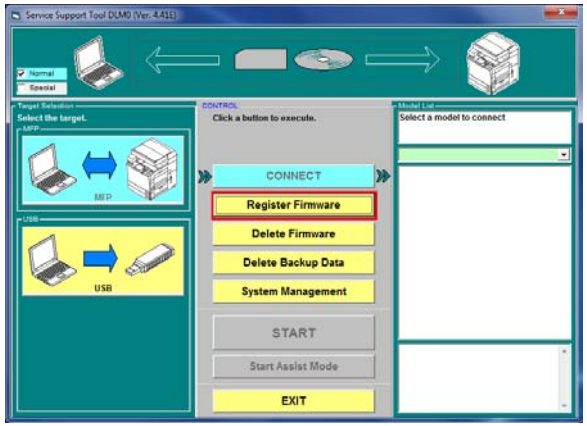
Steps to copy the system software

1) Start the PC

2) Set the system CD in the PC

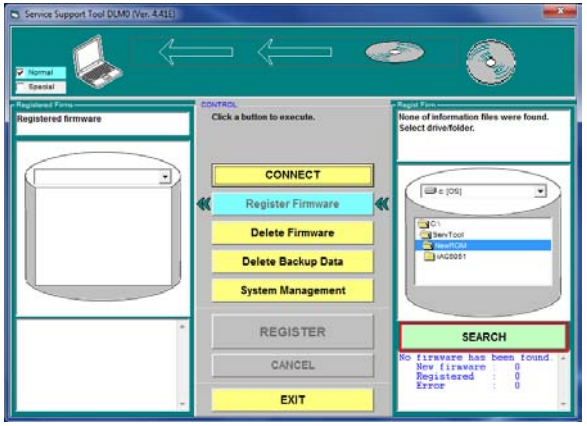
3) Start SST

4) Click “Register Firmware” button.



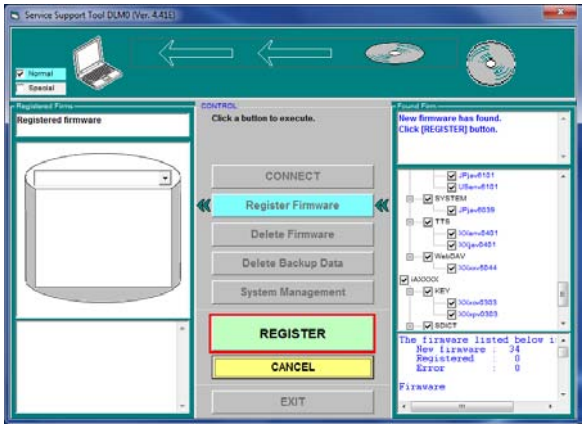
F-6-23

5) Select the drive where the system CD is set and click “Search” button.



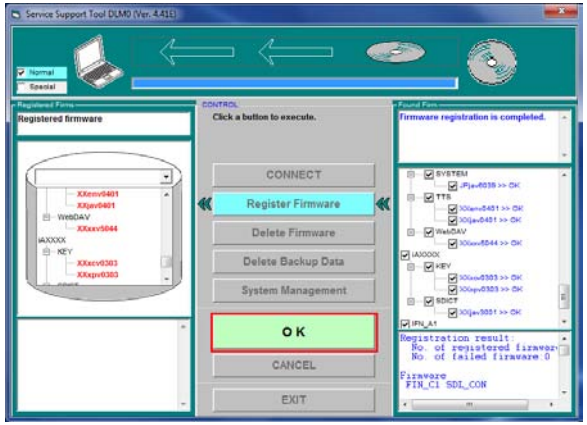
F-6-24

6) The system software stored in the system CD is listed.
Uncheck the box(es) for unnecessary folder(s) and/or system software and click “Copy” button.



F-6-25

7) The message is shown when the system software is successfully copied. Click “OK” button.



F-6-26

Connection

The following IP address is automatically set for this machine at start-up in Download mode.

- IP address:172.16.1.100
- Subnet mask:255.255.255.0

When the PC with SST installed is connected to this machine, change the PC network address to the following.

- IP address:172.16.1.160
- Subnet mask:255.255.255.0
- Default gateway: arbitrary

CAUTION:

If the PC has the connection to the network, the settings changed to the above-mentioned may cause network failures due to redundant IP addresses, etc. Ensure that the PC is disconnected from the network when you change the PC network settings. Alternatively use the cross cable to connect the PC to this machine.

Preparation

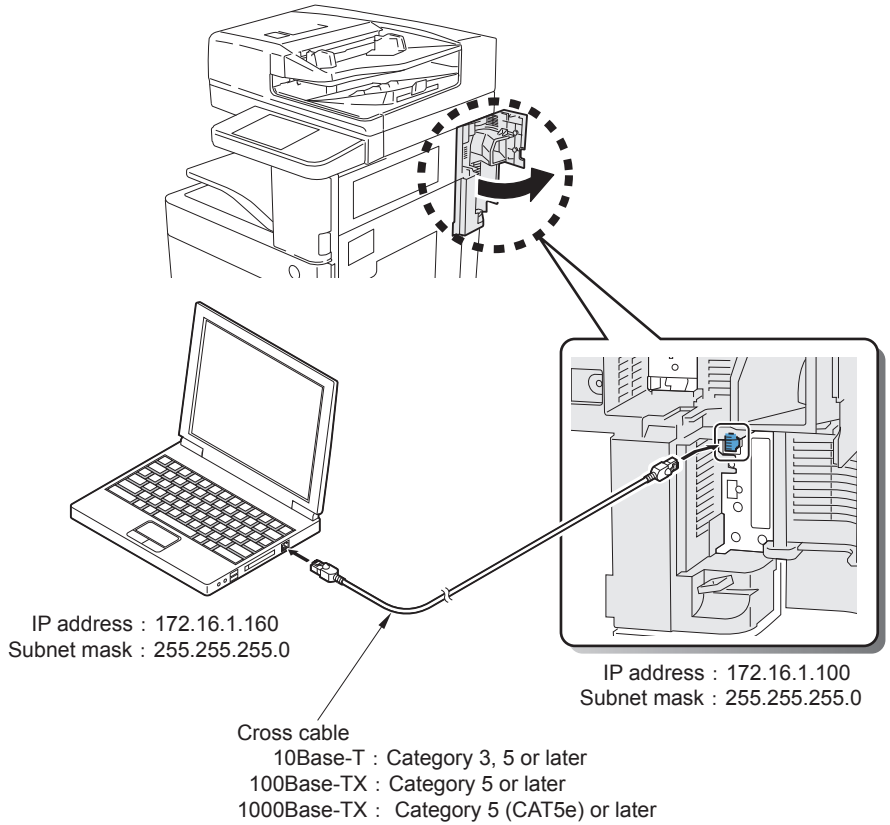
Requirements

- PC with SST Ver. 4.41 or later installed and the system software for this machine is stored
- Cross cable
  10Base-T : Category 3 or 5
  100Base-T : Category 5
  1000Base-T : Enhanced Category 5 (CAT5e) or later

CAUTION:

Disconnect USB memory storage device storage devices if connected.

Communication to SST is disabled in this machine if any USB memory storage device storage device is recognized. SST and the USB memory storage device storage device cannot be used concurrently.



F-6-27

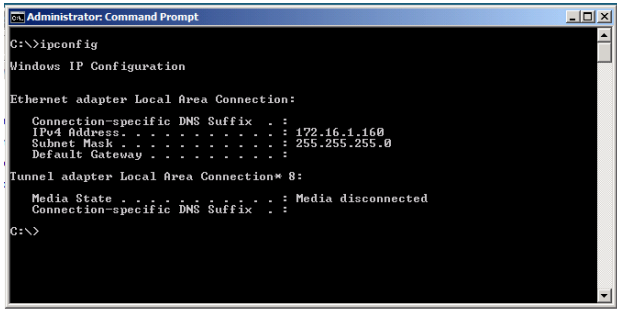
Steps

1) Use the cross cable to connect the machine to the PC with SST installed.

2) Turn on the main power switch of this machine.

3) Enter Service mode to start the machine in Download mode.
Select COPIER > FUNCTION > SYSTEM > DOWNLOAD and press [OK].

4) Check the IP address of the PC.
Go to Start menu to select Program > Accessory > Command Prompt.
Type IPCONFIG and press [Return] to see the network settings of the PC.
If any discrepancies from the description in the figure below are found, change the network settings of the PC.

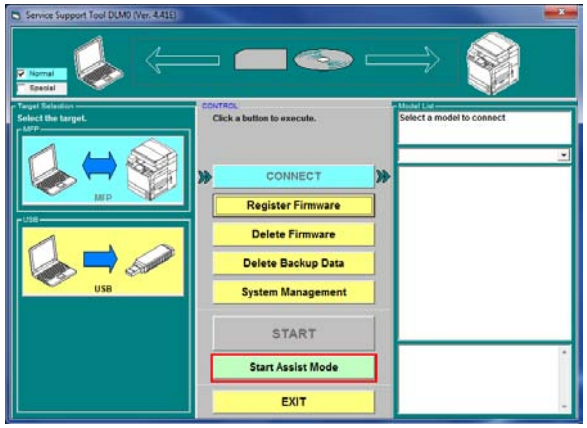


F-6-28

CAUTION:
The network settings are not shown with IPCONFIG if the PC is disconnected from the network. To check the settings, connect the PC to this machine at power-on by the cross cable.

■ Downloading System Software (Assist mode)

1) Start this machine and enter Download mode (COPIER > FUNCTION > SYSTEM > DOWNLOAD).
2) Connect the PC to this machine and start SST.
3) Click “Start Assist mode” button.
Skip this step when starting SST in Assist mode.

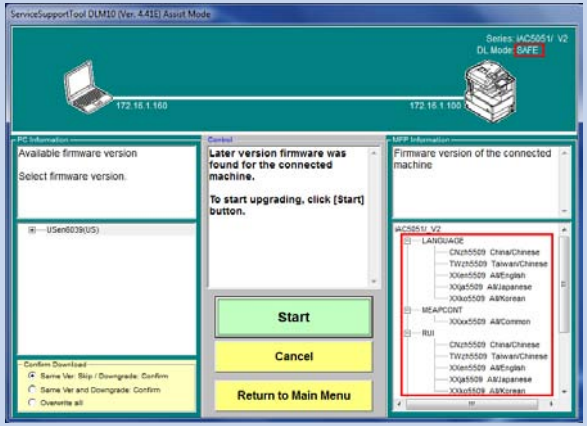


F-6-29

If the upgraded set of the system software is stored in SST, the new set is automatically selected.

NOTE:
If no upgrade is stored, the existing system software set is unchanged. At any rate, any versions of the system software can be downloaded by manual selection.

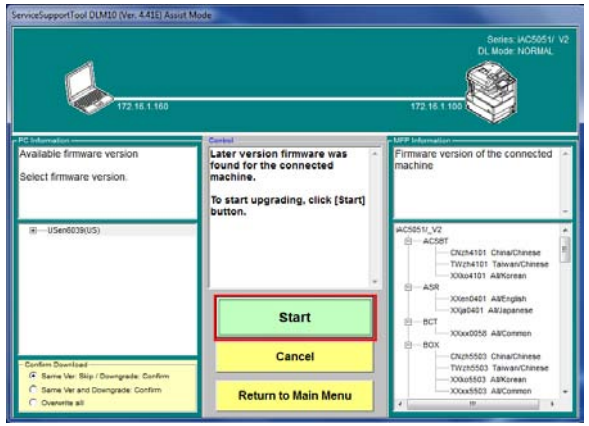
NOTE:
If the PC in Assist mode is connected to the machine in Safe mode,



F-6-30

only the system software of SYSTEM, LANGUAGE, RUI, MEAPCONT and SDICT can acquire version information.

4) Click “Start” button



F-6-31

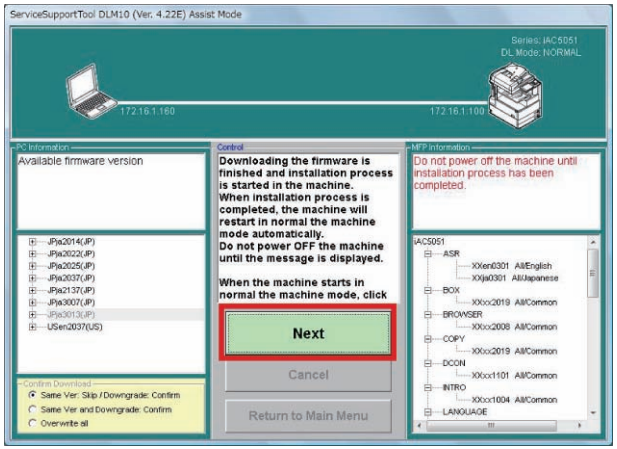
When download is completed, the machine is automatically restarted to initiate the writing process.The machine may repeat restarting several times depending on option configuration. Upon the system software written, the machine is restarted again and the main menu is displayed.

NOTE: Download Confirmation Message Modes
Download is confirmed in any of the three message modes.

- Skip the existing versions and confirm whether to download downgraded versions
  Upgraded versions are downloaded without message.
  Skip download of the existing versions.
  Confirm whether to download downgraded versions.
- Confirm whether to download the existing versions / downgraded versions
  Upgraded versions are downloaded without message.
  Confirm whether to download and overwrite the existing versions.
  Confirm whether to download downgraded versions.
- Overwrite all versions
  Regardless of version upgrade or downgrade, all versions of the system software are downloaded without message.

By default, “Skip the existing versions and confirm whether to download downgraded versions” is selected.

5) Click"Next"button.



F-6-32

6) Disconnect the cross cable from the machine.

7) Enter Service mode to check the system software versions.

8) Click"OK"button.
The main menu is displayed.

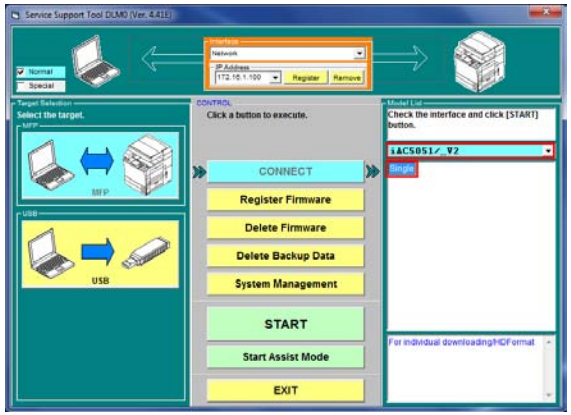
Downloading System Software (Single mode)

The following is the sample steps to download DCON (the other components of the system software can be downloaded similarly).

1) Start the machine in an appropriate Download mode.

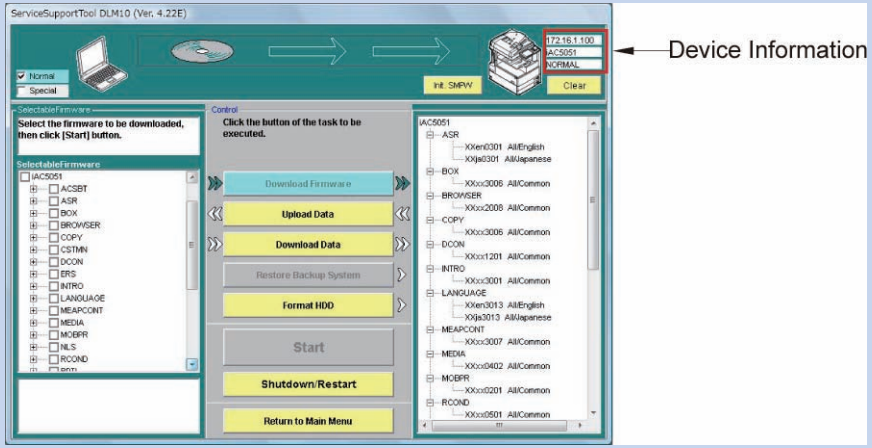
2) Connect the PC to this machine to start SST.

3) Select the model to be connected and “Single”, check the network settings. Click “Start” button.



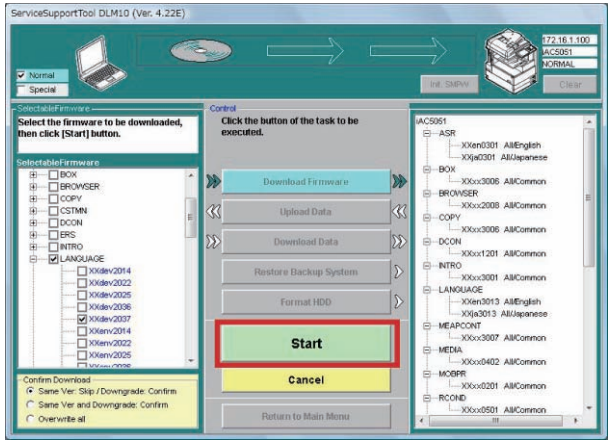
F-6-33

NOTE:
The following device information is shown at the right top of SST screen.
- IP address
- Model name
- Download mode



F-6-34

4) Select the DCON version to be downloaded and click “Start” button.
Multiple files can be selected in this step.

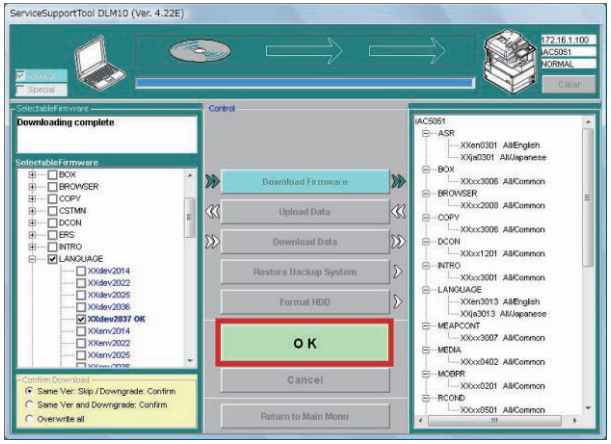


F-6-35

NOTE: Download Confirmation Message Modes
Download is confirmed in any of the three message modes.
- Skip the existing versions and confirm whether to download downgraded versions
  Upgraded versions are downloaded without message.
  Skip download of the existing versions.
  Confirm whether to download downgraded versions.
- Confirm whether to download the existing versions / downgraded versions
  Upgraded versions are downloaded without message.
  Confirm whether to download and overwrite the existing versions.
  Confirm whether to download downgraded versions.
- Overwrite all versions.
  Regardless of version upgrade or downgrade, all versions of the system software are downloaded without message.

By default, “Skip the existing versions and confirm whether to download downgraded

5) When download is completed, click “OK” button.

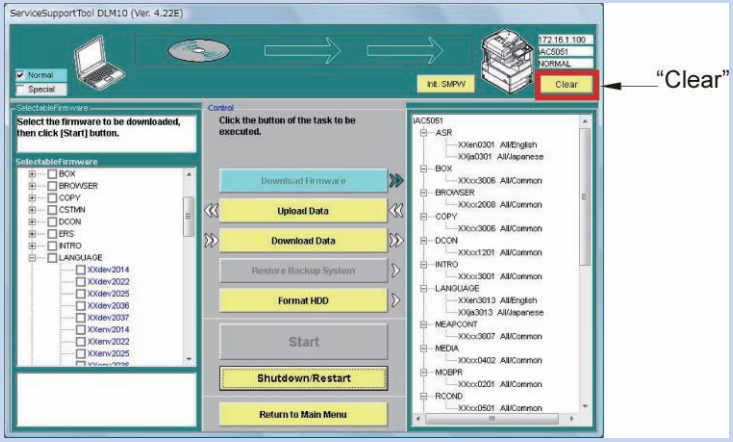


F-6-36

The main menu is displayed.

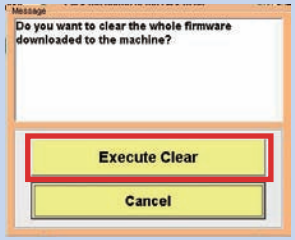
NOTE:
If it is before restarting the machine, the downloaded system software can be deleted not written on HDD or Flash ROM.

1) Click “Clear” button.
“Clear” button



F-6-37

2) Click “Execute Clear” button.
The system software, which is stored in the temporary memory space of HDD, is deleted.

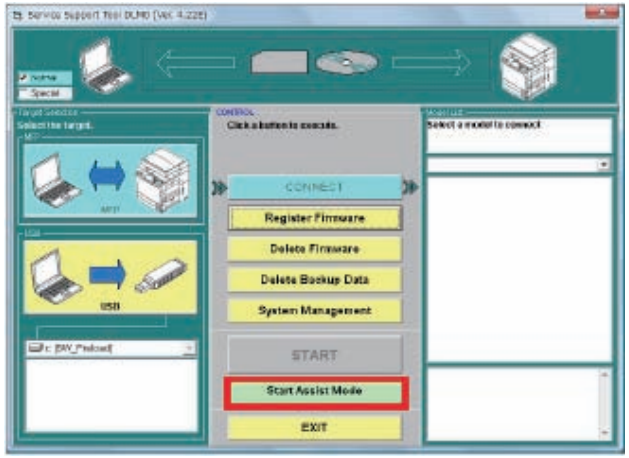


F-6-38

3) Click“OK”button.
Return to the previous screen.

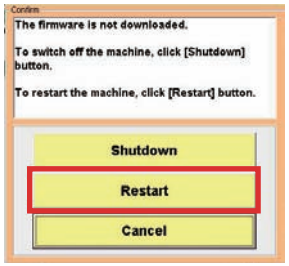
F-6-39

6) Click “Shutdown / Restart” button.



F-6-40

7) Click “Restart” button.



F-6-41

The machine is restarted.
The downloaded system software is written on HDD or Flash ROM.

8) Click"OK"button.

9) Enter Service mode to check the versions.

■ Formatting HDD

● Overview

This machine probides the following two types of HDD Formatting.

- ALL:to format the whole HDD
  - When HDD set as the service parts (the new HDD) is mounted
  - When clearing the system software and data completely from HDD and reloading the system software.

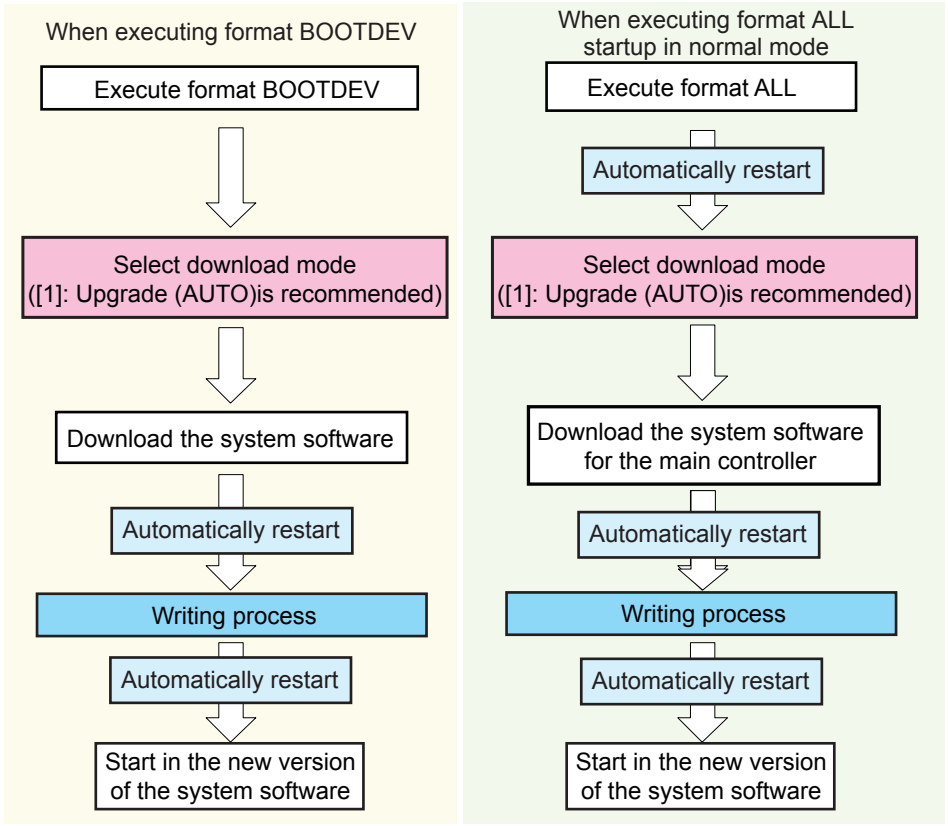
  Once Format ALL is executed in your machine, all the user data and MEAP applications held in HDD will be cleared. Ensure to gain an agreement from the user before formatting.

- BOOTDEV: to format the system software storage area on HDD.
  - When clearing the system software storage area and reloading the system software

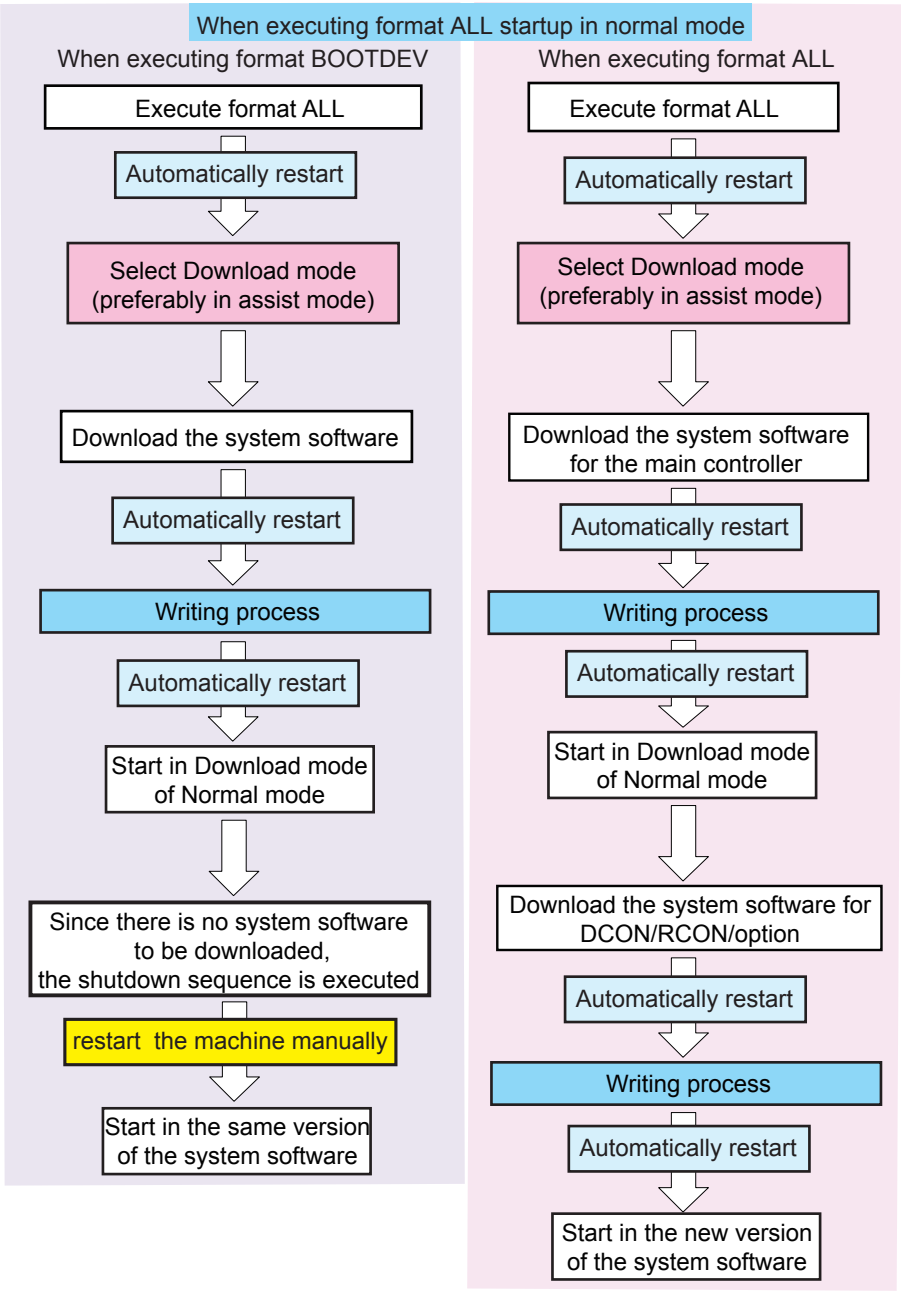
HDD needs not to be formatted at version upgrade.

HDD can be formatted only in Single mode.
After HDD is formatted, the machine cannot be started before the system software is downloaded.

After Format ALL is executed, the machine is automatically restarted to reflect formatting to HDD. At this time, the machine automatically starts in Download mode. For BOOTDEV format, the machine is ready to download the system software without restarting.
After formatting, enter either Assist mode(recommended) or Single mode to download the system software.



F-6-42



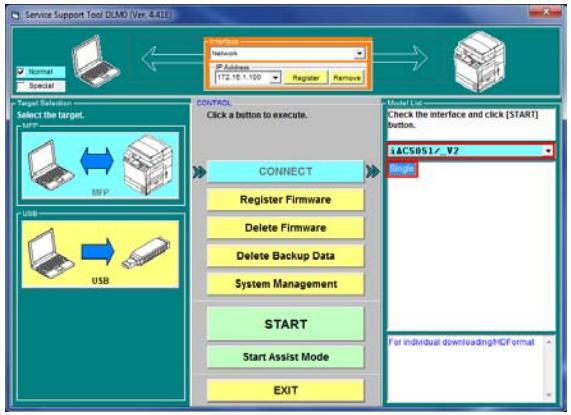
F-6-43

Steps of Formatting

1) Enter Download mode. (Enter Safe mode when you mount the new HDD or when the machine is unable to start normally due to HDD failures, etc.)

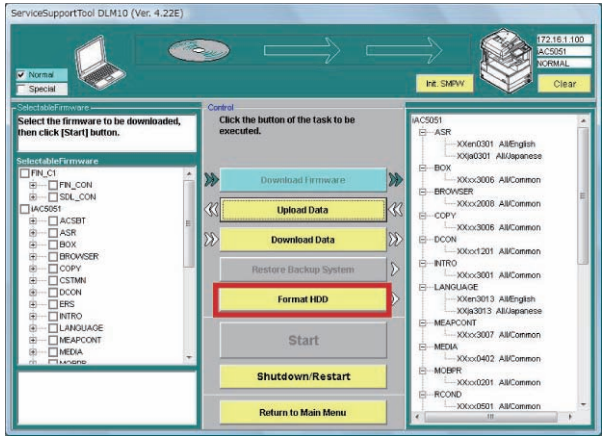
2) Connect the PC to the machine to start SST.

3) Select the model to be connected and “single”. Check the network settings and click “Start” button.



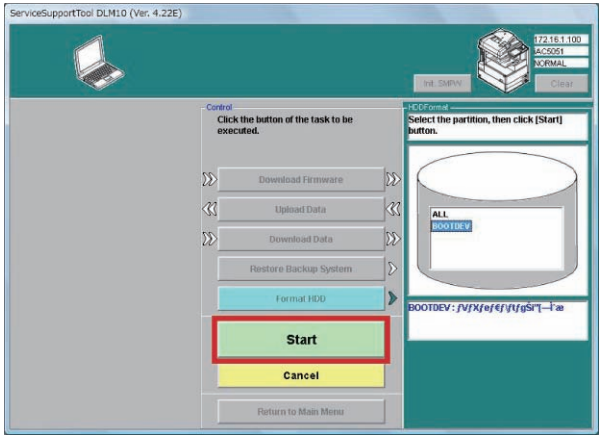
F-6-44

4) Click“Format HDD”button



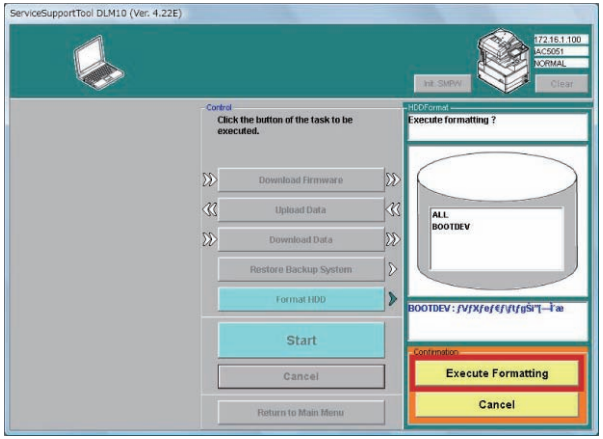
F-6-45

5) Select "BOOTDEV" or "ALL" to click "Start".



F-6-46

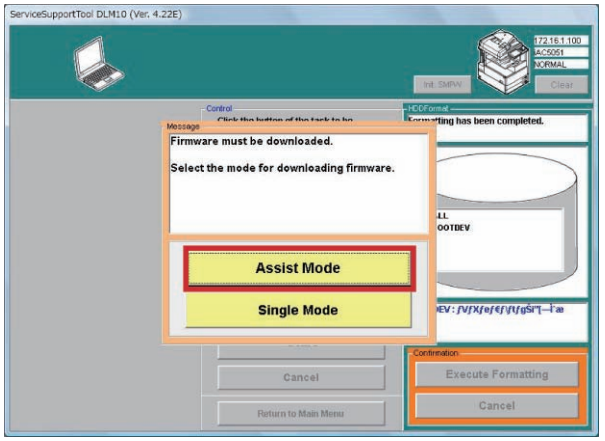
6) Click "Execute Format" button.



F-6-47

HDD is formatted.

7) Download the system software in any Download mode (Assist mode recommended). See the steps to download the system software for details.



F-6-48

CAUTION:

After HDD is formatted, ensure to download the system software. If the system software is not downloaded, E602 error is triggered at power-on.

CAUTION:

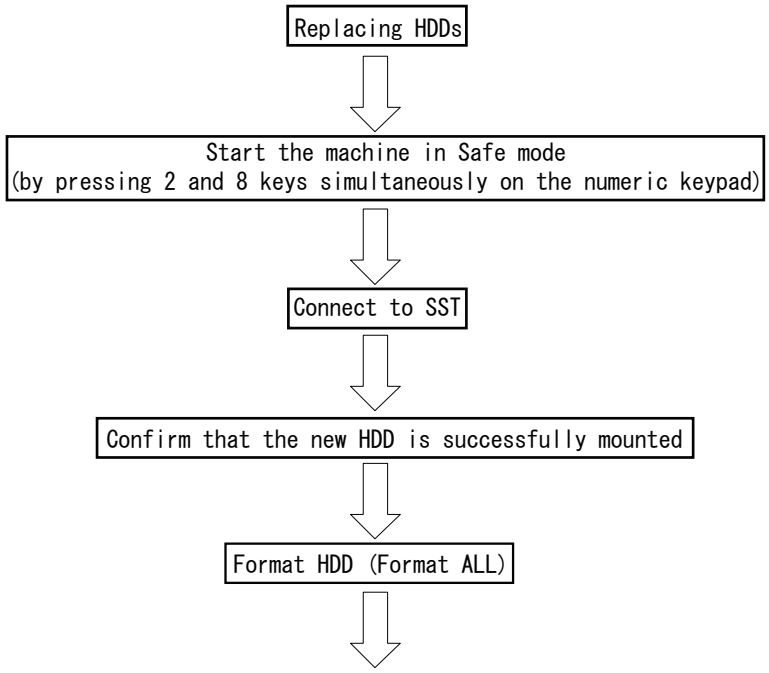
Restarting takes more time after HDD is formatted and the system software is downloaded (to write the downloaded software).

Down time may be approx. 5 minutes in maximum to proceed the writing process. Never turn OFF the machine while Starting screen is shown.

Mounting New HDD

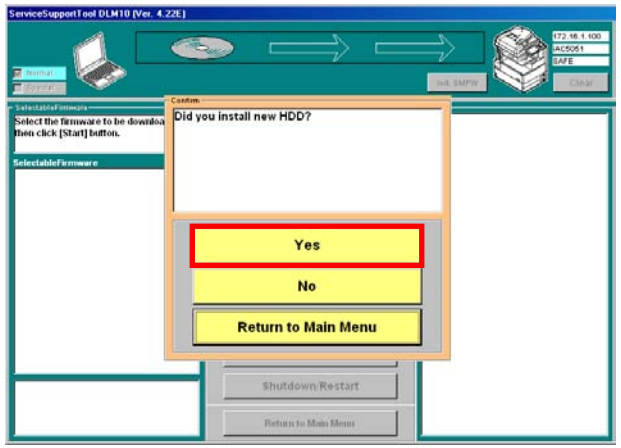
After HDD set as the service parts is mounted, the new HDD should be formatted initially. In this case, the message is shown to confirm if the new HDD is mounted.

The figure below shows the abbreviated steps.



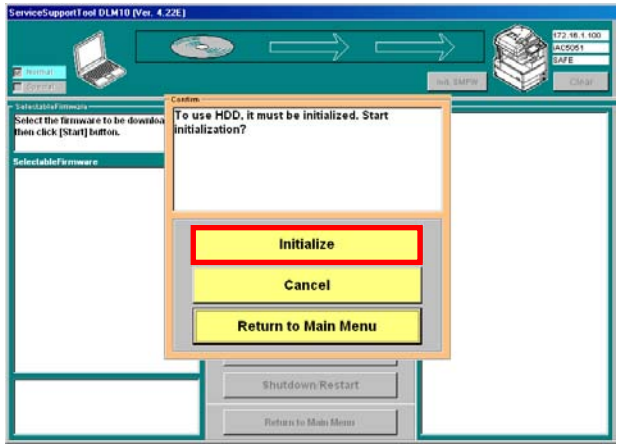
F-6-49

When the new HDD is mounted, the machine cannot be started in the normal procedure. Start the machine in Safe mode as Download mode. When gaining connection to SST, the message is shown to confirm if the new HDD is mounted.



F-6-50

Click "Yes" and the message is shown, confirming whether to format HDD.



F-6-51

Click “Initialize” button to initialize HDD (Format ALL). Follow the steps described in Format ALL section to download the system software.

Backup

Overview

At the time of replacing controller PCBs, the backup function enables to save data held in the PCB to migrate them to the new PCB.

- Backup via SST

Backup data	Downloaded/Uploaded file names
Backup data RAM	SramImg.bin(to be uploaded / downloaded)
MEAP applications	MeapBack.bin(to be uploaded / downloaded)
For investigation in Dev	Sublog.bin((Downloadable))
Service Print	The text file of the contents which You output to paper with a service mode(Downloadable).

T-6-4

  - Backup RAM holds the data from Backup RAM of the Main Controller PCB 2. (Because setting data of service mode for the parts counter and the Main Controller are stored, be sure to back up the data when replacing the Main Controller PCB and the DC Controller PCB.)
  - MeapBack holds MEAP applications and their data stored in HDD

- Backup via Service mode

Backup data	Service mode
Backup of Reader Controller PCB	COPIER > FUNCTION > SYSTEM RSRAMBUP (Backup) COPIER > FUNCTION > SYSTEM RSRAMRES (Restore)
Backup of DC Controller PCB	COPIER > FUNCTION > SYSTEM DSRAMBUP (Backup) COPIER > FUNCTION > SYSTEM DSRAMRES (Restore)

T-6-5

Data is stored in HDD.

NOTE:
Before replacing the Reader Controller PCBs, back up the data from Service mode. The backup data can be restored from Service mode when the PCBs are replaced. This enables to maintain the setting data including Service mode stored in the old Reader Controller PCB.

Before replacing the DC controller PCBs, back up the data from Service mode. The backup data can be restored from Service mode when the PCBs are replaced. This enables to maintain the setting data including Service mode stored in the old Controller PCB.

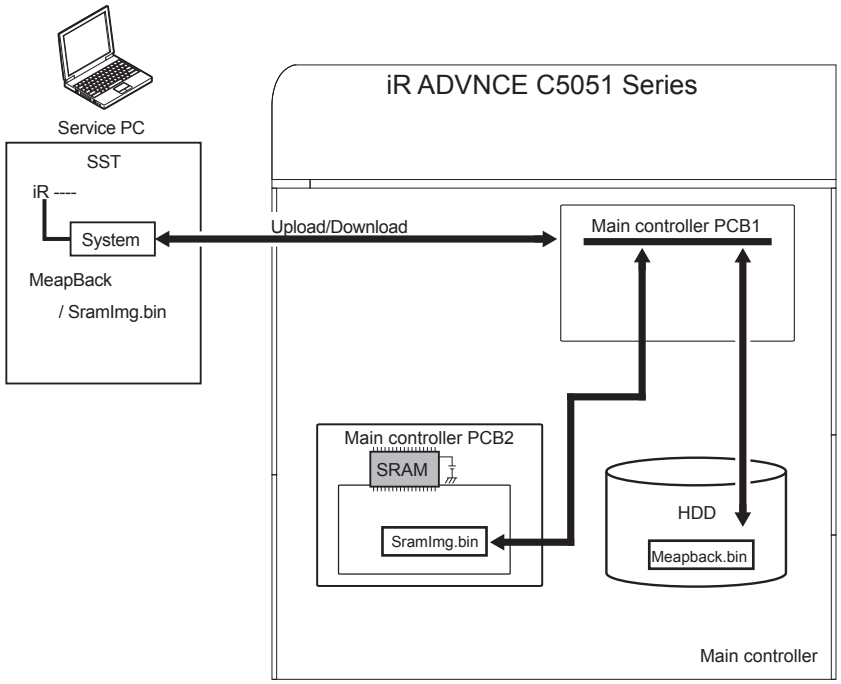
Before replacing the Main Controller PCB 2, upload SramImg.bin. By downloading SramImg.bin after replacement, the new Main Controller PCB 2 inherits the data including Service mode stored in the old PCB

Store Meapbackup.bin; and "Settings/Registration > Data Management> Initialize All Data/Setings"; Restore it; even if it, cannot log in to SMS.
Restore Meapbackup.bin which backed up after "Initialize All Data/Setings"; store it.

Steps to Upload Data

CAUTION:

- When the Canon quality-appointed staff determines the need for an analysis of debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.
- The backup data can be downloaded only on the machine from which the data were uploaded.
- This machine does not use SramRCON and SramDcon



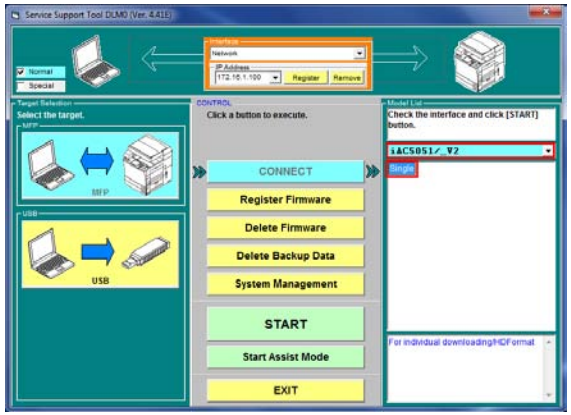
F-6-52

Listed below are the sample steps to upload MeapBack.

1) Enter Download mode.

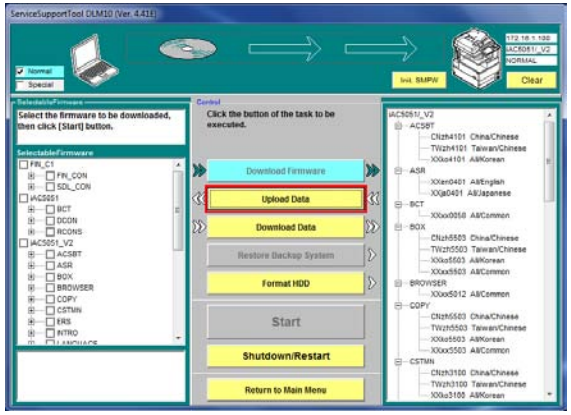
2) Connect the PC to the machine to start SST.

3) Select the model to be connected and “Single”. Check the network settings and click “Start”.



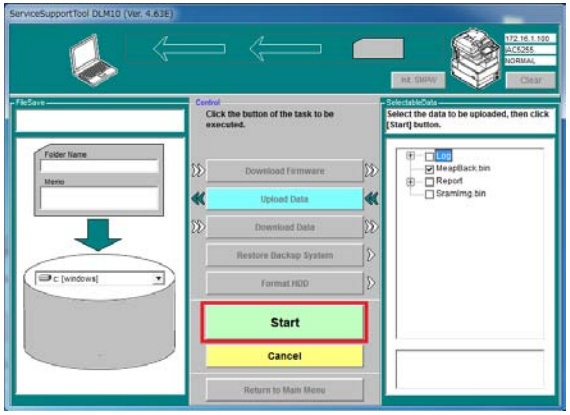
F-6-53

4) Click “Upload Data” button.



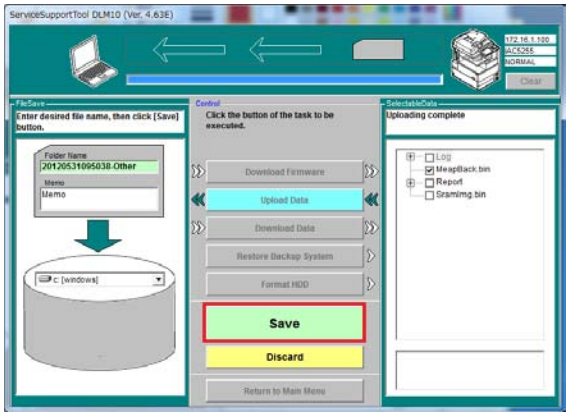
F-6-54

5) Select “MeapBack.bin” to click “Start” button.



F-6-55

6) Enter the file name to be saved and comments when necessary. Click “Save” button.



F-6-56

7) Click “OK” button.

Steps to Download Data

CAUTION:

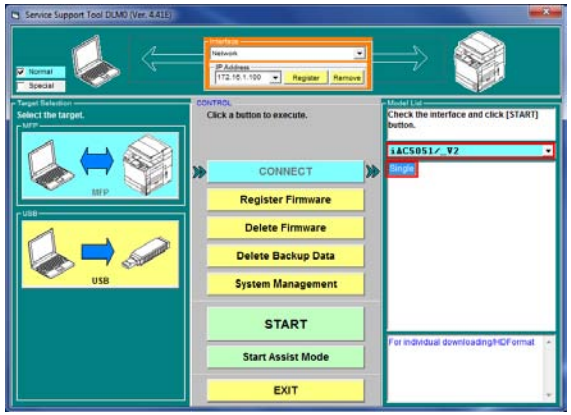
- The backup data can be downloaded to the machine from which the data were uploaded
- Store Meapbackup.bin; and "Settings/Registration > Data Management> Initialize All Data/Setings"; Restore it; even if it, cannot log in to SMS. Restore Meapbackup.bin which backed up after "Initialize All Data/Setings"; store it.

Listed below were the sample steps to download MeapBack.

1) Enter Download mode

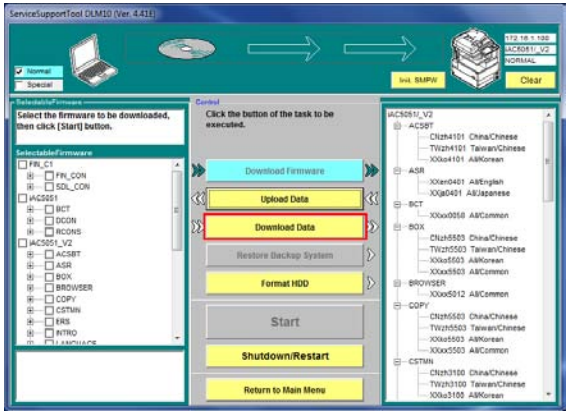
2) Connect the PC to the machine and start SST.

3) Select the model to be connected and “Single”. Check the network setting and click “Start” button.



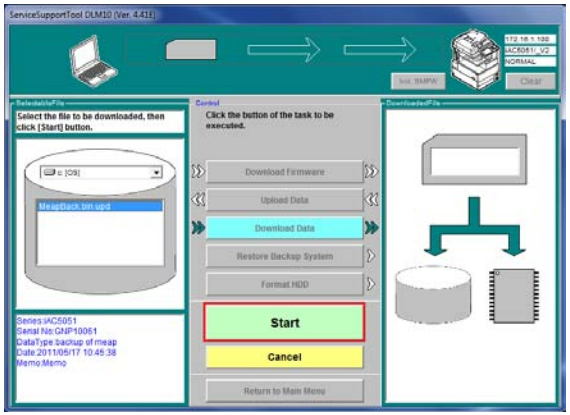
F-6-57

4) Click “Download Data” button.



F-6-58

5) Select the data to be downloaded and click “Start” button.



F-6-59

6) When the data are successfully downloaded, click “OK” button.

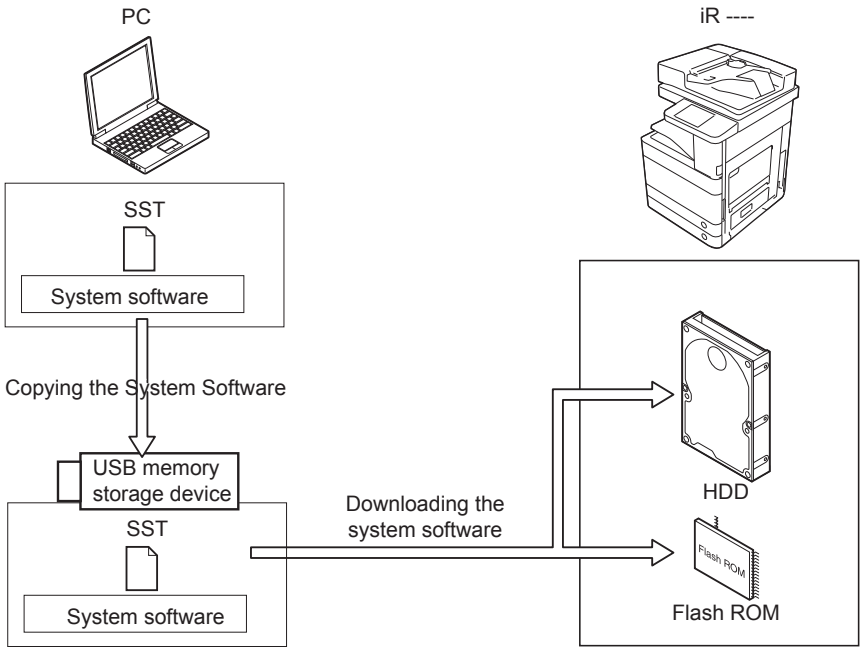
7) Restart the machine

Version Upgrade using USB memory Storage Device

Relation between SST and USB memory storage device Storage Device

When using the USB memory storage device storage device for version upgrade, the system software should be copied to the USB memory storage device storage device. By inserting the USB memory storage device storage device to the slot of the machine, the system software can be upgraded.

The figure below shows the relation between SST and USB memory storage device storage device.



F-6-60

When downloading the system software, enter any of Download modes below.

- Normal mode (recommended)
  Select COPIER > FUNCTION > SYSTEM > Download in Service mode and press [OK].
- Safe mode (only when any system error occurs or the machine is unable to start normally; turn ON the main power switch by pressing 2 and 8 keys simultaneously on the numeric keypad)

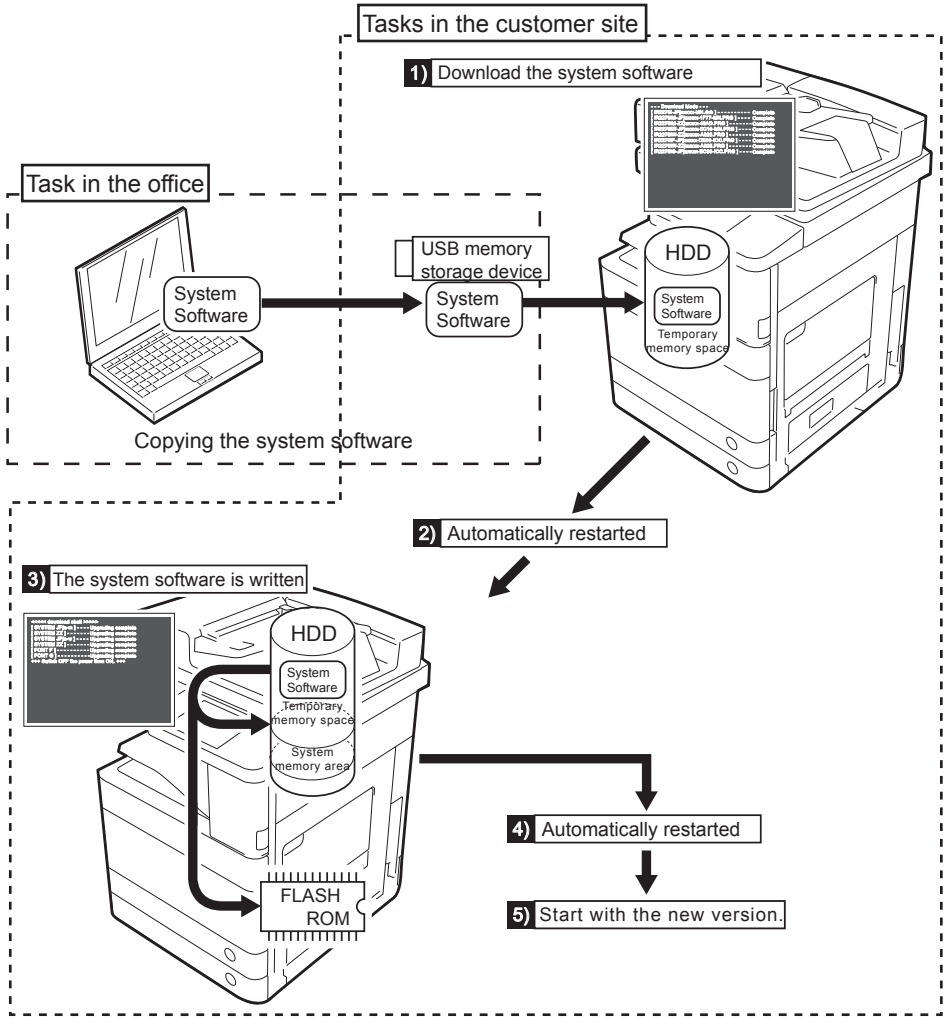
Downloading System Software

Copy the system software from SST to the USB memory storage device storage device.

Right after download from the USB memory storage device storage device, the system software is stored in the temporary memory space in HDD.

The system software is written in the system memory area, Boot area and Flash ROM upon the machine restarted.

When the writing process is successfully completed, the machine is automatically restarted with the new version of the system software.



F-6-61

■ Copying System Software

● System CD to SST

Copy the system software stored in the system CD to SST.

NOTE:
The system software is compressed if the file size exceeds the CD memory capacity.
If the above is the case, decompress the file before copying it to SST.

Preparation

Requirements:

- PC with SST Ver. 4.41 or later installed
- The system CD for this machine

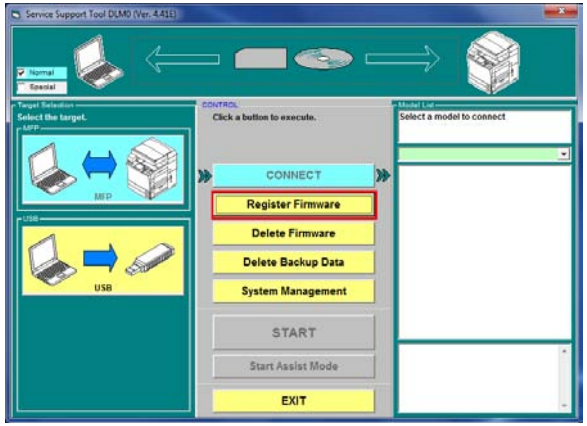
Steps to copy the system software

1) Start the PC.

2) Set the system CD to the PC.

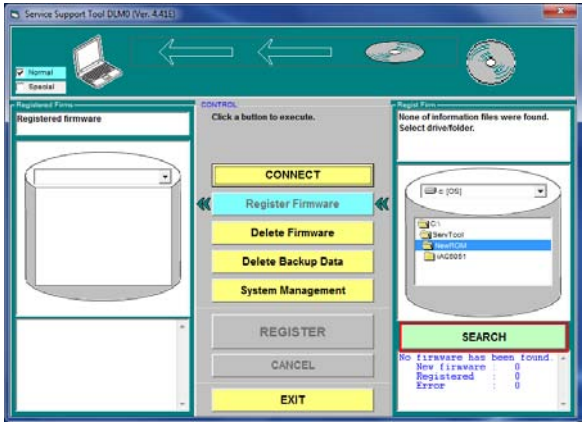
3) Start SST.

4) Click “Register Firmware” button.



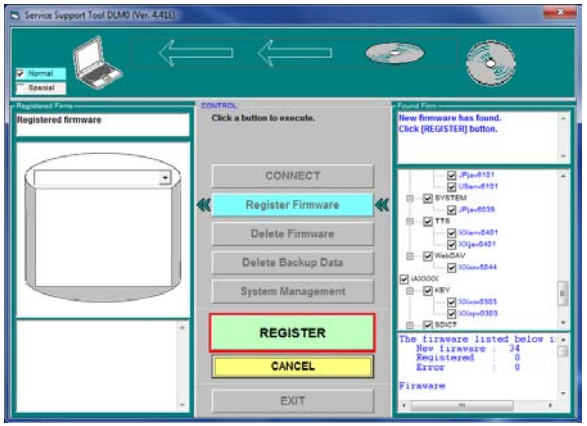
F-6-62

5) Select the drive where the system CD is set and click “Search” button.



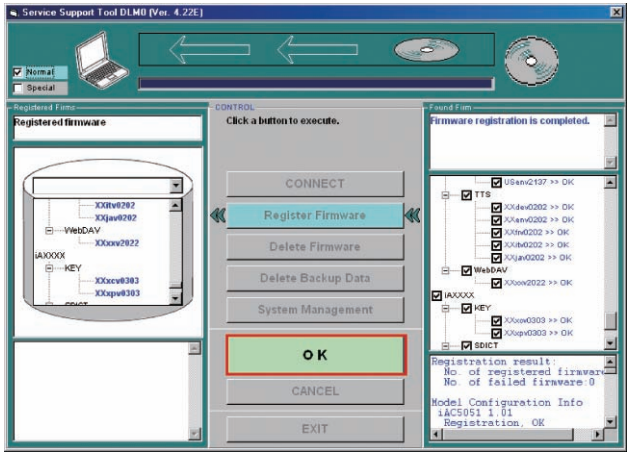
F-6-63

6) The list of the system software components stored in the system CD is shown on the screen.
Uncheck the box(es) of unnecessary folder(s) and/or system software component(s) and click “Copy” button.



F-6-64

7) The message is shown when the system software is copied. Click “OK” button.



F-6-65

SST to USB memory Storage Device

Copy the system software stored in SST to the USB memory storage device storage device.

Preparation

Requirements:

- PC with SST Ver. 4.41 or later installed
- USB memory storage device (*)

Requirements for USB memory storage device:
Interface: USB 1.1 or later (USB 2.0 is recommended)
Memory capacity: 1GB or more is recommended (the total file size of the system software is approx. 500MB).
Format: FAT (FAT 16), FAT32 (NTFS and HFS are not supported). The memory is formatted in a partition (multiple partitions are not supported)
Unavailable USB memory: memory that is protected by a password or the encryption technology.

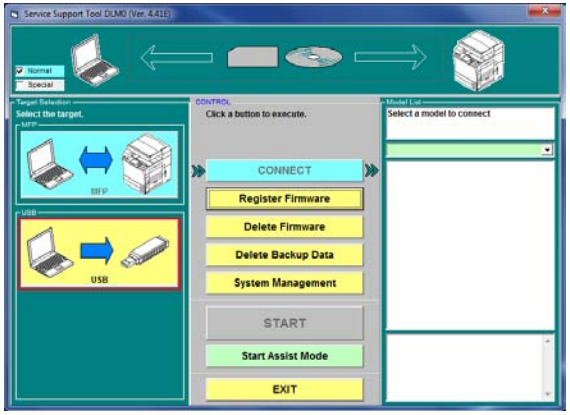
Steps to copy the system software

1) Start the PC.

2) Insert the USB memory storage device storage device to the slot of the PC.

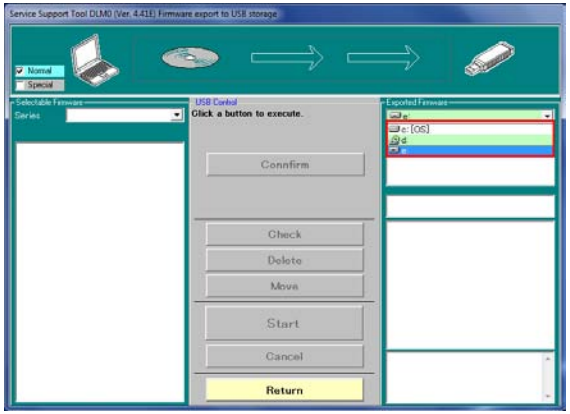
3) Start SST.

4) Click the USB icon shown in "Select the target" Screen.



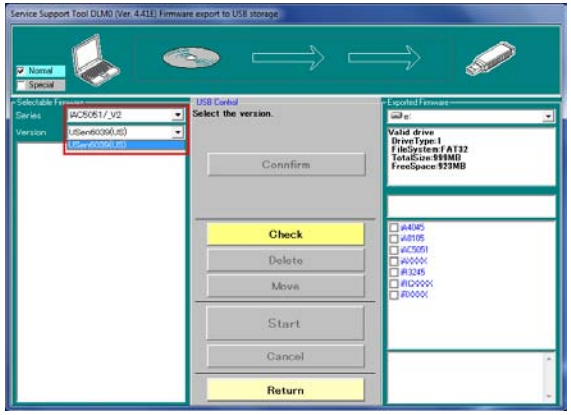
F-6-66

5) Select the drive (removable disk) where the USB memory storage device storage device is inserted.



F-6-67

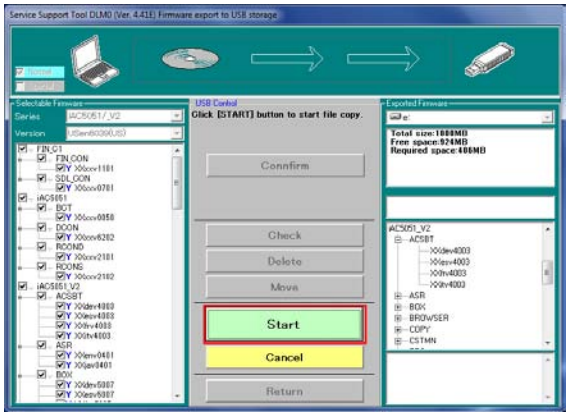
6) Select “Series” and “Version” (the System Version).



F-6-68

NOTE:
The signs shown in the field of “Firmware registration static” indicate the following:
Y: Stored in SST
N: Not stored in SST

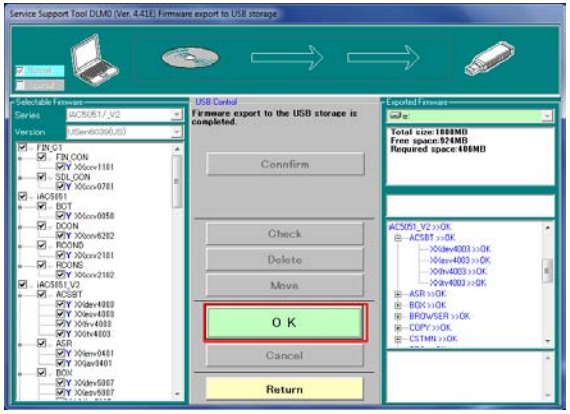
7) Click “Start” button.
Start copying the system software to the USB memory storage device storage device.



F-6-69

NOTE:
When the accessory configuration is known for the machine where the system software is to be downloaded, uncheck the boxes of unnecessary accessories. E753-0001 is triggered if the software for an unnecessary accessory is downloaded. (If this occurred, turn OFF/ON the power to recover the error.)

8) Click “OK” when the system software is successfully copied in the USB memory storage device storage device.



F-6-70

■ Connection

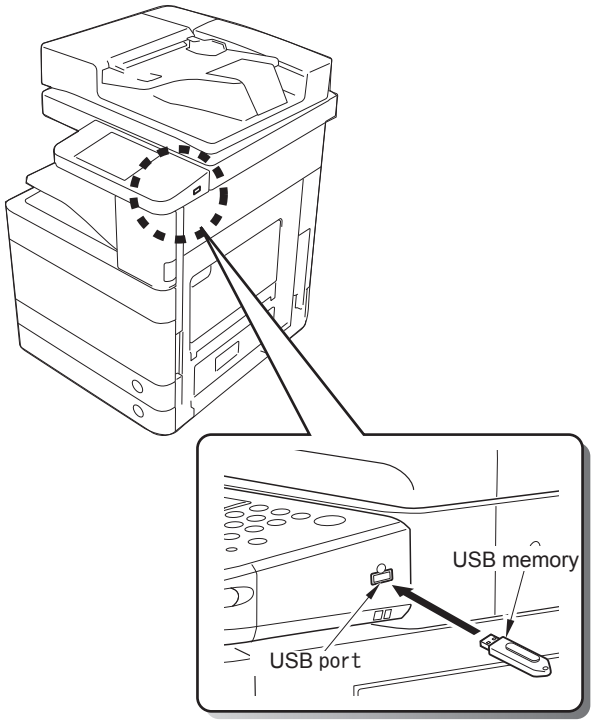
CAUTION:
This machine does not communicate with SST once it recognizes a USB memory storage device; therefore, SST and a USB memory storage device cannot be used at the same time.

Preparation

Item to prepare: a USB memory storage device, which the system software for this machine is stored.

Procedure

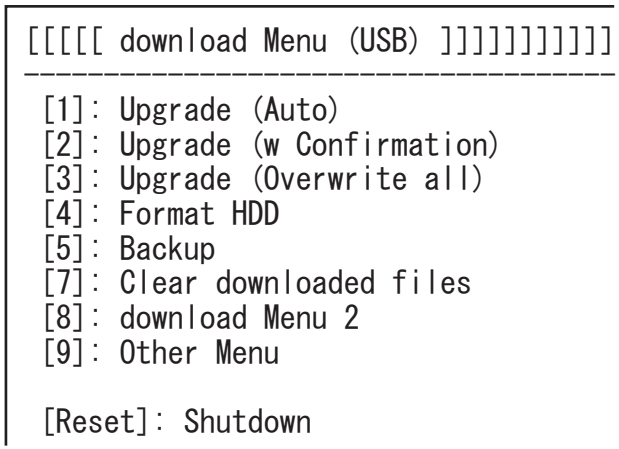
1) If a cross cable is connected to this machine, remove the cross cable.
2) Connect the USB memory storage device to the USB port.



F-6-71

3) Switch to the download mode to use.

- In the case of normal mode (Recommended)
  Select the following in Service Mode: COPIER > FUNCTION > SYSTEM > DOWNLOAD; and then press [OK].
- In the case of safe mode (This mode should not be used as general rule. To be used only when normal startup fails, such as a system error, etc.)
  While pressing 2 + 8 keys at the same time, turn ON the Main Power Switch.
  Once this machine recognizes the USB memory storage device, the following menu is displayed on the Control Panel.



F-6-72

CAUTION:

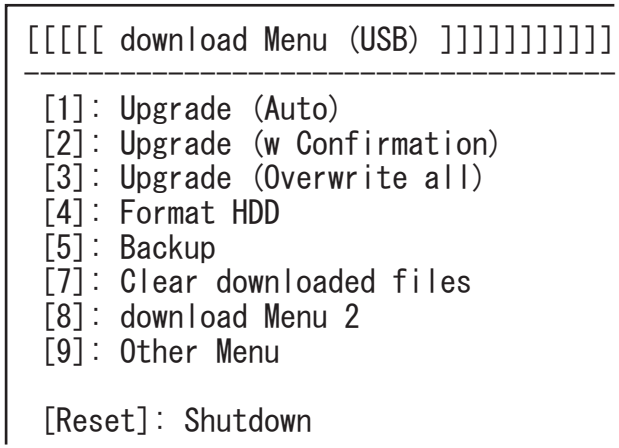
Depending on the manufacturer or the model, this machine may not recognize the USB memory storage device.

This machine retries the detection of a USB memory storage device for up to 60 seconds after power-ON. The above menu is not displayed if the recognition of a USB memory storage device is failed within the time period.

In such a case, use another USB memory storage device.

■ Upgrading System Software

● Menu/Function Overview



F-6-73

Downloading System Software

[1]: Upgrade(Auto)
To download/write the system software (automatic)
[2]: Upgrade (w Confirmation)
To download the system software (confirmation)
[3]: Upgrade (Overwrite all)
To download the system software (overwriting)
[4]: Format HDD
To format the HDD/BOOTDEV partition
[5]: Backup
Collection of debug Log or Service Print(Because You are for R&D review, do not use it other than the following.)
[7]: Clear downloaded files
To clear the system software immediately after downloading (before writing)
[8]: Download Menu 2
To move to Download Menu 2
[9]: Other Menu
Others (e.g.: version information)
[Reset]: Shutdown
To execute shutdown sequence

Press the key on the Control Panel to select/execute the functions.

Points to Note When Operating/Using System Software

NOTE:
The following download method is recommended to execute normal download of the system software (any download work other than downloading after replacing/formatting the HDD):
Download mode --- Normal mode
Download menu --- [1]: Upgrade (Auto)

CAUTION: Prohibition to turn OFF the power during downloading/writing

Do not turn OFF the power during downloading or writing of the system software; otherwise, this machine may not be started even if the power is turned ON.

If the machine fails to be started even if the power is turned ON, start the machine in safe mode (pressing 2 + 8 keys).

When the machine can be started in safe mode, be sure to download the system software once again.

If the machine fails to be started, replace the HDD and then download the system software.

CAUTION: Note when the power is turned OFF

Be sure to execute shutdown sequence to quit download mode.

Pressing the [Reset] key and then the [0] key on the menu screen executes the shutdown sequence.

Once the message on the touch panel disappears, turn OFF the Main Power Switch.

F-6-74

■ Downloading/Writing System Software (Automatic)

● [1]: Upgrade (Auto)

The version is compared between the host machine/option and the system software in the USB memory storage device to download only the system software with newer version in the USB memory storage device to the temporary storage area of the HDD.
In safe mode, only the following system software can retrieve the version information (the version is compared).

SYSTEM, LANGUAGE, RUI, MERAPCONT, SDICT

As for system software of the host machine whose version information cannot be obtained, the software for RCON is not downloaded, but other software are downloaded.

For the system software of the option that is not connected, it is handled as follows:
<In the case of startup in normal mode (Recommended)>

- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is before 00.36

  All the system software including the one of the non-connecting option is to be downloaded as well (E753 is displayed).
- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.36:

  For the Finisher that is not connected, the system software is not to be downloaded. G3CCB/G3CCM is to be downloaded even if Super G3FAX Board – AE1 is not installed (E753 is displayed).
- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.40 or later:

  For the option that is not connected, the system software is not to be downloaded.

<In the case of startup in safe mode>

The system software of the options which are not connected are not downloaded.

After downloading is complete, this machine is automatically restarted to write the downloaded system software to the HDD system area/flash ROM.

Operation procedure

1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
   [1] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

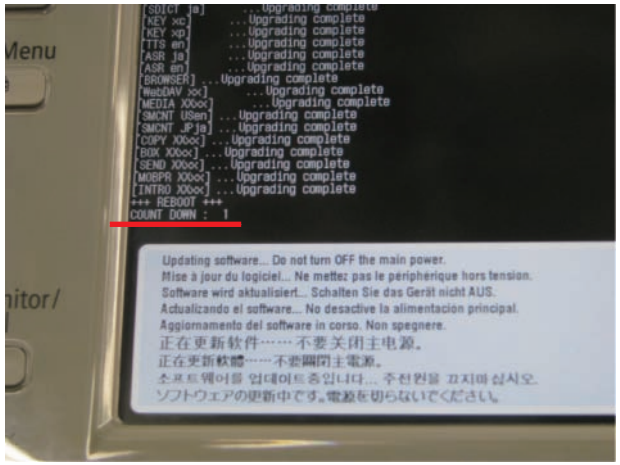
```
[[[[[ download Menu (USB) ]]]]]]]]]]
------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 [Reset]: Shutdown
```

F-6-75

During downloading, download status is displayed on the Control Panel.

F-6-76

Once downloading is complete, this machine is automatically restarted to start writing to the HDD system area/flash ROM.
The screen shows the countdown once writing process is properly complete.



F-6-77

Once the countdown shows 0, this machine is automatically restarted.

4) When the main menu is displayed, press the removal key at the lower right on the touch panel and select removal of the memory media, and then remove the USB memory storage device.

CAUTION:
After HDD formatting and downloading, this machine takes a long time (for writing the software).
This machine, in some cases, stays in standby screen up to 10 min during writing. At this time, do not turn off the main power switch.

■ Downloading System Software (Confirmation)

● [2]: Upgrade (w Confirmation)

The version is compared between the host machine/option and the system software in the USB memory storage device to download the system software with newer version in the USB memory storage device to the temporary storage area of the HDD.
When the system software version in the USB memory storage device is the same or older, a confirmation message is displayed on the Control Panel so that the user can select whether to overwrite or not.

In safe mode, only the following system software can retrieve the version information (the version is compared).
SYSTEM, LANGUAGE, RUI, MERAPCONT, SDICT
As for system software of the host machine whose version information cannot be obtained, the software for RCON is not downloaded, but other software are downloaded.

For the system software of the option that is not connected, it is handled as follows:
<In the case of startup in normal mode (Recommended)>

- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is before 00.36:
  All the system software including the one of the non-connecting option is to be downloaded as well (E753 is displayed).
- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.36:
  For the Finisher that is not connected, the system software is not to be downloaded.
  G3CCB/G3CCM is to be downloaded even if Super G3FAX Board – AE1 is not installed (E753 is displayed).
- When Download Mode Version (to be displayed on the initial screen when starting the download mode) is 00.40 or later:
  For the option that is not connected, the system software is not to be downloaded.

<In the case of startup in safe mode>
The system software of the options which are not connected are not downloaded.

Unlike menu [1], this machine is not automatically started despite completion of downloading. By manually turning OFF/ON the power, the system software is written at the time of startup. In this case, starting the machine in safe mode deletes the downloaded system software saved in the temporary storage area; therefore, do not press the numeric keys (2 + 8), but execute normal startup to execute writing.

Operation procedure

1) Enter download mode.

2) Connect the USB memory storage device to the USB port.

3) Press the key on the Control Panel.

[2] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
----------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 /[2] has been selected. Execute?/
 - (OK):0 / (CANCEL):Any other keys -
```

F-6-78

During downloading, download status is displayed on the Control Panel.

NOTE:
When the system software version in the USB memory storage device is the same or older than the system software in the HDD, a message is displayed in each case to confirm whether to overwrite or not.
Press the key on the Control Panel.
[0]: To overwrite/Any key other than [0]: Not to overwrite

```
////Copying files from USB-dev.///
[Warning] Same version or old version.
--------------------------------
[BOOT XXxx]...Same. OVERWRITE?
   -- (YES):0 /(NO):The other keys—
```

F-6-79

Once downloading is complete, a message is displayed to encourage pressing the “Reset” key.

F-6-80

4) Press the “Reset” key.
Shutdown sequence is executed.

5) Once the message on the touch panel disappears, turn OFF the Main Power Switch.

6) Remove the USB memory storage device.

7) Ensure the LED at the lower right on the Control Panel is turned OFF, and turn ON the Main Power Switch.
Writing to the HDD system area/flash ROM is started after the startup. The screen shows the countdown once the writing process is properly completed.
The screen shows the countdown once the writing process is properly completed. This machine is restarted with the downloaded system software at the count of 0.

■ Downloading System Software (Overwriting)

● [3]: Upgrade (Overwrite all)

Regardless of the system software version in the host machine, all the system software in the USB memory storage device is downloaded.
Regardless of the system software version in the host machine, all the system software in the USB memory storage device is downloaded.
Unlike menu [1], this machine is not automatically started despite completion of downloading. By manually turning OFF/ON the power, the system software is written at the time of startup. In this case, starting the machine in safe mode deletes the downloaded system software saved in the temporary storage area; therefore, do not press the numeric keys (2 + 8), but execute normal startup to execute writing.

Operation procedure

1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
   [3] -> [0]: To execute downloading/Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
---------------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 /[3] has been selected. Execute?/
 - (OK):0 / (CANCEL):Any other keys -
```

F-6-81

During downloading, download status is displayed on the Control Panel.

CAUTION:

In overwriting download mode of the USB memory storage device, all the system software stored in the USB memory storage device is downloaded as well. Therefore, be sure to keep the following in mind: If the USB memory storage device includes the system software of non-connecting option, E753-0001 is displayed when the writing process is completed.

In the case of an error in downloading of the non-connecting option, the machine can be recovered by turning OFF/ON the power.

To prevent such error, uncheck the applicable system software so that the system software of the non-connecting option is not downloaded when downloading the system software from SST to USB.

Once downloading is complete, a message is displayed to encourage pressing the “Reset” key.

F-6-82

4) Press the “Reset” key.
   Shutdown sequence is executed.
5) Once the message on the touch panel disappears, turn OFF the Main Power Switch.
6) Remove the USB memory storage device.
7) After checking that the LED is turned OFF at the lower right on the Control Panel, turn ON the Main Power Switch.
   Writing to the HDD system area/flash ROM is started after the startup. The screen shows the countdown once the writing process is properly complete.
   When the countdown shows 0, this machine is restarted with the downloaded system software.

■ Formatting HDD

● HDD Format Overview

The following 2 types of formatting methods are available with this machine:

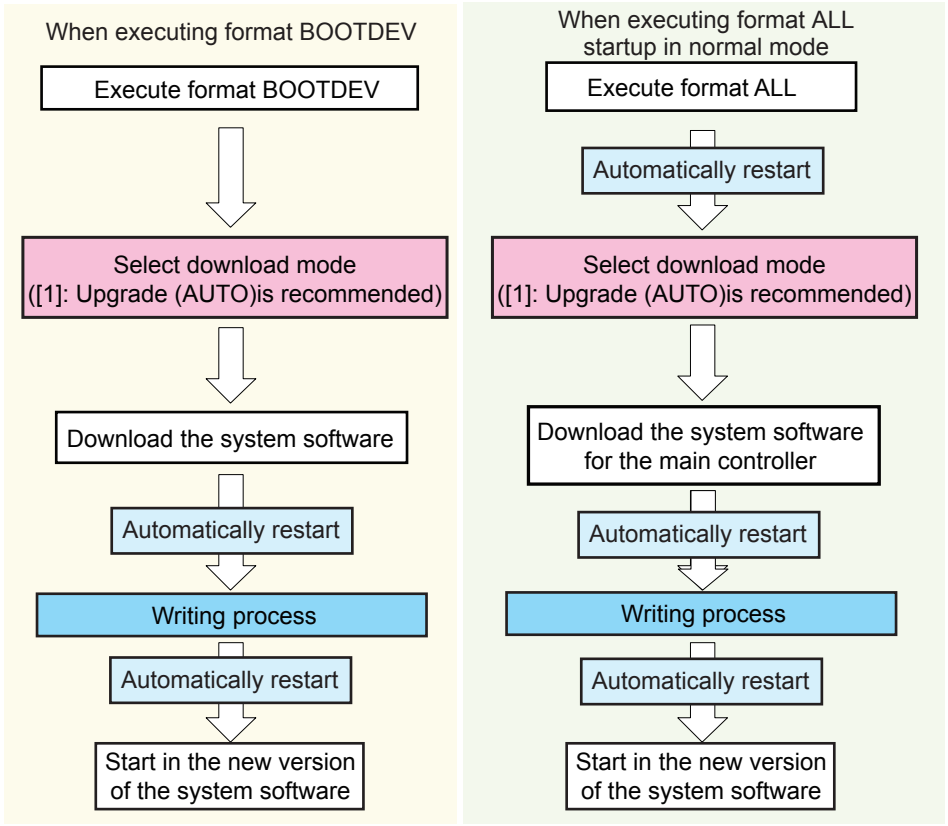
- ALL: To initialize the entire HDD
  - In the case of installing the HDD provided as a service part (a new HDD).
  - In the case of cleaning the entire software and data in the HDD to reinstall the system software.

  All the user data and MEAP application in the HDD is deleted when executing Format ALL with the machine in use; therefore, be sure to obtain agreement from the user to execute Format ALL.

- BOOTDEV: to format the system software storage area on HDD.
  - In the case of normal upgrading by cleaning the storage area of the system software
  - User data will not be deleted.

  To reinstall the system software, HDD formatting is not required.

After formatting, this machine cannot be started unless the system software is downloaded. When Format ALL is executed, initialization process is reflected to the HDD so that this machine is automatically restarted to automatically enter download mode. In the case of formatting BOOTDEV, the machine is not automatically restarted, but the system software can be downloaded.
After formatting is executed, be sure to download the system software by “[1]: Upgrade (AUTO)” in main menu.



F-6-83

[4]: Format HDD

This mode executes formatting of BOOTDEV partition or the entire HDD.

Operation procedure

1) Enter download mode.

2) Connect the USB memory storage device to the USB port.

3) Press the key on the Control Panel.

[4] -> [0]: To execute formating /Any key other than [0] key: To return to the menu screen.

```
[[[[[ download Menu (USB) ]]]]]]]]]]
-----------------------------------
 [1]: Upgrade (Auto)
 [2]: Upgrade (w Confirmation)
 [3]: Upgrade (Overwrite all)
 [4]: Format HDD
 [5]: Backup
 [7]: Clear downloaded files
 [8]: download Menu 2
 [9]: Other Menu

 /[4] has been selected. Execute?/
 - (OK):0 / (CANCEL):Any other keys -
```

F-6-84

4) Press the key on the Control Panel.

[1] -> [0]: To execute formatting BOOTDEV/Any key other than [0]: To return to the menu screen.

[2] -> [0]: To execute formatting the entire HDD/Any key other than [0]: To return to the menu screen.

[C]: To return to the menu screen.

F-6-85

Once downloading is complete, a message is displayed to encourage pressing the “Reset” key.

5) Press any key to return to the menu screen.

6) Download the system software.

Refer to “Separate Download” for details.

■ Backup

● [5]: Backup

CAUTION:

This function includes R&D review.

Do not usually use it other than the following function.

The USB memory collecting log uses the USB memory where You registered a system software for this Host machine with by SST.

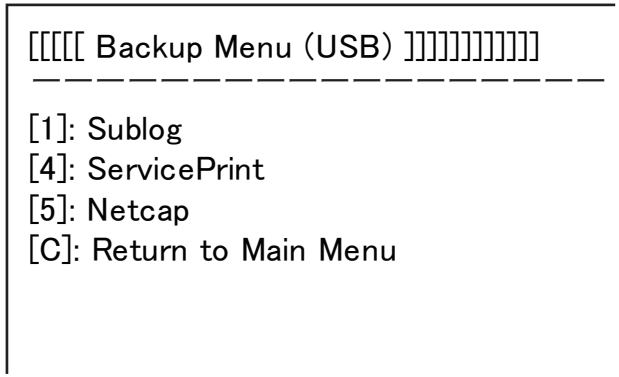
Operation procedure

1) Enter download mode.

2) Connect the USB memory storage device to the USB port.

3) Press the key on the Control Panel.
[5] -> [0]: To execute formating /Any key other than [0] key: To return to the menu screen.

4) SRAM backup of Main Controller PCB 2
[1] Sublog -> Collect debugging log.
[4] ServicePrint -> Save the service data which P-PRINT or etc. output to paper with a text format.



F-6-86

■ Clearing Download File

● [7]: Clear downloaded files

This menu clears the system software stored in the temporary storage area of the HDD.
This function is used to clear the downloaded file without writing it after downloading the system software in menu [2] or [3].
Operation procedure

1) After downloading by menu [2] or [3], press the “Reset” key to execute shutdown sequence, and then turn OFF the main power once the screen display disappears.

2) Start the machine in safe mode (while pressing 2 + 8 keys at the same time, turn ON the Main Power Switch).

If the system software is stored in the HDD temporary storage area when starting the machine in safe mode, the system software is deleted. In such a case, the following message is displayed on the touch panel.
“All downloaded file is deleted.”

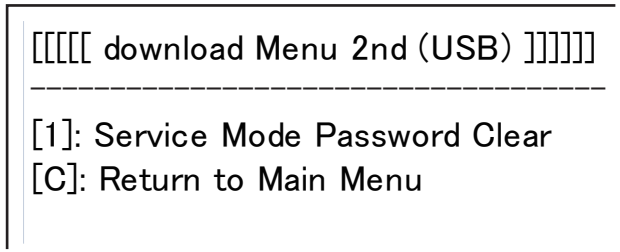
3) Turn OFF the Main Power Switch.

4) Remove the USB memory storage device.

■ Download Menu 2

● [8]: Download Menu 2

[1]: Service Mode Password Clear



F-6-87

Other Menu

[9]: Other Menu

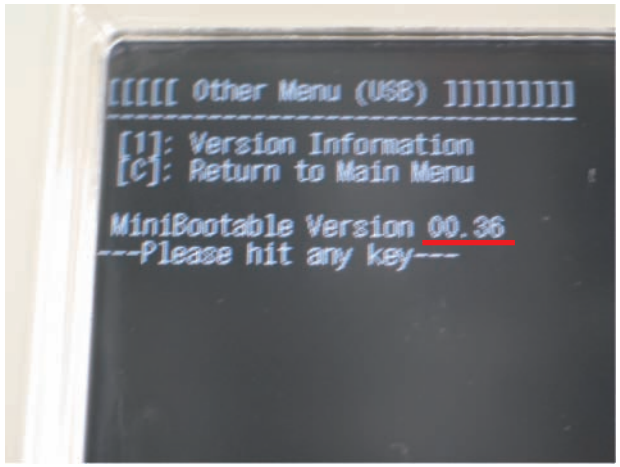
This mode displays other menu.

Operation procedure

1) Enter download mode.
2) Connect the USB memory storage device to the USB port.
3) Press the key on the Control Panel.
   [9] -> [0]: To display other menu/Any key other than [0] key: To return to the menu screen.

[1]: Version Information

This mode displays the version of download mode.



F-6-88

Press any key to return to the main menu.

Troubleshooting

Error Code: E753-0001

Cause

In the case of an error during writing process of the system software or in the case of writing the system software of the option that is not installed, an error is determined to display E753-0001.

Remedy

The result of writing process is displayed at the upper side of E753-0001 error display.
Be sure to check the system software with the error (error or NG) displayed.
Check if the target option is properly installed and see if the software to download is for the correct target option, and then execute downloading again.

Upgrading by SST

Be sure to use Assist mode as a general rule because the system software of the non-connecting option is not to be downloaded in Assist mode.
In Single mode, it is available to download the system software of the option that is not installed.
In the case of downloading the Finisher's system software, make the download mode of the Host Machine in normal mode and connect to SST, and then download just the system software of the Finisher with the version information displayed at the right side of the SST screen.
In the case that Super G3FAX Board – AE1 is not installed or in the case of download mode in safe mode, G3CCB/G3CCM is not displayed on the list of downloadable system software.

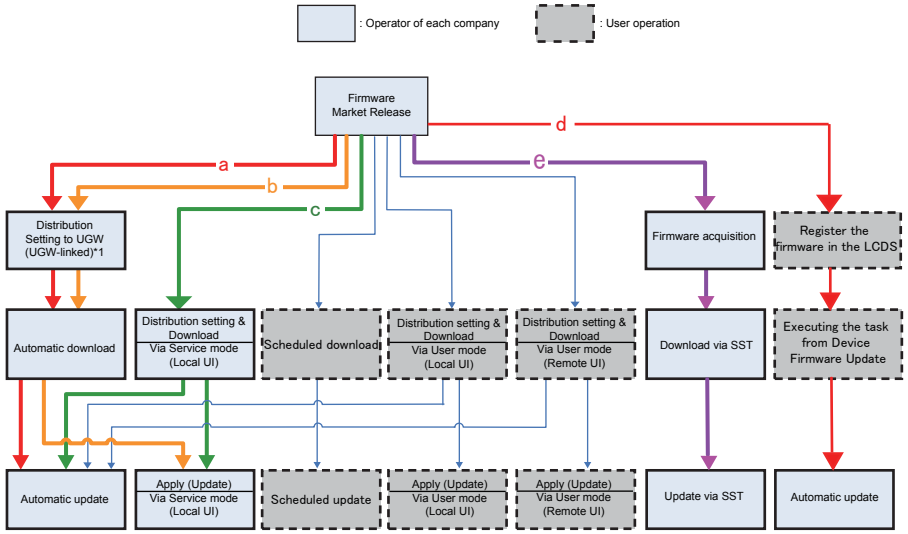
NOTE:
Image Reader has 2 types of system software: RCOND and RCONS.
Downloading both RCOND and RCONS results in writing of only the system software that complies with the Image Reader installed in the Host Machine. When downloading the system software that does not comply with the Image Reader installed in the Host Machine, it results in skipping of writing process (it will not be an error).

Version Upgrade via CDS

Overview

Among the 4 methods in which service technicians provide firmware install services, the following 3 methods are available using Updater functions.

a. UGW-linked Download and Update (Full-remote Update)
b. UGW-linked Download (Remote Distribution Update)
c. Manual Download and Update (On-site Update from Service Mode)
d: Local CDS Download and Update (iW EMC + DFU Plug-in)
e: Update via SST



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*1: Schedules for UGW-linked distribution are maintained on CDS.

NOTE:
- See User Manual of the device for how to connect the device to the external network.
- When needed, perform the communication test before actual download to check if the communication with the distribution server is normal.

Preparation

Overview of Preparation

The following should be prepared before using Updater.

- For updating of firmware

Service Mode	COPIER > FUNCTION > INSTALL		COPIER > OPTION > FNC-SW			
	CDS-CTL		CDS-UGW	CDS-FIRM	LOCLFIRM	LCDSFLG
Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button of User Mode	Enabling [Manual Update] Button of User Mode (Remote UI)	Enabling [Local CDS]
UGW-linked Download and Update	Yes	Yes	Yes	-	-	-
UGW-linked Download	Yes	Yes	Yes	-	-	-
Manual Download and Update	Yes	Yes	-	-	-	-
Manual Download and Update via Local UI	Yes	Yes	-	Yes	-	-
Manual Download and Update via Remote UI	Yes	Yes	-	Yes	-	-
Special Download and Update via Remote UI	Yes	-	-	-	Yes	-
Scheduled update via Local CDS	-	-	-	Yes	-	Yes

T-6-6

- For Install of Application

Installation Method	Network Settings	Enabling [Install Application/ Options] Button of User Mode
LMS-linked Installation	Yes	-
LMA-linked installation via Local UI	Yes	Yes
LMS-linked installation via Remote UI	Yes	Yes

T-6-7

Setting Sales Company's HQ

When using devices input in the markets listed below, the default setting of Sales Company's HQ should be changed before obtaining firmware distributed from CDS. Unless the setting is changed properly, the desired firmware may not be able to be selected.

Market	Default Setting of Sales Company's HQ	Setting of Sales Company's HQ after Change
Canada	US	CA
Latin America	US/SG	LA
Hong Kong	SG	HK

T-6-8

Go to the following screen to change the setting of Sales Company's HQ.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER > FUNCTION > INSTALL > CDS-CTL

NOTE:
The list below shows the setting of Sales Company's HQ for CDS-CTS by market.
Check and adhere to the appropriate setting for your market.
<List of Sales Company's HQ and the settings for CDS-CTL>

Japan = JP
USA = US
Singapore = SG
Europe = NL
Korea = KR
China = CN
Hong Kong = HK
Australia = AU
Canada = CA
Latin America= LA

Network Settings

1.Connecting to External Network

The method of connecting to external network is similar to a normal network connection method. Refer to user manual of the device for details.

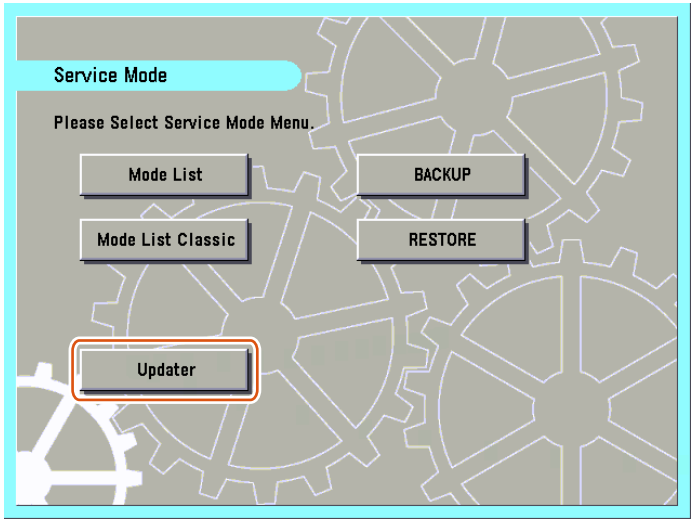
NOTE:
- See User Manual for how to connect the device to the external network.
- Before using UGW link or User mode, see the sections below to prepare as required.
  "Enabling UGW Link"
  "Enabling [Update Firmware] Button of User Mode"
  "Enabling [Install Application/Options] Button of User Mode"

NOTE:
“External Network” here means the network connecting the device to CDS via Internet.

2.Confirming URL Setting of Distribution Server

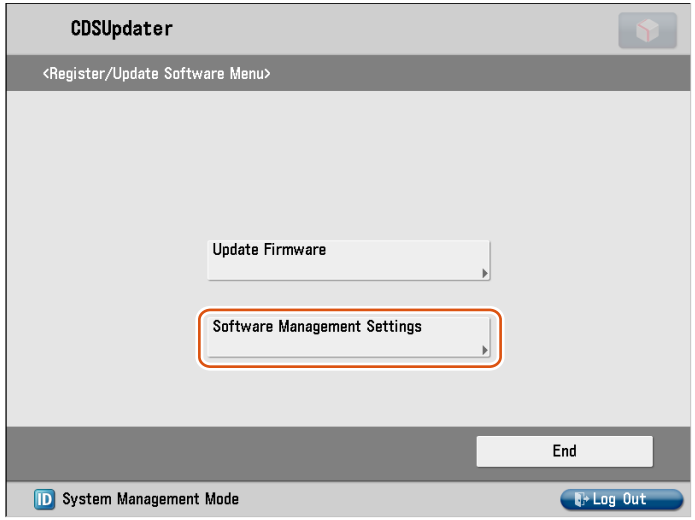
This section describes how to confirm the URL setting of the distribution server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



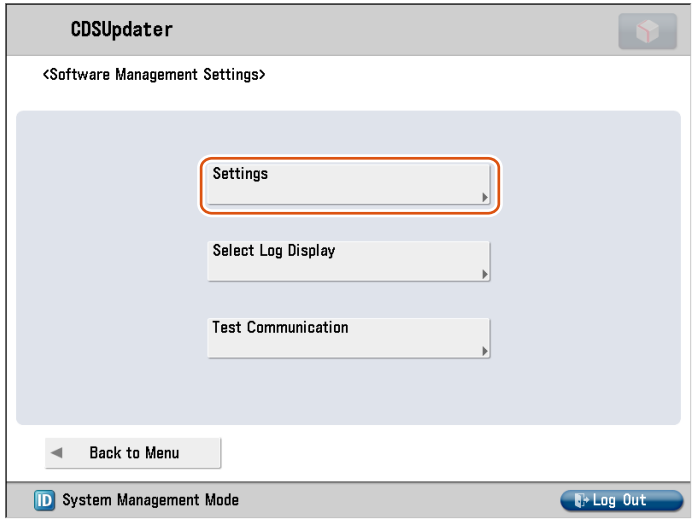
F-6-90

3. Press [Software Management Settings] button.



F-6-91

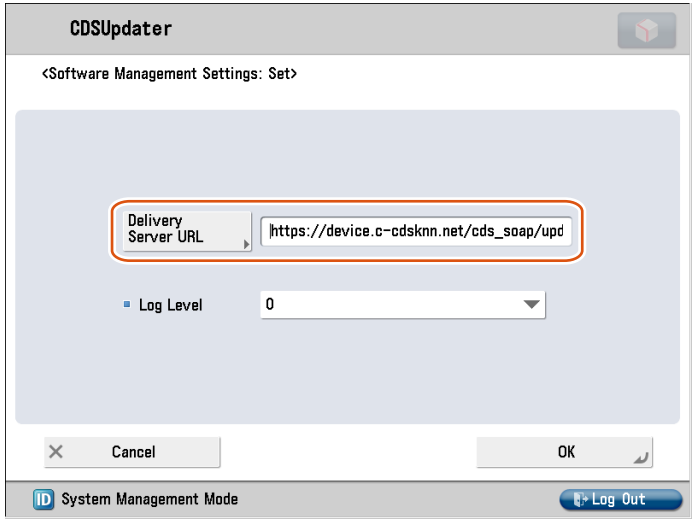
4. Press [Settings] button.



F-6-92

5. Ensure to enter “https://device.c-cdsknn.net/cds_soap/updaterif” in the field beside the [Delivery Server URL] button.
   If the URL is not entered or a wrong URL is entered in the field, click [Delivery Server URL] button to show the virtual keypad. Check the URL and enter the correct one.

Delivery Server CDS



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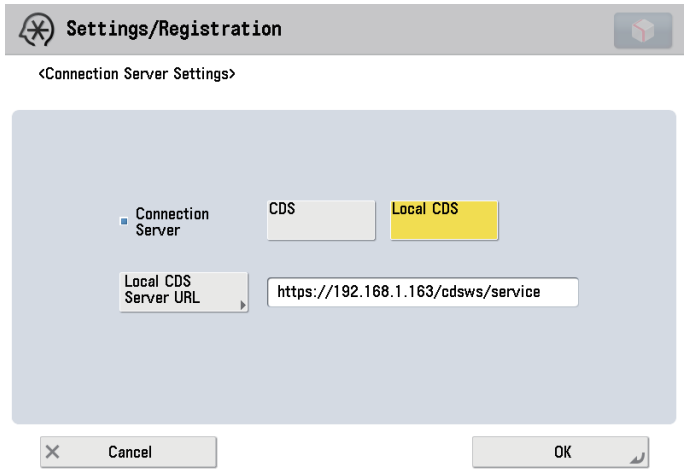
Delivery Server Local CDS



F-6-94

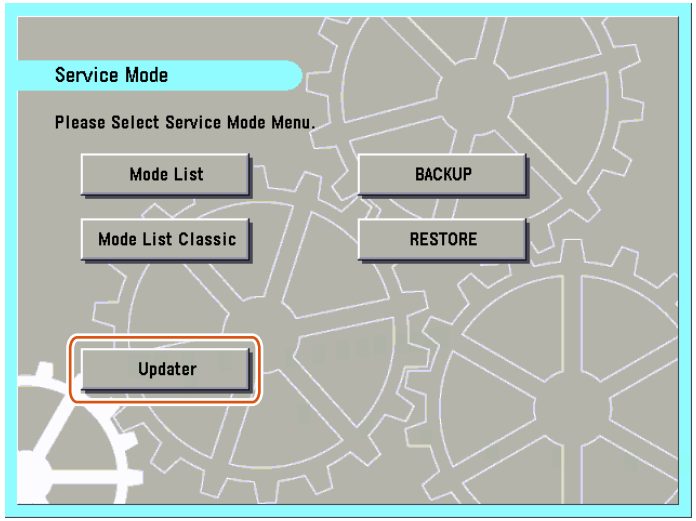
Note:
For the URL of the L-CDS server, enter the address beginning with "htts://" specified in L-CDS. If the port number has not been specified, 443 is internally added as the port number.
To display the button of the local CDS, execute Settings/Registration > Management Settings > License/Other > Register/Update Software. It is not displayed in service mode.

6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

3.Communication Test

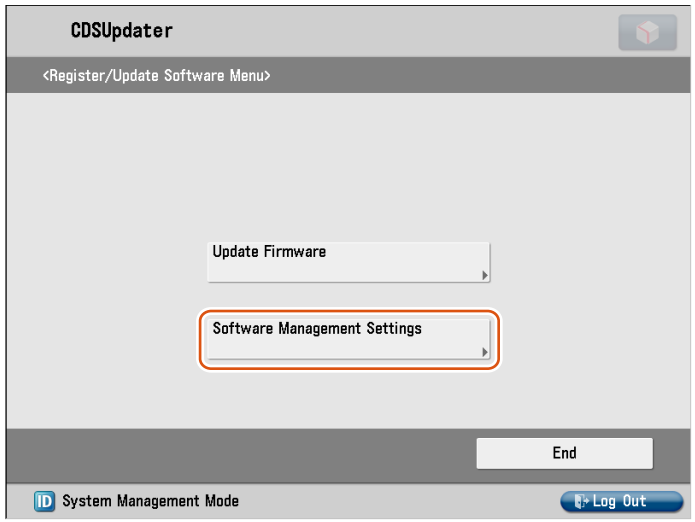
This section describes how to check if the communication is normally done to the distribution server and/or the file server.

1. Start [Service Mode] at Level 1.
2. Press [Updater] button.



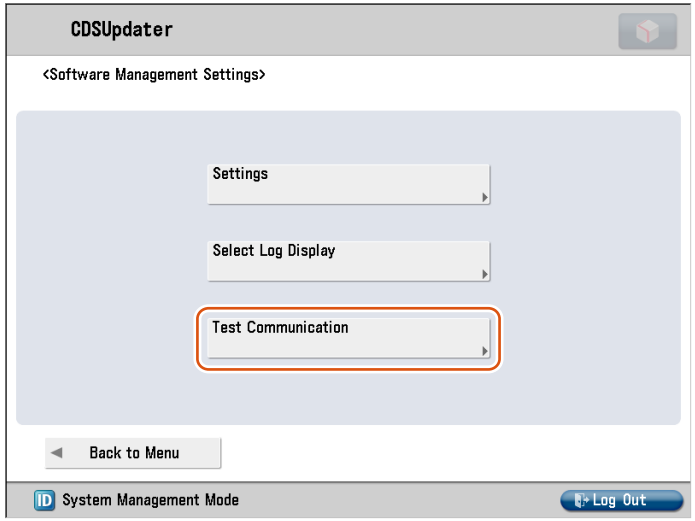
F-6-95

3. Press [Software Management Settings] button.



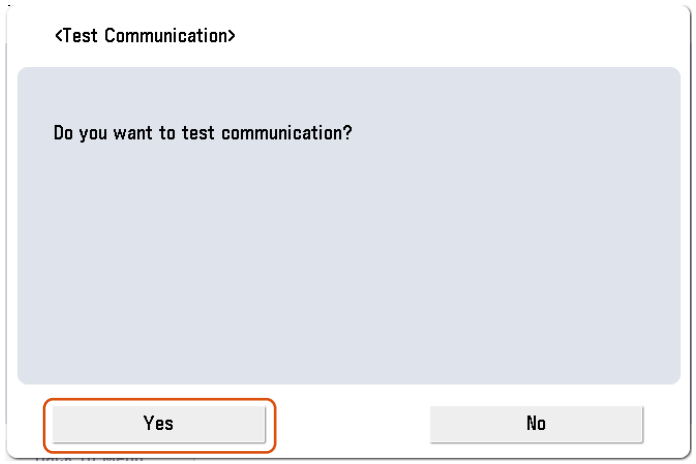
F-6-96

4. Press [Test Communication] button.



F-6-97

5. Press [Yes] button.



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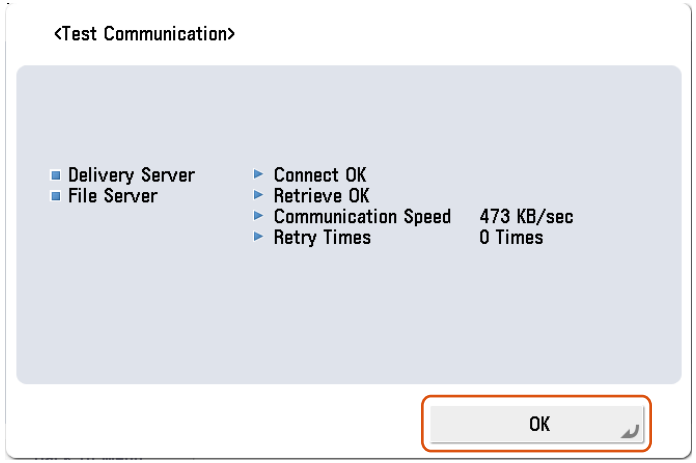
Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).
Using the download file information for communication test, the contents for test are downloaded from the file server (for the communication test to the file server).

6. Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.



F-6-99

Enabling UGW Link

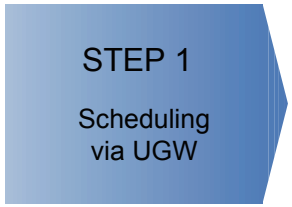
When installing the firmware in the method of “UGW-linked Download and Update” or “UGW-linked Download”, the following should be set before actually using UGW link.

Service Technician	Setting of Device Service Mode (Level 1)	COPIER >OPTION >FNC-SW >CDS-UGW (0 -> 1)
	Setting of UGW WebPortal	In [Customer Management] screen, set [Do not distribute firmware] to [Distribute firmware].
Sales Company's HQ	Setting of Authorities on UGW WebPortal	See "Analysis>Firmware Distribution Information" to grant the appropriate authorities to each account.

NOTE:
- See “imageWARE Remote Operator’s Manual / e-Maintenance Business Operation Manual“ for how to operate UGW WebPortal.
- [Distribute Firmware] should be set on [Customer Management] screen for staff in charge of setting for [Enter customer information] or [Command for firmware distribution] in order to allow them to select the desired device on [Firmware Distribution Information] screen.
- When using the Device Firmware Update Plug-in and Local CDS, it is necessary to disable "UGW linkage".

■ a. UGW-linked Download and Update (Full-remote Update)

See the figure below for the operational flow of “UGW-linked Download and Update”.



F-6-100

STEP1: Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW.
See “UGW-linked Download and Update” in chapter 5 of Operation Manual of Content Delivery System V1.0 for Firmware Distribution for details.

The device checks the schedule concerned every 12 hours on UGW. This allows the device to register the firmware distribution setting, enabling automatic firmware download and update.

CAUTION:

[Devices without Wait for EOJ (end of job) Function]

- Firmware update will delete print jobs in the queue. Ensure to notify users of this before you start updating. It is recommended to perform firmware update during non-business hours.

[Devices with Wait for EOJ Function]

- Firmware update will not be triggered when any of the following jobs remains in the queue.

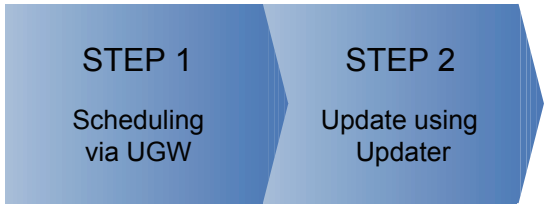
  -Print
  -Scan
  -Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See Chapter 1 “Limitations and Cautions“ of this manual for more detailed information.

NOTE:
To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

■ b. UGW-linked Download (Remote Distribution Update)

See the figure below for the operational flow of “UGW-linked download”.



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STEP 1: Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW.
See “UGW-linked Download” in Operation Manual of Content Delivery System (for Firmware Distribution) for details.

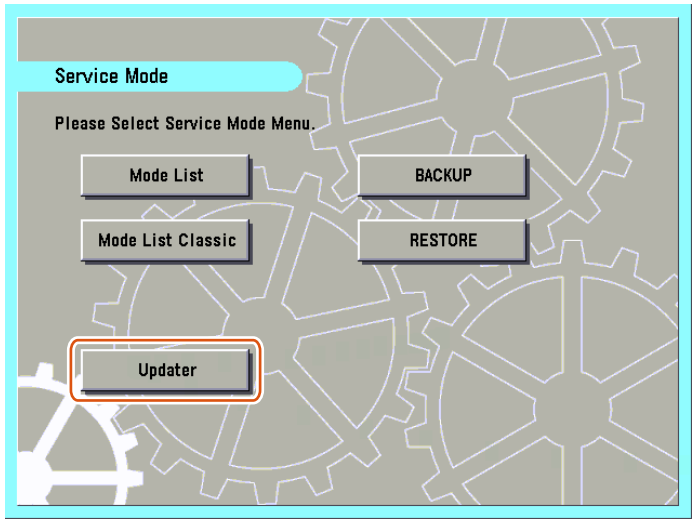
NOTE:
The firmware downloaded by scheduling via UGW can be checked/deleted from User mode, but cannot be updated. If a user download the other firmware, the firmware downloaded with "UGW-linked Download" is overwritten.

STEP 2: Update using Updater

The firmware downloaded on the device can be updated using Updater functions.

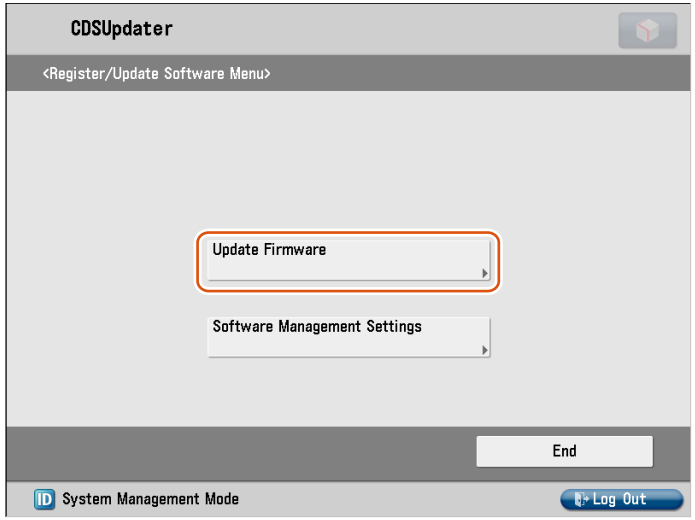
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] button on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



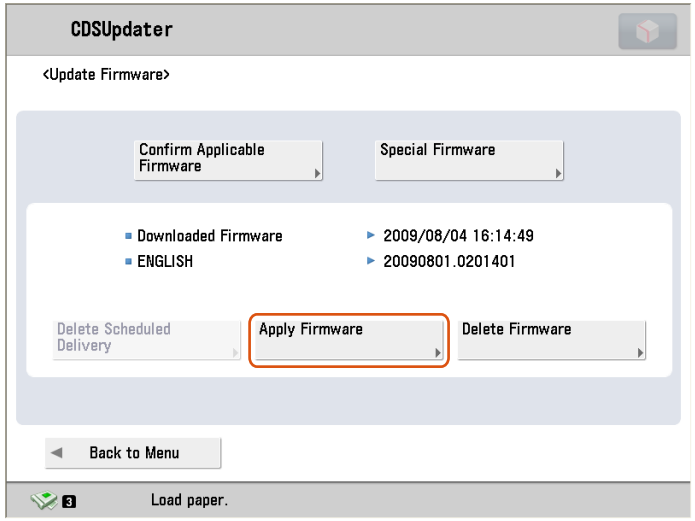
F-6-102

3. Press [Update Firmware] button.



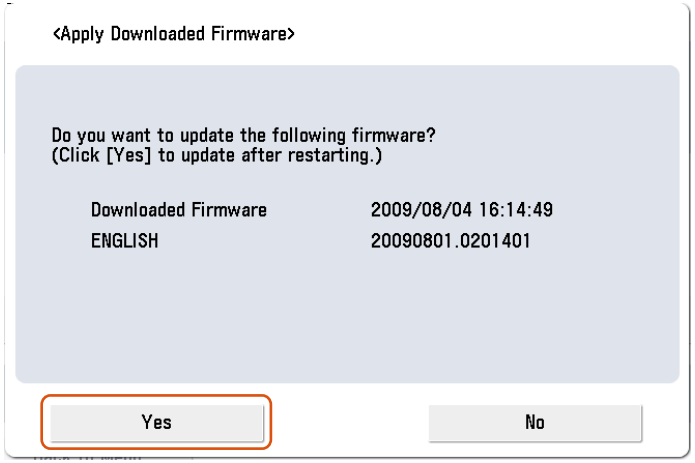
F-6-103

4. Press [Apply Firmware] button.



F-6-104

5. Confirm the downloaded firmware and press [Yes] button.



F-6-105

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.
   1). Press [Check Counter Key] button on the control panel.
   2). Press [Check Device Configuration] button.
   3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method of “Manual Download and Update”.

CAUTION:

[Devices without Wait for EOJ (end of job) Function]

- Firmware update will delete print jobs in the queue. Ensure to notify users of this before you start updating. It is recommended to perform firmware update during non-business hours.

[Devices with Wait for EOJ Function]

- Firmware update will not be triggered when any of the following jobs remains in the queue.

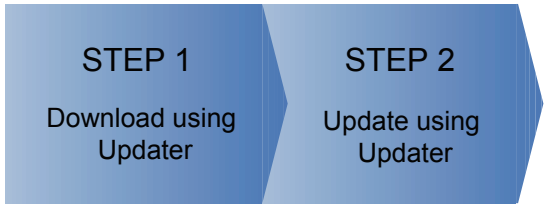
  -Print
  -Scan
  -Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See Chapter 1 “Limitations and Cautions“ of this manual for more detailed information.

NOTE:
To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

c. Manual Download and Update (On-site Update from Service Mode)

The figure below shows the operational flow of “Manual Download and Update”.



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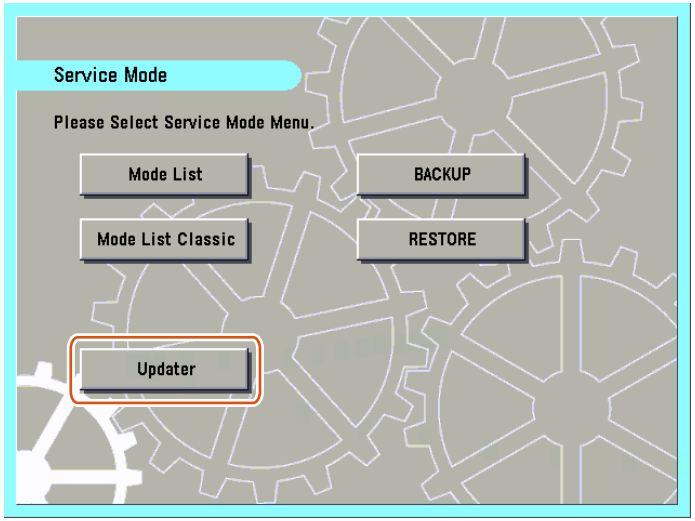
STEP 1: Download using Updater

The firmware can be downloaded from CDS to the device using Updater.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



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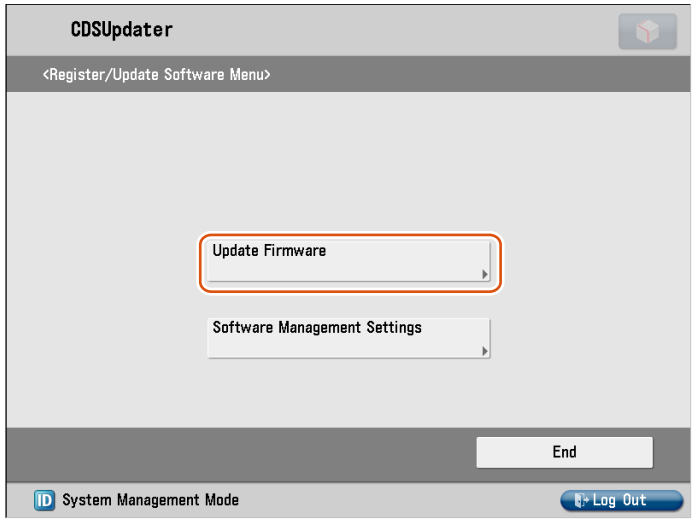
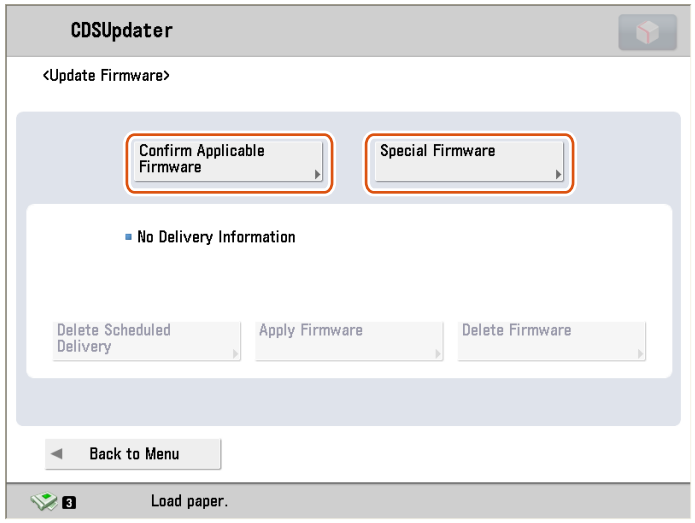
3. Press [Update Firmware] button.



F-6-108

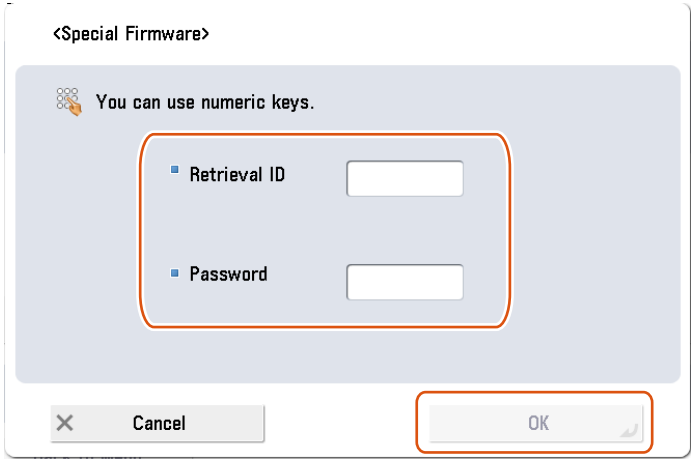
4. Confirm the firmware to be updated in either of the following 2 ways.

- To update to the official edition, press [Confirm Applicable Firmware] button and go to Step 6.
- To update to the individual response edition, press [Special Firmware] and go to Step 5.



F-6-109

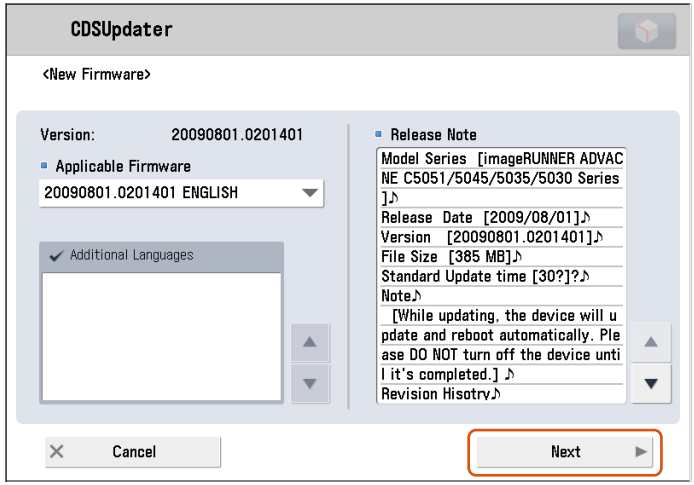
5. [Special Firmware] screen is shown as below. Enter the fields and press [OK] button.



F-6-110

- [Retrieval ID]:
  Enter numeric up to 8 characters.
- [Password]:
  Enter numeric up to 8 characters.

6. [New Firmware] screen is shown as below. Check the contents and press [Next] button.



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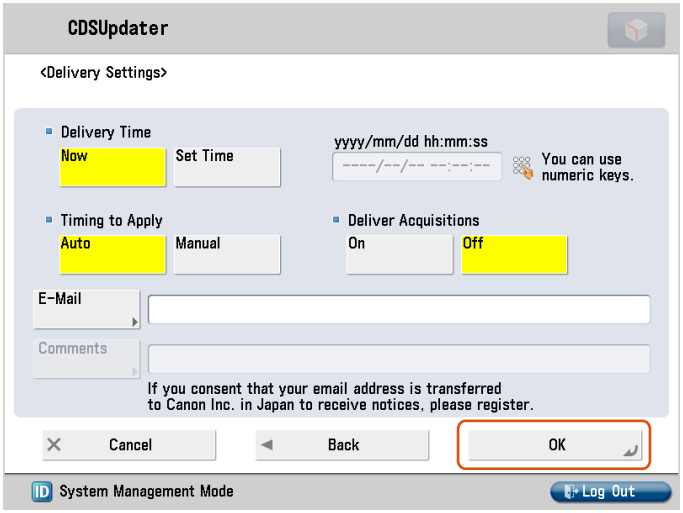
- [Version]:
  The current firmware version is shown.
- [Applicable Firmware]:
  Select the firmware applicable to the device from the dropdown list.
- [Additional Languages]:
  If there are any additional languages, they are displayed.
  More than 1 language can be selected, and it is possible to add another language when upgrading the firmware.
  Up to 8 languages can be added, including Japanese and English. The languages already registered in the device are always selected, and SST is used to delete an unnecessary language from the device.
- [Release Note]:
  If any release note is published, the contents are shown here.

NOTE:
To update to the individual response edition, the firmware corresponding to the ID and password that you input is displayed in [Applicable Firmware].

7. [Delivery Settings] screen is shown as below. Enter the fields and press [OK] button.



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- [Delivery Time]:
  Press either [Now] or [Set Time] button.
  - [Now]:
    The firmware is downloaded immediately after distribution schedule is set.
  - [Set Time]:
    Be sure to specify the date (within 30 days) and time. The firmware is downloaded on the specified date and time.
    Enter the date and time using the numeric keypad in the format of “yyyy/mm/dd hh:mm:ss”
- [Timing to Apply]:
  Press either [Auto] or [Manual] button.
  - [Auto]:
    The firmware is applied automatically upon firmware downloaded.
  - [Manual]:
    The firmware is automatically downloaded. Go to [Apply Firmware] to set up for updating the downloaded firmware.
- [Updated Module Only]:
  Press either [On] or [Off] button.
  - [On]:
    Only difference between the current and new firmware is downloaded.
  - [Off]:
    The firmware to be applied is wholly downloaded.

[E-mail]:
E-mails concerning update statuses are sent from the device to the contact registered here.
Enter the E-mail address of the service technician in charge.
Enter 1-byte alphanumeric or symbols up to 64 characters.

- [Comments]:
  Enter the comment in 1-byte alphanumeric or symbols up to 128 characters.
  Enter the comment to be automatically included in E-mail. Model Name in the comment will be helpful to identify the device relevant to the E-mail.

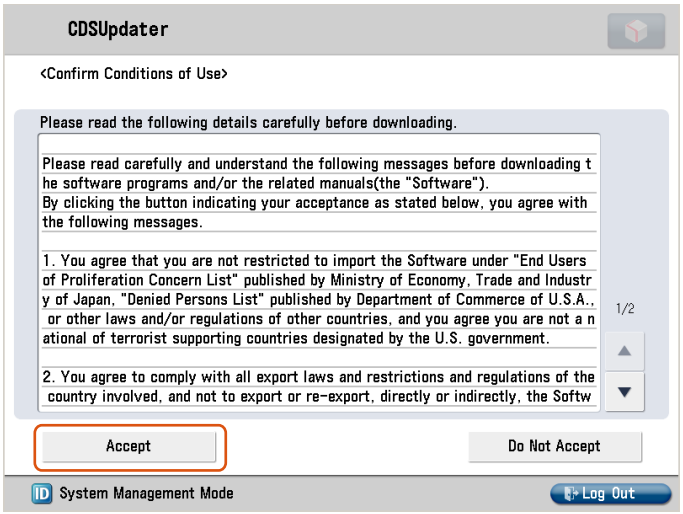
NOTE:
[Timing to Apply]
- For firmware versions with no remote update permission, [Auto] cannot be selected in [Timing to Apply]

[Updated Module Only]
- For firmware versions with difference-only delivery disabled, only [OFF] can be selected in [Updated Module Only].

[E-mail]
- To send E-mails to multiple destinations, each E-mail address should be delimited with comma (,) or semi-colon (;).
- For E-mail addresses entered in this field, a notification E-mail is sent at the following timing.

  -Distribution Set
  -Distribution Started
  -Distribution Finished
  -Update Started
  -Update Finished
  -Error Occurred

8. Confirm Export Criteria screen is shown as below. Check the contents and press [Accept] button.



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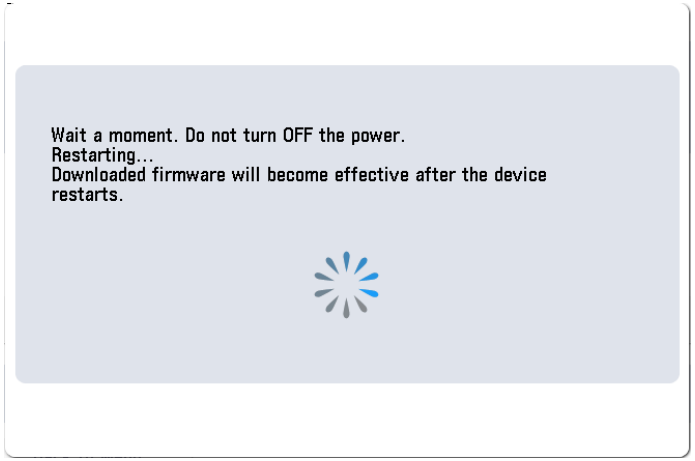
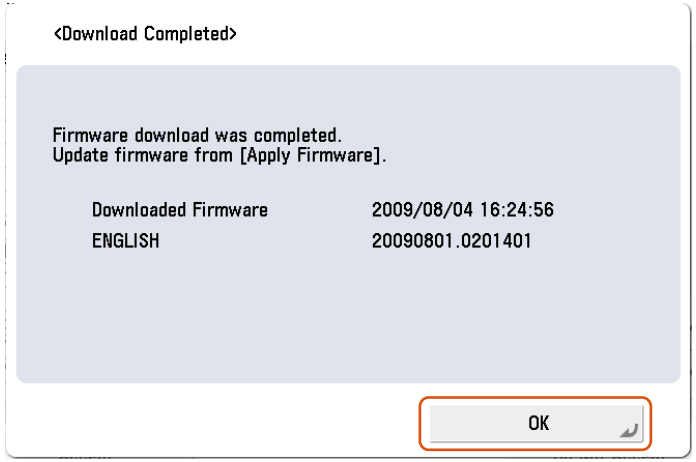
9. One of the screens below is shown according to the setting.

- When Distribution Time and Timing to Apply of Distribution Setting are set to [Now] and [Auto], respectively:
  Firmware is downloaded and updated automatically to the device. The device is automatically restarted upon update completed. Now STEP 1 is successfully completed.



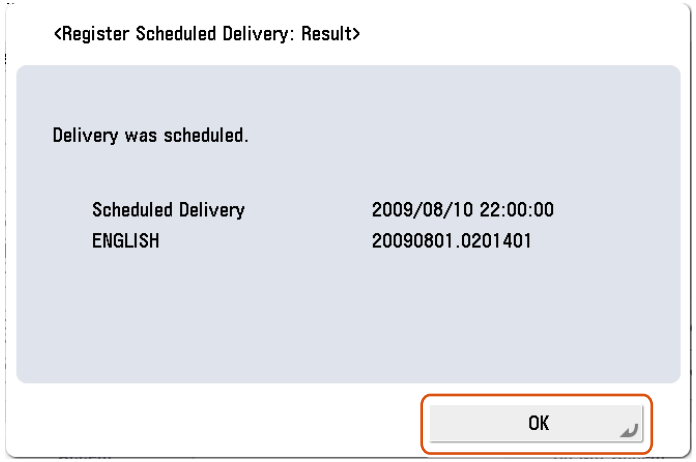
F-6-114

- When Distribution Time and Timing to Apply of Distribution Setting are set to [Now] and [Manual], respectively:
  Confirm the firmware and press [OK] button. Now STEP 1 is successfully completed.



F-6-115

- When Distribution Time is set to [Set Time] in Distribution Setting:
  Confirm the distribution schedule and press [OK] button. Now STEP 1 is successfully completed.



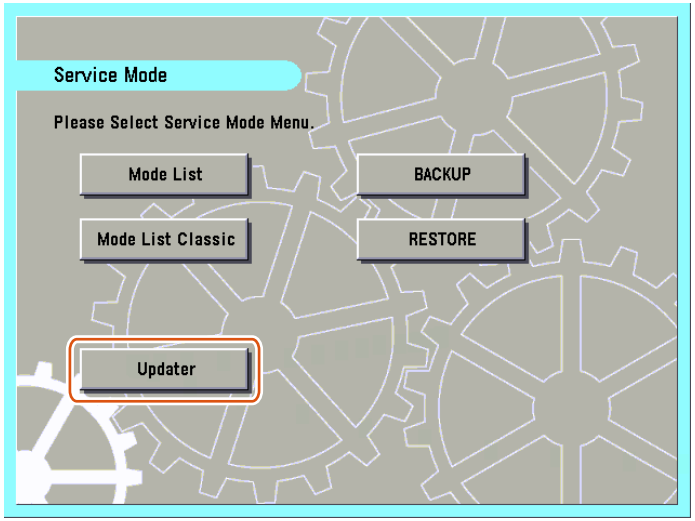
F-6-116

STEP 2: Update using Updater

The firmware downloaded to the device can be updated using Updater functions.
When Timing to Apply is set to [Auto] in Distribution Setting in STEP 1, the firmware is updated automatically. Only when Timing to Apply is set to [Manual], follow the steps below to update the firmware.

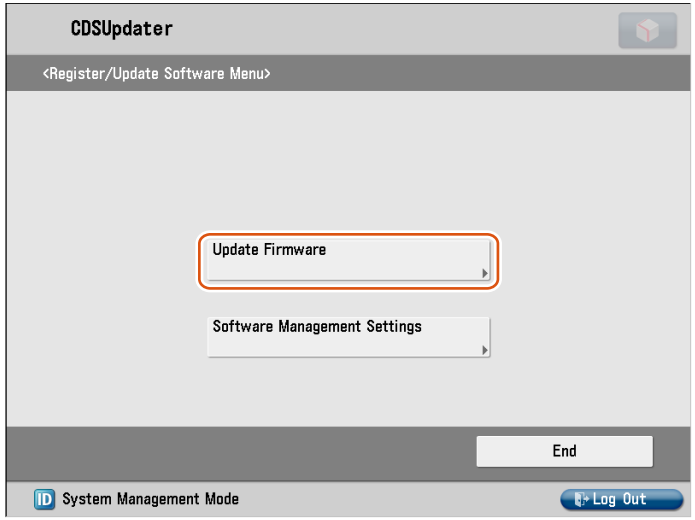
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] button on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.



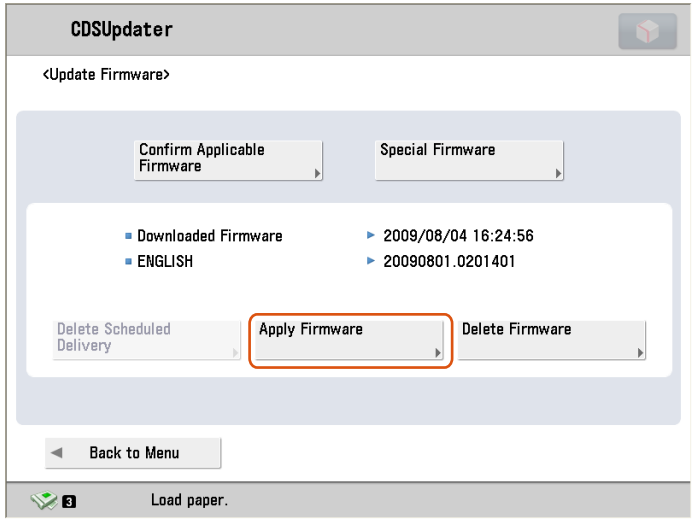
F-6-117

3. Press [Update Firmware] button.



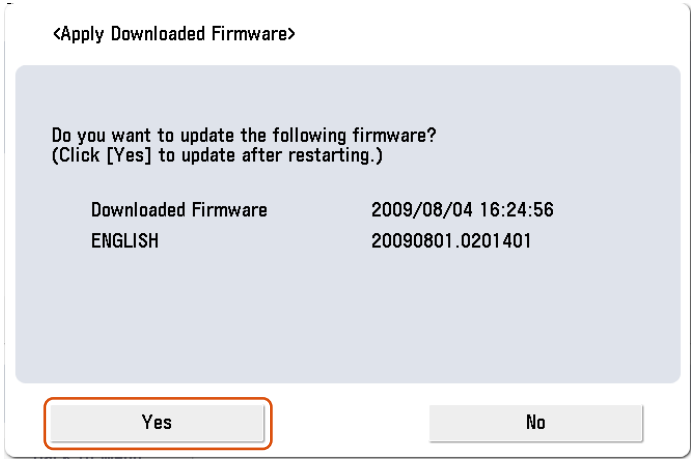
F-6-118

4. Press [Apply Firmware] button.



F-6-119

5. Confirm the downloaded firmware and press [Yes] button.



F-6-120

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.
   1). Press [Check Counter Key] button on the control panel.
   2). Press [Check Device Configuration] button.
   3). Confirm if the updated firmware version corresponds to [Controller Version].

Now the firmware is successfully updated in the method of “Manual Download and Update”.

CAUTION:

[Devices without Wait for EOJ (end of job) Function]

- Firmware update will delete print jobs in the queue. Ensure to notify users of this before you start updating. It is recommended to perform firmware update during non-business hours.

[Devices with Wait for EOJ Function]

- Firmware update will not be triggered when any of the following jobs remains in the queue.

  -Print
  -Scan
  -Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See Chapter 1 “Limitations and Cautions“ of this manual for more detailed information.

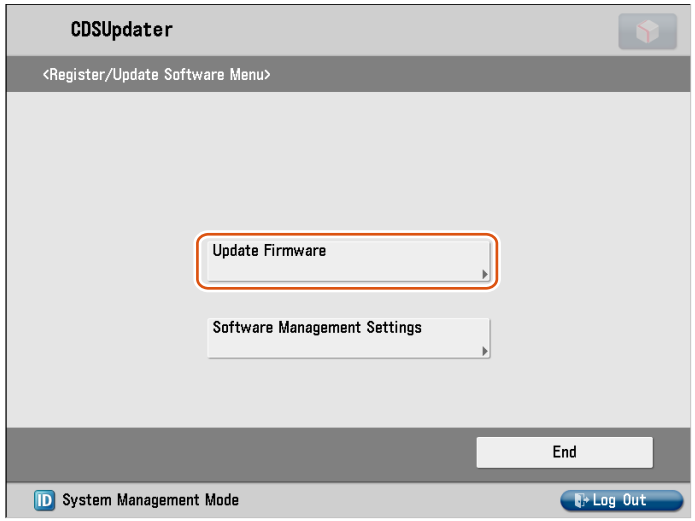
Deleting Firmware Distribution Schedule

This section describes how to delete firmware distribution schedule set by Updater.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] button at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

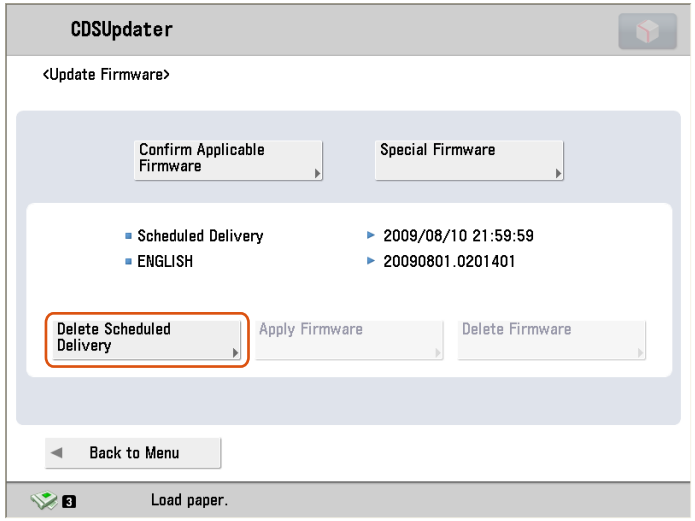
2. Press [Updater] button.

3. Press [Update Firmware] button.



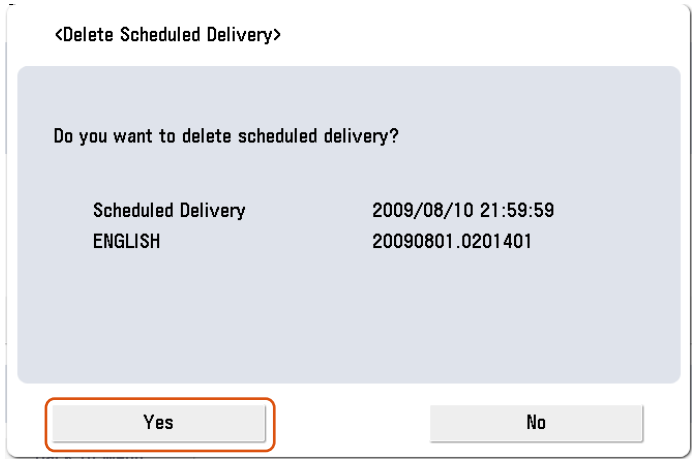
F-6-121

4. Press [Delete Scheduled Delivery] button.



F-6-122

5. Confirm the contents of the distribution schedule and press [Yes] button.



F-6-123

6. Confirm the result of deletion shown on the screen and press [OK] button. Now the firmware distribution schedule is successfully deleted.

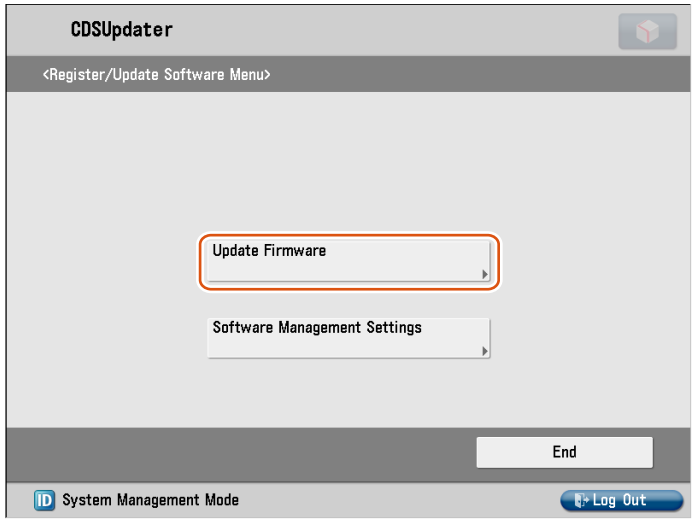
■ Updating Downloaded Firmware (Applying Firmware)

This section describes how to update the downloaded firmware.

1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User mode)] button on the control panel.
   2). Press [2] and [8] buttons at a time on the control panel.
   3). Press [Setting/Registration (User mode)] button on the control panel.
   4). [Service Mode] screen is shown.

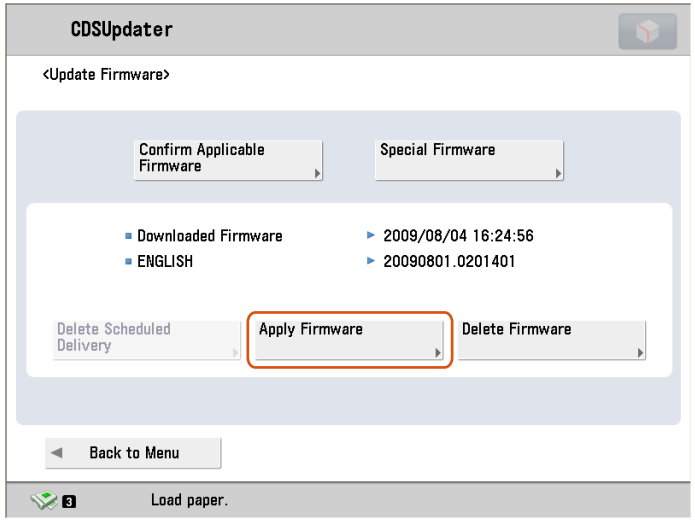
2. Press [Updater] button.

3. Press [Update Firmware] button.



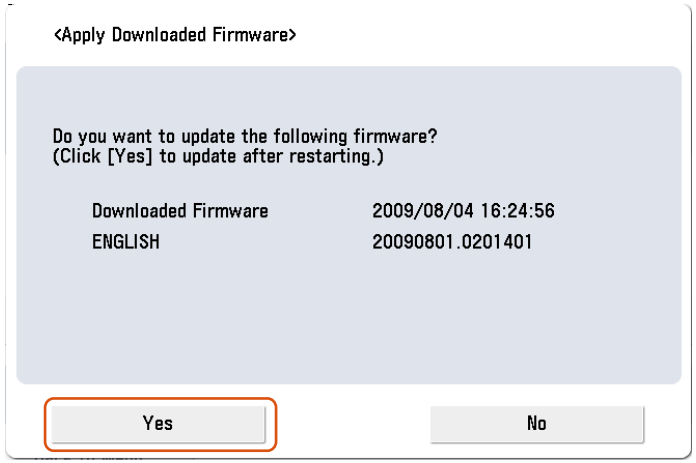
F-6-124

4. Press [Apply Firmware] button.



F-6-125

5. Confirm the downloaded firmware and press [Yes] button.



F-6-126

6. The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

7. When the device is restarted, confirm the version of the firmware.
   1). Press [Check Counter Key] button on the control panel.
   2). Press [Check Device Configuration] button.
   3). Confirm if the updated firmware version corresponds to [Controller Version].

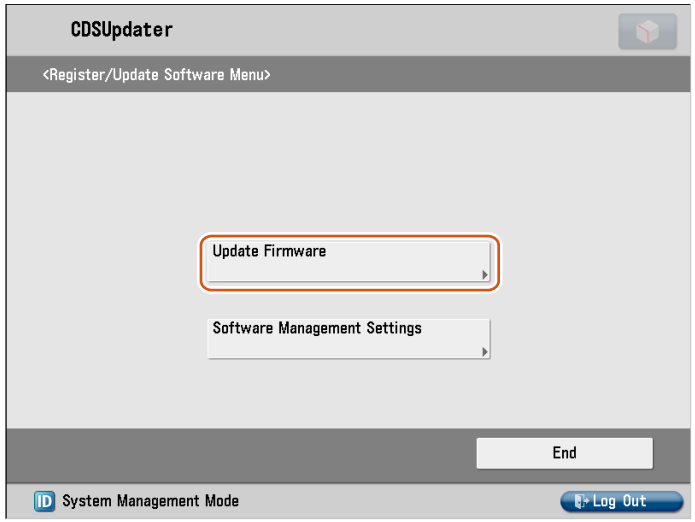
Now the firmware is successfully updated in the method.

Deleting Downloaded Firmware

This section describes how to delete the downloaded firmware using Updater.

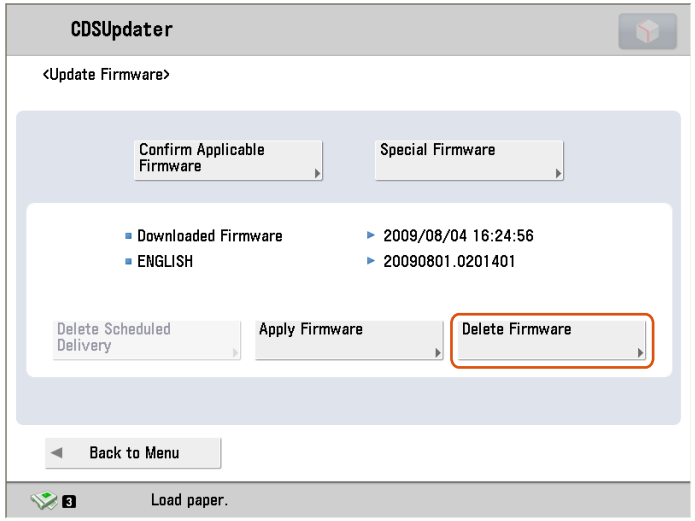
1. Start [Service Mode] at Level 1.
   1). Press [Setting/Registration (User Mode)] button on the control panel.
   2). Press [2] and [8] button at a time on the control panel.
   3). Press [Setting/Registration (User Mode)] button on the control panel.
   4). [Service Mode] screen is shown.

2. Press [Updater] button.
3. Press [Update Firmware] button.



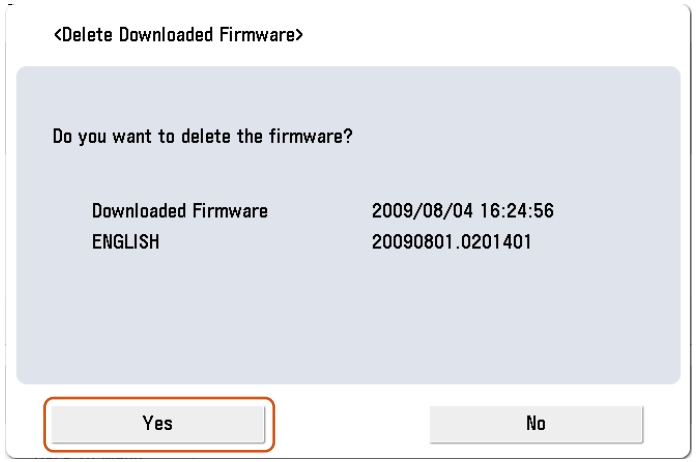
F-6-127

4. Press [Delete Firmware] button.



F-6-128

5. Confirm the downloaded firmware to be deleted and press [Yes] button.



F-6-129

6. Confirm the result of deletion and press [OK] button. Now the downloaded firmware is successfully deleted.

■ Troubleshooting on Firmware Installation

No.1

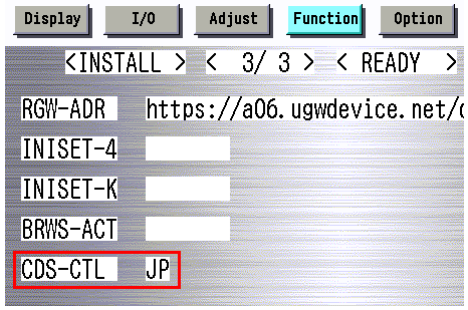
Symptom: I can't find the firmware to be updated using Updater.

Cause: Preparation has not been properly done.

Action: Confirm the setting of Sales Company's HQ bellow.

Setting of Device [SERVICE MODE] (Level1)

COPIER > FUNCTION > INSTALL > CDS-CTL



F-6-130

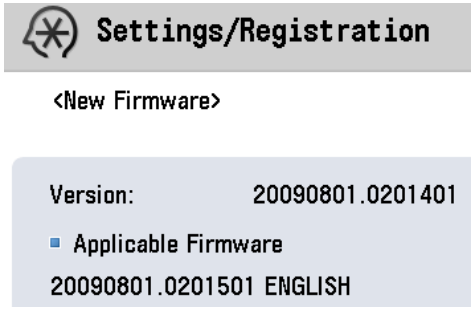
Cause: The version currently in use is not available for update.

Action: Download the release note from CDS separately to upgrade to the version available for update.

Cause: You try to download firmware from User mode.You can download only the latest version of firmware from User mode.

Action: Download from Service mode.

<User Mode>



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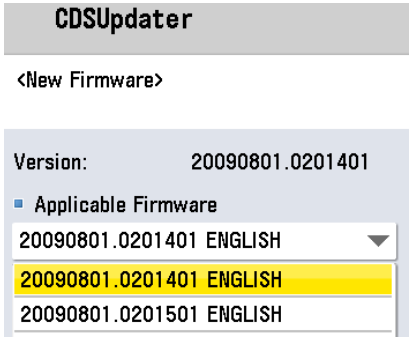
<Service Mode>



F-6-132

No.2

Symptom: Firmware download is aborted during operation using Updater functions.

Cause: The network cable is disconnected or the power went off due to blackout and the like.

Action: Retry download. Firmware under download is cancelled upon aborted.

No.3

Symptom: Firmware update is aborted during operation using Updater functions and the device cannot be started.

Cause: The power went off due to blackout and the like.

Action: Service technicians should follow the steps below via SST.

1. Press [2] and [8] buttons at a time to start the device.
   1) Turn on the power and hold down [2] and [8] buttons at a time on the control panel.
   2) [Download Mode] is shown on Local UI.
      If the operation above does not trigger the download mode, BOOT (Flash Memory, service parts) should be replaced (takes up to 1 minute for rewriting).
      If the operation above successfully triggers the download mode, go to the next steps below.

2. Via SST, format the HDD of BOOT Dev only.

3. Via SST, install the firmware in the device.

No.4

Symptom: Firmware has not been downloaded according to the distribution schedule.

Cause: Other firmware distribution schedule is set.Since only 1 distribution schedule is held, the registered schedule may be overridden by the new firmware distribution schedule.
Action: Once the schedule is overridden, the firmware cannot be downloaded. Distribution should be rescheduled for the firmware.

Cause: At the scheduled distribution date and time, the firmware registered was not found on CDS.
Action: Distribution should be rescheduled for the firmware.

Cause: After distribution is scheduled, device is updated to other version of firmware via SST. (Status of the firmware in the device is changed.)
Action: Distribution should be rescheduled for the firmware.

Cause: The power of the device was off at scheduled date and time.
Action: Distribution should be rescheduled for the firmware.

Cause: The network between the updater and the CDS server has stopped.
Remedy: Conduct a communication test and check the state of network.
There are some cases where the network is stopped only at night, during which update is performed. If the communication test ended in success, check the state of network during the period when update is scheduled.

No.5

Symptom: The firmware presumed to be downloaded to the device cannot be found.

Cause: Since only 1 firmware can be held on the device, the firmware previously downloaded was overridden by the newly downloaded one.
Action: Retry the firmware download.

Information required for Reports

Information required for Service Technicians to Obtain on Site

- Update Logs
- System Logs (Log Level: 4)

Information to Report

- Symptom occurred
- Location of the device
- Date and Time that symptom occurred
- Steps taken for reproduction
- Firmware / Application you tried to install
- Occurrence frequency
- Model dependency (if the same symptom occurred in other models)
- Dependency on firmware/MEAP application/system option
- Conditions of symptom occurrence
  - Model
  - Firmware version installed on the device
  - List of MEAP applications installed on the device
  - Network setting information of the device
  - Service mode setting information

Setting of device service mode (Level 1)	COPIER > FUNCTION > INSTALL > CDS-CTL
	COPIER > OPTION > FNC-SW > CDS-UGW
	COPIER > OPTION > FNC-SW > CDS-FIRM
	COPIER > OPTION > FNC-SW > CDS-MEAP
	COPIER > OPTION > FNC-SW > LOCLFIRM
	COPIER > OPTION > FNC-SW > CDS-LVUP

* As many as the items listed above should be obtained on site. More information provided will be helpful for investigation.

Debug Logs

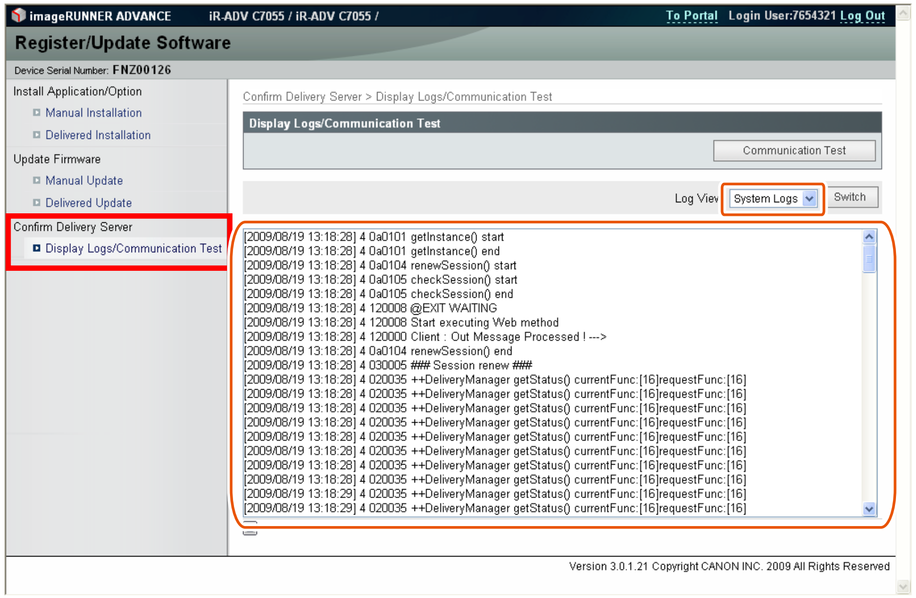
Obtaining Log Files

Updater log files can be obtained by copy & paste from remote UI.
This procedure is shown below.

1. Check that the “CDS-MEAP” or “CDS-FIRM” is enabled in the service mode. If they are not enabled, change the value to “1” and then restart the device.
   Service mode (Level1) > Mode List
   - COPIER > OPTION > FNC-SW > CDS-MEAP: 1
   - COPIER > OPTION > FNC-SW > CDS-FIRM: 1

2. Log in the remote UI (URL: http://<device’s IP address or host name>) using the system administrator right.

3. From “Display Logs/Communication Test” screen, obtain System Logs (log level 4) and Update Logs by copy & paste.
   Top page (Remote UI) > [Settings/Registration] > [Management Settings] > [License/Others] > [Register/Update Software] > “Display Logs/Communication Test”



F-6-133

> NOTE:
> - See "Setting Log Level" in chapter 2 for details of changing Log Level

4. If the value of CDS-MEAP or CDS-FIRM was changed in the service mode, return to the original value and then restart the device to enable this setting.

Obtaining the log files is completed.

■ Error Messages

Error messages displayed in LUI on a device are shown below. As to error codes, see the next list.

No.	Messages	Timing of display	Cause	Remedy
1	An error occurred with the delivery server. Contact your sales representative. Error Code: [xxx]	In communicating with the delivery server.	System error occurred in server.	Obtain the log etc. (Refer to "Version Upgrade via CDS" under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
2	Delivery server is stopped. Wait a while and then try to perform the operation again. Check the following URL for details. <Stopped Delivery Server URL>	In communicating with the delivery server.	Delivery server stopped.	Check the delivery server stop information. After the delivery server starts, perform the operation from this application. When the delivery server stop information is not available, contact the sales company's Support Department.
3	Failed to connect to delivery server. Check the delivery server and network.	In communicating with the delivery server.	Communication error due to incorrect settings of CDS URL.	Set correct CDS URL in the Updater settings.
			Excluding delivery server stop, communication error to the delivery server occurred.	Check if the network environment is correct to solve the cause of the error occurrence. If the network environment of the device is correct, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
4	Download was stopped because an error occurred with the file server. Check the network.	At the time of file download	Communication error to the delivery server occurred.	Check if the network environment is correct to solve the cause of the error occurrence. If the network environment of the device is correct, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
5	Downloaded files are invalid. Check the network.	At the time of file download	The received file is broken.	After checking the network environment of the device, re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
6	Failed to retrieve information of special firmware. Check the retrieval ID and password.	Acquisition of applicable firmware information	No information exists about firmware for special firmware retrieval ID or Password is invalid.	Enter the correct firmware ID or Password applicable to the firmware information. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
7	Scheduled delivery information of firmware does not exist. Check it because it may already have been deleted.	Acquisition of applicable firmware information	Delivery information with specified delivery ID does not exist.	Register the delivery schedule again. If this occurs at the time of canceling file download, deleting downloaded firmware or deleting scheduled delivery, no remedy is required.
8	Failed to apply firmware.	Firmware application error	Error due to the application (NLM)	Obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
9	Delivery Server : Connect Failed File Server : Retrieve Failed Error Code: [xxxx]	Communication test, etc. (communication test result dialogue)	In the communication test, failed to connect to the delivery server. In SOAP communication, failed to success after 1 min retry.	Check the network environment of the device, and re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			ID and Password required for proxy to connect to the internet are not configured in device.	Set proxy and restart the communication test. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			The access to the network is limited.	Set the user environment to make the access to the following domain available. https://device.cdsknn.net/ http://cdsknn.net.edgesuite.net/ If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			Delivery server stopped.	Contact Field Support Group in the sale company. After confirmation that the delivery server has been restored, restart the communication test. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company again.
10	Delivery Server : Connect OK File Server : Retrieve Failed Error Code: [xxxx]	Delivery Server : Connect OK File Server : Retrieve Failed Error Code: [XXXX]	Due to no return of data for the communication test, time-out (in HTTP communication, no response for 1min) occurred. After that, retried but failed to connect to server.	Check the network environment of the device and re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			The network cable was disconnected during data download in the communication test.	Reconnect the network cable and then restart the communication test. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			The file server stopped during data download in the communication test.	Contact the sales company's Support Department. After confirmation that the delivery server has been restored, restart the communication test. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company again.
			Hash value in the communication test file is incorrect.	Check the network environment and re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
11	An error occurred. Error Code: [xxx]	communication test, etc. (main screen)	The max value (space/file) was exceeded and new log was not accepted. Normally an old log file is deleted before the max value (space/file) is exceeded, but error may occur due to other element (e.g. I/O error).	Check if the log file exceeded the max value. <Update log> Max space: 128KB/file Max file number: 4 <System log> Max space: 512KB/file Max file number: 4 If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Notice of version information (main screen)	Failed to acquire version information of device due to no CDS registration of firmware version of device.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			At the time of notifying version information, failed to connect to the delivery server.	Check if the network environment is correct to solve the cause of the error occurrence. If the network environment of the device is correct, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			No return of notifying version information	
			Network cable was disconnected during notice of version information.	Re-connect the network cable and re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			Failed to send notice of version information since the main power was turned OFF and then ON during the sending.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			Server stopped at the time of sending notice of version information.	Check the network environment of the device and re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			An internal error occurred at the time of sending notice of version information.	Obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
11	An error occurred. Error Code: [xxx]	UGW linkage (main screen)	UGW linkage was turned ON when eRDS was OFF.	For a device using eRDS, turn ON the eRDS. For a device not using eRDS, turn OFF the UGW linkage. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			An internal error occurred at the time of acquiring delivery information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		On-site (error dialogue)	An internal error occurred at the time of acquiring applicable firmware information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			An internal error occurred at the time of sending approval information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			An internal error occurred at the time of delivery order	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Immediate download (error dialogue)	An internal error occurred at the time of requesting firmware delivery information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			During the download, all space in the storage disk was occupied. (DiskFull)	After adding vacant space of the storage disk, re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			At the end of receipt, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Manual update (error dialogue)	At the update start, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company
		Automatic update (error dialogue)	At the update start, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Deletion of downloaded firmware	At the time of notifying cancellation, an internal error occurred.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
12	An error occurred. Check the Update Firmware screen.	UGW linkage (main screen)	eRDS sent an order but Updater failed to connect to server.	Conduct a communication test to analyze the cause of the error. After solving the cause, resend the order from the eRDS. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			Delivery server stopped.	Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			Scheduled date and time acquired from the delivery server was before current time (15 or more min had passed.)	Do the delivery setting from UGW again. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			Scheduled data and time acquired from the delivery server did not exist.	Do the delivery setting from UGW again. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Immediate download (main screen)	At the time of immediate download, turned OFF and then ON the power of device main body.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Manual update (main screen) Automatic update (main screen)	Updated version was different from the ordered version.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			After the update, failed to connect to the delivery server.	Check the network environment and re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			After the update, delivery server stopped.	Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			After the update, the network cable was disconnected.	Re-connect the network cable and re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			After the update, server returned an error.	Obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			After the update, an internal error occurred.	If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
13	Delivery Error Error Code: [xxx]	UGW linkage (Update Firmware screen)	eRDS sent an order but Updater failed to connect to the server.	Conduct a communication test to analyze the cause of the error. After solving the cause, resend the order from the eRDS. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			The delivery server stopped.	Contact the sales company's Support Department. After confirming restoration of the delivery server, re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
			The scheduled data and time acquired from delivery server does not exist.	Do the delivery setting from UGW again. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
14	Delivery Error Delivery Time Delivery Firmware Label Delivery Firmware version Error Code: [xxx]	UGW linkage (Update Firmware screen)	The scheduled date and time acquired from delivery server was before current time (15 or more min had passed).	Do the delivery setting from UGW again. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Immediate download (Update Firmware screen)	At the time of immediate download, turned OFF and then ON the power of device main body.	Re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
15	Applicable firmware is not registered.	On-site (error dialogue)	At the user site, no latest firmware exists.	This means the current firmware is the latest, so this error has no impact. But when the latest firmware to be retrieved must exist e.g. released new firmware information has been notified, contact Field Support Group in the sales company.
			No applicable firmware exists on CDS, so the service person can't select any applicable firmware.	Contact the sales company's Support Department.
16	Restart failed. Turn the main power OFF and ON.	Manual update (error dialogue)	An error occurred at the time of the device restart.	After turning OFF and then ON the main power of the device, re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
		Automatic update (error dialogue)	An error occurred at the time of the device restart.	After turning OFF and then ON the main power of the device, re-execute the job. If it recurs, obtain the log etc. (Refer to “Version Upgrade via CDS” under “Version Upgrade”of Chapter 6 “Troubleshooting” of this manual.) and contact Support Div. of the sales company.
17	Specify [E-Mail Address] with up to 64 characters.	At the time of periodical update setting	The specified E-mail address exceeded 64 characters.	Specify E-mail address within 64 characters.
18	The following characters cannot be used for the [E-Mail Address]: , : ; “ ( ) [ ] < > \	At the time of periodical update setting	The E-mail address was including the characters which could not be used.	Do not specify E-mail address with characters which cannot be used.
19	Specify [Comments] with up to 128 characters.	At the time of periodical update setting	Comments exceeded 128 characters.	Specify comments within 128 characters.
20	The [Delivery Server URL] is incorrect.	In setting with the deliver server URL.	The specified deliver server URL is wrong.	Enter the right URL(https://device.c-cdsknn.net/cds_soap/updaterif)

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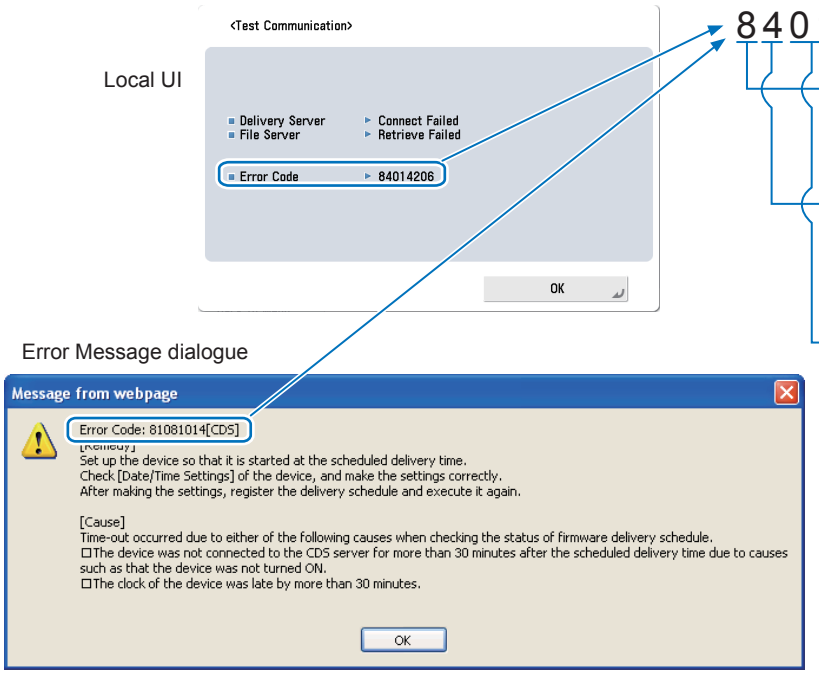
Error Code

The following shows the error codes displayed on CDS error dialogs and the Control Panel of the device (local UI) and explanation of those error codes.

How to read an error code



84014206

Code	Value	Contents
The first digit Error field	8	Error
The second digit Operator	0 1 2 3 4 5 6	Not defined. CDS server Updater UGW Service person IT administrator (User) Scheduled Update
The 3rd - 4th digits Method category	XX	Method
The 5th digit Category code	0 1 2 3 4 5 6 7	Category code
The 6 - 8th digits Description code	000-	See Error code list

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List of Error Codes Likely to Be Displayed

In the list shown below, error codes which are likely to be displayed are classified into two groups:

- Error codes caused by the CDS server (error codes starting with "81")
- Error codes caused by the device (error codes starting with "82" to "86")

When an error code is displayed, check this list first. If it is not in this list, see "Error Code".

Error codes caused by the CDS server (error codes starting with "81")

Error Code (hex number)	Description	Remedy
Error codes starting with "81": CDS server		
81021008	As to the device serial number in the data entry items, there is no applicable device code product	Check registration of LMS. (CINC)
81040002	In a string type of a data entry item, digit number and/or character type is/are set against the regulations 81040002 is displayed in the following cases: • The number of digits of the registration ID or password is not 8. • The registration ID or password includes characters other than single-byte numeric characters.	When 81040002 is displayed: Enter the correct ID and password for Special Firmware. (User)
81041012	Device is "Not applicable to CDS" (Firmware distribution) * It occurs only when a device that can access CDS is managed.	Register the device as a CDS device.
81060002	In a string type of a data entry item, digit number and/or character type is/are set against the regulations 81060002 is displayed in the following cases: • The number of digits or type of characters used for Firm Type, Firmware Version, Firmware Group Version, or Firmware Label does not meet the specified number of digits or type of characters. • The character string of Firmware Group Version (firmGroupVersion) includes characters other than numeric values. • The number of digits of E-mail Address mailAddress) is larger than 128. • Characters other than single-byte alphanumeric characters and symbols are used for E-mail Address (mailAddress). • An invalid e-mail address was input (The domain name is missing, .(dot) was input instead of , (comma), etc.)	When 81060002 is displayed due to an error in Firm Type, Firmware Version, or Firmware Group Version, register the correct firmware again.(CINC) When 81060002 is displayed due to an invalid e-mail address, register the correct e-mail address. (User)
81081014	When confirmation of the firmware distribution settings ended in time-out. CDS was not accessed within 30 minutes after the distribution time. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.
81091001	81091001 is displayed in the following cases: • The firmware information of the device at the time of execution of distribution differs from the firmware information of the device at the time of registration of the distribution schedule. The firmware was upgraded without using CDS when distribution schedule for the device that supports the UGW-linked function had been registered. • As a result, the firmware information of the CDS server at the time of execution of distribution differs from the firmware information of the CDS server at the time of registration of the distribution schedule. When the remote update setting for the firmware to be updated was disabled after distribution schedule was registered using auto update.	If distribution of the firmware is necessary, search the applicable firmware again, and perform distribution of the firmware.
8106100A	The delivery status is Applying After the firmware was updated and when an update completion notification has not been sent to CDS, distribution of the firmware was attempted again before update time-out is processed in CDS.	After 2 hours and 30 minutes have passed since the failed attempt to distribute the firmware, search the applicable firmware again, and perform distribution of the firmware.

Error Code (hex number)	Description	Remedy
8108100D	The delivery status is Distributing/Distributed/Applying/Finished/Failed 8108100D: When the distribution status was not correct, schedule information was checked with CDS. (CDS has not been notified of the status change due to a network	Search the applicable firmware again, and perform distribution of the firmware.
810A1015	When firmware distribution time-out occurs. A reception completion notification was not sent to CDS within 24 hours after the start of the distribution. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.
810B1010	The delivery status is New/Waiting to Distribute/Distributing/Applying/Finished/Failed 810B1010: An update start notification was sent to CDS with an invalid status. (The CDS server failed to receive the status change due to a network error, etc.)	Search the applicable firmware again, and perform distribution of the firmware.
810C1016	Firmware update time-out occurred. An update completion notification had not been sent to CDS even after 2 hours since the start of the update.	Check the device to see if the update has been completed. When the update has ended in failure, execute the operation again if there is no problem with the device.

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● Error codes caused by the device (error codes starting with "82" to "86")

Error Code (hex number)	Description	Remedy
Error codes starting with "82": Updater		
82001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
82005202	Failed to connect to the server	Check the network environment of the device (check for any problem in the DNS server), and start the operation again.
82005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
82005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
82005205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
82005206	Error in a HTTP response	Check the network environment.
82005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
82005304	Failed to receive the data	Check the network environment of the device, and start the operation again.
82005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
82005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)
82007502	The scheduled distribution had not been executed even after a certain period of time due to the power of the device being OFF at the scheduled time or other reasons.	Scheduled deliveries not executed within the defined period of time are abandoned, so register a scheduled delivery again. When setting the date and time of the scheduled delivery, be sure to designate a time when the device is ON.
82095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
82095206	Error in a HTTP response	Check the network environment.

Error Code (hex number)	Description	Remedy
82095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
82095309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)
Error codes starting with "84": Service person		
84001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
84005202	Failed to connect to the server	Check the network environment of the device (check for any problem in the DNS server), and start the operation again.
84005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
84005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84005205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84005206	Error in a HTTP response	Check the network environment.
84005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
84005304	Failed to receive the data	Check the network environment of the device, and start the operation again.
84005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
84005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)
84095203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
84095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84095205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
84095206	Error in a HTTP response	Check the network environment.
84095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
84095309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)
Error codes starting with "85" :IT administrator (User)		
85001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
85005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
85005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.

Error Code (hex number)	Description	Remedy
85005206	Error in a HTTP response	Check the network environment.
85005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
85005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
85005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)
85095203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
85095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
85095206	Error in a HTTP response	Check the network environment.
85095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
850C1104	Session time-out excluding after application inquiry (after issuing delivery ID)	Start the operation again from the beginning
Error codes starting with "86": Scheduled Update		
86001106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device
86005203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
86005204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
86005205	Failed to read a HTTP response	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
86005206	Error in a HTTP response	Check the network environment.
86005300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.
86005304	Failed to receive the data	Check the network environment of the device, and start the operation again.
86005305	Failed to receive the data	Check that no problem is found in the HDD. When this error occurs again, contact Support Group of sales companies.
86005308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.
86005309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)
86095203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.
86095204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.
86095300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.

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Error Code

The error code list is shown below. Remedy are error codes of "-", and for all the error codes out of the list, contact Field Support Group in the sales company.

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	Error											
8	0	Not defined.										
8	1	CDS server										
8	1	x	x	Relating method code								
8	1	x	x	0	Not categorized							
8	1	x	x	0	001	No value is set in a mandatory data entry item	Contact the support department of the sales company.	Yes	-	Yes	-	-
8	1	x	x	0	002	In a string type of a data entry item, digit number and/or character type is/are set against the regulations 81040002 is displayed in the following cases: • The number of digits of the registration ID or password is not 8. • The registration ID or password includes characters other than single-byte numeric characters. 81060002 is displayed in the following cases: • The number of digits or type of characters used for Firm Type, Firmware Version, Firmware Group Version, or Firmware Label does not meet the specified number of digits or type of characters. • The character string of Firmware Group Version (firmGroupVersion) includes characters other than numeric values. • The number of digits of E-mail Address (mailAddress) is larger than 128. • Characters other than single-byte alphanumeric characters and symbols are used for E-mail Address (mailAddress). • An invalid e-mail address was input (The domain name is missing, . (dot) was input instead of , (comma), etc.)	When 81040002 is displayed: • Enter the correct ID and password for Special Firmware. (User) When 81060002 is displayed due to an error in Firm Type, Firmware Version, or Firmware Group Version: • Register the correct firmware again. (CINC) When 81060002 is displayed due to an invalid e-mail address: - Register the correct e-mail address. (User)	Yes	-	Yes	-	-
8	1	x	x	0	003	In an data entry item, the value is set against the regulations (E.g. the set value is other than "Operator: 4. Service person, 5. User")	Contact the support department of the sales company.	Yes	-	Yes	-	-
8	1	x	x	0	004	No applicable delivery information exists	Contact the support department of the sales company.	Yes	-	-	-	-

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	1	x	x	1	Operation							
8	1	x	x	1	001	Inconsistency between the current firmware component in the data entry item and delivery information (E.g. the conditions for automatic update are not met. The settings of a mandatory additional set are invalid) 81071001 is displayed in the following cases: • A cancellation notification was sent to CDS when the distribution status was not correct. (CDS has not received the status change due to a network failure, etc.) 81091001 is displayed in the following cases: • The firmware information of the device at the time of execution of distribution differs from the firmware information of the device at the time of registration of the distribution schedule. • The firmware was upgraded without using CDS when distribution schedule for the device that supports the UGW-linked function had been registered. As a result, the firmware information of the CDS server at the time of execution of distribution differs from the firmware information of the CDS server at the time of registration of the distribution schedule. • When the remote update setting for the firmware to be updated was disabled after distribution schedule was registered using auto update.	If distribution of the firmware is necessary, search the applicable firmware again, and perform distribution of the firmware.	Yes	-	Yes	-	-
8	1	x	x	1	002	In a notice of delivery-allowed information, an install-set was release to the market, but the market release was stopped during the delivery	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	003	No mail template file exists	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	004	The device serial number in the data entry item differs from that in delivery information	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	005	User is selected as Operator in the data entry items and the retrieval type is other than the latest	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	006	The retrieval type in the data entry item is special and registration ID and individual Password are not set (* Operator did not enter registration ID and individual Password)	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	007	The retrieval type in the data entry item is special and Operator is not Service person	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	008	As to the device serial number in the data entry items, there is no applicable device code product	Check registration of LMS. (CINC)	Yes	-	-	-	-
8	1	x	x	1	009	The retrieval type in the data entry items is special and there are no basic-set applicable to the registration ID and Password (* When wrong registration ID or Password was entered by an operator)	Enter correct ID and the password.	Yes	-	-	-	-

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	1	x	x	1	00A	The delivery status is Applying After the firmware was updated and when an update completion notification has not been sent to CDS, distribution of the firmware was attempted again before update time-out is processed in CDS.	After 2 hours and 30 minutes have passed since the failed attempt to distribute the firmware, search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	00B	No approval information exists about EULA or the export criteria when the delivery is determined	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	00C	The delivery status is Distributing/Distributed/Applying/Finished/Failed When the distribution status was not correct, distribution information was obtained from CDS. (CDS has not been notified of the status change due to a network failure, etc.)	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	00D	The delivery status is Distributing/Distributed/Applying/Finished/Failed 8108100D: When the distribution status was not correct, schedule information was checked with CDS. (CDS has not been notified of the status change due to a network	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	00E	The delivery status is New/Waiting to Distribute/Distributed/Applying/ Finished/Failed	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	00F	The delivery code is other than Distributing. (Firmware distribution)	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	010	The delivery status is New/Waiting to Distribute/Distributing/Applying/ Finished/Failed 810B1010: An update start notification was sent to CDS with an invalid status. (The CDS server failed to receive the status change due to a network error, etc.)	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	011	The delivery status is Distributing/Distributed/Applying/Finished/Failed	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	012	Device is "Not applicable to CDS" (Firmware distribution) * It occurs only when a device that can access CDS is managed.	Register the device as a CDS device.	Yes	-	-	-	-
8	1	x	x	1	013	When the specified distribution time was within the time frame of CDS distribution stop. (Firmware distribution)	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	014	When confirmation of the firmware distribution settings ended in time-out. CDS was not accessed within 30 minutes after the distribution time. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-
8	1	x	x	1	015	When firmware distribution time-out occurs. A reception completion notification was not sent to CDS within 24 hours after the start of the distribution. The device has been turned OFF, the network has been disconnected, etc.	Search the applicable firmware again, and perform distribution of the firmware.	Yes	-	-	-	-

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	1	x	x	1	016	Firmware update time-out occurred. An update completion notification had not been sent to CDS even after 2 hours since the start of the update.	Check the device to see if the update has been completed. When the update has ended in failure, execute the operation again if there is no problem with the device.	Yes	-	-	-	-
8	1	x	x	1	017	When the firmware distribution information notification showed an error in processing the distribution information.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	018	When the firmware distribution information notification showed an error in processing the scheduled update information.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	019	When the status of the scheduled update information is "Set", "Finished", or "Failed".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	020	When the status of the scheduled update information is "Waiting to Transmit" or "New".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	021	When the status of the scheduled update information is "Set".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	022	The scheduled update setting information differs between the input information and the distribution information.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	1	023	When the distribution status is "Cancel".	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	I/O							
8	1	x	x	2	001	The specified license access number does not exist in LMS	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	002	The specified license access number has been deauthorized	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	003	The package product of the entered license access number doesn't include MEAP application/System Option	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	004	The sales company for the MEAP application isn't identical with the sale company for the package product	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	005	The number of licenses to be issued will exceed the limit number allowed to register	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	006	As for System Option for the same function, the license keys were issued more than the defined number of times for the same device serial number	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	007	No device product exists applicable to the optional product	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	008	No product exists applicable to the device serial number	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	009	The product of the entered license access number cannot be used with this device because the settings of the sales company are incorrect	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00A	No product linked to the license access number is registered in CDS for delivery	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00B	Although the product linked to the license access number is registered in CDS for delivery, the delivery is stopped now	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00C	No existence of optional product applicable to the device serial number.	Contact the support department of the sales company.	Yes	-	-	-	-

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	1	x	x	2	00D	The license access number has been registered for another device	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	00E	For the device product applicable to the device serial number, no available software (MEAP application, System Option) exists	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	010	LMS system error * In support of multi-manifest, when the MFP/SFP section value shows any value other than 0 or 1, LMS returns an error code "-215" to CDS.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	011	LMS system error * In the case of failure in collection of manifest in support of multi-manifest, LMS returns an error code "-999" to CDS.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	012	License cannot be issued for the upgrade product. Since the configuration has been changed in the upgrade product, there are no applications and options for which a license can be issued.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	2	013	Not registered in CSA CSA associated with the license access number does not include any products associated with the group ID.	Contact the support department of the sales company.	Yes	-	-	-	-
8	1	x	x	F	L-CDS							
8	1	x	x	F	000	Unclassified	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	001	Communication test information not registered Download file information for communication test does not exist.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	003	Firmware information not registered Firmware information corresponding to the target device serial number does not exist.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	007	Invalid firmware version The firmware version at the time of registration of the distribution schedule differs from the current firmware version.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	008	Invalid firmware information Firmware information to be distributed does not exist.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	009	Forcible termination Distribution information is forcibly terminated from the server UI.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	00F	Invalid distribution status Distribution status of the server is in a condition where a requested method from the client cannot be accepted.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	010	Invalid parameter Requested parameter from the client is not correct.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	011	Version information not registered Version information corresponding to the specified serial number has not been registered.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	012	Distribution time-out Distribution has not been completed even after a certain period of time from the start of the distribution.	Contact the support department of the sales company.	-	Yes	-	-	-

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	1	x	x	F	013	Unable to judge the necessity of distribution Version information from a device has not been registered in the local CDS. Since the local CDS does not know the version information of the device, it cannot respond to the distribution request from updater. As a result of that, an error occurred when the request has been made.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	FFE	DB error General error to access DB.	Contact the support department of the sales company.	-	Yes	-	-	-
8	1	x	x	F	FFF	DB error Internal error other than error to access DB (file I/O, etc.).	Contact the support department of the sales company.	-	Yes	-	-	-
8	2~6											
8	2~6	x	x	Relating method code								
8	2~6	x	x	0	Not cartelized							
8	2~6	x	x	0	000	Not defined	Normally not indicated					
8	2~6	x	x	0	100	Unknown error	Normally not indicated					
8	2~6	x	x	1	Operation							
8	2~6	x	x	1	001	Processing exclusively	Start the operation again after terminating other Updater operations being executed simultaneously	-	-	Yes	-	-
8	2~6	x	x	1	002	Stopped	Restart the device, and start the operation again.	-	-	Yes	-	-
8	2~6	x	x	1	101	Failed to process preparation for use	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	1	102	Failed to process use end	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	1	103	Time out during restart of readiness preparation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	1	104	Session time-out excluding after application inquiry (after issuing delivery ID)	Start the operation again from the beginning	-	-	Yes	-	-
8	2~6	x	x	1	105	CDS URL is not set	Set CDS URL	-	-	Yes	-	-
8	2~6	x	x	1	106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device	-	-	Yes	-	-
8	2~6	x	x	1	201	Specifying of an iR option for a model that does not support iR options	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	1	202	Specifying of scheduled update for a model that does not support scheduled update	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	1	203	Firmware processing for a model that does not support firmware processing	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	1	204	L-CDS update process for a model that does not support L-CDS	Contact the support department of the sales company.	-	Yes	-	-	-
8	2~6	x	x	1	301	Security Token verification error	Contact the support department of the sales company.	-	-	-	-	Yes
8	2~6	x	x	1	302	Privilege check error	Perform the authentication as a correct user.	-	-	-	-	Yes
8	2~6	x	x	1	303	Parameter error	Contact the support department of the sales company.	-	-	-	-	Yes

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	2~6	x	x	1	304	There is no distribution information from the server.	Contact the support department of the sales company.	-	-	-	-	-
8	2~6	x	x	1	305	Version notification is not required.	Contact the support department of the sales company.	-	-	-	-	-
8	2~6	x	x	1	306	Connection server information mismatch error	Check the connection server settings.	-	-	-	-	Yes
8	2~6	x	x	2	I/O							
8	2~6	x	x	2	1xx	An internal error about file operation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	2xx	An internal error about xML file operation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	301	Failed to output the license file	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	400	Codes other than the following "4xx" definition	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	401	Failure in creation of an auto shutdown stop file	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	2	402	Failure in deletion of the auto shutdown stop file	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	Device							
8	2~6	x	x	3	1xx	An internal error in CPCA	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	2xx	An internal error in IMI	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	3xx	An internal error in SMS	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	4xx	An internal error in NLM	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	5xx	Configuration Service property setting error	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	6xx	An internal error related to APL_CDS partition	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	3	7xx	DCM-related service error	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	SOAP communication							
8	2~6	x		4	101	The processing thread stopped	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	102	Processing SOAP communication now	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	103	The function type is not matched	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	104	An invalid SOAP response error	Check the network environment. When this problem recurs, contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	4	201	An internal error about application information	Contact the support department of the sales company.	-	-	Yes	-	-

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	2~6	x	x	4	202	config.xml is NOT FOUND	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	203	type.xml is NOT FOUND	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	204	An error in binding type.xml	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	205	An error in creating a service tab	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	4	206	A runtime error in performing the web method	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	4	207	An unknown host error in performing the web method	• Check the network environment of the device and start the operation again • Check if the URL settings of the CDS server are correct, and start the operation again after resetting	Yes	-	Yes	-	Yes
8	2~6	x	x	4	301	The delivery server is stopped	Contact the support department of the sales company.	Yes	-	-	-	-
8	2~6	x	x	4	302	<In the case of scheduled update> In response to a download start notification sent from the device, the distribution server returned an error and stopped the operation of the device within a certain period of time before the distribution server maintenance time. <In the case of distribution executed by specifying the date and time> The firmware version of the device at the time when the distribution settings were specified and the version at the time immediately before update are different.	<In the case of scheduled update> Specify the distribution settings again, making sure that the distribution server maintenance time and the scheduled update time do not overlap. <In the case of distribution executed by specifying the date and time> Specify the distribution settings again, making sure that the firmware version of device at the time when the distribution settings are specified and the version at the time immediately before update are the same.	Yes	-	Yes	-	-
8	2~6	x	x	5	HTTP communication							
8	2~6	x	x	5	101	Specified Hash Algorithm is unknown	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	5	102	Download file URL is invalid	Check the URL setting of CDS server, reset the setting, and then start the operation again.	-	-	Yes	-	-
8	2~6	x	x	5	103	No network cable connection (device side)	Check the network environment of the device, and start the operation again.	-	-	Yes	-	-
8	2~6	x	x	5	201	Invalid HTTP request	Contact the support department of the sales company.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	202	Failed to connect to the server	Check the network environment of the device (check for any problem in the DNS server), and start the operation again.	-	-	Yes	Yes	Yes

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	2~6	x	x	5	203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	204	An input/output error occurred during the connecting process to the server	Check that no problem is found in the two items displayed during the communication test. If any problem was found, check the network environment.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	205	Failed to read a HTTP response		-	-	Yes	Yes	Yes
8	2~6	x	x	5	206	Error in a HTTP response	Check the network environment.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	207	Generation of secure socket failed.	Contact the support department of the sales company.		-	Yes	Yes	Yes
8	2~6	x	x	5	208	Certificate check error	Contact the support department of the sales company.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	209	Connection time-out	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	300	Codes other than the following "3xx" definition	Check that no problem is found in the proxy settings and network environment.	Yes	-	Yes	Yes	Yes
8	2~6	x	x	5	301	Failed to retrieve the data stream	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	302	Failed to create the file object for receipt	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	303	Failed to create the data stream of the file for receipt	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	5	304	Failed to receive the data	Check the network environment of the device, and start the operation again.	-	-	Yes	Yes	Yes
8	2~6	x	x	5	305	An error about reserving the file data for receipt	Check that no problem is found in the HDD. When this error occurs again, contact Support Group of sales companies.	-	-	Yes	-	-
8	2~6	x	x	5	306	Failed to close the data stream	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	5	307	Failed to close the file data for receipt	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	5	308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.	Yes	-	Yes	Yes	Yes
8	2~6	x	x	5	309	The proxy authentication method is not supported, or access to the CDS file server is not permitted.	Check the proxy authentication method being used, change the setting to use a supported proxy authentication, and then start the operation again. Check that access to the following URL is permitted. • device.c-cdsknn.net (protocol: https) • cdsknn.net.edgesuite.net (protocol: http)	-	-	Yes	-	Yes

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	2~6	x	x	6	Socket communication							
8	2~6	x	x	6	101	Failed to connect the eRDS	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	102	No response from eRDS	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	103	No notice of start from the eRDS	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	104	Error of socket reading	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	6	105	Socket communication time-out	Contact the support department of the sales company.	-	-	Yes	-	Yes
8	2~6	x	x	7	Other internal codes							
8	2~6	x	x	7	002	One of installation, start or authorization failed (When installation or authorization failed, it is regarded as an error) *	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	03x	An internal error in processing the installation	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	1xx	An error by using invalid API	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	2xx	An internal error in SMS	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	301	No existence of delivery ID	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	302	Invalid delivery ID	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	303	The updated firmware information is not identical with the firmware information after activation of the Updater	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	304	The process of firmware download is incomplete It occurs when the power of the device is turned OFF during download.	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	305	The update process is incomplete The power was turned OFF after completion of download and before start of update processing.	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	306	The installment process is incomplete	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	401	Failed to retrieve delivery information	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	501	Failed to execute the delivery process	Contact the support department of the sales company.	-	-	Yes	-	-
8	2~6	x	x	7	502	The scheduled distribution had not been executed even after a certain period of time due to the power of the device being OFF at the scheduled time or other reasons.	Scheduled deliveries not executed within the defined period of time are abandoned, so register a scheduled delivery again. When setting the date and time of the scheduled delivery, be sure to designate a time when the device is ON	-	-	Yes	-	-

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	2~6	x	x	A	Internal Module							
8	2~6	x	x	A	xxx	Communication error in the internal module	Contact the support department of the sales company.	-	-	Yes	-	-
8	x											
8	x	x	x									
8	x	x	x	1	I/O							
8	x	x	x	1	200	An error occurred in the CDS server.	Contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	1	201			Yes	-	-	-	-
8	x	x	x	1	202			Yes	-	-	-	-
8	x	x	x	1	203			Yes	-	-	-	-
8	x	x	x	3	Device							
8	x	x	x	3	303	Restart of the device failed.	Restart the device, and perform the operation again.	-	-	Yes	-	-
8	x	x	x	3	304		When this problem recurs, obtain the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	3	401	Application of the firmware failed.	Obtain the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	3	402			-	-	Yes	-	-
8	x	x	x	3	403			-	-	Yes	-	-
8	x	x	x	3	404			-	-	Yes	-	-
8	x	x	x	3	405			-	-	Yes	-	-
8	x	x	x	3	406			-	-	Yes	-	-
8	x	x	x	3	407	Restart of the device failed.	Restart the device, and perform the operation again. When this problem recurs, obtain the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	3	409	Application of the firmware failed.	Obtain the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	4	SOAP communication							
8	x	x	x	4	104	An error occurred in the CDS server.	Contact the support department of the sales company.	Yes	-	-	-	-
8	x	x	x	4	207	An error occurred in the CDS server due to an unknown host error at execution of Web method.	Check the network environment of the device, and then check that the URL setting of the CDS server is correct, and perform the operation again.	Yes	-	Yes	Yes	Yes

Error Code (hex number)						Description	Remedy	Cause of error				
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category		The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	Local CDS server	UP DATER	CDS file server	Network
8	x	x	x	5	HTTP communication							
8	x	x	x	5	101	Download was canceled due to an error that occurred in the file server.	Check the network environment. When there is no problem with the network environment, collect the Updater log, and contact the support department of the sales company.	-	-	Yes	-	-
8	x	x	x	5	201			-	-	Yes	Yes	Yes
8	x	x	x	5	202			-	-	Yes	Yes	Yes
8	x	x	x	5	203			-	-	Yes	Yes	Yes
8	x	x	x	5	204			-	-	Yes	Yes	Yes
8	x	x	x	5	205			-	-	Yes	Yes	Yes
8	x	x	x	5	206			-	-	Yes	Yes	Yes
8	x	x	x	5	300			-	-	Yes	-	Yes
8	x	x	x	5	301			-	-	Yes	-	Yes
8	x	x	x	5	302			-	-	Yes	-	Yes
8	x	x	x	5	303			-	-	Yes	-	Yes
8	x	x	x	5	304			-	-	Yes	Yes	Yes
8	x	x	x	5	305			-	-	Yes	-	-
8	x	x	x	5	306			-	-	Yes	-	-
8	x	x	x	5	307			-	-	Yes	-	-
8	x	x	x	5	309			-	-	Yes	-	Yes
8	x	x	x	5	308	An error occurred in the CDS server due to an invalid hash code of download file.	Check the network environment, and perform the operation again. When there is no problem with the network environment, collect the Updater log, and contact the support department of the sales company.	-	-	Yes	Yes	Yes

* Not displayed on a device UI

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■ Error Codes When Using the UGW-linked Function

Codes displayed as eRDS errors when the UGW-linked function is used

Error Code (hex number)					Description	Remedy	Cause of error			
The first digit Error field	The second digit Operator	The 3rd - 4th digits Method category	The 5th digit Category code	The 6 - 8th digits Description code			CDS delivery server	UP DATER	CDS file server	Network
8	Error									
	x									
		x	x							
			0	Unclassified						
				000	An unexpected error occurred in the device.	Restart the device, and perform the operation again. When this problem recurs, the firmware of the device needs to be reinstalled (upgraded).	-	Yes	-	-
				002	A time-out error occurred due to no response from Updater within the specified time (3 seconds).	Obtain the sublog, and contact the support department of the sales company.	-	Yes	-	-
				101	Processing in the device (event processing) failed. Restart the device, and perform the operation again.	Restart the device, and perform the operation again. When this problem recurs, the firmware of the device needs to be reinstalled (upgraded).	-	Yes	-	-
				303	Queue could not be sent due to failure of processing in the device (event processing).	Restart the device, and perform the operation again. When this problem recurs, the firmware of the device needs to be reinstalled (upgraded).	-	Yes	-	-
				304	An error occurred in control of synchronization or interruption processing between processes being handled in parallel.	Wait for a while, and perform a communication test again.	-	Yes	-	-
				706	Communication with Updater failed.	Restart the device, and perform the operation again after checking that Updater has been started. When this problem recurs, obtain the sublog, and contact the support department of the sales company.	-	Yes	-	-
				707			-	Yes	-	-
				708			-	Yes	-	-
				709	At the time of firmware update, the Tracking ID ordered by UGW and the one to which the Updater responded did not match.	Obtain the sublog, and contact the support department of the sales company.	-	Yes	-	-

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■ Error Codes Not Included in the Error Code List and Remedy for Them

● Scenes Where an Error Occurs

When an error code not included in the error code list is displayed, one of the errors shown in the following scenes may have occurred.

Scenes Where an Error Occurs

Scenes Where an Error Occurs	Content
Communication test, etc. (main screen)	Log could not be written due to maximum value (capacity/the number of files) being exceeded.
Version information notification (main screen)	Retrieval of device version information ended in failure because the firmware version of the device was not registered in CDS.
	Connection to the delivery server failed at the time of notification of version information.
	The network cable was disconnected during notification of version information.
	Notification of version information ended in failure because the device was restarted during notification of version information.
UGW linkage (main screen)	UGW linkage was turned ON while eRDS was OFF.
On-site (error dialog)	An internal error occurred when obtaining the applicable firmware information.
Immediate download (error dialog)	An internal error occurred at the time of request of firmware delivery information.
	Free space in the storage destination disk ran out during download. (DiskFull)
Manual/auto update (error dialog)	An internal error occurred at start of update.
Deletion of downloaded firmware	An internal error occurred at the time of cancellation notification.

T-6-14

● Remedy

Check that the log files shown below do not exceed the maximum values.

When this problem recurs, obtain the log, and contact the support department of the sales company.

Logs and maximum capacity / number

Log name	Maximum capacity	Maximum number of files
Update log	128KB/ file	4
System log	512KB/ file	4

■ T-6-15

Controller Self Diagnosis

Controller Self Diagnosis

Introduction

Operation of the (2 types of) error diagnosis tools added to the main body and remedy for errors are described. These tools can reduce time to determine cause of errors occurred in field and improve the accuracy of specifying error locations.
This manual can be applied when the main body is placed in the following conditions.

- The main body does not boot. (In such a case that the Control Panel is not displayed or the progress bar does not work, etc.)
- An error is suspected to have occurred in the Main Controller PCB 1/2 and other related PCBs (child PCBs such as SDRAM or TPM mounted in the Main Controller PCB 1/2).

PCBs and units diagnosed by each tool are as follow:

Boot System Error Diagnosis Tool

- Main Controller PCB 1 side <Main Controller PCB 1, SDRAM, FLASH Memory PCB>
- Control Panel
- All-night Power Supply, Non-all-night Power Supply

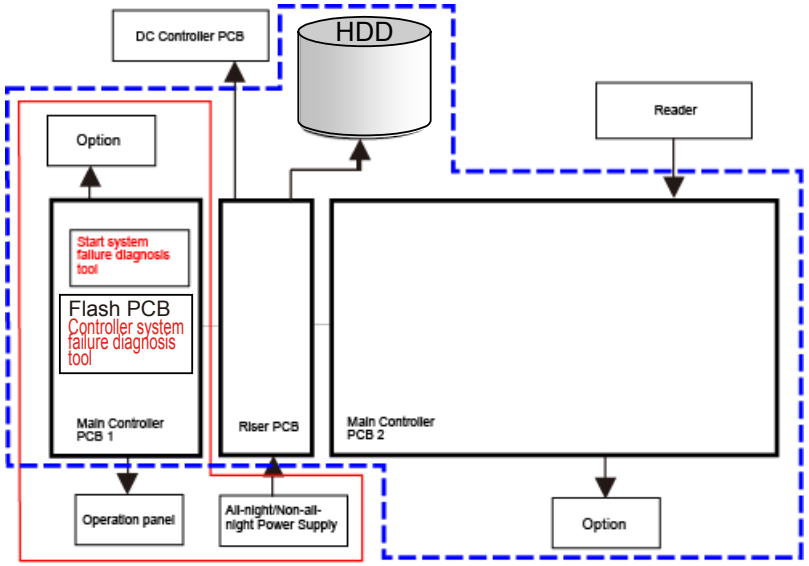
Controller System Error Diagnosis Tool

- Main Controller PCB 1 side <Main Controller PCB 1, SDRAM, TPM PCB>
- Main Controller PCB 2 side <Main Controller PCB 2, SDRAM (M0*, M1), SDRAM (P), Memory PCB, Open I/F PCB (option)>
- Rizer PCB / HDD

* SDRAM (M0) is an option.

Overview

Two types of error diagnosis tools are installed in this machine, and stored in the locations shown below.



F-6-135

Boot System Error Diagnosis Tool covers the components shown in the red frame (solid line) in the figure. Controller System Error Diagnosis Tool covers the components shown in the blue frame (dotted line).

Boot System Error Diagnosis Tool

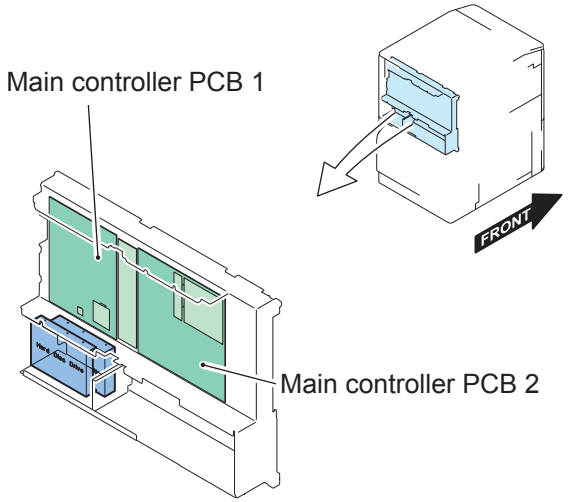
This tool automatically checks the Control Panel, Main Controller PCB 1, All-night Power Supply, and Non-all-night Power Supply, and notifies the result by the number of light-out and blinking interval of the lamp on the Control Panel.
This tool is installed in the ROM of Main Controller PCB 1.
Therefore, regardless the version of MN-CNT, this tool can be used even when an error occurs in child PCBs or when the Controller System Error Diagnosis Tool cannot be booted.

Controller System Error Diagnosis Tool

This tool automatically checks the Main Controller PCB 1/2, child PCBs mounted on the Main Controller PCB 1/2, and HDD, and display the result on the Control Panel.

Layout Drawing

Layout Drawing of PCBs Subject to Diagnosis

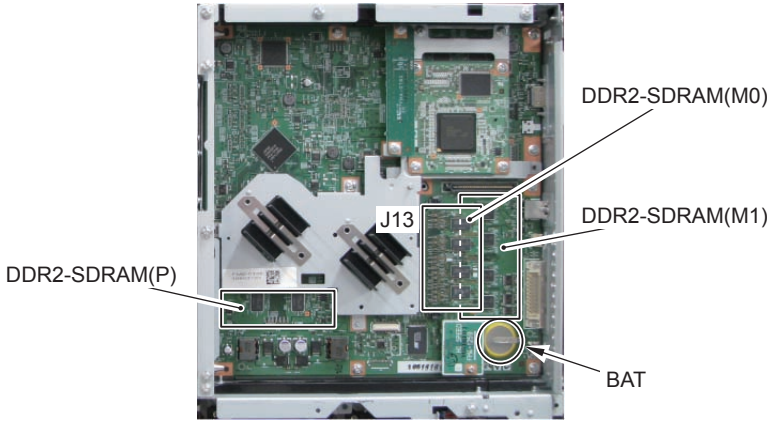


F-6-136

Main Controller PCB 1

F-6-137

Main Controller PCB 2

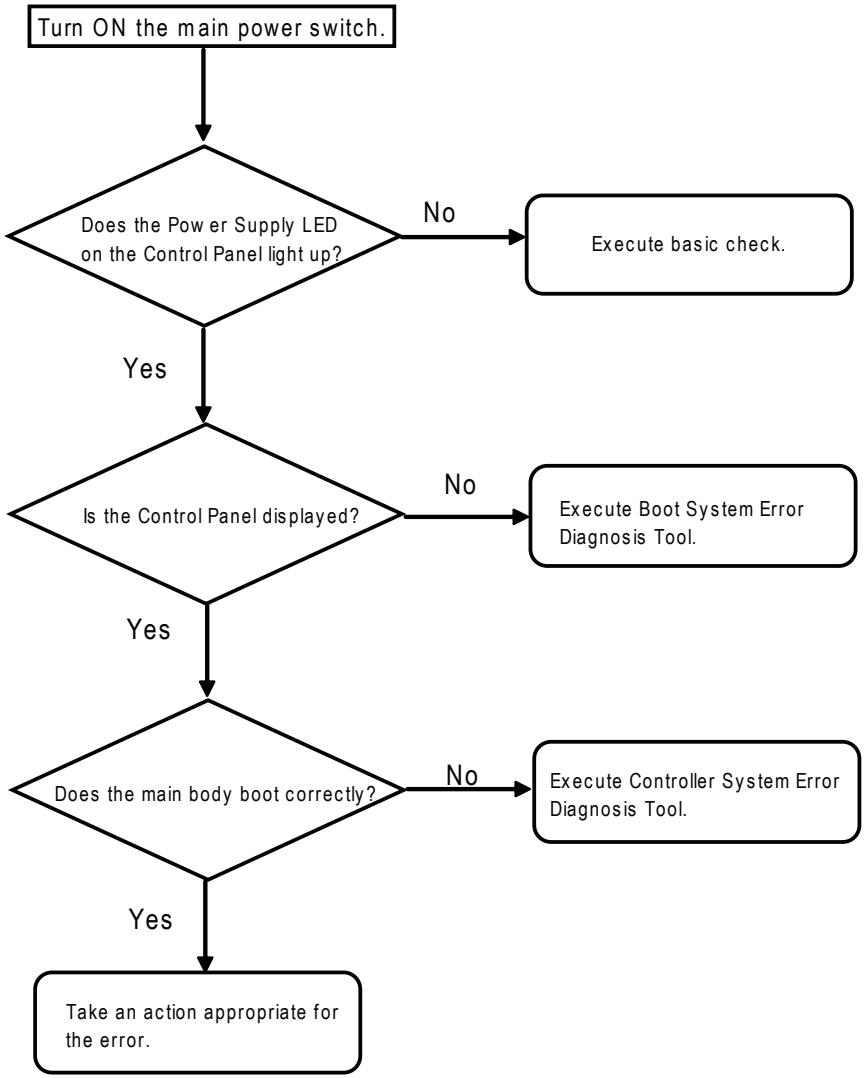


F-6-138

Basic Flowchart

Basic Check Items

Check all of the items shown below.



F-6-139

Basic Check Items

1. Check if the Leakage Breaker is turned OFF.
2. Check if the Power Supply Plug is disconnected.
3. Check if the Connection Cable between the Main Controller PCB 1 and Control Panel is disconnected.
4. Check if the Connection Main Controller PCB 1 and Main Controller PCB 2 definitely?
5. Check if the Connection An All-night Power Supply. Change Non-all-night Power Supply if not recovered.

Operation

Operations of the two diagnosis tools are explained below.
Use each tool according to the following purposes.

- When the main body does not boot (the Control Panel is not displayed): Execute Boot System Error Diagnosis.
- When an error is suspected to have occurred in the Main Controller PCB 1/2 or child PCBs mounted on the Main Controller PCB 1/2: Execute Controller System Error Diagnosis.

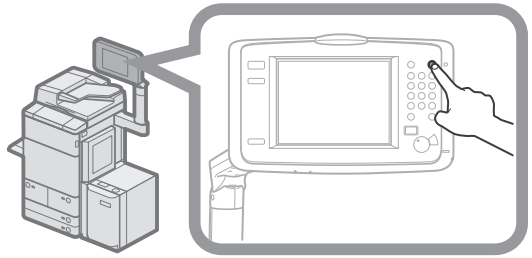
Boot System Error Diagnosis

Boot Method

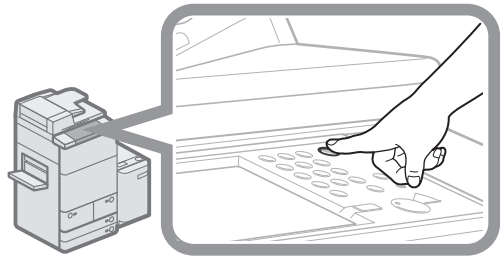
1) Turn ON the Main Power Supply Switch while pressing the Control Panel Energy Saver Switch.

Note:
At the time of high-speed start ON, you cannot use it.
Perform OFF/ON of the breaker once.

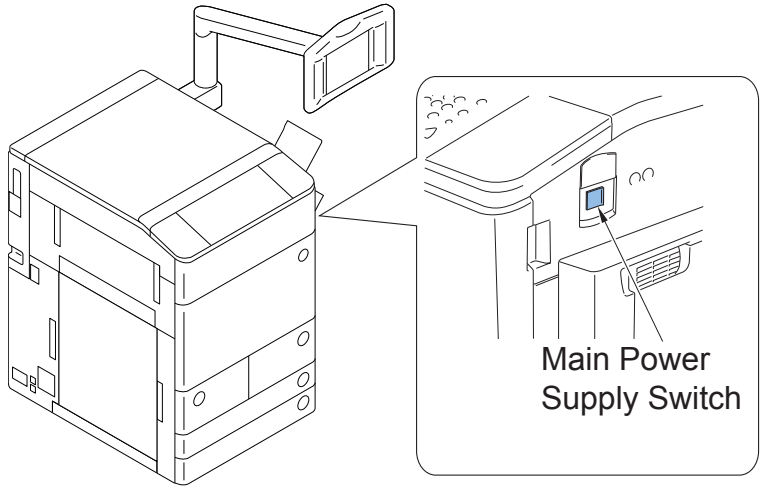
Upright Control Panel



Control Panel (Flat)

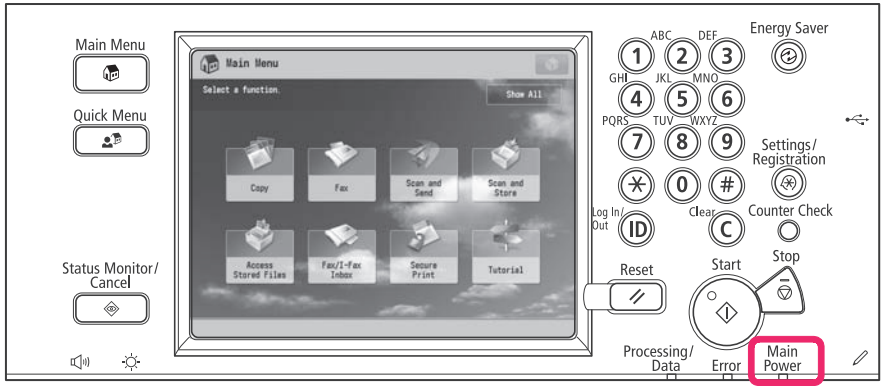


F-6-140



F-6-141

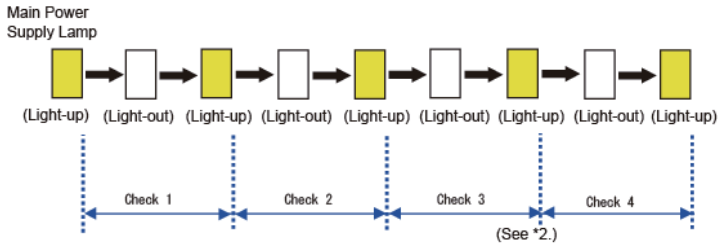
2) Right after the Main Power Supply Lamp lights up once, it lights out instantly, and diagnosis starts.
(When the Main Power Supply Lamp lights out, you can release your finger from the Control Panel Switch.)



F-6-142

Diagnosis Time

Diagnosis is completed in approx. 1 minuites.
<When the diagnosis result is normal>
After the Main Power Supply Lamp repeatedly lights out 4 times, it lights up and the diagnosis is completed.
After completion of the diagnosis, this machine executes normal boot sequence.



F-6-143

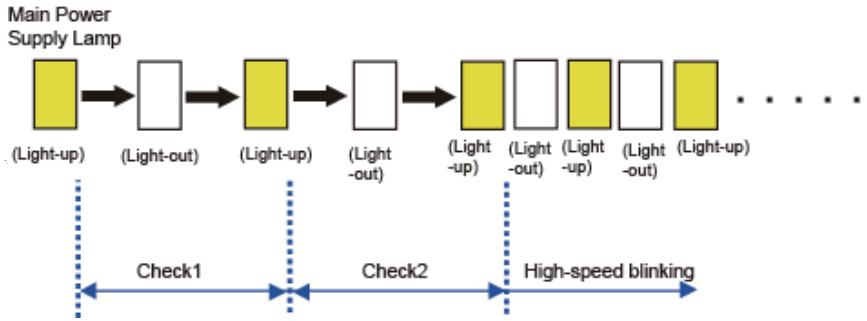
<When an error is detected by diagnosis>

The Main Power Supply Lamp repeats high-speed blinking after completion of a check in which an error is detected. (See *1.)

For example, when an error is detected in Check 2, the Main Power Supply Lamp lights out twice and repeats high-speed blinking (ON/OFF in 0.3 seconds interval).

When an error is detected, be sure to count the number of times the Main Power Supply Lamp lights out.

For detailed results, see “Error Diagnosis



F-6-144

*1: When an error is detected, there is a possibility that the Main Power Supply Lamp may not perform high-speed blinking but perform other operation (continuous light-up, light-out). In this case, remove and then install the Main Controller PCB 1.

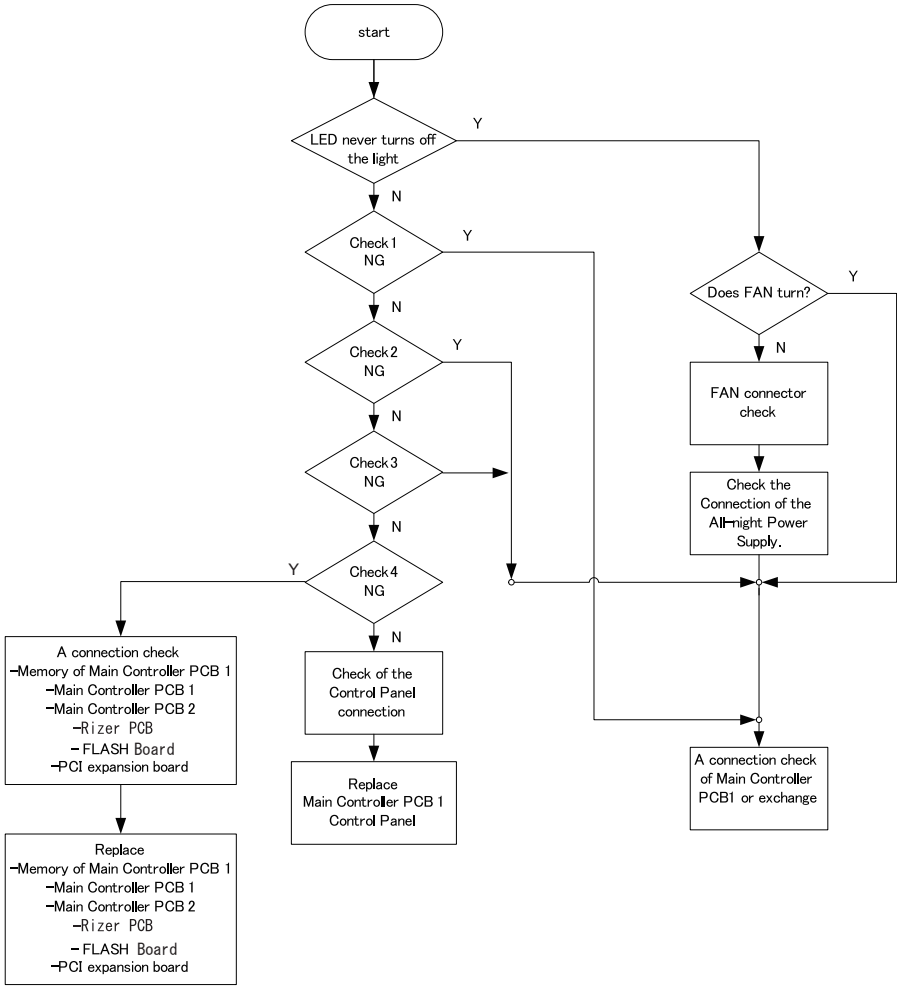
If the error is not resolved, execute the remedy of the Check No. which is not completed normally. (For details, see “Error Diagnosis”.)

*2: Although diagnosis time for Check 3, and Check 4 is longer than that of other Checks, it is correct operation.

Error Diagnosis

<Boot System Error Diagnosis Table>

The error locations are identified according to the following table.

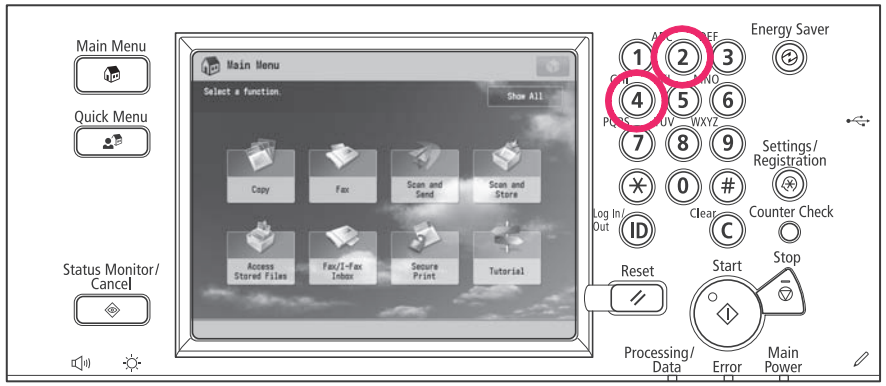


F-6-145

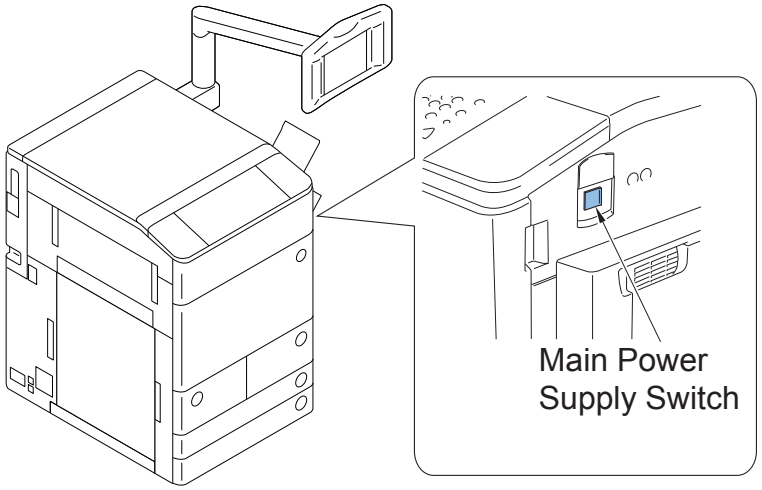
Controller System Error Diagnosis

Boot Method

1) Turn ON the Main Power Supply Switch while pressing the numeric keys '2' and '4' simultaneously.

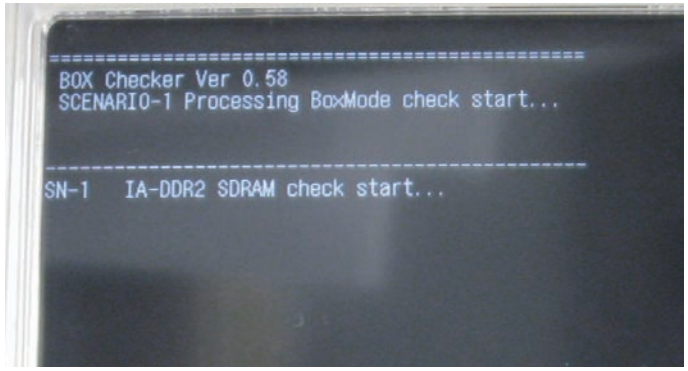


F-6-146



F-6-147

2) Keep pressing the numeric keys (for approx. 20 seconds) until the following screen appears on the Control Panel.



F-6-148

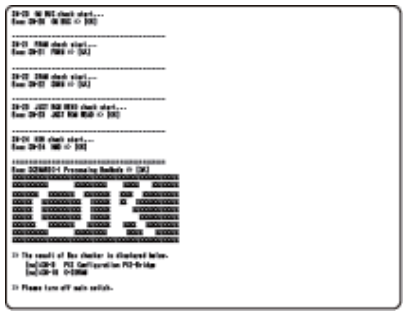
NOTE:
When this tool is not installed correctly, the following regular screen is displayed.
In this case, perform the following remedy.
Turn OFF the Main Power Supply Switch again, and execute step 1 and 2 shown above.
If this tool still does not boot, it means that BCT is deleted. So, install BCT.
If BCT is not installed correctly, "--.--" is displayed in Service Mode (COPIER>DISPLAY>VERSION>BCT) in the main body.

F-6-149

Diagnosis Time

Diagnosis is completed in approx. 3 minutes.
The result is displayed on the Control Panel.

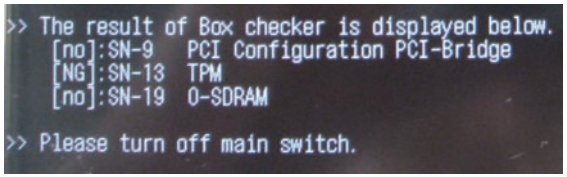
<When the diagnosis result is normal>



F-6-150

<When an error is detected by diagnosis>

Detailed information is displayed under the judgment result. In detailed information, the name of the test where an error was detected is indicated.



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<How to view the error result>

The following screen is an enlarged view of the detailed information indicated above.
Explanation of the detailed error information is described.

[no] means that optional PCBs are not mounted.
When [no] is displayed although an optional PCB is mounted, it means that an error has been occurring.
[NG] means that an error occurred to PCBs mounted as standard.

<Controller System Error Diagnosis Table>

The error locations are identified according to the following table.

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-1 IA-DDR2 SDRAM	Check an error between the Main Controller PCB 1 and SDRAM on the Main Controller PCB 1	Main Controller PCB 1 SDRAM on Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-2 SM BUS IA DIMM1	Check an SM bus error in SDRAM (outside) on the Main Controller PCB 1	Main Controller PCB 1 SDRAM (outside) on Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-4 SM BUS IA Clock Gen	Check an SM bus error in Clock Generator on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-5 SM BUS SOC DIMM1	Check an SM bus error in the Main Controller PCB 1 and the Main Controller PCB 2	Main Controller PCB 1 Main Controller PCB 2 SDRAM on Main Controller PCB 2	1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2. 2. Check the installation of SDRAM (M1) on the Main Controller PCB 2. 3. Replace SDRAM (M1) on the Main Controller PCB 2. 4. Replace the Main Controller PCB 2. 5. Replace the Main Controller PCB 1.	-
SN-6 PCI Config Maestro	Check a PCI bus error in the Main Controller PCB 1 and the Main Controller PCB 2	Main Controller PCB 1 Main Controller PCB 2 SDRAM on Main Controller PCB 2	1. Check the connection of the Main Controller PCB 1, and the Main Controller PCB 2. 2. Replace the Main Controller PCB 1. 3. Replace the Main Controller PCB 2.	-
SN-7 PCI Config LANC	Check a LAN chip error on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-8 PCI Config PCI-Bridge	Check a PCI bus error between the Main Controller PCB 1	Main Controller PCB 1	1. Check the installation between the Main Controller PCB 1. 2. Replace the Main Controller PCB 1.	-
SN-9 CPLD	Check failure of CPLD chip on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-10 LANC SPI	Check failure of LANC SPI on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-11 RTC CHECK	Check failure of RTC on the Main Controller PCB 1	Main Controller PCB 1	1. Replace the Main Controller PCB 1.	-
SN-12 TPM	Check failure of the TPM PCB on the Main Controller PCB 1 * TPM PCB is not installed in products for China. So, the diagnosis results NG.	Main Controller PCB 1 TPM PCB	1. Check the installation of the TPM PCB. 2. Replace the TPM PCB. 3. Replace the Main Controller PCB 1.	E746
SN-13 DDR2 SDRAM	Check an error between SDRAMs on the Main Controller PCB 2	Main Controller PCB 2 SDRAM (M0) on Main Controller PCB 2	1. Check the installation of SDRAM (M0) on the Main Controller PCB 2. 2. Replace SDRAM (M0) on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	-
SN-14 FLASH ROM	Check failure of CPU ROM (IC60) on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	-
SN-15 P-DDR2 SDRAM	Check an error between the Main Controller PCB 2 and SDRAM (P) on the Main Controller PCB 2	Main Controller PCB 2 SDRAM (P) Open I/F PCB Bypass board	1. Check the connection of the bypass board /Open I/F board. 2. Replace the Main Controller PCB 2.	E747 E748
SN-16 GOR(R)-DDR2 SDRAM	Check failure of Rchip SDRAM on the Main Controller PCB 2	Main Controller PCB 2 Open I/F PCB Bypass board	1. Check the connection of the bypass board /Open I/F board. 2. Replace the Main Controller PCB 2.	E747 E748
SN-17 S-SDRAM	Check failure of Schip SDRAM on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	E747 E748 E732
SN-18 GOR-DDR2 SDRAM	Check failure of Ochip SDRAM on the Open I/F PCB	Main Controller PCB 2 Open I/F PCB	1. Check the installation of the Open I/F PCB. 2. Replace the Open I/F PCB. 3. Replace the Main Controller PCB 2. Supplementary Information: If the Open I/F PCB is not installed, [no] is displayed for the diagnosis result.	E747 E748
SN-19 GU BUS	Check a GUBUS error on the Main Controller PCB 2	Main Controller PCB 2 Open I/F PCB Bypass PCB	1. Check the installation of the Open I/F PCB or the Bypass I/F PCB on the Main Controller PCB 2. 2. Replace the Open I/F PCB or the Bypass I/F PCB on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	E747 E748
SN-20 FRAM	Check failure between the Main Controller PCB 2 and the Memory PCB	Main Controller PCB 2 Memory PCB	1. Check the installation of the Memory PCB on the Main Controller PCB 2. 2. Replace the Memory PCB on the Main Controller PCB 2. 3. Replace the Main Controller PCB 2.	E355

Test Name	Description	Assumed Error Location	Remedy	Error Code
SN-21 SRAM	Check failure of SDRAM and battery exhaustion on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	E246 E350 E355
SN-22 JUST ROM READ	Check ROM READ on the Main Controller PCB 2	Main Controller PCB 2	1. Replace the Main Controller PCB 2.	-
SN-23 HDD	Check an HDD I/F error	Main Controller PCB 2 HDD Cable HDD	1. Check the cable connection of the HDD. 2. Check the connection between the Main Controller PCB 2 and the Main Controller PCB 1. 3. Replace the HDD.	-
SN-24 S-SRI	Check an SRI bus	Main Controller PCB 2 Image Processing Sub PCB	1. Check the Image Processing Sub PCB connection 2. Replace the Image Processing Sub PCB 3. Replace the Main Controller PCB 2.	

T-6-16

■ Restrictions

● <Boot System Error Diagnosis>

- If an error cannot be resolved by executing remedy according to the error diagnosis table described above, consider boot failure of the main power supply and take appropriate actions.

● <Controller System Error Diagnosis>

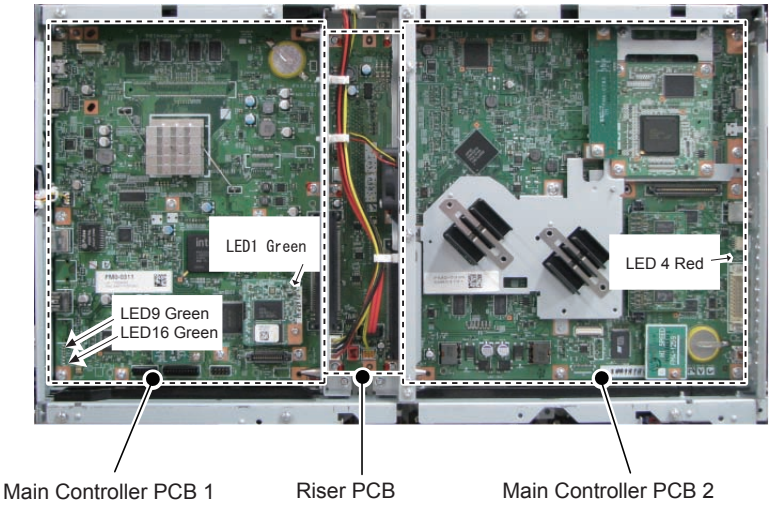
- Regarding the diagnosis for the test names (SN-1, 2, 7, 15, 21, 24), if an error occurs in the diagnosis under the test names, this diagnosis tool will not boot.
- When no PCBs are installed on the Main Controller PCB 1/2, the following judgment results are displayed.

Standard PCB: [NG]
Optional PCB: [OK]
However, [no] is displayed in detailed error information for optional PCBs.

Operation Check of the Main Controller LEDs

You may be able to determine the remedies against Main Controller-related troubles by checking the lighting status of LEDs on the PCB.

Location of LEDs

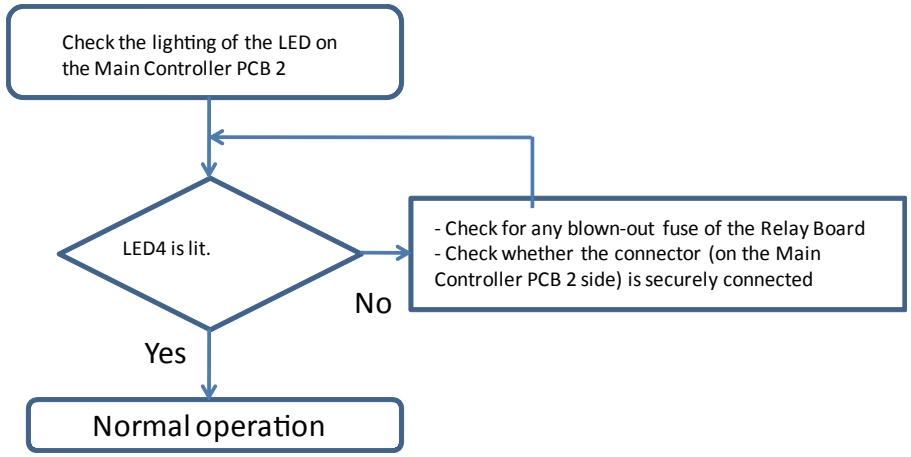


F-6-152

Preconditions

Check whether the Main Controller PCB 1 and the Main Controller PCB 2 are properly inserted.
Check whether the connectors are securely connected. LEDs are not lit when the contaction is poor. (Power-on is not possible)
When the LED of the Control Panel main power is not lit, check the connection of cables (such as UI Cable).

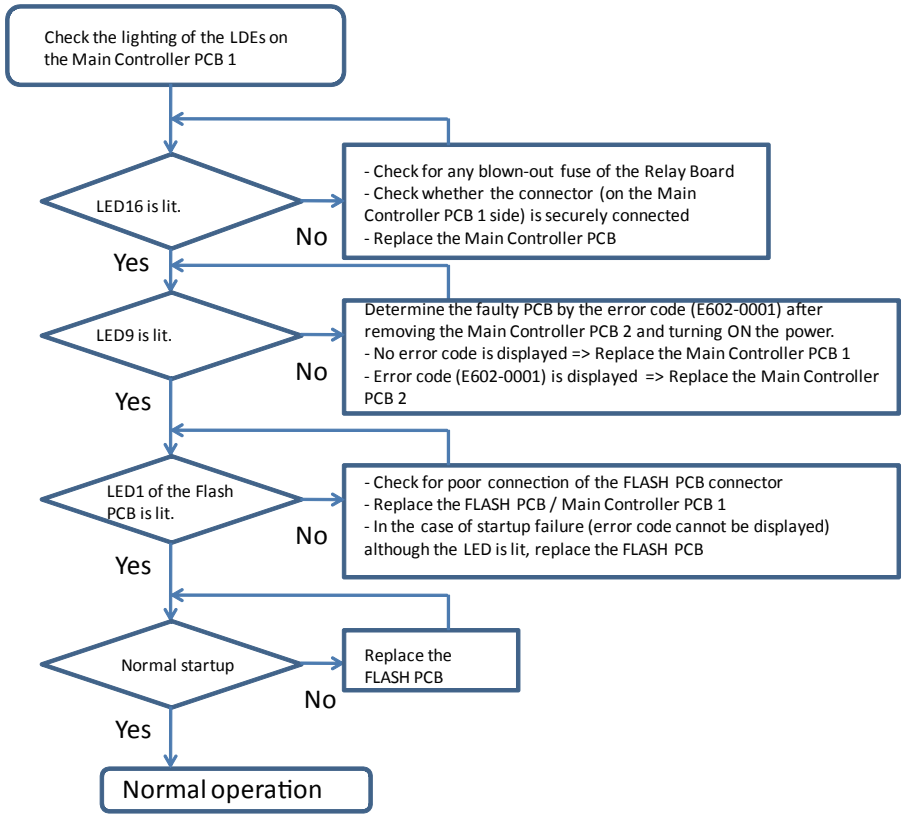
Checking the lighting of the LED4 RED on the Main Controller 2



F-6-153

Check the lighting of the LDEs on the Main Controller PCB 1

- Main Controller PCB 1 - LED9, LED16
- Flash PCB - LED1



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Debug log

Scope of Application

Purpose

When the Canon quality-appointed staff determines the need for an analysis of debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.

Overview

Function Overview

Debug log is an integrated log for failure analysis that gathers logs prepared by the software modules in the device for debug purpose.
In the case of a field failure that is hard to be reproduced, this measure is intended to improve efficiency in failure analysis and reduce the time for failure support by collecting debug log at the user site (which was created immediately after the failure) and sending it to the R&D.
When the Canon quality-appointed staff determines the need for an analysis of firmware debug log by the R&D department, we ask the field to collect log for an investigation to determine the cause.

Effective Instances of Collecting Debug Log

- The error occurs only at the customer site and cannot be reproduced by the sales company or the Canon staff who is in charge of quality follow-up.
- When the error frequency is low.
- When the error is suspected of links with firmware rather than a mechanical/electrical failure.

  * Collection of Sublog is not necessary when the reproduction procedure is identified and the error can be reproduced by the sales company HQ or the Canon staff who is in charge of quality follow-up.

Types of Logs

There are continuous logs, event logs, and manual logs.

Type	Collecting method	Size of logs	Setting
Event log	Automatically recorded in accordance with the conditions specified in DEBUG-1.	Less than 500MB	Service mode Lev2: COPIER > FUNCTION > SYSTEM > DEBUG-1 > 3 (default) 3: Exception + E code + Reboot Make movement same as 3 even if you change setting of it.
Manual log	Perform the following procedure. 1. Hold down the [Counter] button (10 seconds or longer). 2. Press 1 on the numeric keypad. 3. Press 2 on the numeric keypad. 4. Press 3 on the numeric keypad. While logs are being obtained, the screen is locked. It takes approx. 3 minutes before obtaining the logs is completed and the user can work on the screen.		n/a

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Conditions of Log Collection

- Logs can be collected on a PCB-by-PCB basis. (SUBLOG, SUBLOG_RCON, SUBLOG_DCON)

Location	File name	Automatic collection		Manual collection
		Logs generated while the host machine is being operated.	Event log When an event has occurred	Manual log
Main Controller	SUBLOG	Yes	Yes	Yes
Reader Controller	SUBLOG_RCON	No	Yes	Yes
DC Controller	SUBLOG_DCON	No	Yes	Yes

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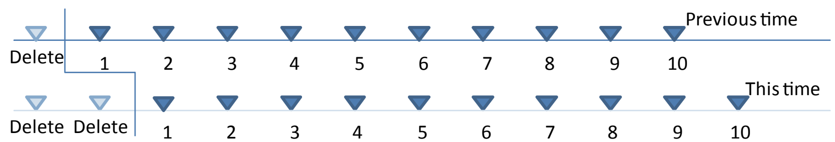
Collection of Logs

Connect SST or a USB memory device,
and select COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK to collect logs.

Description of Log to be Collected

When operation from the Control Panel or an event log (exceptional operation, error code, or reboot) occurs, the number of logs increases.
Logs are stored from the latest one, and the latest file is always stored.
Logs earlier than those logs are overwritten and deleted from the oldest log.
When collecting logs from the machine, the log file in the machine is deleted.

> Note:
> The number of files stored differs depending on the model and situation.



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Collecting System Information

Collection Destination

To retrieve debug log to an external location from the device, use a USB memory device, FTP server or SST (Ver. 4.63 or later).

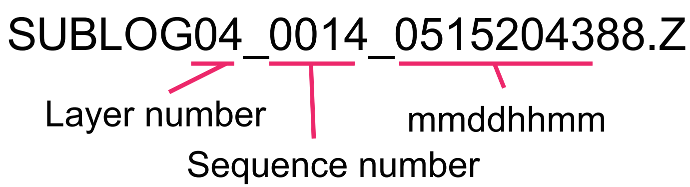
Collection Method

Retrieve debug log from the machine by any of the following methods.

- Make the machine recognize the USB memory device. Select the following in service mode Lev1: COPIER > FUNCTION > SYSTEM > DOWNLOAD; and click OK.
- Use SST on a PC with the network cable connected to transfer the debug log.
- Transfer the debug log to a USB memory device that stores the system of the machine.

File Name of Sublog

Whether the file is new or old can be judged by the year, month, day, hour, and minute.



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Collecting Debug Log (USB memory device)

> NOTE:
> When the data is sent to the USB memory device:
> USB memory where the system software for this machine has been registered using the SST.

1) Lev1 COPIER > FUNCTION > SYSTEM > DOWNLOAD > OK
Connect the USB memory device to the machine.
2) [5] Execute [BACKUP].

```
[[[[[ download Menu (USB) ]]]]]]]]]]
------------------------------------
[1]: Upgrade (Auto)
[2]: Upgrade (w Confirmation)
[3]: Upgrade (Overwrite all)
[4]: Format HDD
[5]: Backup
[7]: Clear downloaded files
[8]: download Menu 2
[9]: Other Menu

/[5] has been selected. Execute?/
- (OK):0 / (CANCEL):Any other keys -
```

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3) [1] Execute [Sublog].

```
[[[[[ Backup Menu (USB) ]]]]]]]]]]
——————————————————

[1]: Sublog
[4]: ServicePrint
[5]: Netcap
[6]: SRAM(HDD)
[7]: SRAM(USB)

[C]: Return to Main Menu
```

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When the data is sent to the USB memory device

A folder of the year, month, day, hour, and minute is created in the USB memory device. The log file is saved in the folder.

Example: Folder 201205241821

SUBLOG_DCON.TXT	89 KB
SUBLOG_DCON01.TXT	89 KB
SUBLOG_RCON.TXT	47 KB
SUBLOG_RCON01.TXT	47 KB
SUBLOG00_0104_0524130499.Z	1,841 KB
SUBLOG00_0105_0524131010.Z	472 KB
SUBLOG00_0106_0524132088.Z	72 KB
SUBLOG00_XX00_0524130499.Z	1,841 KB
SUBLOG01_0034_0524130499.Z	1 KB
SUBLOG01_0035_0524132088.Z	1 KB
SUBLOG02_0001_0524130499.Z	30 KB
SUBLOG02_0002_0524132088.Z	163 KB
SUBLOG04_0034_0524130499.Z	2 KB
SUBLOG04_0035_0524132088.Z	1 KB
SUBLOG05_0034_0524130499.Z	1 KB
SUBLOG05_0035_0524132088.Z	1 KB
SUBLOG06_0034_0524130499.Z	5 KB
SUBLOG06_0035_0524132088.Z	1 KB
SUBLOG07_0034_0524130499.Z	2 KB
SUBLOG07_0035_0524132088.Z	1 KB
SUBLOGLUT.TXT	64 KB

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Uploading Data by SST

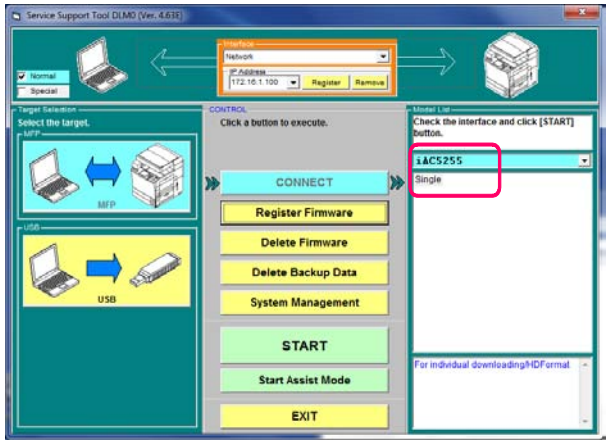
The following shows a method to collect a log by connecting a PC with SST (Ver. 4.63 or later) running to the machine.

Preconditions:

In addition to continuous logs, obtained manual logs (holding down the counter + 1, 2, and 3 keys) and event logs (DEBUG-1) are stored in the machine.
A PC where SST is running is connected to the machine, and the machine is in download mode.

Note:
Executing a log collection by SST deletes logs in the machine.

1. Start SST (Ver. 4.63 or later) and select iRC5051 from Model List. Press the Start button.



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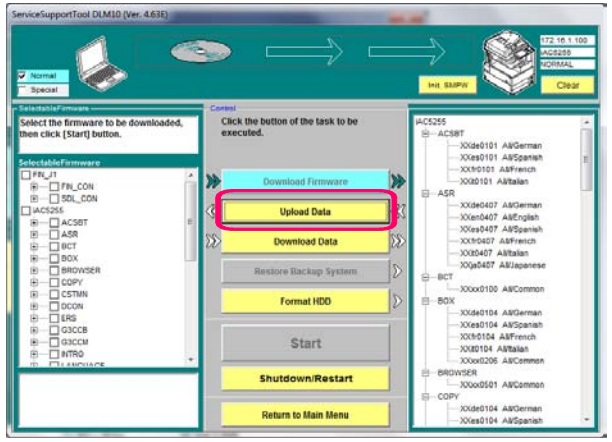
2. Press the Upload Data button.



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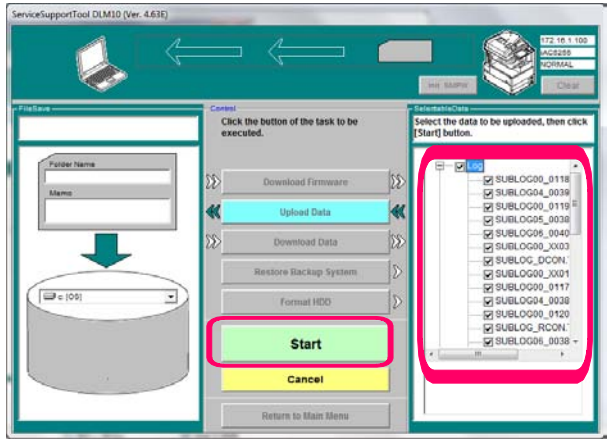
3. Select the data to be uploaded, then click [Start] button.
When there is no log in the machine, it results in blank option items for "data to upload".
When the file name is longer than the frame, it displays that it is a log in the comment column just below.
It is displayed as "log" in the figure below.

Note:
The log is not stored when You cancel it before pushing the Start button.
It is deleted from the main body.



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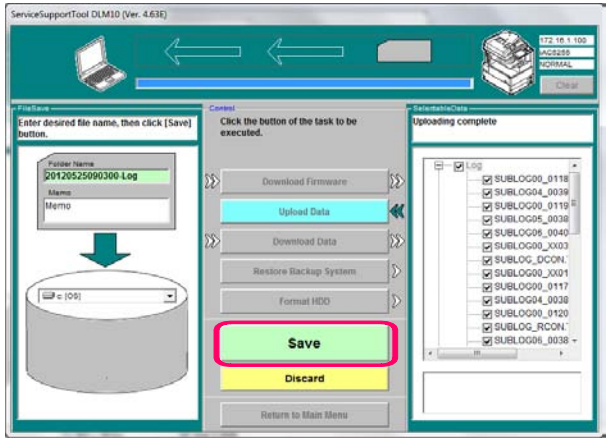
4. Press the "Save" button.



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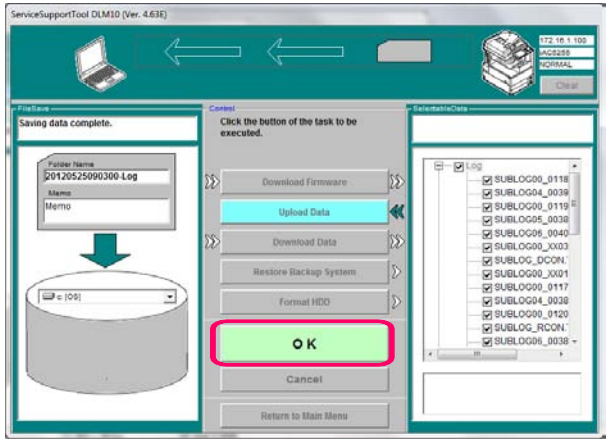
5. Check that the data storage is completed and click the "OK" button.



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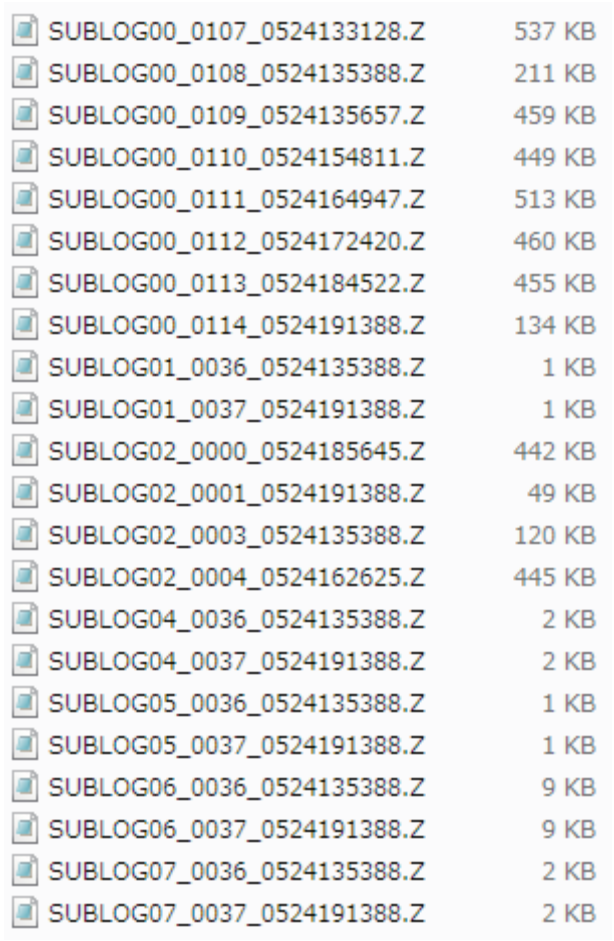
6. Check that the log is stored in the specified location in the PC.
   In the initial setting:
   Windows(C:) > ServData > iAxxxx(Model) > JWH00003(Serial number) >
   20120524192934-Log(yymmddhhmm)



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When to Obtain Logs

The assumed procedure to be taken when a request for log collection has been received is shown below.

Preconditions

When the Canon staff who is in charge of quality follow-up determines the need for an analysis of debug log by the R&D department, log collection is requested via sales company HQ. Logs are used to determine the cause.

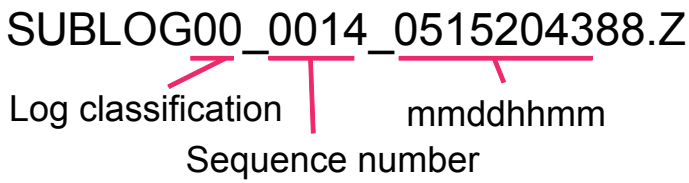
Anticipated log collection procedure

1. Contact the user to identify the date and time the failure to be analyzed occurred. (The date and time of occurrence is used to judge whether it is included in the dates and times of the obtained log files. The date and time of occurrence needs to be informed together with the obtained logs. The information is necessary in order to shorten the time required for the analysis. If multiple failures have occurred, the dates and times of those failures need to be informed. If the exact date and time is not clear, just a rough idea will do.)
2. At the user's site, enter download mode and obtain logs.
3. Check that files of around the specified date are included in the logs.
4. If the symptom can be reproduced, reproduce it.
5. Press the counter + 1, 2, and 3 keys to obtain logs.
6. Collect all the obtained logs.

NOTE:
- Prepare a USB memory device of 2 GB or more in capacity as the USB memory device used for log collection. It is necessary in order to secure enough capacity when logs are obtained multiple times.
- As for the collected logs, all the logs moved to the USB memory device should be sent.
- The logs are directly saved to the HDD. It is assumed that logs of a day (if various operations are continuously performed) or logs of approx. 30 days (in the case of common use) can be stored. In the case of logs within the foregoing assumed storage period, it is rare that the logs are overwritten and need to be collected again.

Checking the name of the log file

Check the date of the file whose name begins with SUBLOG00_00. It is highly possible that files of around the date and time the symptom occurred contain information recorded at the time when the failure occurred.



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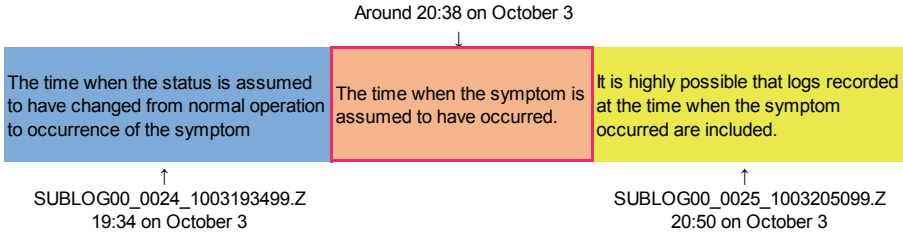
An example of log acquisition when the occurrence date has been specified

- An example of a failure which occurred around 20:38 on October 3:



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NOTE:

- If the obtained log file name contains "SHT", it means that the log was recorded at the time of shutdown.

  Example:
  SUBLOG00_0001_0918140788SHT.TXT

  When checking the occurrence date and time with the user, if the performed operations include turning OFF the power, use the file name "SHT" as a clue for identifying the date and time.

- If the number of seconds is expressed as "99 + three-digit number", the number shows the cause which triggered the log acquisition (e.g. acquisition due to an error code E[three-digit number]).

  Example:
  When an error code E747 occurred
  SUBLOG00_0001_0918140799747.TXT

  When checking the occurrence date and time with the user, if an error code has occurred, use E[three-digit number] as a clue for identifying the date and time.

Network Packet Capture

Overview

The network capture function is an embedded function of the machine.The network data sent to and received from the machine can be collected (captured) without using any special equipment.
Until now, in the case of network failures that could not be solved at the first visit, the service technician collected packet at the second visit to solve it.
By providing this function, investigation to determine the cause is available before the second visit to take some measures. Also, service technicians can reproduce the symptoms of network failure and collect network packet to bring it back to the office.

The network capture data can be collected using SST/USB memory.

There is no need to prepare dedicated equipments (PC, HUB, cable, packet capture software, etc.) that have been needed before.

The following effects can be expected thanks to the embedded feature.

- The packet in customer environment can be collected by remote operation.
- Packet collection can be continued when the symptom is not reproduced during the visit.
- For network failures on iR-ADV collaboration (a function to communicate between machines across a network), packet collection for both sides becomes easy.

Caution:

The network capture function may fail to collect a part of packet in a high-loaded network environment.

The network capture function of the machine is more prone to failures in collecting packet than when using a PC to do so.

When collecting packet due to trouble of print data, etc., a case is assumed in which it is impossible to judge whether it is a failure in the print data or a failure in collecting packet.

To check whether packet is failed to be collected by the network capture function of the machine, there may be a case where user is requested to collect packet using a PC.

Overall flow

1) Enable network capture
2) Start the network capture function
3) Overwrite function
4) Encryption function
5) Start/stop network capture
6) Stop the network capture function
7) Disable network capture

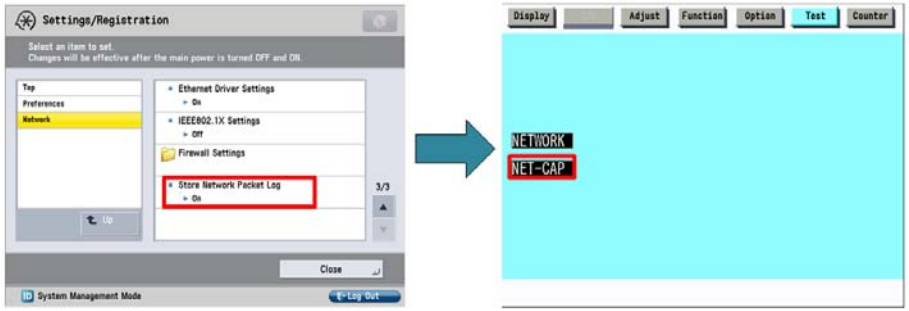
Embedded Network Packet Capture Collection

Enable network capture

To enable this function, the following 2 steps need to be executed.

- Enabling the license of network capture
- Enabling user mode > Network > Store Network Packet Log

Because this function is able to acquire the customer information such as print data, it is not standard function.You make it valid as free license option after obtaining permission from the customer.Then it displays "OFF/ON" in the user mode, you obtain permission from the customer again and let the customer change it to ON.



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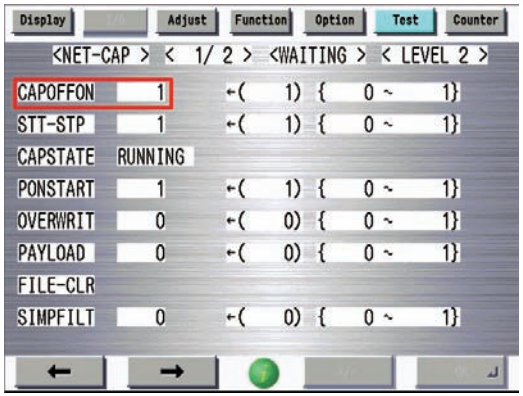
Changing it to "ON" in user mode, it is displayed in Service Mode.

Start the network capture function

Select the following: Service Mode(level 2) Copier > Test > NET-CAP > CAPOFFON > "1".



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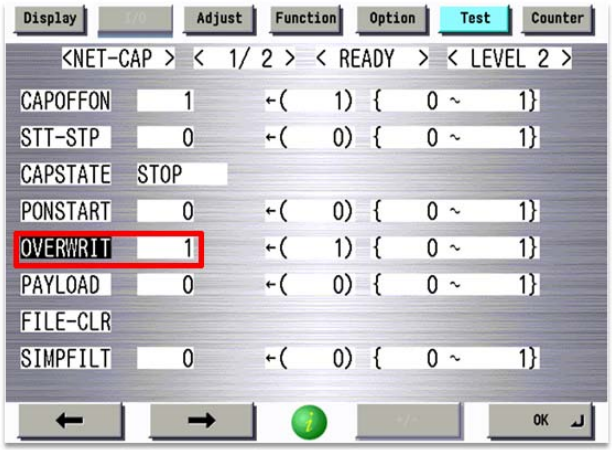
*1: ON (enabled) The capture function is available.

Overwrite function

Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > OVERWRIT > 1



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Note:
When the HDD space becomes full after starting the capture, the oldest file is deleted and the captured data continues to be saved; therefore, it is necessary to set "1: Overwrite" in advance.

The following shows the machine behavior when the HDD space reaches full.

When the overwriting setting is ON

- The oldest packet file is deleted. The oldest file is determined by the last update time of the file (not by the date and time attached to the file).
- When the HDD space reaches full during packet collection, the oldest file is deleted to continue collecting packet data to the currently-stored file.
- CAPSTATE of capturing continues to be "RUNNING".

When the overwriting setting is OFF

- Capturing is stopped.
- CAPSTATE of capturing becomes "HDDFULL". Note that STT-STP remains as start state (1). Capturing is started again by changing the value from STT-STP (0) to STT-STP (1).
- If the HDDFULL state is cleared when starting capturing again, capturing is started.
- CAPSTATE of capturing becomes "RUNNING".
- If the HDDFULL state is not cleared, starting data capturing results in an error.
- CAPSTATE of capturing remains as "HDDFULL".
- When a command of stopping data capturing is given during the "HDDFULL" state, CAPSTATE of capturing remains as "STOP".

Encryption function

Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > ENCDATA >2.

0: Data is encrypted at data extraction (factory setting value).

1: Data is not encrypted at data extraction.

2: Two types of files (one in encrypted format and another in clear text format) are extracted at data extraction.

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Note:
When collecting data using SST, the above service mode setting is not reflected and both files in encrypted format and clear text format are always collected.

When the encryption setting is enabled, the extension of the extracted packet data is XXX.can.
When the encryption setting is disabled, the extension of the extracted packet data is XXX.cap.
This setting applies only when using USB memory for data extraction.
This setting is ignored when using SST for data collection because both files in encrypted format and clear text format are extracted.

Start/stop network capture

1) Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > STT-STP > 1.
2) To stop capturing, set "0".

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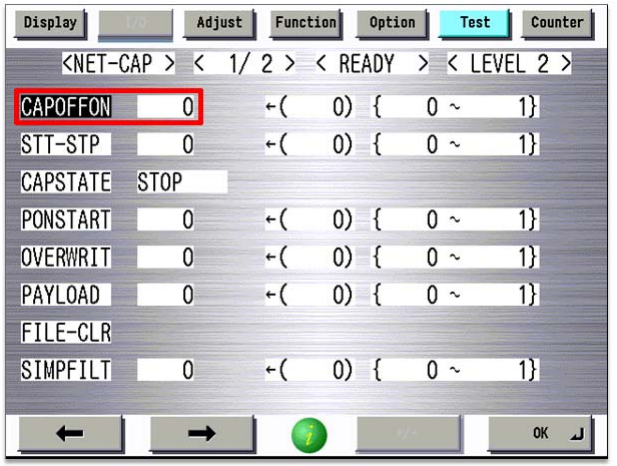
"RUNNING" is displayed for the item CAPSTATE during packet collection.
“STOP” is displayed at the time of shipment or at completion of packet collection, and “HDDFULL” is displayed when 1GB of data (the upper limit for packet collection) is collected.

Stop the network capture function

Select the following: Service Mode(Level 2) Copier > Test > NET-CAP > CAPOFFON > 0.



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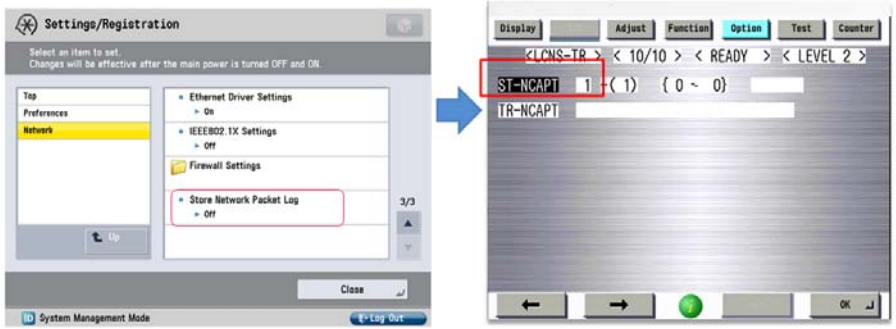
Caution:

Be sure to stop the network capture function after collecting network packet capture data.

0: OFF (disabled) The capture function is not available. At the time of shipment.
1: ON (enabled) The capture function is available.

Disable network capture

1) Select the following: Service Mode(Lv2) Copier > Option > LCNS-TR > ST-NCAPT > 0, and click OK.
2) Select the following in user mode: Network > Store Network Packet Log > OFF.



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Caution:

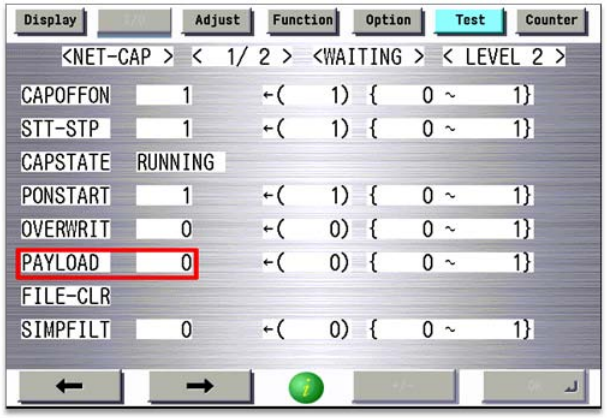
Be sure to disable the network capture function once analysis of network failure is complete. It is required to disable and transfer the license; however, the further step, LMS license transfer, is not required.

Other functions

Payload discard function

Payload is customer data. Data is collected including payload by default. To prevent leak of customers' information or large volume of network packet, the network packet can be collected while payload is discarded.

Service Mode(Level 2) Copier>Test>NET-CAP>PAYLOAD
0: Payload is not discarded (factory setting value)
1: Payload is discarded



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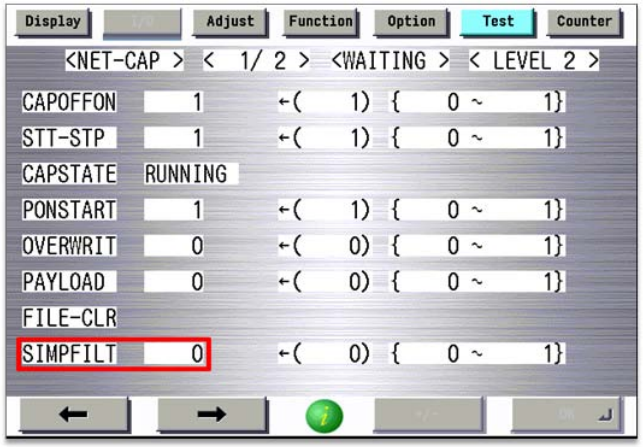
Filter function

Filtering setting is available.
Service Mode(Level 2) Copier > Test > NET-CAP > SIMPFILT
0: Filtering is performed. All the data is collected (factory default setting).
1: Only the packet data where the machine's MAC address is included in the destination address or sender's address of Ether header is captured.



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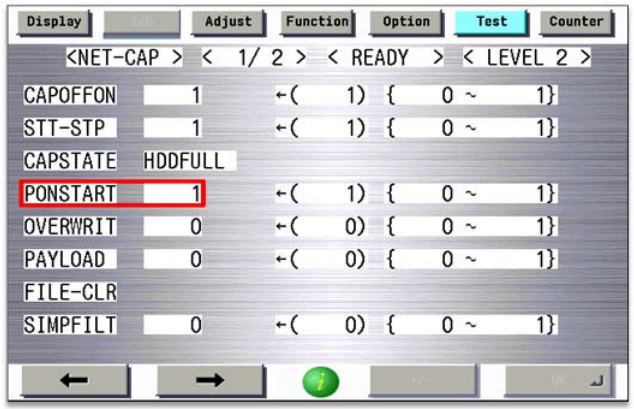
Collection function at startup

Setting this service mode automatically starts collecting packet data if the condition of network capture operation is satisfied when the main power of the host machine is turned ON. Completion of packet data collection needs to be executed manually.

Service Mode(Level 2) Copier > Test > NET-CAP > PONSTART
0: Data is not automatically collected at startup (factory setting value).
1: Data is automatically collected at startup.



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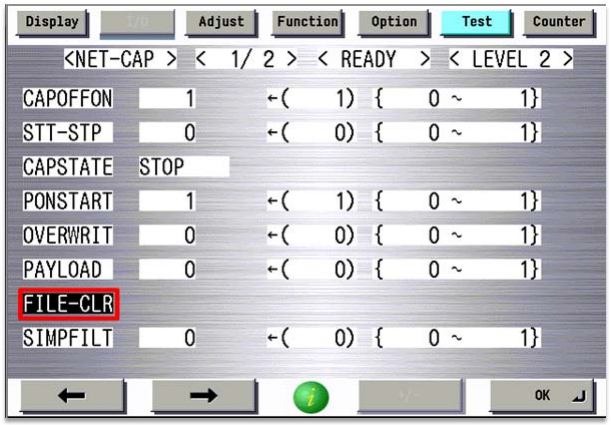
Delete files

Delete all the network capture data stored on the HDD.
Select Service Mode(level 2) Copier > Test > NET-CAP > FILE-CLR, and then click the OK button.



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SST Network Packet File Collection

Overview

- Collect the network capture data that has been stored in the machine using SST.
- It is possible to use files in clear text format for in-house analysis by using free software, such as Wireshark. Note that only Canon Inc. can analyze encrypted files. In the case of failure in solving problems, send encrypted files to Canon Inc.
- When using SST for collecting data, the setting of encryption function in Service Mode(level 2) Copier > Test > NET-CAP > ENCDATA is disabled and files in clear text format/encrypted format can be always collected.

Preparation

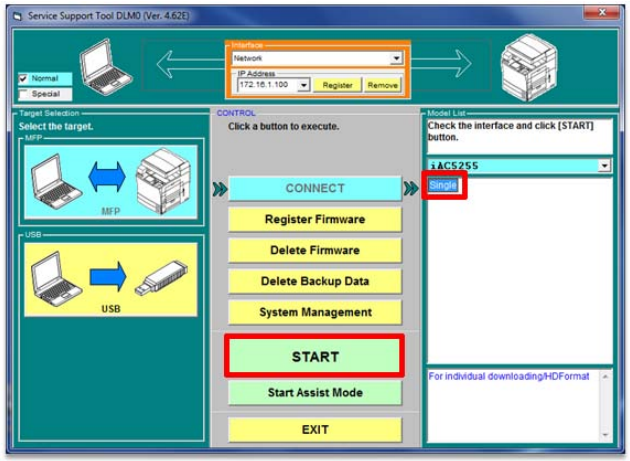
PC with SST (V4.62 or later) registered
(The system software of the corresponding model must have been registered with SST.)

Overflow

1) Connect the machine to SST
2) Upload data
3) Collect the network capture data

Starting the Machine and SST

1) Start the machine using the 2 and 8 keys, and connect SST in Single mode.
2) Click the "Start" button.
3) Select a model to connect and "Single", check the network settings, and then click the "Start" button.



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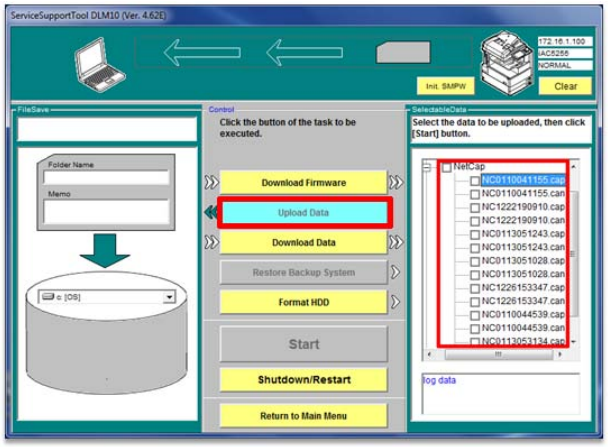
Upload data

1) Click the [Upload Data] button on SST.
2) When a list of packet files stored in the device appears, select target data files to upload.



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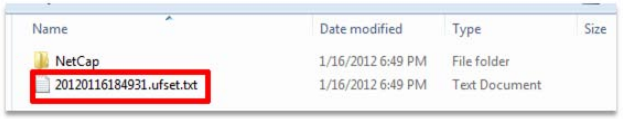
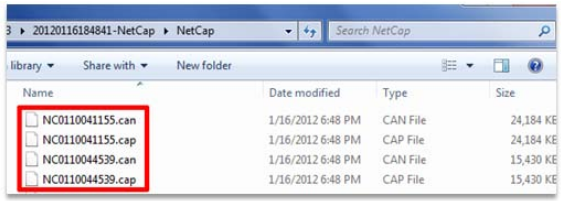
Note:
When using SST to collect data, you can select both files in encrypted format and clear text format.

Collect the network capture data

1) In the case of the default installation destination for SST, click the folder with the name of the serial number of the machine stored in C drive > ServData > target model (e.g.: iAC5255) on the PC.
2) Three types of files are collected; a file in clear text format (xxx.cap), a file in encrypted format (xxx.can), and a list of collected network capture files (ufset.txt).



F-6-181



F-6-182

3) Use free software to analyze the collected network packet capture data in clear text format (xxx.cap).

Note:
When the analysis work fails, send the file in encrypted format (xxx.can) to Canon Inc.

USB Network Packet File Collection

Overview

- Collect the network capture data that has been stored in the machine using a USB memory.
- It is possible to use files in clear text format for in-house analysis by using free software, such as Wireshark. Note that only Canon Inc. can analyze encrypted files. In the case of failure in solving problems, send encrypted files to Canon Inc.

Preparation

USB memory

Store in advance the system software of the machine to connect to.

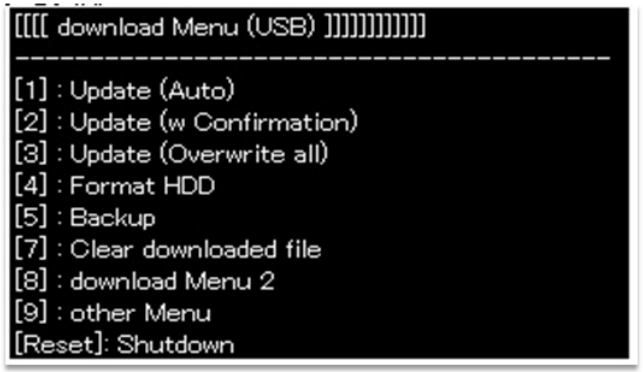
For the system software, it is fine to store just one of the system software of the machine (LANG, etc). There is no need to store the full set.

Overall flow

1) Enter download mode
2) Select Backup
3) Transfer the network capture data
4) Collect the network capture data

Enter Download Mode

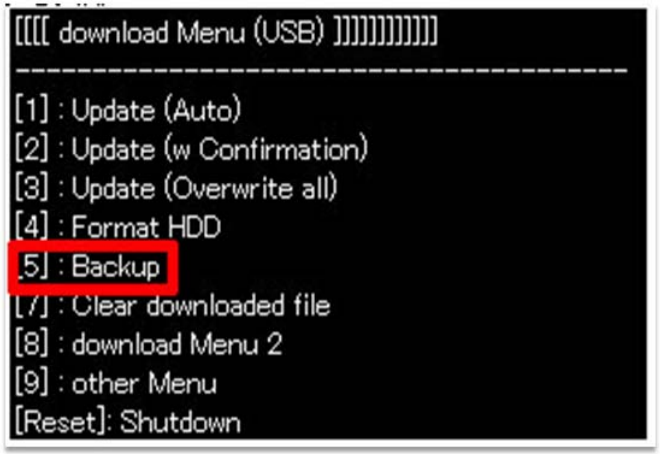
1) Connect the USB memory to the USB port.
2) Select COPIER > FUNCTION > SYSTEM > DOWNLOAD, and then press [OK].
3) When the machine recognizes the USB memory, download Menu (USB) appears on the Control Panel.



F-6-183

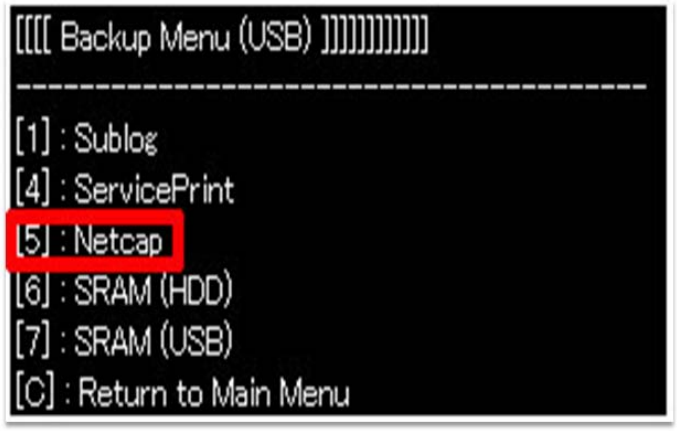
Select Backup

1) When Download Menu (USB) appears, select [5]: Backup.



F-6-184

2) Select - (OK): 0.
3) When Backup Menu (USB) appears, select [5]: Netcap.



F-6-185

4) Select - (OK): 0.

Transfer the network capture data

1) Store all the network capture data stored in the machine on the USB memory.

F-6-186

2) When "---Please hit any key---" appears, press any key.

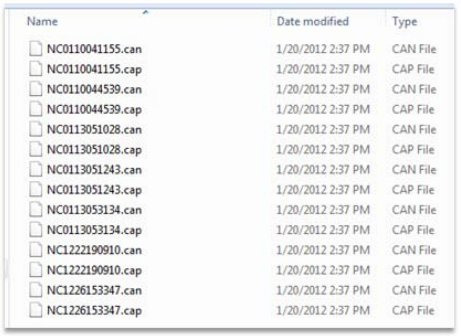
3) Press the [C] key to return to the download Menu (HDD).

4) Press the [Reset] key to shut down the machine.

Collect the network capture data

1) Check that the network capture files are stored on the USB memory.

2) Two types of files are collected; a file in clear text format (xxx.cap) and a file in encrypted format (xxx.can).



F-6-187

3) Use free software to analyze the collected network packet capture data in clear text format (xxx.cap).

Note:
When the analysis work fails, send the file in encrypted format (xxx.can) to Canon Inc.

7

Error Code

- Over View
- Error Code
- Jam Code
- Alarm Code

Over View

Outline

Outline

This chapter describes various codes which are displayed when a failure occurs on the product. These are classified into 3 codes as follows.

Code type	Explanation	Reference
Error code	This code is displayed when an error occurs on the machine.	p. 7-3
Jam code	This code is displayed when a jam occurs inside the machine.	p. 7-128
Alarm code	This code is displayed when a function of the machine is malfunctioned.	p. 7-144

T-7-1

- Error code notation
  An error code is shown in 7-digit [E000XXX] on the display on the operation panel. However, [000] in 2 to 4 digit is not used. Thus, an error code is described as [EXXX] using 5 to 7 digit in the service manual. (e.g.: E012 = E000012)

Location Code

Error code and jam code include the location information.
Location information is displayed as 2-digit numbers as follows.
In the jam display screen, the “L” row corresponds to the location code.

Device	DISPLAY>JAM	DISPLAY>ERR
imageRUNNER ADVANCE C9075 PRO/9065 PRO	00	Main Controller = 00 Printer engine = 05
Color Image Reader Unit - A1(Reader+DADF) Multi Color Image Reader - A1(Reader+DADF)	01	04
POD Deck Light - A1	00	05
Paper Deck Unit - A1	00	05
Multi Deck - A1	00	05
Buffer Path Unit - F1	00	05
Insertion Unit -H1	02	05
Insertion Unit -J1	02	05
Paper Folding Insertion Unit - G1	02	05
Professional Puncher - C1 / Professional Puncher Integration Unit - B1	02	05
Paper Folding Unit - G1	02	05
External 2(2/3,2/4,4)-hole Puncher - A1	02	05
Saddle Finisher - A1/Staple Finisher - A1	02	05
Saddle Finisher - B1/Staple Finisher - B1	02	05
Inner Trimmer - A1	02	05

T-7-2

Location Code

When jam occurs, pickup location is indicated with the following pickup position code.
In the jam display screen, the “P” row corresponds to the pickup position code.

Pickup position		Pickup position code
At Finisher jam/At error avoidance jam/At ADF jam without pickup operation (at SEND, Inbox, etc.)		0
Right deck		1
Left deck		2
Cassette 3		3
Cassette4		4
Multi-purpose Tray		5
Side Paper Deck		6
Duplex (At duplex printing, jam occurs after paper passes through the Duplex Paper Sensor (PS24).)		F0
Multi-drawer Paper Deck-A1	Upper deck	11
	Middle deck	12
	Lower deck	13
Document Insertion Unit	Upper tray	2A
	Lower tray	2B
Document Insertion / Folding Unit		28

T-7-3

Points to Note When Clearing MN-CON

- Execution of clearing MN-COM deletes all data in Address Book, Forwarding Settings, Settings/Registration (Preferences), Adjustment/Maintenance, Function Settings, Set Destination, Management Settings, TPM Settings, etc. Before execution of this operation, ask user to back up the data and get approval for this operation.
- When clearing MN-CON while any login application other than Default Authentication is, error such as not displayed login screen occurred. In this case, access SMS once and switch login application to Default Authentication to recover to the normal status.

Points to Note When Clearing HDD

As a remedy for error codes (E602-XXXX, E611-0000), HDD partition is selected and the target partition may be cleared.
When clearing partition, be sure to check which data will be deleted by referring Detail of HDD partition and explain to the user before starting work.

Measures for E747

There are many detail codes in E747. Since these detail codes are for R&D use, remedy to be performed in the field is the same, except for E747-1201 and E747-FF01. Because of that, errors other than the 2 errors mentioned above are described as E747-XXXX, and common remedy is described.

Error Code

Error Code Details

E000 to E015

E code	Detailed code	Occurance area	Items	Description
E000	-0001	-05	Title	Fixing Film temperature rise is insufficient at power ON.
			Description of detection	Fixing main thermistor (THM1-1) temperature does not reach 50 degrees Celsius within 20 seconds after startup of fixing film temperature control.
			Measures	Check if the detection temperature of the thermistor is risen in service mode (COPIER> DISPLAY> ANALOG> FIX-xx). A. In case that either one of the thermistor detection temperature is risen A-1. Replace the fixing film unit A-2. Faulty drawer connector -> Clean the drawer connector or replace the fixing drawer cable B. In case that neither of them are not risen B-1. Check the connection of the fixing thermistor (to see if the connection of the drawer is faulty, the connector is physically removed or disconnected) -> replace the fixing film unit B-2. Check the connection of the IH power connector (to see if the connector is physically removed or disconnected, or the cable is caught) B-3. Replace the IH power unit B-4. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR
E001	-0001	-05	Title	Abnormal temperature rise of fixing main thermistor
			Description of detection	Fixing main thermistor (THM1) sensed an abnormal high temperature. (ASIC detection)
			Measures	Check the detection temperature of the fixing main thermistor (THM1) in service mode (COPIER> DISPLAY> ANALOG> FIX-UC). A. In case that the detection temperature is 250 degC A-1. The cable of the fixing main thermistor is caught -> replace the fixing film unit B. In case that the detection temperature is other than 250 degC B-1. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR
E001	-0002	-05	Title	Abnormal temperature rise of fixing subthermistor 1 (THM3)
			Description of detection	Fixing subthermistor 1 (THM3) sensed an abnormal high temperature. (ASIC detection)
			Measures	Check the detection temperature of the fixing sub thermistor 1 (THM3) in service mode (COPIER> DISPLAY> ANALOG> FIX-UE). A. In case that the detection temperature is 250 degC A-1. The cable of the fixing sub thermistor 1 is caught -> replace the fixing film unit B. In case that the detection temperature is other than 250 degC B-1. Location of the fixing main thermistor is inappropriate -> replace the fixing film unit B-2. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR

E code	Detailed code	Occurance area	Items	Description
E001	-0003	-05	Title	Abnormal temperature rise of fixing subthermistor 2 (THM4)
			Description of detection	Fixing subthermistor 2 (THM4) sensed an abnormal high temperature. (ASIC detection)
			Measures	Check the detection temperature of the fixing sub thermistor 2 (THM4) in service mode (COPIER> DISPLAY> ANALOG> FIX-UE2). A. In case that the detection temperature is 250 degC A-1. The cable of the fixing sub thermistor 2 is caught ->replace the fixing film unit B. In case that the detection temperature is other than 250 degC B-1. Location of the fixing main thermistor is inappropriate -> replace the fixing film unit B-2. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR
E001	-0011	-05	Title	Fixing main thermistor abnormal temperature rise
			Description of detection	Fixing main thermistor (THM1) detected abnormal high temperature. (software detection)
			Measures	Check the detection temperature of the fixing main thermistor (THM1) in service mode (COPIER> DISPLAY> ANALOG> FIX-UC). A. In case that the detection temperature is 250 degC A-1. The cable of the fixing main thermistor is caught -> replace the fixing film unit B. In case that the detection temperature is other than 250 degC B-1. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR

E code	Detailed code	Occurance area	Items	Description
E001	-0012	-05	Title	Fixing sub thermistor 1 (THM3) abnormal temperature rise
			Description of detection	Fixing sub thermistor 1 (THM3) detected abnormal high temperature. (software detection)
			Measures	Check the detection temperature of the fixing sub thermistor 1 (THM3) in service mode (COPIER> DISPLAY> ANALOG> FIX-UE). A. In case that the detection temperature is 250 degC A-1. The cable of the fixing sub thermistor 1 is caught -> replace the fixing film unit B. In case that the detection temperature is other than 250 degC B-1. Location of the fixing main thermistor is inappropriate -> replace the fixing film unit B-2. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR
E001	-0013	-05	Title	Fixing sub thermistor 2 (THM4) abnormal temperature rise
			Description of detection	Fixing sub thermistor 2 (THM4) detected abnormal high temperature. (software detection)
			Measures	Check the detection temperature of the fixing sub thermistor 2 (THM4) in service mode (COPIER> DISPLAY> ANALOG> FIX-UE2). A. In case that the detection temperature is 250 degC A-1. The cable of the fixing sub thermistor 2 is caught -> replace the fixing film unit B. In case that the detection temperature is other than 250 degC B-1. Location of the fixing main thermistor is inappropriate -> replace the fixing film unit B-2. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR

E code	Detailed code	Occurance area	Items	Description
E001	-0014	-05	Title	Abnormal temperature rise of Fixing Edge Rear Thermistor (THM5)
			Description of detection	The Fixing Edge Rear Thermistor (THM5) detected abnormal high temperature (software detection).
			Remedy	Check the detected temperature of the Fixing Edge Rear Thermistor (THM5) in service mode (COPIER > DISPLAY > ANALOG > FIX-UE). A. When the detected temperature was 260 deg C or higher A-1. Cable of the Fixing Edge Rear Thermistor is caught. -> Replace the Fixing Film Unit. B. When the detected temperature was lower than 260 deg C B-1. The Fixing Main Thermistor is not securely attached. -> Replace the Fixing Film Unit. B-2. Replace the DC Controller PCB. NOTE: After performing the remedy work above, go through the following to clear the error: COPIER > FUNCTION > CLEAR > ERR.
E001	-0015	-05	Title	Abnormal Temperature Rise of Fixing Edge Front Thermistor (THM2)
			Description of detection	The Fixing Edge Front Thermistor (THM2) detected abnormal high temperature (software detection).
			Remedy	Check the detected temperature of the Fixing Edge Front Thermistor (THM2) in service mode (COPIER > DISPLAY > ANALOG > FIX-UE2) A. When the detected temperature was 260 deg C or higher A-1. Cable of the Fixing Edge Front Thermistor is caught. -> Replace the Fixing Film Unit. B. When the detected temperature was lower than 260 deg C B-1. The Fixing Main Thermistor is not securely attached. -> Replace the Fixing Film Unit. B-2. Replace the DC Controller PCB. NOTE: After performing the remedy work above, go through the following to clear the error: COPIER > FUNCTION > CLEAR > ERR.

E code	Detailed code	Occurance area	Items	Description
E003	-0001	-05	Title	Fixing Film abnormally low temperature
			Description of detection	After standby, fixing main thermistor (THM1) detected less or equal to 110 degrees Celsius in succession for 1 second.
			Measures	1. Check the rear louver. (If the rear of the machine is close to the wall, temperature of the power supply area may rise) 2. Check the detection temperature of the thermistor in service mode (COPIER> DISPLAY> ANALOG> FIX-xx). A. In case that either one of the thermistor detection temperature is risen A-1. Check the fixing film unit (to see if the location of the thermistor is inappropriate or the thermistor failure) -> replace the fixing film unit A-2. Faulty drawer connector -> clean the drawer connector or replace the fixing drawer cable B. In case that neither of them are not risen B-1. Check the connection of the fixing thermistor (to see if the connection of the drawer is faulty, the connector is physically removed or disconnected) -> replace the fixing film unit B-2. Check the connection of the IH power connector (to see if the connector is physically removed or disconnected, or the cable is caught) B-3. Replace the IH power unit B-4. Replace the DC controller PCB NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR
E004	-0201	-05	Title	Fixing Film temperature difference error 1
			Description of detection	Difference of detected temperature between the fixing subthermistor 2 (THM4) and the fixing subthermistor 1 (THM3) is bigger than the rated value.
			Measures	1. Fixing main /sub thermistor (THM1-1/2/3) connector disconnetion (pinching wire, broken wire) -> replace the fixing film unit 2. Check the rotation of the fixing motor (to see if the connector is physically removed or disconnected) -> replace the fixing motor or the harness 3. Faulty drawer connector -> clean the drawer connector or replace the fixing drawer cable 4. Replace the DC controller PCB

E code	Detailed code	Occurance area	Items	Description
E004	-0202	-05	Title	Fixing Film temperature difference error 2
			Description of detection	Difference of detected temperature between the fixing main thermistor (THM1) and the fixing subthermistor 1 (THM3) are bigger than the rated value.
			Measures	1. Fixing main /sub thermistor (THM1-1/2/3) connector disconnetion (pinching wire, broken wire) -> replace the fixing film unit 2. Check the rotation of the fixing motor (to see if the connector is physically removed or disconnected) -> replace the fixing motor or the harness 3. Faulty drawer connector -> clean the drawer connector or replace the fixing drawer cable 4. Replace the DC controller PCB
E004	-0203	-05	Title	Fixing Film temperature difference error 3
			Description of detection	Difference of detected temperature between the fixing main thermistor (THM1) and the fixing subthermistor 2 (THM1) are bigger than the rated value.
			Measures	1. Fixing main /sub thermistor (THM1-1/2/3) connector disconnetion (pinching wire, broken wire) -> replace the fixing film unit 2. Check the rotation of the fixing motor (to see if the connector is physically removed or disconnected) -> replace the fixing motor or the harness 3. Faulty drawer connector -> clean the drawer connector or replace the fixing drawer cable 4. Replace the DC controller PCB
E004	-0214	-05	Title	Fixing Film temperature difference error 4
			Description of detection	Temperature difference between the Fixing Edge Front Thermistor (THM2) and the Fixing Edge Rear Thermistor (THM5) is 50 deg C or greater.
			Remedy	1. Replace the Fixing Film Unit. 2. Replace the Fixing Motor/Harness. 3. Clean the Drawer Connector/Replace the Fixing Drawer Harness. 4. Replace the DC Controller PCB.
E004	-0215	-05	Title	Fixing Film displacement error
			Description of detection	Temperature difference between the Fixing Edge Front Thermistor (THM2) and the Fixing Edge Rear Thermistor (THM5) was 20 deg C or greater when checking operation of the Fixing Film.
			Remedy	Replace the Fixing Film Unit.

E code	Detailed code	Occurance area	Items	Description
E004	-0301	-05	Title	IH overcurrent detection error
			Description of detection	Detected an overcurrent on IH power supply board.
			Measures	1. Faulty fixing film unit -> replace the fixing film unit 2. Faulty fixing IH unit -> replace the fixing IH unit 3. Faulty IH power PCB -> replace the IH power PCB
E004	-0401	-05	Title	12V failure error
			Description of detection	Detected abnormality on the 12V power supply line.
			Measures	1. Check the Fixing Film -> Replace the Fixing Film Unit when it is damaged. 2. Check connection of the Fixing Thermoswitch (TP2) (to see if Thermoswitch is being turned OFF/open circuit). -> Replace the Fixing Film Unit. 3. Replace the Relay PCB. 4. Replace the DC Controller PCB. 5. Replace the IH power supply. NOTE: After performing the remedy work above, go through the following to clear the error: COPIER > FUNCTION > CLEAR > ERR.
E004	-0501	-05	Title	Connection error of Fixing Main Thermistor or Fixing Edge Front Thermistor
			Description of detection	Connection detection signal for the Fixing Main Thermistor or Fixing Edge Front Thermistor could not be detected.
			Measures	1. Check connection of the Fixing Film Unit. -> Replace the Fixing Film Unit when it is damaged. 2. Failure in Drawer Connector. -> Clean the Drawer Connector/Replace the Fixing Drawer Harness.
E004	-0502	-05	Title	Connection error of Fixing Sub Thermistor 1/2 or Fixing Edge Rear Thermistor
			Description of detection	Connection detection signal for Fixing Sub Thermistor 1/2 or Fixing Edge Rear Thermistor could not be detected.
			Measures	1. Check connection of the Fixing Film Unit. -> Replace the Fixing Film Unit when it is damaged. 2. Failure in Drawer Connector. -> Clean the Drawer Connector/Replace the Fixing Drawer Harness.
E004	-0702	-05	Title	IH power supply relay abnormality
			Description of detection	Voltage shows abnormal value even with the relay-off
			Measures	IH power supply replacement

E code	Detailed code	Occurance area	Items	Description
E005	-0000	-05	Title	Fixing Web level absence error
			Description of detection	The count exceeded 60,000 (using A4/Letter size or smaller paper) after the Fixing Web Level Sensor detected absence of the web.
			Remedy	1. Check the Fixing Web. 2. When the Fixing Web is replaced, execute the following to clear the counter value: COPIER > COUNTER > DRBL-1 > FX-WEB1 to 4, or COPIER> COUNTER>MISC>FX-WEB. Then, turn OFF and then ON the main power. 3. Check the Sensor Harness. 4. Replace the Web Level Sensor (PS102). 5. Replace the Torsion Spring. 6. Replace the Level Detection Arm. 7. Replace the Web Sensor Support Plate.
E006	-0001	-05	Title	Fixing Feed drawer connection error
			Description of detection	Fixing Feed drawer connector is abnormal (Sensor cannot detect)
			Measures	1. Fixing Feed drawer connector has connection failure 2. Wire harness failure 3. Sensor failure
E006	-0002	-05	Title	Fixing Feed drawer connection error
			Description of detection	Fixing feed knob of fixing drawer is abnormal (Sensor cannot detect)
			Measures	1. Fixing feed knob of fixing drawer has connection failure 2. Wire harness failure 3. Sensor failure
E008	-0002	-05	Title	Fixing Film Unit life detection error
			Description of detection	Total rotation time of the Fixing Film reached 5206 hours.
			Measures	1. Life of the Fixing Film Unit -> Replace the Fixing Film Unit. 2. When the Fixing Film Unit is replaced, turn OFF and then ON the main power after executing the following: COPIER > COUNTER > DRBL-1 > FX-BLT-U.

E code	Detailed code	Occurance area	Items	Description
E008	-0003	-05	Title	Fixing Film Unit life detection error
			Description of detection	Count of the number of fed sheets through the Fixing Film reached approx. 360,000 sheets (A4/LTR).
			Measures	1. Life of the Fixing Film Unit -> Replace the Fixing Film Unit. 2. When the Fixing Film Unit is replaced, turn OFF and then ON the main power after executing the following: COPIER > COUNTER > DRBL-1 > FX-BLT-U. NOTE: Only applicable under the following condition: OPTION > IMG-FIX > FX-ERRSW = 1. The print counter setting value can be changed by selecting the following: OPTION > IMG-FIX > FX-U-ERR.
E009	-0500	-05	Title	Pressure unit pressure release HP search error
			Description of detection	Home position for engagement/disengagement of the Fixing Assembly could not be detected.
			Measures	1. Check connectors of the Fixing Motor (M48), Pressure Roller HP Sensor (PS73) and Semi-pressure Sensor (PS102). 2. Check harness of the corresponding parts. -> Replace the harness when it is disconnected. 3. Check the Fixing Pressure Release Drive System Gear. -> Replace the gear when it is damaged. 4. Replace the Pressure Roller HP Sensor (PS73) and Semi-pressure Sensor (PS102). 5. Replace the Fixing Motor (M48). 6. Replace the Fixing Feed Driver PCB. 7. Replace the DC Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0101	-05	Title	A. Drum Speed Detection PCB (Y) 1/2 signal error (Controller Version 2x.xx or later) B. Drum motor (Y) error (Prior to Controller Version 1x.xx)
			Description of detection	A. This error occurs when the Drum Speed Detection PCB (Y) 1/2 signal error is detected. B. The lock signal for the drum motor (Y) (M21) cannot be detected within a specified period. • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (Y) 1/2 (UN20/21). (Sensor side) Sensor side: J7316, J7317, J8019 A-2. Check that the Encoder Wheel of the Drum Speed Detection PCB (Y) 1/2 is properly installed. A-3. Check the connection of the Drum ITB Driver PCB (UN6). PCB side: J1902 A-4. Take out the Drum Speed Detection PCB (Y) 1/2 to clean the Drum Speed Detection PCB (Y) 1/2 and Encoder Wheel. A-5. Replace the Drum Speed Detection PCB (Y) 1/2. A-6. Replace the Drum ITB Driver PCB. B: B-1. Check the connection between the drum motor (Y) (M21) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7300/J8019, PCB side: J1902 B-2. Check the connection between the drum speed detection PCB (Y) (UN20/21) and the drum ITB driver PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7316/J7317/J8019, PCB side: J1902 B-3. Reinstall the drum unit (Y). B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0102	-05	Title	A. Drum Speed Detection PCB (Y) 1 signal error (Controller Version 2x.xx or later) B. Drum motor (Y) error (Prior to Controller Version 1x.xx)
			Description of detection	A. The signal is not detected for 80msec or more. B. Lock signal of Drum motor (Y) (M21) cannot be detected for the specified period of time after first detection • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (Y) 1 (UN20). Sensor side: J7316, J8016PCB side:J1910 A-2. Take out the Drum Speed Detection PCB (Y) 1 to clean. A-3. Replace the Drum Speed Detection PCB (Y) 1. A-4. Check if the Harness of the Drum Speed Detection PCB (Y) 1 is faulty. (Replace the Harness if it's disconnected.) A-5. Replace the Drum ITB Driver PCB (UN6). B: B-1. Check the connection between the drum motor (Y) (M21) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7300/J8019, PCB side: J1920 B-2. Check the connection between the drum speed detection PCB (Y) (UN20/21) and the drum ITB driver PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7316/J7317/J8016, PCB side: J1910 B-3. Reinstall the drum unit (Y). B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0103	-05	Title	Drum Speed Detection PCB (Y) 2 signal error
			Description of detection	The signal is not detected for 80 msec or more.
			Measures	1. Check the connection of the Drum Speed Detection PCB (Y) 2 (UN21). Sensor side: J7317, J8019PCB side:J1902 2. Take out the Drum Speed Detection PCB (Y) 2 to clean. 3. Replace the Drum Speed Detection PCB (Y) 2. 4. Check if the Harness of the Drum Speed Detection PCB (Y) 2 is faulty. (Replace the Harness if it's disconnected.) 5. Replace the Drum ITB Driver PCB (UN6).
E012	-0104	-05	Title	Drum Speed Detection PCB (Y) Encoder Wheel error
			Description of detection	This error occurs when the Drum Speed Detection PCB (Y) Encoder Wheel error is detected.
			Measures	1. Take out the Drum Speed Detection PCB (Y) to clean the Drum Speed Detection PCB (Y) 1/2 (UN20/21) and Encoder Wheel. 2. Replace the Encoder Wheel. 3. Replace the Drum Speed Detection PCB (Y) 1/2. 4. Replace the Drum ITB Driver PCB (UN6).
E012	-0105	-05	Title	Drum Motor (Y) control error
			Description of detection	Unstable rotation of the Drum Motor (Y)
			Measures	1. Check if the Drum Unit (Y) is installed. 2. Take out the Drum Speed Detection PCB (Y) to clean the Drum Speed Detection PCB (Y) 1/2 (UN20/21) and Encoder Wheel. 3. Remove and then reinstall the Process Unit (Bk). 4. Replace the Drum Unit (Y). 5. Replace the Drum ITB Driver PCB (UN6).
E012	-0106	-05	Title	Drum Motor (Y) rotation error
			Description of detection	The Drum Motor (Y) is not rotating at the specified speed, or it is stopped.
			Measures	1. Check the connection between the Drum Motor and Drum ITB Driver PCB (UN6). Sensor side: J7300, J8019PCB side: J1902 2. Check the ITB. Check to see if the ITB is displaced or ripped. Refer to E075 if the ITB is displaced. 3. Replace the ITB Cleaning Blade. 4. Replace the Drum ITB Driver PCB (UN6).

E code	Detailed code	Occurance area	Items	Description
E012	-0201	-05	Title	A. Drum Speed Detection PCB (M) 1/2 signal error (Controller Version 2x.xx or later) B. Drum motor (M) error (Prior to Controller Version 1x.xx)
			Description of detection	A. This error occurs when the Drum Speed Detection PCB (M) 1/2 signal error is detected. B. The lock signal for the drum motor (M) (M23) cannot be detected within a specified period. • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (M) 1/2 (UN22/23). (Sensor side) Sensor side: J7314, J7315, J8020 A-2. Check that the Encoder Wheel of the Drum Speed Detection PCB (M) 1/2 is properly installed. A-3. Check the connection of the Drum ITB Driver PCB (UN6). PCB side: J1910 A-4. Take out the Drum Speed Detection PCB (M) 1/2 to clean the Drum Speed Detection PCB (M) 1/2 and Encoder Wheel. A-5. Replace the Drum Speed Detection PCB (M) 1/2. A-6. Replace the Drum ITB Driver PCB. B: B-1. Check the connection of the drum motor (M) (M23). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7302/J8020, PCB side: J1902 B-2. Check the connection between the drum speed detection PCB (M) (UN22/23) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7314/J7315/J8020, PCB side: J1902 B-3. Reinstall the drum unit (M). B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0202	-05	Title	A. Drum Speed Detection PCB (M) 1 signal error (Controller Version 2x.xx or later) B. Drum motor (M) error (Prior to Controller Version 1x.xx)
			Description of detection	A. The signal is not detected for 80 msec or more. B. Lock signal of Drum motor (M) (M23) cannot be detected for the specified period of time after first detection • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (M) 1 (UN22). Sensor side: J7314, J8020PCB side:J1902 A-2. Take out the Drum Speed Detection PCB (M) 1 to clean. A-4. Replace the Drum Speed Detection PCB (M) 1. A-5. Check if the Harness of the Drum Speed Detection PCB (M) 1 is faulty. (Replace the Harness if it's disconnected.) A-6. Replace the Drum ITB Driver PCB (UN6). B: B-1. Check the connection of the drum motor (M) (M23). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7302/J8020, PCB side: J1902 B-2. Check the connection between the drum speed detection PCB (M) (UN22/23) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7314/J7315/J8020, PCB side: J1902 B-3. Reinstall the drum unit (M). B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0203	-05	Title	Drum Speed Detection PCB (M) 2 signal error
			Description of detection	The signal is not detected for 80 msec or more.
			Measures	1. Check the connection of the Drum Speed Detection PCB (M) 2 (UN23). Sensor side: J7315, J8020PCB side:J1902 2. Take out the Drum Speed Detection PCB (M) 2 to clean. 4. Replace the Drum Speed Detection PCB (M) 2. 5. Check if the Harness of the Drum Speed Detection PCB (M) 2 is faulty. (Replace the Harness if it's disconnected.) 6. Replace the Drum ITB Driver PCB (UN6).
E012	-0204	-05	Title	Drum Speed Detection PCB (M) Encoder Wheel error
			Description of detection	This error occurs when the Drum Speed Detection PCB (M) Encoder Wheel error is detected.
			Measures	1. Take out the Drum Speed Detection PCB (M) to clean the Drum Speed Detection PCB (M) 1/2 (UN22/23) and Encoder Wheel. 2. Replace the Encoder Wheel. 3. Replace the Drum Speed Detection PCB (M) 1/2. 4. Replace the Drum ITB Driver PCB (UN6).
E012	-0205	-05	Title	Drum Motor (M) control error
			Description of detection	Unstable rotation of the Drum Motor (M)
			Measures	1. Check if the Drum Unit (M) is installed. 2. Take out the Drum Speed Detection PCB (M) to clean the Drum Speed Detection PCB (M) 1/2 (UN22/23) and Encoder Wheel. 3. Remove and then reinstall the Process Unit (Bk). 4. Replace the Drum Unit (M). 5. Replace the Drum ITB Driver PCB (UN6).
E012	-0206	-05	Title	Drum Motor (M) rotation error
			Description of detection	The Drum Motor (M) is not rotating at the specified speed, or it is stopped.
			Measures	1. Check the connection between the Drum Motor and Drum ITB Driver PCB (UN6). Sensor side: J7302, J8020PCB side: J1902 2. Check the ITB. Check to see if the ITB is displaced or ripped. Refer to E075 if the ITB is displaced. 3. Replace the ITB Cleaning Blade. 4. Replace the Drum ITB Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0301	-05	Title	A. Drum Speed Detection PCB (C) 1/2 signal error (Controller Version 2x.xx or later) B. Drum motor (C) error (Prior to Controller Version 1x.xx)
			Description of detection	A. This error occurs when the Drum Speed Detection PCB (C) 1/2 signal error is detected. B. The lock signal for the drum motor (C) (M25) cannot be detected within a specified period. • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (C) 1/2 (UN24/25). (Sensor side) Sensor side: J7312, J7313, J8021 A-2. Check that the Encoder Wheel of the Drum Speed Detection PCB (C) 1/2 is properly installed. A-3. Check the connection of the Drum ITB Driver PCB (UN6). PCB side: J1910 A-4. Take out the Drum Speed Detection PCB (C) 1/2 to clean the Drum Speed Detection PCB (C) 1/ and Encoder Wheel. A-5. Replace the Drum Speed Detection PCB (C) 1/2. A-6. Replace the Drum ITB Driver PCB. B: B-1. Check the connection between the drum motor (C) (M25) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7304/J8021, PCB side: J1904 B-2. Check the connection between the drum speed detection PCB (C) (UN24/23) and the drum ITB driver PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7312/J7313/J8021, PCB side: J1904 B-3. Reinstall the drum unit (C). B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0302	-05	Title	A. Drum Speed Detection PCB (C) 1 signal error (Controller Version 2x.xx or later) B. Drum motor (C) error (Prior to Controller Version 1x.xx)
			Description of detection	A. The signal is not detected for 80 msec or more. B. Lock signal of Drum motor (C) (M25) cannot be detected for the specified period of time after first detection • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (C) 1 (UN24). Sensor side: J7312, J7313, J8021PCB side:J1904 A-2. Take out the Drum Speed Detection PCB (C) 1 to clean. A-3. Replace the Drum Speed Detection PCB (C) 1. A-4. Check if the Harness of the Drum Speed Detection PCB (C) 1 is faulty. (Replace the Harness if it's disconnected.) A-5. Replace the Drum ITB Driver PCB (UN6). B: B-1. Check the connection between the drum motor (C) (M25) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7304/J8021, PCB side: J1904 B-2. Check the connection between the drum speed detection PCB (C) (UN24/23) and the drum ITB driver PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7312/J7313/J8021, PCB side: J1904 B-3. Reinstall the drum unit (C). B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0303	-05	Title	Drum Speed Detection PCB (C) 2 signal error
			Description of detection	The signal is not detected for 80 msec or more.
			Measures	1. Check the connection of the Drum Speed Detection PCB (C) 2 (UN25). Sensor side: J7313, J8021PCB side:J1904 2. Take out the Drum Speed Detection PCB (C) 2 to clean. 3. Replace the Drum Speed Detection PCB (C) 2. 4. Check if the Harness of the Drum Speed Detection PCB (C) 2 is faulty. (Replace the Harness if it's disconnected.) 5. Replace the Drum ITB Driver PCB (UN6).
E012	-0304	-05	Title	Drum Speed Detection PCB (C) Encoder Wheel error
			Description of detection	This error occurs when the Drum Speed Detection PCB (C) Encoder Wheel error is detected.
			Measures	1. Take out the Drum Speed Detection PCB (C) 1/2 to clean the Drum Speed Detection PCB (C) 1/2 (UN24/25) and Encoder Wheel. 2. Replace the Encoder Wheel. 3. Replace the Drum Speed Detection PCB (C) 1/2. 4. Replace the Drum ITB Driver PCB (UN6).
E012	-0305	-05	Title	Drum Motor (C) control error
			Description of detection	Unstable rotation of the Drum Motor (C)
			Measures	1. Check if the Drum Unit (C) is installed. 2. Take out the Drum Speed Detection PCB (C) 1/2 to clean the Drum Speed Detection PCB (C) 1/2 (UN24/25) and Encoder Wheel. 3. Remove and then reinstall the Process Unit (Bk). 4. Replace the Drum Unit (C). 5. Replace the Drum ITB Driver PCB (UN6).
E012	-0306	-05	Title	Drum Motor (C) rotation error
			Description of detection	The Drum Motor (C) is not rotating at the specified speed, or it is stopped.
			Measures	1. Check the connection between the Drum Motor and Drum ITB Driver PCB (UN6). Sensor side: J7304, J8021PCB side: J1904 2. Check the ITB. Check to see if the ITB is displaced or ripped. Refer to E075 if the ITB is displaced. 3. Replace the ITB Cleaning Blade. 4. Replace the Drum ITB Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0401	-05	Title	A. Drum Speed Detection PCB (Bk) 1/2 signal error (Controller Version 2x.xx or later) B. Drum motor (Bk) error (Prior to Controller Version 1x.xx)
			Description of detection	A. This error occurs when the Drum Speed Detection PCB (Bk) 1/2 signal error is detected. B. The lock signal for the drum motor (Bk) (M19) cannot be detected within a specified period. • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (Bk) 1/2 (UN18/19). (Sensor side) Sensor side: J7310, J7311 A-2. Check that the Encoder Wheel of the Drum Speed Detection PCB (Bk) 1/2 is properly installed. A-3. Check the connection of the Drum ITB Driver PCB (UN6). PCB side: J1905 A-4. Take out the Drum Speed Detection PCB (Bk) 1/2 to clean the Drum Speed Detection PCB (Bk) 1/2 and Encoder Wheel. A-5. Replace the Drum Speed Detection PCB (Bk) 1/2. A-6. Replace the Drum ITB Driver PCB. B: B-1. Check the connection between the drum motor (Bk) (M19) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7306, PCB side: J1903 B-2. Check the connection between the drum speed detection PCB (Bk) (UN18/19) and the drum ITB driver PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7310/J7311, PCB side: J1905 B-3. Reinstall the drum unit (Bk). B-4. Replace the drum cleaning unit and the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0402	-05	Title	A. Drum Speed Detection PCB (Bk) 1 signal error (Controller Version 2x.xx or later) B. Drum motor (Bk) error (Prior to Controller Version 1x.xx)
			Description of detection	A. The signal is not detected for 80 msec or more. B. Lock signal of Drum motor (Bk) (M19) cannot be detected for the specified period of time after first detection • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) not inserted • Drum unit failure • Encoder failure (This occurs in very rare cases.)
			Measures	A: A-1. Check the connection of the Drum Speed Detection PCB (Bk) 1 (UN18). Sensor side: J7310PCB side: J1905 A-2. Take out the Drum Speed Detection PCB (Bk) 1 to clean. A-3. Replace the Drum Speed Detection PCB (Bk) 1. A-4. Check if the Harness of the Drum Speed Detection PCB (Bk) 1 (UN18) is faulty. (Replace the Harness if it's disconnected.) A-5. Replace the Drum ITB Driver PCB (UN6). B: B-1. Check the connection between the drum motor (Bk) (M19) and the drum ITB driver PCB (UN6). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7306, PCB side: J1903 B-2. Check the connection between the drum speed detection PCB (Bk) (UN18/19) and the drum ITB driver PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7310/J7311, PCB side: J1905 B-3. Reinstall the drum unit (Bk). B-4. Replace the drum cleaning unit and the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) B-5. Replace the drum ITB driver PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0403	-05	Title	Drum Speed Detection PCB (Bk) 2 signal error
			Description of detection	The signal is not detected for 80 msec or more.
			Measures	1. Check the connection of the Drum Speed Detection PCB (Bk) 2 (UN19). Sensor side: J7311PCB side: J1905 2. Take out the Drum Speed Detection PCB (Bk) 2 to clean. 4. Replace the Drum Speed Detection PCB (Bk) 2. 5. Check if the Harness of the Drum Speed Detection PCB (Bk) 2 is faulty. (Replace the Harness if it's disconnected.) 6. Replace the Drum ITB Driver PCB (UN6).
E012	-0404	-05	Title	Drum Speed Detection PCB (Bk) Encoder Wheel error
			Description of detection	This error occurs when the Drum Speed Detection PCB (Bk) Encoder Wheel error is detected.
			Measures	1. Take out the Drum Speed Detection PCB (Bk) to clean the Drum Speed Detection PCB (Bk) 1/2 (UN18/19) and Encoder Wheel. 2. Replace the Encoder Wheel. 3. Replace the Drum Speed Detection PCB (Bk) 1/2. 4. Replace the Drum ITB Driver PCB (UN6).
E012	-0405	-05	Title	Drum Motor (Bk) control error
			Description of detection	Unstable rotation of the Drum Motor (Bk)
			Measures	1. Check if the Drum Unit (Bk) is installed. 2. Take out the Drum Speed Detection PCB (Bk) to clean the Drum Speed Detection PCB (Bk) 1/2 (UN18/19) and Encoder Wheel. 3. Remove and then reinstall the Process Unit (Bk). 4. Replace the Drum Unit (Bk). 5. Replace the Drum ITB Driver PCB (UN6).
E012	-0406	-05	Title	Drum Motor (Bk) rotation error
			Description of detection	The Drum Motor (Bk) is not rotating at the specified speed, or it is stopped.
			Measures	1. Check the connection between the Drum Motor and Drum ITB Driver PCB (UN6). Sensor side: J7306PCB side: J1903 2. Check the ITB. Check to see if the ITB is displaced or ripped. Refer to E075 if the ITB is displaced. 3. Replace the ITB Cleaning Blade. 4. Replace the Drum ITB Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0501	-05	Title	A. ITB Drive Roller Speed Detection PCB 1/2 (UN16/17) signal error B. ITB drive motor error
			Description of detection	A. This error occurs when the ITB Drive Roller Speed Detection PCB 1/2 (UN16/17)signal error is detected. B. The lock signal for the ITB drive motor (M3) cannot be detected within a specified period. • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) Y/M/C/K not inserted • Peeling of the ITB cleaning blade • Encoder Y/M/C/K failure (This occurs in rare cases.)

E code	Detailed code	Occurance area	Items	Description
E012	-0501	-05	Measures	A: A-1. Check the connection of the ITB Drive Roller Speed Detection PCB 1/2 (UN16/17). (Sensor side) Sensor side: J7318, J7319, J8047 A-2. Check that the Encoder Wheel of the ITB Drive Roller Speed Detection PCB 1/2 is properly installed. A-3. Check the connection of the DC controller PCB. PCB side: J1912 A-4. Manually turn the Rotor of the ITB Drive Motor (M3) clockwise and check that the ITB Rotation Sensor Encoder Wheel rotates. If the Encoder Wheel does not rotate, replace the Drum Drive Unit. A-5. Take out the ITB Drive Roller Speed Detection PCB 1/2 to clean the ITB Drive Roller Speed Detection PCB 1/2 and Encoder Wheel. A-6. Replace the ITB Drive Roller Speed Detection PCB 1/2. A-7. Replace the DC controller PCB. B: B-1. Check the connection between the ITB driver motor (M3) and the DC controller PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7518, J8011,J8050, PCB side: J1242 B-2. Check the connection of the ITB drive roller speed detection PCB 1/2 (UN16/17). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7318, J7319, J8047, J8050 PCB side: J1242 B-3. Reinstall the 4 color drum units. (If the drum unit is not installed properly, more load is applied to ITB drive.) B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) There may be cause in each color. B-5. Replace the DC controller PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0502	-05	Title	A. ITB Drive Roller Speed Detection PCB 1 signal error B. ITB drive motor error
			Description of detection	A. The signal is not detected for 80msec or more. B. Lock signal of ITB drive motor (M3) cannot be detected for the specified period of time after first detection • Connector disconnected, Breaking (Breaking (shorting)) • Drum (unit) Y/M/C/K not inserted • Peeling of the ITB cleaning blade • Encoder Y/M/C/K failure (This occurs in rare cases.)
			Measures	A: A-1. Check the connection of the ITB Drive Roller Speed Detection PCB 1 (UN16). Sensor side: J7318, J8047PCB side: J1242 A-2. Take out the ITB Drive Roller Speed Detection PCB 1 to clean. A-3. Replace the ITB Drive Roller Speed Detection PCB 1. A-4. Check if the Harness of the ITB Drive Roller Speed Detection PCB 1 is faulty. (Replace the Harness if it's disconnected.) A-5. Replace the DC controller PCB. B: B-1. Check the connection between the ITB driver motor (M3) and the DC controller PCB. (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7518, J8050 PCB side: J1242 B-2. Check the connection of the ITB drive roller speed detection PCB 1/2 (UN16/17). (Connection of the connector, Breaking (Breaking (shorting))) Motor side: J7318, J7319, J8047, J8050 PCB side: J1242 B-3. Reinstall the 4 color drum units. (If the drum unit is not installed properly, more load is applied to ITB drive.) B-4. Replace the drum unit. (Drum drive may be overloaded due to peeling of the blade, etc.) There may be cause in each color. B-5. Replace the DC controller PCB. NOTE: In some rare cases, this error occurs when the encoder is not installed with the drum speed detection PCB or when dirt is applied to the sensor surface of the drum speed detection PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-0503	-05	Title	ITB Drive Roller Speed Detection PCB 2 signal error
			Description of detection	The signal is not detected for 80 msec or more.
			Measures	1. Check the connection of the ITB Drive Roller Speed Detection PCB 2 (UN17). Sensor side:J7319, J8047PCB side: J1242 2. Take out the ITB Drive Roller Speed Detection PCB 2 to clean. 3. Replace the ITB Drive Roller Speed Detection PCB 2. 4. Check if the Harness of the ITB Drive Roller Speed Detection PCB 2 is faulty. (Replace the Harness if it's disconnected.) 5. Replace the DC controller PCB.
E012	-0504	-05	Title	ITB Drive Roller Speed Detection PCB Encoder Wheel error
			Description of detection	This error occurs when the Drum Speed Detection PCB (Bk) Encoder Wheel error is detected.
			Measures	1. Take out the ITB Drive Roller Speed Detection PCB to clean the ITB Drive Roller Speed Detection PCB 1/2 (UN16/17) and Encoder Wheel. 2. Replace the Encoder Wheel. 3. Replace the ITB Drive Roller Speed Detection PCB 1/2. 4. Replace the DC controller PCB.
E012	-0505	-05	Title	ITB Drive Motor control error
			Description of detection	Unstable rotation of the ITB Drive Motor
			Measures	1. Check if the ITB (Unit) is installed. 2. Take out the ITB Drive Roller Speed Detection PCB to clean the ITB Drive Roller Speed Detection PCB 1/2 (UN16/17) and Encoder Wheel. 3. Remove and then reinstall the Process Unit (Bk). 4. Replace the ITB Unit. 5. Replace the DC controller PCB.
E012	-0506	-05	Title	ITB Drive Motor rotation error
			Description of detection	ITB Drive Motor is not rotating at the specified speed, or it is stopped.
			Measures	1. Check the connection between the ITB Drive Motor and DC controller PCB. Sensor side: J7518, J8047, J8050PCB side: J1912, J8011 2. Check the ITB. Check to see if the ITB is displaced or ripped. Refer to E075 if the ITB is displaced. 3. Replace the ITB Cleaning Blade. 4. Replace the DC controller PCB.

E code	Detailed code	Occurance area	Items	Description
E012	-2000	-05	Title	Rotation error of Drum Motor (Y/M/C/Bk) (M21/23/25/19) and ITB Drive Motor
			Description of detection	Simultaneous rotation error in all Motors
			Measures	1. Check the connection of the Drum ITB Driver PCB. PCB side: J1902 to J1904 2. Check the connection of the Relay PCB. PCB side: J1805 3. Check the Interlock Switch. 4. Check if the Harness of the Drum ITB Driver PCB (UN6) is faulty.
E012	-3000	-05	Title	Error in Drum Speed Detection PCB (UN18 to 25) of all colors
			Description of detection	This error occurs when the Drum Speed Detection PCB (UN18 to 25) error is detected for all colors simultaneously.
			Measures	1. Check the connection of the Drum ITB Driver PCB. PCB side: J1902, J1904, J1905 2. Check if the Harness of the Drum ITB Driver PCB (UN6) is faulty. 3. Replace the Drum ITB Driver PCB.
E012	-3001	-05	Title	Control error of Drum Motor (Y/M/C/Bk) (M21/23/25/19)
			Description of detection	This error occurs when the Drum Motor (Y/M/C/Bk) (M21/23/25/19) control error is detected for all colors simultaneously.
			Measures	1. Check the Process Unit (to see if the Connector is physically removed). 2. Check the Drum Unit (to see if the Connector is physically removed).
E012	-3002	-05	Title	Rotation error of Drum Motor (Y/M/C/Bk) (M21/23/25/19)
			Description of detection	All of the Drum Motors (Y/M/C/Bk) (M21/23/25/19) are not rotating at the specified speed, or they are stopped.
			Measures	Check the connector of the Drum ITB Driver PCB (UN6). PCB side: J1902 to J1904

E code	Detailed code	Occurance area	Items	Description
E013	-0001	-05	Title	Waste toner feed screw lock detection error
			Description of detection	When the waste toner pipe screw lock SW (SW10) detected the lock status for 500 msec (100 msec x 5 times) consecutively
			Measures	• Pull out the Waste Toner Container. If it is full of toner, go to Step 1, 2, and 5. • If the Waste Toner Container is not full of toner, go to Step 1, 2, and 4. • If the Waste Toner Container is not full and the Waste Toner Pipe is not clogged with toner, go to Step 3 and 4. 1. Remove the toner in the Waste Toner Pipe. 2. Replace the Waste Toner Full Sensor and the Waste Toner Container. 3. Replace the Waste Toner Screw Lock Detection Switch (SW10). 4. Replace the Waste Toner Drive Unit. 5. Reduce the value of timing setting for waste toner full alert display (COPIER> ADJUST> MISC> WT-FL-LM) by 1.
E013	-0003	-05	Title	Waste toner full sensor error
			Description of detection	Output of the waste toner full sensor cannot be detected.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Check the connection between the Waste Toner Full Sensor (TS9) and thePickup feed drive PCB. (Connection of the connector, Breaking (Breaking (shorting)), Wire caught by parts) Sensor side: J8981, PCB side: J898, J1470 2. Check the connection of the 24 V Power Supply connector. 3. Replace the Waste Toner Full Sensor. 4. Replace the 24 V Power Supply.

E code	Detailed code	Occurance area	Items	Description
E014	-0001	-05	Title	Fixing motor error (At start-up)
			Description of detection	Locking was not released within 3 seconds after the fixing motor was turned on.
			Measures	Because the DC Controller turns OFF the 38 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Check the fixing unit drive gear -> replace the gear 2. Replace the fixing motor (M48) 3. Replace the pckup feed drive PCB. 4. Check the connection of the 38 V Power Supply connector. 5. Replace the 38 V Power Supply. 6. Replace the DC controller PCB
E014	-0002	-05	Title	Fixing motor error (At regular rotation)
			Description of detection	Locking was released for 1 second consecutively after the fixing motor (M48) was locked.
			Measures	1. Check the fixing unit drive gear -> replace the gear 2. Replace the fixing motor (M48) 3. Replace the pickup feed drive PCB. 4. Replace the DC controller PCB
E015	-0001	-05	Title	Decurler incoming amount control error 1
			Description of detection	Change of the decurler HP sensor 1 (PS88) cannot be detected even when a specified period of time elapsed after driving of the decurler incoming amount adjustment motor 1 (M50) started.
			Measures	1. Failure of the decurler HP sensor 1 (PS88) 2. Failure of the decurler incoming amount adjustment motor 1 (M50) 3. Failure of the buffer driver PCB (UN150)
E015	-0002	-05	Title	Decurler incoming amount control error 2
			Description of detection	Change of the decurler HP sensor 2 (PS89) cannot be detected even when a specified period of time elapsed after driving of the decurler incoming amount adjustment motor 2 (M53) started.
			Measures	1. Failure of the decurler HP sensor 2 (PS89) 2. Failure of the decurler incoming amount adjustment motor 2 (M53) 3. Failure of the buffer driver PCB (UN150)

T-7-4

■ E020

E code	Detailed code	Occurance area	Items	Description
E020	-0080	-05	Title	ITB base light intensity upper limit error
			Description of detection	When executing ITB base correction, the average value of P wave light intensity detected/calculated is more than 900.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Clean the patch sensor (PS21). 2. Check the connection between the patch sensor and the Drum ITB driver PCB(UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 3. Check open/close operation of the patch shutter. 4. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 5. Replace the patch sensor unit.
E020	-0081	-05	Title	ITB base light intensity lower limit error
			Description of detection	When executing ITB base correction, the average value of P wave light intensity detected/calculated is less than 300.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Clean the patch sensor (PS21). 2. Check the connection between the patch sensor and the Drum ITB driver PCB. (UN6. (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 3. Check open/close operation of the patch shutter. 4. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 5. Replace the patch sensor unit.
E020	-0082	-05	Title	Patch sensor light intensity correction error
			Description of detection	When executing correction of patch sensor light intensity, the P wave output is not more than 500 and less than 900.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Clean the patch sensor (PS21). 2. Check the connection between the patch sensor and the Drum ITB driver PCB. (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 3. Check open/close operation of the patch shutter. 4. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 5. Replace the patch sensor unit.
E020	-0120	-05	Title	Initial installation toner density sensor (Y) output lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-Y), the output level does not reach 128 even when control voltage of the toner density sensor reached 255 or more.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (Breaking (shorting))) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether the toner density sensor is not disconnected or Breaking (Breaking (shorting)) occurs. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0124	-05	Title	Initial installation patch (Y) density lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-Y), the ATR patch detection value (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Breaking (shorting)) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0130	-05	Title	Initial installation toner density sensor (Y) output upper limit error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-Y), the output level does not reach 128 even when control voltage of the toner density sensor became less than 55.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Shorting) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0134	-05	Title	Initial installation patch (Y) density upper limit error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-Y), the ATR patch output (SigD) is more than 970.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0136	-05	Title	Initial installation patch (Y) sampling error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-Y), the variation before average patch P wave light intensity is more than 100.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0190	-05	Title	Patch (Y) density lower limit error
			Description of detection	The ATR patch detection output (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0191	-05	Title	Patch (Y) density upper limit error
			Description of detection	The ATR patch detection output (SigD) is more than 970.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of COPIER> DISPLAY > DENS >P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.
E020	-01A0	-05	Title	Toner density sensor (Y) output lower limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 43.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-01A2	-05	Title	Toner density sensor (Y) output upper limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 247.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.
E020	-01C2	-05	Title	Patch (Y) sampling error
			Description of detection	The variation before average patch P wave light intensity is more than 100.
			Measures	1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Breaking (shorting)) Sensor side: J7412, J8035 PCB side: J1907 4. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 5. Replace the patch sensor unit. 6. Replace the developing assembly. (Check whether there is not uneven coating on the developing sleeve.)

E code	Detailed code	Occurance area	Items	Description
E020	-0220	-05	Title	Initial installation toner density sensor (M) output lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-M), the output level does not reach 128 even when control voltage of the toner density sensor reached 255 or more.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether the toner density sensor is not disconnected or Breaking (Breaking (shorting)) occurs. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0224	-05	Title	Initial installation patch (M) density lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-M), the ATR patch detection value (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Breaking (shorting)) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0230	-05	Title	Initial installation toner density sensor (M) output upper limit error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-M), the output level does not reach 128 even when control voltage of the toner density sensor became less than 55.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Shorting) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0234	-05	Title	Initial installation patch (M) density upper limit error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-M), the ATR patch output (SigD) is more than 970.
			Measures	• When the value of COPIER> DISPLAY> DENS>P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0236	-05	Title	Initial installation patch (M) sampling error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-M), the variation before average patch P wave light intensity is more than 100.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0290	-05	Title	Patch (M) density lower limit error
			Description of detection	The ATR patch detection output (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0291	-05	Title	Patch (M) density upper limit error
			Description of detection	The ATR patch detection output (SigD) is more than 970.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.
E020	-02A0	-05	Title	Toner density sensor (M) output lower limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 43.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-02A2	-05	Title	Toner density sensor (M) output upper limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 247.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.
E020	-02C2	-05	Title	Patch (M) sampling error
			Description of detection	The variation before average patch P wave light intensity is more than 100.
			Measures	1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Breaking (shorting)) Sensor side: J7412, J8035 PCB side: J1907 4. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 5. Replace the patch sensor unit. 6. Replace the developing assembly. (Check whether there is not uneven coating on the developing sleeve.)

E code	Detailed code	Occurance area	Items	Description
E020	-0320	-05	Title	Initial installation toner density sensor (C) output lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-C), the output level does not reach 128 even when control voltage of the toner density sensor reached 255 or more.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (Breaking (shorting))) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether the toner density sensor is not disconnected or Breaking (Breaking (shorting)) occurs. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0324	-05	Title	Initial installation patch (C) density lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-C), the ATR patch detection value (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0330	-05	Title	Initial installation toner density sensor (C) output upper limit error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-C), the output level does not reach 128 even when control voltage of the toner density sensor became less than 55.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Shorting) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0334	-05	Title	Initial installation patch (C) density upper limit error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-C), the ATR patch output (SigD) is more than 970.

			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor.
				• This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred.
				1. Check whether the developing assembly and the drum unit are properly installed.
				2. Clean the patch sensor (PS21).
				3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907
				4. Check open/close operation of the patch shutter.
				5. Clean or replace the ITB.
				  • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN).
				  • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB.
				6. Replace the patch sensor unit.
				7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0336	-05	Title	Initial installation patch (C) sampling error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-C), the variation before average patch P wave light intensity is more than 100.
			Measures	• When the value of COPIER> DISPLAY> DENS>P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Replace the patch sensor unit. 6. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0390	-05	Title	Patch (C) density lower limit error
			Description of detection	The ATR patch detection output (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21) . 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0391	-05	Title	Patch (C) density upper limit error
			Description of detection	The ATR patch detection output (SigD) is more than 970.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21) . 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.
E020	-03A0	-05	Title	Toner density sensor (C) output lower limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 43.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-03A2	-05	Title	Toner density sensor (C) output upper limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 247.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.
E020	-03C2	-05	Title	Patch (C) sampling error
			Description of detection	The variation before average patch P wave light intensity is more than 100.
			Measures	1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Breaking (shorting)) Sensor side: J7412, J8035 PCB side: J1907 4. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 5. Replace the patch sensor unit. 6. Replace the developing assembly. (Check whether there is not uneven coating on the developing sleeve.)

E code	Detailed code	Occurance area	Items	Description
E020	-0420	-05	Title	Initial installation toner density sensor (Bk) output lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-K), the output level does not reach 128 even when control voltage of the toner density sensor reached 255 or more.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (Breaking (shorting))) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or Breaking (Breaking (shorting)) of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0424	-05	Title	Initial installation patch (Bk) density lower limit error
			Description of detection	When executing the developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-K), the ATR patch detection value (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0430	-05	Title	Upper limit error for output of Toner Density Sensor (Bk) at initial installation
			Description of detection	When executing the initial installation mode of the Developing Assembly (COPIER > FUNCTION > INSTALL > INISET-K), output failed to reach 128 although the control voltage value of the Toner Density Sensor reached 55 or smaller.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (Breaking (shorting))) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or Breaking (Breaking (shorting)) of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0434	-05	Title	Initial installation patch (Bk) density upper limit error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-K), the ATR patch output (SigD) is more than 970.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0436	-05	Title	Initial installation patch (K) sampling error
			Description of detection	When executing developing assembly initial installation mode (COPIER> FUNCTION> INSTALL> INISET-K), the variation before average patch P wave light intensity is more than 100.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 6. Replace the patch sensor unit. 7. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0490	-05	Title	Patch (Bk) density lower limit error
			Description of detection	The ATR patch detection output (SigD) is less than 79.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-0491	-05	Title	Patch (Bk) density upper limit error
			Description of detection	The ATR patch detection output (SigD) is more than 970.
			Measures	• When the value of COPIER> DISPLAY> DENS> P-LED-DA is large (153(D) or more) and the value of P-SENS-P is small, there is a high possibility that dirt is applied to the patch sensor. • This occurs only at a regular timing. When the value of COPIER> DISPLAY> DENS> DENS-S-x is small (2 digits), there is a high possibility that breaking occurred. 1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Shorting) Sensor side: J7412, J8035 PCB side: J1907 4. Check open/close operation of the patch shutter. 5. Check whether scratches/dirt are applied to the ITB. If many scratches are found, replace the ITB. If dirt is applied, clean the ITB. In this case, check the ITB cleaning blade at the same time. 6. Replace the patch sensor unit. NOTE: This error also occurs when there is not enough toner in the developing assembly. In this case, check the supply-related parts in the developing assembly.
E020	-04A0	-05	Title	Toner density sensor (Bk) output lower limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 43.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.

E code	Detailed code	Occurance area	Items	Description
E020	-04A2	-05	Title	Toner density sensor (Bk) output upper limit error
			Description of detection	The toner density sensor output (Vsig_ind) is less than 247.
			Measures	1. Check the connection between the toner density sensor and the DC controller PCB. (Connector, Breaking (shorting)) <Y> sensor side: J7133, J8028, J8087 PCB side: J1244, J8085 <M> sensor side: J7134, J8029, J8088 PCB side: J1244, J8085 <C> sensor side: J7135, J8030, J8089 PCB side: J1244, J8086 <Bk> sensor side: J7146, J8015, J8117 PCB side: J1244, J8080 2. Check whether disconnection or shorting of the toner density sensor occurs or not. 3. Replace the developing assembly.
E020	-04C2	-05	Title	Patch (Bk) sampling error
			Description of detection	The variation before average patch P wave light intensity is more than 100.
			Measures	1. Check whether the developing assembly and the drum unit are properly installed. 2. Clean the patch sensor (PS21). 3. Check the connection between the patch sensor and the Drum ITB driver PCB (UN6). (Connector, Breaking (shorting)) Sensor side: J7412, J8035 PCB side: J1907 4. Clean or replace the ITB. • Check whether the ITB belt is dirty or not. If it is dirty, perform cleaning with the service mode (COPIER> FUNCTION> CLEANING> TBLT-CLN). • If it is assumed that this error occurred due to scratches on the ITB, replace the ITB. 5. Replace the patch sensor unit. 6. Replace the developing assembly. (Check whether there is not uneven coating on the developing sleeve.)

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■ E021 to E077

E code	Detailed code	Occurance area	Items	Description
E021	-0101	-05	Title	Developing sleeve drive motor (Y) error
			Description of detection	The lock signal of the developing sleeve drive motor (Y) (M20) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6) • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (Y) (UN20) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7535, J8034 PCB side: J1220 2. Replace the developing assembly (Y). 3. Replace the Drum ITB driver PCB (UN6). 4. Replace the developing sleeve drive motor (Y).
E021	-0102	-05	Title	Developing sleeve drive motor (Y) error
			Description of detection	Lock signal of Developing sleeve drive motor (Y) (M20) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6) • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (Y) (M20) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7535, J8034 PCB side: J1220 2. Replace the developing assembly (Y). 3. Replace the Drum ITB driver PCB (UN6). 4. Replace the developing sleeve drive motor (Y).

E code	Detailed code	Occurance area	Items	Description
E021	-0201	-05	Title	Developing sleeve drive motor (M) error
			Description of detection	The lock signal of the developing sleeve drive motor (M) (M22) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6) • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (M) (M22) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7536, J8034 PCB side: J1220 2. Replace the developing assembly (M). 3. Replace the Drum ITB driver PCB (UN6). 4. Replace the developing sleeve drive motor (M).
E021	-0202	-05	Title	Developing sleeve drive motor (M) error
			Description of detection	Lock signal of Developing sleeve drive motor (M) (M22) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6) • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (M) (M22) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7536, J8034 PCB side: J1220 2. Replace the developing assembly (M). 3. Replace the Drum ITB driver PCB (UN6). 4. Replace the developing sleeve drive motor (M).

E code	Detailed code	Occurance area	Items	Description
E021	-0301	-05	Title	Developing sleeve drive motor (C) error
			Description of detection	The lock signal of the developing sleeve drive motor (C) (M24) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6) • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (C) (M24) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7537, J8034 PCB side: J1906 2. Replace the developing assembly (C). 3. Replace the DC controller interface PCB. 4. Replace the developing sleeve drive motor (C).
E021	-0302	-05	Title	Developing sleeve drive motor (C) error
			Description of detection	Lock signal of Developing sleeve drive motor (C) (M24) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6) • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (C) (M24) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7537, J8034 PCB side: J1906 2. Replace the developing assembly (C). 3. Replace the Drum ITB driver PCB (UN6). 4. Replace the developing sleeve drive motor (C).

E code	Detailed code	Occurance area	Items	Description
E021	-0401	-05	Title	Developing sleeve drive motor (Bk) error
			Description of detection	The lock signal of the developing sleeve drive motor (Bk) (M18) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6) • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (Bk) (M18) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7538, PCB side: J1914 2. Replace the developing assembly (Bk). 3. Replace the Drum ITB driver PCB (UN6). 4. Replace the developing sleeve drive motor (Bk).
E021	-0402	-05	Title	Developing sleeve drive motor (Bk) error
			Description of detection	Lock signal of Developing sleeve drive motor (Bk) (M18) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the Drum ITB driver PCB (UN6). • Failure of the developing sleeve motor
			Measures	1. Check the connection between the developing sleeve drive motor (Bk) (M18) and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7538, PCB side: J1914 2. Replace the developing assembly (Bk). 3. Replace the Drum ITB driver PCB (UN6). 4. Replace the developing sleeve drive motor (Bk).

E code	Detailed code	Occurance area	Items	Description
E022	-0001	-05	Title	Drum cleaning / waste toner feed drive motor error
			Description of detection	The lock signal of the drum cleaning/waste toner feed drive motor (M30) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the drum cleaning unit (Overload) • Failure of the waste toner feed screw (Overload) • Failure of the Drum ITB driver PCB (UN6). • Failure of the drum cleaning/waste toner feed drive motor
			Measures	1. Check the connection between the drum cleaning/ waste toner feed drive motor and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7539, PCB side: J1914 2. Clean the screw in the drum cleaning unit (Bk), or replace the unit. Remove toner clog with the feed screw. 3. Clean the waste toner feed pipe unit, or replace the unit. Remove toner clog with the feed screw. 4. Replace the Drum ITB driver PCB (UN6). 5. Replace the drum cleaning/waste toner feed drive motor.

E code	Detailed code	Occurance area	Items	Description
E022	-0002	-05	Title	Drum cleaning / waste toner feed drive motor error
			Description of detection	Lock signal of Drum cleaning/waste toner feed drive motor (M30) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the drum cleaning unit (Overload) • Failure of the waste toner feed screw (Overload) • Failure of the Drum ITB driver PCB (UN6) • Failure of the drum cleaning/waste toner feed drive motor
			Measures	1. Check the connection between the drum cleaning/ waste toner feed drive motor and the Drum ITB driver PCB (UN6). (Connection of the connector, Breaking (shorting)) Motor side: J7539, PCB side: J1914 2. Clean the screw in the drum cleaning unit (Bk), or replace the unit. Remove toner clog with the feed screw. 3. Clean the waste toner feed pipe unit, or replace the unit. Remove toner clog with the feed screw. 4. Replace the Drum ITB driver PCB (UN6). 5. Replace the drum cleaning/waste toner feed drive motor.
E023	-0101	-05	Title	Developing stirring motor (Y) error
			Description of detection	The lock signal of the developing stirring motor (Y) (M26) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (Y) and the DC controller PCB. (Connection of the connector, Breaking (shorting)) Motor side: J7158, J8031 PCB side: J1243 2. Replace the developing assembly (Y). 3. Replace the DC controller PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (Y).

E code	Detailed code	Occurance area	Items	Description
E023	-0102	-05	Title	Developing stirring motor (Y) error
			Description of detection	Lock signal of Developing stirring motor (Y) (M26)cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (Y) and the DC controller interface PCB (UN2). (Connection of the connector, Breaking (shorting)) Motor side: J7158, J8031 PCB side: J1243 2. Replace the developing assembly (Y). 3. Replace the DC controller PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (Y).
E023	-0201	-05	Title	Developing stirring motor (M) error
			Description of detection	The lock signal of the developing stirring motor (M) (M28) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (M) and the DC controller PCB. (Connection of the connector, Breaking (shorting)) Motor side: J8031 PCB side: J1243 2. Replace the developing assembly (Y). 3. Replace the DC controller PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (M).

E code	Detailed code	Occurance area	Items	Description
E023	-0202	-05	Title	Developing stirring motor (M) error
			Description of detection	Lock signal of Developing stirring motor (M) (M28) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (M) and the DC controller interface PCB (UN2). (Connection of the connector, Breaking (shorting)) Motor side: J7156, J8031 PCB side: J1243 2. Replace the developing assembly (Y). 3. Replace the DC controller PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (M).
E023	-0301	-05	Title	Developing stirring motor (C) error
			Description of detection	The lock signal of the developing stirring motor (C) (M27) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (C) and the DC controller PCB. (Connection of the connector, Breaking (shorting)) Motor side: J7157, J8038 PCB side: J1243 2. Replace the developing assembly (C). 3. Replace the DC controller PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (C).

E code	Detailed code	Occurance area	Items	Description
E023	-0302	-05	Title	Developing stirring motor (C) error
			Description of detection	Lock signal of Developing stirring motor (C) (M27) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (C) and the DC controller PCB. (Connection of the connector, Breaking (shorting)) Motor side: J7157, J8038 PCB side: J1243 2. Replace the developing assembly (C). 3. Replace the DC controller PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (C).
E023	-0401	-05	Title	Developing stirring motor (Bk) error
			Description of detection	The lock signal of the developing stirring motor (Bk) (M29) cannot be detected within a specified period. • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (Bk) and the DC controller PCB. (Connection of the connector, Breaking (shorting)) Motor side: J7152, J8038 PCB side: J1243 2. Replace the developing assembly (Bk). 3. Replace the DC controller PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (Bk).

E code	Detailed code	Occurance area	Items	Description
E023	-0402	-05	Title	Developing stirring motor (Bk) error
			Description of detection	Lock signal of Developing stirring motor (Bk) (M29) cannot be detected for the specified period of time after first detection • Connector disconnected, breaking (shorting) • Failure of the developing assembly (Sleeve overloaded) • Failure of the DC controller PCB • Contact failure of the drawer connector • Failure of the developing stirring motor
			Measures	1. Check the connection between the developing stirring motor (Bk) and the DC controller PCB. (Connection of the connector, Breaking (shorting)) Motor side: J7152, J8038 PCB side: J1243 2. Replace the developing assembly (Bk). 3. Replace the DC controller interface PCB. 4. Check the contact of the drawer connector (J8031). 5. Replace the developing stirring motor (Bk).
E025	-0102	-05	Title	Block supply timeout (Y) error
			Description of detection	The toner supply screw rotation sensor cannot detect rotation of the screw.
			Measures	1. Check the connection between the hopper/stirring supply motor (M9) and the DC controller PCB. Motor side: J7104, J8106 PCB side: J1247 2. Check the connection between the toner feed screw rotation sensor (PS12) and the DC controller PCB. Sensor side: J7418, J8106 PCB side: J1247 3. Replace the hopper/stirring supply motor. 4. Clean and replace the toner feed screw rotation sensor. 5. Replace the toner supply pipe unit. 6. Replace the hopper unit. CAUTION: Remedies 5 and 6 are taken when the motor is overloaded due to toner adhesion in the unit or gear interlocking failure, etc. Since it is difficult to identify the cause, it is recommended to replace the unit.

E code	Detailed code	Occurance area	Items	Description
E025	-0110	-05	Title	Toner container sealing/release holder shift cam HP sensor timeout (Y) error
			Description of detection	HP sensor of release holder shift cam cannot detect within specified period of time.
			Measures	1. Check the connection of the toner container drive motor (M10) harness. (Check whether the wire is not caught by parts.) Check the connection with the DC controller PCB. Motor side: J7100 PCB side: J1247 2. Check the connection between the release holder shift cam HP sensor (PS8) and the DC controller PCB. Sensor side: J7135, J8040 PCB side: J1248 3. Replace the toner container drive motor. 4. Clean and replace the release holder shift cam HP sensor. 5. Replace the hopper unit. CAUTION: As for Remedy 5, since it is difficult to identify the cause, it is recommended to replace the unit. NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR
E025	-0120	-05	Title	Toner container/toner container inserting inlet phase (Y) error
			Description of detection	When the power was turned on, it was detected that the toner container cap was opened (the release holder shift cam phase sensor was protected against light) AND the toner container inserting inlet cover was opened (the toner container inserting inlet cover open/close sensor was transmissive).
			Measures	1. Close the toner container inserting inlet cover and turn OFF/ON the power. 2. Check the connection between the toner container inserting inlet cover open/close sensor (PS10) and the DC controller PCB. (Connection of the connector, Breaking, Wire caught by parts) Sensor side: J7122, PCB side: J2146 3. Check the connection between the release holder shift cam phase sensor (PS81) and the DC controller PCB. (Connection of the connector, Breaking, Wire caught by parts) Sensor side: J7123,J8106, PCB side: J1247 4. Replace the toner container inserting inlet cover open/close sensor.

E code	Detailed code	Occurance area	Items	Description
E025	-01A0	-05	Title	Error in Y Toner Container Reciprocation HP Sensor (PS11)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (ON -> OFF) when opening the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit12) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1. If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2. When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-01B0	-05	Title	Error in Y Toner Container Reciprocation HP Sensor (PS11)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (OFF -> ON) when closing the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit12) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1. If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2. When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-01C0	-05	Title	Error in Y Toner Insertion Inlet Cover Sensor (PS10)
			Description of detection	Unable to detect opening of the Toner Insertion Inlet Cover when removing the Toner Container.
			Measures	Identify the cause of the error whether it is due to link mechanism to open the Toner Insertion Inlet Cover or problem at the Toner Insertion Inlet Cover Sensor side. 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Insertion Inlet Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Insertion Inlet Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DC-CON> P035 bit7) to see that the output value of the Toner Insertion Inlet Cover Sensor is changed normally when opening/closing the Toner Insertion Inlet Cover. If it is normal, the value becomes 0 by driving the Hopper Unit with the Toner Container Removing Tool and opening the Toner Insertion Inlet Cover. When closing the Toner Insertion Inlet Cover by hand, it becomes 1. 3-1. When the Toner Insertion Inlet Cover is not opened although the Hopper Unit is driven, check the drive system from upstream (Hopper Unit -> link mechanism of Hopper Tray -> Toner Insertion Inlet Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps. 3-2. When the output value is not changed normally although the Toner Insertion Inlet Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector). If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps. 4. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 5 and later steps. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-0202	-05	Title	Block supply timeout (M) error
			Description of detection	The toner supply screw rotation sensor cannot detect rotation of the screw.
			Measures	1. Check the connection between the hopper/stirring supply motor (M12) and the DC controller PCB. Motor side: J7105, J8107 PCB side: J1247 2. Check the connection between the toner feed screw rotation sensor (PS15) and the hopper driver PCB. Sensor side: J7419, J8107 PCB side: J1247 3. Replace the hopper/stirring supply motor. 4. Clean and replace the toner feed screw rotation sensor. 5. Replace the toner supply pipe unit. 6. Replace the hopper unit. CAUTION: Remedies 5 and 6 are taken when the motor is overloaded due to toner adhesion in the unit or gear interlocking failure, etc. Since it is difficult to identify the cause, it is recommended to replace the unit.
E025	-0210	-05	Title	Toner container sealing/release holder shift cam HP sensor timeout (M) error
			Description of detection	HP sensor of release holder shift cam cannot detect within specified period of time.
			Measures	1. Check the connection of the toner container drive motor (M13) harness. (Check whether the wire is not caught by parts.) Check the connection with the DC controller PCB. Motor side: J7101,J8107, PCB side: J1247 2. Check the connection between the release holder shift cam HP sensor (PS14) and the DC controller PCB. Sensor side: J7198 PCB side: J1249 3. Replace the toner container drive motor. 4. Clean and replace the release holder shift cam HP sensor. 5. Replace the hopper unit. CAUTION: As for Remedy 5, since it is difficult to identify the cause, it is recommended to replace the unit. NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR

E code	Detailed code	Occurance area	Items	Description
E025	-0220	-05	Title	Toner container/toner container inserting inlet phase (M) error
			Description of detection	When the power was turned on, it was detected that the toner container cap was opened (the release holder shift cam phase sensor was protected against light) AND the toner container inserting inlet cover was opened (the toner container inserting inlet cover open/close sensor was transmissive).
			Measures	1. Close the toner container inserting inlet cover and turn OFF/ON the power. 2. Check the connection between the toner container inserting inlet cover open/close sensor (PS13) and the DC controller PCB. (Connection of the connector, Breaking, Wire caught by parts) Sensor side: J7125 PCB side: J1246 3. Check the connection between the release holder shift cam phase sensor (PS82) and the hopper driver PCB. (Connection of the connector, Breaking, Wire caught by parts) Sensor side: J7126 PCB side: J1247 4. Replace the toner container inserting inlet cover open/close sensor.

E code	Detailed code	Occurance area	Items	Description
E025	-02A0	-05	Title	Error in M Toner Container Reciprocation HP Sensor (PS14)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (ON -> OFF) when opening the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit11) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1.If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2 When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-02B0	-05	Title	Error in M Toner Container Reciprocation HP Sensor (PS14)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (OFF -> ON) when closing the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit11) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1.If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2. When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-02C0	-05	Title	Error in M Toner Insertion Inlet Cover Sensor (PS13)
			Description of detection	Unable to detect opening of the Toner Insertion Inlet Cover when removing the Toner Container.
			Measures	Identify the cause of the error whether it is due to link mechanism to open the Toner Insertion Inlet Cover or problem at the Toner Insertion Inlet Cover Sensor side. 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Insertion Inlet Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Insertion Inlet Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DC-CON> P035 bit6) to see that the output value of the Toner Insertion Inlet Cover Sensor is changed normally when opening/closing the Toner Insertion Inlet Cover. If it is normal, the value becomes 0 by driving the Hopper Unit with the Toner Container Removing Tool and opening the Toner Insertion Inlet Cover. When closing the Toner Insertion Inlet Cover by hand, it becomes 1. 3-1. When the Toner Insertion Inlet Cover is not opened although the Hopper Unit is driven, check the drive system from upstream (Hopper Unit -> link mechanism of Hopper Tray -> Toner Insertion Inlet Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps. 3-2. When the output value is not changed normally although the Toner Insertion Inlet Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector). If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps. 4. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 5 and later steps. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-0302	-05	Title	Block supply timeout (C) error
			Description of detection	The toner supply screw rotation sensor cannot detect rotation of the screw.
			Measures	1. Check the connection between the hopper/stirring supply motor (M15) and the DC controller PCB. Motor side: J7102, J8108 PCB side: J1248 2. Check the connection between the toner feed screw rotation sensor (PS18) and the DC controller PCB. Sensor side: J7420, J8108 PCB side: J1248 3. Replace the hopper/stirring supply motor. 4. Clean and replace the toner feed screw rotation sensor. 5. Replace the toner supply pipe unit. 6. Replace the hopper unit. CAUTION: Remedies 5 and 6 are taken when the motor is overloaded due to toner adhesion in the unit or gear interlocking failure, etc. Since it is difficult to identify the cause, it is recommended to replace the unit.
E025	-0310	-05	Title	Toner container sealing/release holder shift cam HP sensor timeout (C) error
			Description of detection	HP sensor of release holder shift cam cannot detect within specified period of time.
			Measures	1. Check the connection of the toner container drive motor (M16) harness. (Check whether the wire is not caught by parts.) Check the connection with the DC controller PCB. SinceMotor side: J7102,J8108 PCB side: J1248 2. Check the connection between the release holder shift cam HP sensor (PS17) and the DC controller PCB. SinceSensor side: J7197, PCB side: J1249 3. Replace the toner container drive motor. 4. Clean and replace the release holder shift cam HP sensor. 5. Replace the hopper unit. CAUTION: As for Remedy 5, since it is difficult to identify the cause, it is recommended to replace the unit. NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR

E code	Detailed code	Occurance area	Items	Description
E025	-0320	-05	Title	Toner container/toner container inserting inlet phase (C) error
			Description of detection	When the power was turned on, it was detected that the toner container cap was opened (the release holder shift cam phase sensor was protected against light) AND the toner container inserting inlet cover was opened (the toner container inserting inlet cover open/close sensor was transmissive).
			Measures	1. Close the toner container inserting inlet cover and turn OFF/ON the power. 2. Check the connection between the toner container inserting inlet cover open/close sensor (PS16) and the DC controller PCB. (Connection of the connector, Shorting, Wire caught by parts) Sensor side: J7128, PCB side: J1246 3. Check the connection between the release holder shift cam phase sensor (PS82) and the DC controller PCB. (Connection of the connector, Shorting, Wire caught by parts) Sensor side: J7129, PCB side: J1248 4. Replace the toner container inserting inlet cover open/close sensor.

E code	Detailed code	Occurance area	Items	Description
E025	-03A0	-05	Title	Error in C Toner Container Reciprocation HP Sensor (PS17)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (ON -> OFF) when opening the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit10) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1. If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2. When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-03B0	-05	Title	Error in C Toner Container Reciprocation HP Sensor (PS17)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (OFF -> ON) when closing the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit10) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1. If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2. When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-03C0	-05	Title	Error in C Toner Insertion Inlet Cover Sensor (PS16)
			Description of detection	Unable to detect opening of the Toner Insertion Inlet Cover when removing the Toner Container.
			Measures	Identify the cause of the error whether it is due to link mechanism to open the Toner Insertion Inlet Cover or problem at the Toner Insertion Inlet Cover Sensor side. 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Insertion Inlet Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Insertion Inlet Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DC-CON> P034 bit5) to see that the output value of the Toner Insertion Inlet Cover Sensor is changed normally when opening/closing the Toner Insertion Inlet Cover. If it is normal, the value becomes 0 by driving the Hopper Unit with the Toner Container Removing Tool and opening the Toner Insertion Inlet Cover. When closing the Toner Insertion Inlet Cover by hand, it becomes 1. 3-1. When the Toner Insertion Inlet Cover is not opened although the Hopper Unit is driven, check the drive system from upstream (Hopper Unit -> link mechanism of Hopper Tray -> Toner Insertion Inlet Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps. 3-2. When the output value is not changed normally although the Toner Insertion Inlet Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector). If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps. 4. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 5 and later steps. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-0402	-05	Title	Block supply timeout (Bk) error
			Description of detection	The toner supply screw rotation sensor cannot detect rotation of the screw.
			Measures	1. Check the connection between the hopper/stirring supply motor (M6) and the DC controller PCB. Motor side: J7107, J8040 PCB side: J1248 2. Check the connection between the toner feed screw rotation sensor (PS9) and the DC controller PCB. Sensor side: J7417, J8040 PCB side: J1248 3. Replace the hopper/stirring supply motor. 4. Clean and replace the toner feed screw rotation sensor. 5. Replace the toner supply pipe unit. 6. Replace the hopper unit. CAUTION: Remedies 5 and 6 are taken when the motor is overloaded due to toner adhesion in the unit or gear interlocking failure, etc. Since it is difficult to identify the cause, it is recommended to replace the unit.
E025	-0410	-05	Title	Toner container sealing/release holder shift cam HP sensor timeout (Bk) error
			Description of detection	HP sensor of release holder shift cam cannot detect within specified period of time.
			Measures	1. Check the connection of the toner container drive motor (M7) harness. (Check whether the wire is not caught by parts.) Check the connection with the DC controller PCB. Motor side: J7103, J8040 PCB side: J1248 2. Check the connection between the release holder shift cam HP sensor (PS8) and the DC controller PCB. Sensor side: J7135, J8040 PCB side: J1248 3. Clean and replace the toner feed screw rotation sensor. 4. Replace the hopper/stirring supply motor. 5. Replace the hopper unit. CAUTION: As for Remedy 5, since it is difficult to identify the cause, it is recommended to replace the unit. NOTE: After performing the above remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR

E code	Detailed code	Occurance area	Items	Description
E025	-0420	-05	Title	Toner container/toner container inserting inlet phase (Bk) error
			Description of detection	When the power was turned on, it was detected that the toner container cap was opened (the release holder shift cam phase sensor was protected against light) AND the toner container inserting inlet cover was opened (the toner container inserting inlet cover open/close sensor was transmissive).
			Measures	1. Close the toner container inserting inlet cover and turn OFF/ON the power. 2. Check the connection between the toner container inserting inlet cover open/close sensor (PS7) and the DC controller PCB. (Connection of the connector, Shorting, Wire caught by parts) Sensor side: J7138, PCB side: J1246 3. Check the connection between the release holder shift cam phase sensor (PS84) and the DC controller PCB. (Connection of the connector, Shorting, Wire caught by parts) Sensor side: J7139, J8040 PCB side: J1248 4. Replace the toner container inserting inlet cover open/close sensor.

E code	Detailed code	Occurance area	Items	Description
E025	-04A0	-05	Title	Error in Bk Toner Container Reciprocation HP Sensor (PS8)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (ON -> OFF) when opening the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit9) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1. If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2. When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-04B0	-05	Title	Error in Bk Toner Container Reciprocation HP Sensor (PS8)
			Description of detection	Unable to detect the change in the Release Holder Shift Cam HP Sensor status (OFF -> ON) when closing the cap so that open and close status of the cap cannot be judged.
			Measures	Identify the cause of the error whether it is due to mechanical problem to open/close the cap or problem at the Release Holder Shift Cam HP Sensor side. 1. Check if the Release Holder Shift Cam HP Sensor is soiled and the installation of the sensor. 2. Drive the Hopper Unit a little with the Toner Container Removing Tool, and check the service mode (COPIER> I/O> DC-CON> P036 bit9) to see that the output value of the sensor is changed. Since it is difficult to check the screen while driving it, repeat the operation to drive it a little and check the screen until the value is changed. If it is normal, the output value of the sensor is changed when opening/closing the cap. Even if it is normal, be sure to perform step 4 and later steps. 2-1. If there is an error in drive of the Hopper Unit, check the drive system such as gears. If it is damaged, replace the Set-on Drive Unit and then perform step 4 and later steps. 2-2. When the output value of the sensor is not changed although the Hopper Unit is driven, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed). If there is no problem, replace the sensor. After checking the output value in step 2, perform step 4 and later steps. 3. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 4 and later steps. 4. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 5. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E025	-04C0	-05	Title	Error in Bk Toner Insertion Inlet Cover Sensor (PS7)
			Description of detection	Unable to detect opening of the Toner Insertion Inlet Cover when removing the Toner Container.
			Measures	Identify the cause of the error whether it is due to link mechanism to open the Toner Insertion Inlet Cover or problem at the Toner Insertion Inlet Cover Sensor side. 1. Perform the user mode (Adjustment/Maintenance> Replace Specified Toner) to check if the Toner Insertion Inlet Cover opens normally (damage, slide of shaft area, etc.). 2. Check if the Toner Insertion Inlet Cover Sensor is soiled and the installation of the sensor. 3. Check the service mode (COPIER> I/O> DC-CON> P035 bit4) to see that the output value of the Toner Insertion Inlet Cover Sensor is changed normally when opening/closing the Toner Insertion Inlet Cover. If it is normal, the value becomes 0 by driving the Hopper Unit with the Toner Container Removing Tool and opening the Toner Insertion Inlet Cover. When closing the Toner Insertion Inlet Cover by hand, it becomes 1. 3-1. When the Toner Insertion Inlet Cover is not opened although the Hopper Unit is driven, check the drive system from upstream (Hopper Unit -> link mechanism of Hopper Tray -> Toner Insertion Inlet Cover Unit). If it is damaged, replace the damaged part and then perform step 5 and later steps. 3-2. When the output value is not changed normally although the Toner Insertion Inlet Cover can be opened/closed, check the Sensor Harness (to see if the harness is caught, disconnected or physically removed, *including the Relay Connector). If there is no problem, replace the sensor. After checking the output value in step 3, perform step 5 and later steps. 4. If the problem is not solved by replacing the foregoing parts, replace the DC controller PCB and then perform step 5 and later steps. 5. Clear the error in service mode (COPIER> FUNCTION> CLEAR> ERR), and then turn OFF and then ON the main power. 6. Replace the toner (reinstall the removed Toner Container) at least once in user mode (Adjustment/ Maintenance> Replace Specified Toner), and check that toner replacement can be performed normally.

E code	Detailed code	Occurance area	Items	Description
E056	-0001	-05	Title	Reverse Roller disengagement home position error
			Description of detection	At initial operation, the Reverse Roller Disengagement HP Sensor (PS101) failed to detect home position despite an operation of the Reverse Disengagement Motor (M54).
			Remedy	1. Replace the Reverse Disengagement Motor. 2. Check the mechanism to detect home position for disengagement of the Reverse Roller. 3. Replace the Reverse Roller Disengagement HP Sensor.
E056	-0002	-05	Title	Reverse Roller operation error
			Description of detection	During printing, the Reverse Roller Disengagement HP Sensor (PS101) failed to detect change in the detection flag despite an operation of the Reverse Disengagement Motor (M54).
			Remedy	1. Replace the Reverse Disengagement Motor. 2. Check the mechanism to detect home position for disengagement of the Reverse Roller. 3. Replace the Reverse Roller Disengagement HP Sensor.
E060	-0001	-05	Title	Primary Charging Wire Shutter HP open error
			Description of detection	The Primary Charging Wire Shutter HP Sensor (PS92) detected that the shutter was open although it was moved to the close position.
			Remedy	1. Check connection of the Primary Charging Wire Cleaning Motor (M1). 2. Replace the Primary Charging Wire Cleaning Motor (M1). 3. Check connection of the Primary Charging Wire Shutter HP Sensor (PS92). 4. Replace the Primary Charging Wire Shutter HP Sensor (PS92). 5. Check shutter mechanism of the Primary Charging Assembly. 6. Replace the Primary Charging Assembly. 7. Replace the DC Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E060	-0002	-05	Title	Primary Charging Wire Shutter HP close error
			Description of detection	The Primary Charging Wire Shutter HP Sensor (PS92) detected that the shutter was closed although it was moved to the open position.
			Remedy	1. Check connection of the Primary Charging Wire Cleaning Motor (M1). 2. Replace the Primary Charging Wire Cleaning Motor (M1). 3. Check connection of the Primary Charging Wire Shutter HP Sensor (PS92). 4. Replace the Primary Charging Wire Shutter HP Sensor (PS92). 5. Check shutter mechanism of the Primary Charging Assembly. 6. Replace the Primary Charging Assembly. 7. Replace the DC Controller PCB.
E060	-0011	-05	Title	Primary Charging Wire Shutter error 1 when cleaning the Primary Charging Wire
			Description of detection	The Primary Charging Wire Shutter HP Sensor (PS92) failed to be detected although 10 seconds have passed since the Primary Charging Wire Shutter started its operation.
			Remedy	1. Check connection of the Primary Charging Wire Shutter HP Sensor (PS92). 2. Replace the Primary Charging Wire Shutter HP Sensor (PS92). 3. Check shutter mechanism of the Primary Charging Assembly. 4. Replace the Primary Charging Assembly. 5. Replace the DC Controller PCB.
E060	-0012	-05	Title	Primary Charging Wire Shutter error 2 when cleaning the Primary Charging Wire
			Description of detection	The Primary Charging Wire Shutter HP Sensor (PS92) remained to be detected although 10 seconds have passed since the Primary Charging Wire Shutter started its operation.
			Remedy	1. Check connection of the Primary Charging Wire Shutter HP Sensor (PS92). 2. Replace the Primary Charging Wire Shutter HP Sensor (PS92). 3. Check shutter mechanism of the Primary Charging Assembly. 4. Replace the Primary Charging Assembly. 5. Replace the DC Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E060	-0023	-05	Title	Error in the Primary Charging Wire Shutter position during rotation of the Bk Drum
			Description of detection	Faulty position of the Primary Charging Wire Shutter was detected while the Bk Drum was rotating.
			Remedy	1. Check connection of the Primary Charging Wire Cleaning Motor (M1). 2. Replace the Primary Charging Wire Cleaning Motor (M1). 3. Check connection of the Primary Charging Wire Shutter HP Sensor (PS92). 4. Replace the Primary Charging Wire Shutter HP Sensor (PS92). 5. Check shutter mechanism of the Primary Charging Assembly. 6. Replace the Primary Charging Assembly. 7. Replace the DC Controller PCB.
E061	-0001	-05	Title	Primary charging bias (Bk) lower limit error
			Description of detection	At initial rotation, the drum surface potential Vd at potential control is less than 30 V. • Primary charging bias (Bk) is not properly applied. • The drum does not rotate correctly.
			Measures	1. Check whether the primary charging assembly is properly installed or connected. (Connection of the connector, Shorting, Wire caught by parts) 2. Check whether the primary charging high-voltage PCB (Bk) is properly installed or connected. (Connection of the connector, Shorting, Wire caught by parts) 3. Check whether the drum motor (Bk) is properly installed or connected. (Connection of the connector, Shorting, Wire caught by parts) 4. Replace the parts. • Primary charging assembly • Primary charging high-voltage PCB (Bk) • Drum/ITB drive motor • DC controller interface PCB • DC controller PCB
E061	-0002	-05	Title	Potential sensor offset adjustment error
			Description of detection	When the result of potential sensor offset adjustment is more than +/-30 V.
			Measures	1. Check whether the potential sensor offset adjustment tool is properly installed. 2. Replace the potential sensor.

E code	Detailed code	Occurance area	Items	Description
E061	-0003	-05	Title	Potential control Vd failure
			Description of detection	At the time of measurement of Vd at potential control, the value is more than +50 V or less than -200 V against Vgrid. • Drum cleaning pre-exposure is not performed correctly. • Primary charging is not performed correctly. • The drum is reaching the end of life.
			Measures	1. Check the connection of the drum cleaning pre-exposure LED. 2. Check the connection of the primary charging assembly. • Check whether the grid plate is properly installed. • Check whether the shield plate is not soiled by toner. -> Clean the shield plate. • Check whether disconnection of the connector or shorting does not occur or the wire is not caught by parts. 3. Replace the parts. • Drum cleaning pre-exposure LED • Primary charging assembly • Drum (Checking can be performed by COPIER> DISPLAY>DPOT>D-CONT-K. Estimated life is 150,000 or less.)
E061	-0004	-05	Title	Laser power shortage error
			Description of detection	At the time of measurement of 8 bright section potential Vl at potential control, the grid bias Vgrid is more than 100 V at least at one point. • Dirt is applied to the dust prevention glass. • Laser is not applied correctly.
			Measures	1. Clean the dust prevention glass. 2. Check the connection of the laser scanner unit. (Connection of the connector, Shorting, Wire caught by parts) 3. Replace the parts. • Laser scanner unit (Bk) • Laser interface PCB
E064	-1101	-05	Title	Primary charging DC bias (Y) output error
			Description of detection	The primary charging DC bias (Y) output showed an abnormal value.
			Remedy	Replace the Primary Charging High Voltage PCB (Y/M/C).
E064	-1103	-05	Title	Developing DC bias (Y) output error
			Description of detection	The developing DC bias (Y) output showed an abnormal value.
			Remedy	Replace the Developing High Voltage PCB (Y/M/C).

E code	Detailed code	Occurance area	Items	Description
E064	-2201	-05	Title	Primary charging DC bias (M) output error
			Description of detection	The primary charging DC bias (M) output showed an abnormal value.
			Remedy	Replace the Primary Charging High Voltage PCB (Y/M/C).
E064	-2203	-05	Title	Developing DC bias (M) output error
			Description of detection	The developing DC bias (M) output showed an abnormal value.
			Remedy	Replace the Developing High Voltage PCB (Y/M/C).
E064	-3301	-05	Title	Primary charging DC bias (C) output error
			Description of detection	The primary charging DC bias (C) output showed an abnormal value.
			Remedy	Replace the Primary Charging High Voltage PCB (Y/M/C).
E064	-3303	-05	Title	Developing DC bias (C) output error
			Description of detection	The developing DC bias (C) output showed an abnormal value.
			Remedy	Replace the Developing High Voltage PCB (Y/M/C).
E064	-4403	-05	Title	Developing DC bias (Bk) output error
			Description of detection	The developing DC bias (Bk) output showed an abnormal value.
			Remedy	Replace the Developing High Voltage PCB (Bk).
E064	-1000	-05	Title	No output of reference signal for primary charging DC bias (Y/M/C)
			Description of detection	No output of reference signal for primary charging DC bias (Y/M/C).
			Remedy	Replace the Primary Charging High Voltage PCB (Y/M/C).
E064	-1001	-05	Title	No output of reference signal for developing DC bias (Y/M/C/Bk)
			Description of detection	No output of reference signal for developing DC bias (Y/M/C/Bk).
			Remedy	Replace the Developing High Voltage PCB (Y/M/C, Bk).
E066	-0001	-05	Title	Pre-transfer Charging Wire Shutter HP open error
			Description of detection	The Pre-transfer Charging Wire Shutter HP Sensor (PS93) detected that the shutter was open although it was moved to the close position.
			Remedy	1. Check connection of the Pre-transfer Charging Wire Cleaning Motor (M2). 2. Replace the Pre-transfer Charging Wire Cleaning Motor (M2). 3. Check connection of the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 4. Replace the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 5. Check shutter mechanism of the Pre-transfer Charging Assembly. 6. Replace the Pre-transfer Charging Assembly. 7. Replace the DC Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E066	-0002	-05	Title	Pre-transfer Charging Wire Shutter HP close error
			Description of detection	The Pre-transfer Charging Wire Shutter HP Sensor (PS93) detected that the shutter was closed although it was moved to the open position.
			Remedy	1. Check connection of the Pre-transfer Charging Wire Cleaning Motor (M2). 2. Replace the Pre-transfer Charging Wire Cleaning Motor (M2). 3. Check connection of the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 4. Replace the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 5. Check shutter mechanism of the Pre-transfer Charging Assembly. 6. Replace the Pre-transfer Charging Assembly. 7. Replace the DC Controller PCB.
E066	-0011	-05	Title	Primary Charging Wire Shutter error 1 when cleaning the Pre-transfer Charging Wire
			Description of detection	The Pre-transfer Charging Wire Shutter HP Sensor (PS93) failed to be detected although 10 seconds have passed since the Pre-transfer Charging Wire Shutter started its operation.
			Remedy	1. Check connection of the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 2. Replace the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 3. Check shutter mechanism of the Pre-transfer Charging Assembly. 4. Replace the Pre-transfer Charging Assembly. 5. Replace the DC Controller PCB.
E066	-0012	-05	Title	Primary Charging Wire Shutter error 2 when cleaning the Pre-transfer Charging Wire
			Description of detection	The Pre-transfer Charging Wire Shutter HP Sensor (PS93) remained to be detected although 10 seconds have passed since the Pre-transfer Charging Wire Shutter started its operation.
			Remedy	1. Check connection of the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 2. Replace the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 3. Check shutter mechanism of the Pre-transfer Charging Assembly. 4. Replace the Pre-transfer Charging Assembly. 5. Replace the DC Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E066	-0023	-05	Title	Error in the Pre-transfer Charging Wire Shutter position during rotation of the Bk Drum
			Description of detection	Faulty position of the Pre-transfer Charging Wire Shutter was detected while the Bk Drum was rotating.
			Remedy	1. Check connection of the Pre-transfer Charging Wire Cleaning Motor (M2). 2. Replace the Pre-transfer Charging Wire Cleaning Motor (M2). 3. Check connection of the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 4. Replace the Pre-transfer Charging Wire Shutter HP Sensor (PS93). 5. Check shutter mechanism of the Pre-transfer Charging Assembly. 6. Replace the Pre-transfer Charging Assembly. 7. Replace the DC Controller PCB.
E073	-0001	-05	Title	Host machine interlock failure
			Description of detection	Interlock at 24 V cannot be detected in the condition where all of the front cover, left lower cover, and manual feed cover are closed.
			Measures	1. Check whether shorting does not occur to the harness of the interlock group. If it occurs, replace the harness. 2. Replace the relay board. (Blowout at the relay PCB (UN7)) 3. Replace the interlock switch. • Front door open/close switch 1 (SW1) • Front door open/close switch 2 (SW2) • Manual feeding unit open/close switch (SW3) • Paper delivery door open/close switch (SW4)

E code	Detailed code	Occurance area	Items	Description
E074	-0001	-05	Title	Primary transfer roller detachment/attachment error
			Description of detection	The primary transfer roller attachment/detachment HP sensor (PS4) cannot detect the home position within a specified period.
			Measures	1. Check the connection between the primary transfer roller detachment HP sensor (PS4) and the ITB relay PCB (UN28). (Connector, Breaking (shorting)) Sensor side: J7113 PCB side: J2701 2. Check the connection between the ITB relay PCB and the DC controller PCB. (Connector, Breaking (shorting)) ITB relay PCB: J2700, J8050 DC controller PCB: J1241, J8010 3. Replace the primary transfer roller detachment HP sensor. 4. Check the link parts of the primary transfer roller (pressure release lever, link, cam). If foreign matters are found, remove them. If they are soiled with toner, etc., perform cleaning (when the parts do not move smoothly due to dirt). 5. Check whether the gear is not damaged. If it is damaged, replace the attachment/detachment drive unit (FM3-4905).
E075	-0000	-05	Title	Steering HP error
			Description of detection	The home position of the steering roller cannot be detected. It cannot move from the home position.
			Measures	1. Check the connection between the steering drive HP sensor (PS3) and the ITB relay PCB (UN28). (Connector, Breaking (shorting)) Sensor side: J7416, J8045 PCB side: J2701 2. Check the connection between the steering drive motor (M4) and the ITB relay PCB. (Connector, Breaking (shorting)) Sensor side: J7414, J8044 PCB side: J2701 3. Replace the parts. • Steering drive HP sensor • Steering drive motor
E075	-0001	-05	Title	ITB displacement sensor lower limit error
			Description of detection	The output value of the ITB displacement sensor (PS2) continues to be the lower limit value.
			Measures	1. Check the connection between the ITB displacement sensor (PS2) and the ITB relay PCB (UN28). (Connector, Breaking (shorting)) Sensor side: J7415 PCB side: J2702 2. Clean the ITB displacement sensor. 3. Replace the parts.

E code	Detailed code	Occurance area	Items	Description
E075	-0002	-05	Title	ITB displacement sensor upper limit error
			Description of detection	The output value of the ITB displacement sensor (PS2) continues to be the upper limit value.
			Measures	1. Check whether the ITB displacement sensor (PS2) and the ITB displacement sensor flag are installed properly. • Isn't the ITB displacement sensor flag inserted under the ITB? • Is the ITB displacement sensor installed correctly? 2. Replace the parts. • Replace the ITB displacement sensor flag (if the flag is damaged). • Replace the ITB displacement sensor. • Replace the ITB. (Replace the ITB of which edge is damaged.) • Replace the steering control mechanism parts. (Pressure spring removed from the steering arm, etc.)

E code	Detailed code	Occurance area	Items	Description
E077	-0001	-05	Title	Secondary transfer external roller detachment/attachment error
			Description of detection	The secondary transfer roller attachment/detachment HP sensor (PS22) cannot detect the home position within a specified period.
			Measures	1. Check the connection between the secondary transfer roller attachment/detachment HP sensor (PS22) and the fixing feed driver (UN5). (Connector, Breaking (shorting)) Sensor side: J7214, J8102 PCB side: 1509 2. Check the connection between the fixing feed driver and the DC controller PCB. (Connector, Shorting) Fixing feed driver: J1510 DC controller PCB: J1215 3. Check the connection between the secondary transfer roller detachment motor (M31) and the pickup feed driver PCB (UN4). (Connector, Breaking (shorting)) Motor side: J7003 DC controller interface side: 1409 4. Check the connection between the pickup feed driver PCB and the DC controller PCB. (Connector, Breaking (shorting)) Pickup feed driver PCB: J1401 DC controller PCB: J1215 5. Check the installation condition of the detachment mechanism assemblies (cam, arm, secondary transfer external roller holder). Check the condition of the attachment/detachment cam mechanism assembly. 6. Replace the secondary transfer roller attachment/detachment HP sensor. 7. Check the drive gear. -> Replace the gear. 8. Replace the secondary transfer roller detachment motor. 9. Replace the drive unit.

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■ E100 to E197

E code	Detailed code	Occurance area	Items	Description
E100	-0101	-05	Title	Laser scanner motor BD (Y) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal and PLOCK signal during BD rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8070, J5509, Laser Interface PCB: J5101Y 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E100	-0201	-05	Title	Laser scanner motor BD (M) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal and PLOCK signal during BD rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8076, J5510, Laser Interface PCB: J5101M 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E100	-0301	-05	Title	Laser scanner motor BD (C) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal and PLOCK signal during BD rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8064, J5511, Laser Interface PCB: J5101C 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E100	-0401	-05	Title	Laser scanner motor BD (Bk) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal and PLOCK signal during BD rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8066, J5512, Laser Interface PCB: J5101K 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.

E code	Detailed code	Occurance area	Items	Description
E102	-0101	-05	Title	Laser scanner unit (Y) EEPROM error
			Description of detection	Laser scanner unit EEPROM failure / Failure of the data written in the laser scanner unit EEPROM was detected.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8070, J5509, Laser Interface PCB: J5101Y 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E102	-0201	-05	Title	Laser scanner unit (M) EEPROM error
			Description of detection	Laser scanner unit EEPROM failure / Failure of the data written in the laser scanner unit EEPROM was detected.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8076, J5510, Laser Interface PCB: J5101M 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.

E code	Detailed code	Occurance area	Items	Description
E102	-0301	-05	Title	Laser scanner unit (C) EEPROM error
			Description of detection	Laser scanner unit EEPROM failure / Failure of the data written in the laser scanner unit EEPROM was detected.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8064, J5511, Laser Interface PCB: J5101C 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E102	-0401	-05	Title	Laser scanner unit (Bk) EEPROM error
			Description of detection	Laser scanner unit EEPROM failure / Failure of the data written in the laser scanner unit EEPROM was detected.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8066, J5512, Laser Interface PCB: J5101K 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.

E code	Detailed code	Occurance area	Items	Description
E110	-0101	-05	Title	Laser scanner motor (Y) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal during FG rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8070, J5509, Laser Interface PCB: J5101Y 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E110	-0201	-05	Title	Laser scanner motor (M) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal during FG rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8076, J5510, Laser Interface PCB: J5101M 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.

E code	Detailed code	Occurance area	Items	Description
E110	-0301	-05	Title	Laser scanner motor (C) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal during FG rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8064, J5511, Laser Interface PCB: J5101C 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E110	-0401	-05	Title	Laser scanner motor (Bk) error
			Description of detection	The laser scanner motor cannot detect the VLOCK signal during FG rotation.
			Measures	1. Check that the cover is closed. 2. Check connection of the following parts: Relay PCB, DC Controller PCB, Laser Power Supply Relay PCB (UN101), and Laser Interface PCB (UN100) (connector connection, open circuit, the caught cable). Relay PCB: J1817, DC Controller PCB: J1200, J1201, Laser Power Supply Relay PCB: J5600, J5601, Laser Interface PCB: J5500 3. Check connection between the Laser Scanner Unit and Laser Interface PCB (connector connection/open circuit/the caught cable). Laser Scanner Unit: J8066, J5512, Laser Interface PCB: J5101K 4. Replace the Laser Scanner Unit. 5. Replace the Laser Interface PCB. 6. Replace the Laser Power Supply Relay PCB.
E197	-0000	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Fixing Feed Driver PCB.
			Measures	1. Check the connection between the Fixing Feed Driver PCB (J1511) and the DC Controller PCB (J1222). 2. Replace the DC Controller PCB. 3. Replace the Fixing Feed Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E197	-0001	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Fixing Feed Driver PCB.
			Measures	1. Check the connection between the Fixing Feed Driver PCB (J1511) and the DC Controller PCB (J1222). 2. Replace the DC Controller PCB. 3. Replace the Fixing Feed Driver PCB.
E197	-0002	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Pickup Feed Driver PCB.
			Measures	1. Check connection between the Pickup Feed Driver PCB (J1401) and the DC Controller PCB (J1221). 2. Replace the DC Controller PCB. 3. Replace the Pickup Feed Driver PCB.
E197	-0003	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Pickup Feed Driver PCB.
			Measures	1. Check connection between the Pickup Feed Driver PCB (J1401) and the DC Controller PCB (J1221). 2. Replace the DC Controller PCB. 3. Replace the Pickup Feed Driver PCB.
E197	-0004	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the DC Controller PCB.
			Measures	1. Check connection of the DC Controller PCB (J1210). 2. Replace the DC Controller PCB.
E197	-0006	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the DC Controller PCB.
			Measures	1. Check connection of the DC Controller PCB (J1210). 2. Replace the DC Controller PCB.
E197	-0007	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Buffer Path Unit.
			Measures	1. Check the connection between the Buffer Driver PCB and the DC Controller PCB (J1226). 2. Replace the DC Controller PCB. 3. Replace the Buffer Driver PCB.
E197	-0008	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Multi Deck.
			Measures	1. Check the connection between the Buffer Driver PCB and the DC Controller PCB (J1226). 2. Replace the DC Controller PCB. 3. Replace the Buffer Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E197	-0009	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Multi Deck.
			Measures	1. Check the connection between the Buffer Driver PCB and the DC Controller PCB (J1226). 2. Replace the DC Controller PCB. 3. Replace the Buffer Driver PCB.
E197	-000a	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Multi Deck.
			Measures	1. Check the connection between the Buffer Driver PCB and the DC Controller PCB (J1226). 2. Replace the DC Controller PCB. 3. Replace the Buffer Driver PCB.
E197	-0010	-05	Title	Serial communication error
			Description of detection	Communication error between the VIDEO Board and the scanner (Y)
			Measures	1. Check the harness between the scanner and the VIDEO Board. 2. Replace the Scanner Board. 3. Replace the VIDEO Board.
E197	-0011	-05	Title	Serial communication error
			Description of detection	Communication error between the VIDEO Board and the scanner (M)
			Measures	1. Check the harness between the scanner and the VIDEO Board. 2. Replace the Scanner Board. 3. Replace the VIDEO Board.
E197	-0012	-05	Title	Serial communication error
			Description of detection	Communication error between the VIDEO Board and the scanner (C)
			Measures	1. Check the harness between the scanner and the VIDEO Board. 2. Replace the Scanner Board. 3. Replace the VIDEO Board.
E197	-0013	-05	Title	Serial communication error
			Description of detection	Communication error between the VIDEO Board and the scanner (Bk)
			Measures	1. Check the harness between the scanner and the VIDEO Board. 2. Replace the Scanner Board. 3. Replace the VIDEO Board.

E code	Detailed code	Occurance area	Items	Description
E197	-0020	-05	Title	Serial communication error
			Description of detection	HOB serial communication (= register serial communication) error with the DC Controller PCB.
			Measures	1. Check connection of the DC Controller PCB (J1210). 2. Replace the DC Controller PCB.
E197	-0021	-05	Title	Serial communication error
			Description of detection	HOB serial communication error in the Drum ITB Driver PCB.
			Measures	1. Check the connection between the Drum ITB Driver PCB (J1901) and the DC Controller PCB (J1226). 2. Replace the DC Controller PCB. 3. Replace the Drum ITB Driver PCB.
E197	-0022	-05	Title	Serial communication error
			Description of detection	HOB serial communication error with the Laser Interface PCB.
			Measures	1. Check the connection between the Laser Interface PCB (J5501) and the DC Controller PCB (J1220). 2. Replace the DC Controller PCB. 3. Replace the Laser Interface PCB.
E197	-0023	-05	Title	Serial communication error
			Description of detection	HOB serial communication error with the Laser Interface PCB.
			Measures	1. Check the connection between the Laser Interface PCB (J5501) and the DC Controller PCB (J1220). 2. Replace the DC Controller PCB. 3. Replace the Laser Interface PCB.
E197	-0030	-05	Title	Serial communication error
			Description of detection	HOB serial communication (= register serial communication) timeout error with the DC Controller PCB.
			Measures	1. Check connection of the DC Controller PCB (J1210). 2. Replace the DC Controller PCB.
E197	-0031	-05	Title	Serial communication error
			Description of detection	HOB serial communication error in the Drum ITB Driver PCB.
			Measures	1. Check the connection between the Drum ITB Driver PCB (J1901) and the DC Controller PCB (J1226). 2. Replace the DC Controller PCB. 3. Replace the Drum ITB Driver PCB.
E197	-0032	-05	Title	Serial communication error
			Description of detection	HOB serial communication error with the Laser Interface PCB.
			Measures	1. Check the connection between the Laser Interface PCB (J5501) and the DC Controller PCB (J1220). 2. Replace the DC Controller PCB. 3. Replace the Laser Interface PCB.
E197	-0033	-05	Title	Serial communication error
			Description of detection	HOB serial communication error with the Laser Interface PCB.
			Measures	1. Check the connection between the Laser Interface PCB (J5501) and the DC Controller PCB (J1220). 2. Replace the DC Controller PCB. 3. Replace the Laser Interface PCB.
E197	-0040	-05	Title	Serial communication error
			Description of detection	Communication error due to poor contact of Drawer Connector with the Fixing Feed Driver PCB.
			Measures	Replace the PCB and the harness.
E197	-0050	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Fixing Feed Driver PCB.
			Measures	1. Check the connection between the Fixing Feed Driver PCB (J1551) and the DC Controller PCB (J1222). 2. Replace the DC ControllerPCB. 3. Replace the Fixing Feed Driver PCB.
E197	-0051	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Fixing Feed Driver PCB.
			Measures	1. Check the connection between the Fixing Feed Driver PCB (J1551) and the DC Controller PCB (J1222). 2. Replace the DC ControllerPCB. 3. Replace the Fixing Feed Driver PCB.
E197	-0052	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Pickup Feed Driver PCB.
			Measures	1. Check connection between the Pickup Feed Driver PCB (J1401) and the DC Controller PCB (J1221). 2. Replace the DC Controller PCB. 3. Replace the Pickup Feed Driver PCB.
E197	-0053	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Pickup Feed Driver PCB.
			Measures	1. Check connection between the Pickup Feed Driver PCB (J1401) and the DC Controller PCB (J1221). 2. Replace the DC Controller PCB. 3. Replace the Pickup Feed Driver PCB.
E197	-0057	-05	Title	Serial communication error
			Description of detection	Ex serial communication error with the Buffer Path Unit.
			Measures	1. Check the connection between the Buffer Driver PCB (J1401) and the DC Controller PCB (J1226). 2. Replace the DC Controller PCB. 3. Replace the Buffer Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E197	-0100	-05	Title	Serial communication error
			Description of detection	Serial communication error in ASIC
			Measures	Laser Interface PCB
E197	-0101	-05	Title	Serial communication error
			Description of detection	Serial communication error in ASIC
			Measures	Laser Interface PCB
E197	-0102	-05	Title	Serial communication error
			Description of detection	Serial communication error in ASIC
			Measures	Laser Interface PCB
E197	-0103	-05	Title	Serial communication error
			Description of detection	Serial communication error in ASIC
			Measures	Laser Interface PCB
E197	-1000	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the Primary Charging High Voltage PCB (UN37, 38)
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Primary Charging High Voltage PCB (UN37, 38). 2. Replace the Primary Charging High Voltage PCB (UN37, 38). 3. Replace the DC Controller PCB (UN2).
E197	-1001	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the Developing High Voltage PCB
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Developing High Voltage PCB. 2. Replace the Developing High Voltage PCB. 3. Replace the DC Controller PCB (UN2).
E197	-1002	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the High Voltage PCBs
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Primary Charging High Voltage PCB (UN37, 38). 2. Check the connection between the DC Controller PCB (UN2) and the Developing High Voltage PCB. 3. Replace the Primary Charging High Voltage PCB. 4. Replace the Developing High Voltage PCB. 5. Replace the DC Controller PCB (UN2).

E code	Detailed code	Occurance area	Items	Description
E197	-2000	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the Fixing Feed Driver PCB (UN5)
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Fixing Feed Driver PCB (UN5). 2. Replace the Fixing Feed Driver PCB (UN5). 3. Replace the DC Controller PCB (UN2).
E197	-2001	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the Pickup Driver PCB (UN4)
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Pickup Driver PCB (UN4). 2. Replace the Pickup Driver PCB (UN4). 3. Replace the DC Controller PCB (UN2).
E197	-2002	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the Drum Driver PCB (UN6)
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Drum Driver PCB (UN6). 2. Replace the Drum Driver PCB (UN6). 3. Replace the DC Controller PCB (UN2).
E197	-2003	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the Relay PCB (UN7)
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Relay PCB (UN7). 2. Replace the Relay PCB (UN7). 3. Replace the DC Controller PCB (UN2).
E197	-2004	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the Buffer Driver PCB (UN150)
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and the Buffer Driver PCB (UN150). 2. Replace the Buffer Driver PCB (UN150). 3. Replace the DC Controller PCB (UN2).
E197	-2005	-05	Title	Serial communication error
			Detection description	Communication error between the DC Controller PCB (UN2) and the other Driver PCB
			Remedy	1. Check the connection between the DC Controller PCB (UN2) and other Driver PCB. 2. Replace the DC Controller PCB (UN2).

E code	Detailed code	Occurance area	Items	Description
E198	-0001	-05	Title	DC Controller PCB IC error
			Detection description	The fuse of the DC Controller PCB has melted.
			Remedy	[CAUTION] The fuse (FU1) has melted, therefore the whole DC Controller PCB (UN2) needs to be replaced. 1. Check the following harnesses connected with the DC Controller PCB. -> Replace the harness if it is disconnected. - Between J1222 and the Fixing Feed Driver PCB (UN5) J1511 - Between J1223 and the Pickup Feed Driver PCB (UN4) J1400 - Between J1225 and the Drum ITB Driver PCB (UN6) J1901 - Between J1226 and the Buffer Driver PCB (UN150) J2102 2. Replace the DC Controller PCB. (For details, refer to Chapter 6 of the Service Manual.)

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E202 to E280

E code	Detailed code	Occurance area	Items	Description
E202	-0001	-04	Title	Scanner home position error
			Description of detection	Failure of detection of the home position of the optical unit for front side (outward)
			Measures	1. Displacement/disconnection of the connector of the optical home position sensor (SR2) 2. Damage to the optical home position sensor 3. Damage to the optical motor (M1) 4. Damage to the reader controller PCB (PCB1)
E202	-0002	-04	Title	Scanner home position error
			Description of detection	Failure of detection of the home position of the optical unit for front side (homeward)
			Measures	1. Displacement/disconnection of the connector of the optical home position sensor (SR2) 2. Damage to the optical home position sensor 3. Damage to the optical motor (M1) 4. Damage to the reader controller PCB (PCB1)
E202	-0003	-04	Title	Scanner home position error
			Description of detection	Faulty position of the Scanner Unit (Paper Front) at the start of a reading job
			Measures	1. Displacement/disconnection of the connector of the optical home position sensor (SR2) 2. Damage to the optical home position sensor 3. Damage to the optical motor (M1) 4. Damage to the reader controller PCB (PCB1)
E202	-0101	-04	Title	Glass home position error
			Description of detection	Failure of detection of the glass home position (outward)
			Measures	1. Displacement/disconnection of the connector of the glass movement home position sensor (SR11) 2. Damage to the glass movement home position sensor 3. Damage to the glass movement motor (M9) 4. Damage to the DADF driver PCB (PCB1)
E202	-0102	-04	Title	Glass home position error
			Description of detection	Failure of detection of the glass home position (homeward)
			Measures	1. Displacement/disconnection of the connector of the glass movement home position sensor (SR11) 2. Damage to the glass movement home position sensor 3. Damage to the glass movement motor (M9) 4. Damage to the DADF driver PCB (PCB1)
E227	-0001	-04	Title	Power supply (24 V) error
			Description of detection	The 24 V port is turned off at the time of power-on.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24 V port of the Reader Controller PCB and DADF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DADF Driver PCB.
E227	-0002	-04	Title	Power supply (24 V) error
			Description of detection	The 24 V port is turned off at the time of job start.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24 V port of the Reader Controller PCB and DADF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DADF Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E227	-0003	-04	Title	Power supply (24 V) error
			Description of detection	The 24 V port is turned off at the time of job completion.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24 V port of the Reader Controller PCB and DADF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DADF Driver PCB.
E227	-0004	-04	Title	Power supply (24 V) error
			Description of detection	The 24 V port is turned off at the time of load drive.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24 V port of the Reader Controller PCB and DADF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DADF Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E227	-0101	-04	Title	Power supply (24 V) error
			Description of detection	The 24 V port is turned off at the time of power-on at DADF.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24 V port of the Reader Controller PCB and DADF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DADF Driver PCB.
E227	-0102	-04	Title	Power supply (24 V) error
			Description of detection	The 24 V port is turned off at the time of job start at DADF.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24 V port of the Reader Controller PCB and DADF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DADF Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E227	-0103	-04	Title	Power supply (24 V) error
			Description of detection	The 24 V port is turned off at the time of job completion at DADF.
			Measures	Because the DC Controller turns OFF the 24 V Power Supply when an error is detected, it is needed to restart and check the power output before the machine detects the error to determine whether the cause of the error is power supply. If there is no power output, power supply is the cause. If there is power output, factor other than power supply can be the cause of the error. 1. Turn OFF and then ON the power. 2. Check the connection between Reader and Printer, and check that the Cable is not open-circuit. 3. Check the 24 V port of the Reader Controller PCB and DADF Driver PCB. 4. Check the power supply and Relay PCB on the Printer side. 5. Replace the Reader Controller PCB and DADF Driver PCB.
E246	-0001	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E246	-0002	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E246	-0003	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E246	-0005	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E247	-0001	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E247	-0002	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases

E code	Detailed code	Occurance area	Items	Description
E247	-0003	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E247	-0004	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E248	-0001	-04	Title	EEPROM error
			Description of detection	Failure of power-on at EEPROM for the reader controller PCB (PCB1)
			Measures	Replace the reader controller PCB (PCB1)
E248	-0002	-04	Title	EEPROM error
			Description of detection	Failure of writing at EEPROM for the reader controller PCB (PCB1)
			Measures	Replace the reader controller PCB (PCB1)
E248	-0003	-04	Title	EEPROM error
			Description of detection	Failure of reading after writing at EEPROM for the reader controller PCB (PCB1)
			Measures	Replace the reader controller PCB (PCB1)
E260	-0000	-05	Title	Power supply (24VA/24VB) error
			Description of detection	24V power (+24VA, +24VB) was not supplied.
			Remedy	1. Connector disconnection/open circuit of harness with the corresponding PCB. Check connectors and harnesses between the following: AC Driver PCB, Relay PCB, DC Power Supply PCB (24VA), DC Power Supply PCB (24VB). 2. Failure of PCB. Replace the following: AC Driver PCB, Relay PCB, DC Power Supply PCB (24VA), DC Power Supply PCB (24VB).
E260	-0001	-05	Title	Power supply (24VA) error
			Description of detection	24V power (+24VA) was not supplied.
			Remedy	1. Connector disconnection/open circuit of harness with the corresponding PCB. Check connectors and harnesses between the following: AC Driver PCB, Relay PCB, DC Power Supply PCB (24VA). 2. Failure of PCB. Replace the following: AC Driver PCB, Relay PCB, DC Power Supply PCB (24VA).

E code	Detailed code	Occurance area	Items	Description
E260	-0002	-05	Title	Power supply (24VB) error
			Description of detection	24V power (+24VB) was not supplied.
			Remedy	1. Connector disconnection/open circuit of harness with the corresponding PCB. Check connectors and harnesses between the following: AC Driver PCB, Relay PCB, DC Power Supply PCB (24VB). 2. Failure of PCB. Replace the following: AC Driver PCB, Relay PCB, DC Power Supply PCB (24VB).
E260	-0003	-05	Title	DC Controller PCB 5V error
			Description of detection	An error in the 5V output from the DC Controller PCB was detected.
			Measures	Replace the DC Controller PCB.
E270	-0001	-04	Title	Failure of the front side vertical direction synchronization signal
			Description of detection	The vertical direction synchronization signal (VSYNC) was not sent from the CMOS PCB (front side optical unit) correctly, and an image failure occurred or the operation stopped in failure.
			Measures	1. Displacement/disconnection of the connector of the optical unit (reader) 2. Displacement/disconnection of the connector of the reader controller PCB (PCB1) 3. Failure of the optical unit (reader) 4. Failure of the reader controller PCB
E270	-0002	-04	Title	Failure of the horizontal/vertical direction synchronization signal
			Description of detection	The vertical direction synchronization signal (VSYNC) was not sent due to a failure of the horizontal direction synchronization signal (HSYNC), and an image failure occurred or the operation stopped in failure.
			Measures	1. Displacement/disconnection of the connector of the optical unit (reader/DADF) 2. Displacement/disconnection of the connector of the reader controller PCB (PCB1) 3. Failure of the optical unit (reader/DADF) 4. Failure of the reader controller PCB

E code	Detailed code	Occurance area	Items	Description
E270	-0101	-04	Title	Failure of the backside vertical scanning direction synchronization signal
			Description of detection	The vertical direction synchronization signal (VSYNC) was not sent from the CMOS PCB (backside optical unit) correctly, and an image failure occurred or the operation stopped in failure.
			Measures	1. Displacement/disconnection of the connector of the optical unit (DADF) 2. Displacement/disconnection of the connector of the reader controller PCB (PCB1) 3. Failure of the optical unit (DADF) 4. Failure of the reader controller PCB
E280	-0001	-04	Title	Communication error between Reader Controller PCB (PCB1) and Scanner Unit (Paper Front) (Reader)
			Description of detection	Within the specified period of time, communication between the Reader Controller PCB and Scanner Unit (Paper Front) was not started.
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Front) (Reader). → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness. 3. Replace the Scanner Unit (Reader). 4. Replace the Reader Controller PCB.
E280	-0002	-04	Title	Harness disconnection between Reader Controller PCB (PCB1) and Scanner Unit (Paper Front) (Reader)
			Description of detection	Harness disconnection between Reader Controller PCB (PCB1) and Scanner Unit (Paper Front) (Reader).
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Front) (Reader). → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness.

E code	Detailed code	Occurance area	Items	Description
E280	-0101	-04	Title	Communication error between Reader Controller PCB (PCB1) and Scanner Unit (Paper Back) (Reader)
			Description of detection	Within the specified period of time, communication between the Reader Controller PCB and Scanner Unit (Paper Back) was not started.
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Back) (Reader) → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness. 3. Replace the Scanner Unit (Reader). 4. Replace the Reader Controller PCB.
E280	-0102	-04	Title	Harness disconnection between Reader Controller PCB (PCB1) and Scanner Unit (Paper Back) (Reader)
			Description of detection	Harness disconnection between Reader Controller PCB (PCB1) and Scanner Unit (Paper Back) (Reader).
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Back) (Reader) → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness.

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■ E301 to E490

E code	Detailed code	Occurance area	Items	Description
E301	-0001	-04	Title	Front side light intensity failure
			Description of detection	The light intensity amount at front side shading is less than the standard level.
			Measures	Replace the optical unit (reader)
E301	-0101	-04	Title	Backside light intensity failure
			Description of detection	The light intensity amount at backside shading is less than the standard level.
			Measures	Replace the optical unit (DADF)
E302	-0001	-04	Title	Front side white shading failure
			Description of detection	Shading RAM access failure occurred, or the shading value is less than or more than the specified level.
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Front) (Reader). → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness. 3. Replace the Scanner Unit (Paper Front) (Reader). 4. Replace the Reader Controller PCB.
E302	-0002	-04	Title	Error in paper front black shading
			Description of detection	Shading RAM access error, or the shading value was either below or higher than the specified level.
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Front) (Reader). → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness. 3. Replace the Scanner Unit (Paper Front) (Reader). 4. Replace the Reader Controller PCB.
E302	-0101	-04	Title	Backside white shading failure
			Description of detection	Shading RAM access failure occurred, or the shading value is less than or more than the specified level.
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Back) (Reader) → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness. 3. Replace the Scanner Unit (Paper Back) (Reader). 4. Replace the Reader Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E302	-0102	-04	Title	Error in paper back black shading
			Description of detection	Shading RAM access error, or the shading value was either below or higher than the specified level.
			Measures	1. Connector disconnection/open circuit of the Scanner Unit (Paper Back) (Reader) → Connect the connector/ Replace the harness. 2. Connector disconnection/open circuit of the Reader Controller PCB (PCB1). → Connect the connector/ Replace the harness. 3. Replace the Scanner Unit (Paper Back) (Reader). 4. Replace the Reader Controller PCB.
E315	-000e	-00	Title	Error in the soft decode
			Description of detection	JBIG decode error
			Measures	Replace the main controller PCB
E350	-0000	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E350	-0001	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E350	-0002	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E350	-0003	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E350	-3000	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E351	-0000	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E354	-0001	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases

E code	Detailed code	Occurance area	Items	Description
E354	-0002	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E355	-0001	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E355	-0002	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E355	-0003	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E355	-0004	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E400	-0001	-04	Title	Communication error between Reader Controller PCB and DADF
			Description of detection	A check error occurred at the time of communication between the Reader Controller PCB and the DADF.
			Measures	1. Failure of the connection between the DADF driver PCB (PCB1) and the reader controller PCB (PCB1) 2. Failure of the DADF driver PCB 3. Failure of the reader controller PCB
E400	-0002	-04	Title	Failure of communication between the reader controller PCB (PCB1) and the DADF
			Description of detection	A reception error occurred in communication between the reader controller PCB and the DADF.
			Measures	1. Failure of the connection between the DADF driver PCB (PCB1) and the reader controller PCB (PCB1) 2. Failure of the DADF driver PCB 3. Failure of the reader controller PCB
E400	-0003	-04	Title	Harness disconnection between Reader Controller PCB and DADF
			Description of detection	Harness disconnection between Reader Controller PCB and DADF.
			Remedy	1. Check connection between the DADF Driver PCB and the Reader Controller PCB (connector connection/open circuit/the caught cable). 2. Replace the DADF Driver PCB. 3. Replace the Reader Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E401	-0001	-04	Title	Pickup roller unit up/down failure
			Description of detection	Even when the pickup roller unit up/down motor (M10) is driven, the level of the pickup roller unit up/down home position sensor (SR12) does not change within a specified period.
			Measures	1. Displacement/disconnection of the connector of the pickup roller unit up/down home position sensor (SR12) 2. Displacement/disconnection of the connector of the pickup roller unit up/down motor (M10) 3. Failure of the pickup roller unit up/down home position sensor 4. Failure of the pickup roller unit up/down motor
E401	-0002	-04	Title	Pickup roller unit up/down failure
			Description of detection	Even when the pickup roller unit up/down motor (M10) is driven, the level of the pickup roller unit up/down home position sensor (SR12) does not change within a specified period.
			Measures	1. Displacement/disconnection of the connector of the pickup roller unit up/down home position sensor (SR12) 2. Displacement/disconnection of the connector of the pickup roller unit up/down motor (M10) 3. Failure of the pickup roller unit up/down home position sensor 4. Failure of the pickup roller unit up/down motor
E407	-0001	-04	Title	Failure of the tray up/down motor (M8)
			Description of detection	Even when the tray up/down motor (M8) is driven, the tray home position sensor (SR13) is not turned ON or OFF within a specified period.
			Measures	1. Displacement/disconnection of the connector of the tray home position sensor (SR13) 2. Displacement/disconnection of the connector of the tray up/down motor (M8) 3. Failure of the tray home position sensor 4. Failure of the tray up/down motor
E407	-0002	-04	Title	Failure of the tray up/down motor (M8)
			Description of detection	Even when the tray up/down motor (M8) is driven, the paper surface sensor (SR6) is not turned ON within a specified period.
			Measures	1. Displacement/disconnection of the connector of the paper surface sensor (SR6) 2. Displacement/disconnection of the connector of the tray up/down motor (M8) 3. Failure of the paper surface sensor 4. Failure of the tray up/down motor

E code	Detailed code	Occurance area	Items	Description
E412	-0001	-04	Title	Failure in drive of the Scanner Unit Cooling Fan (Reader Assembly)
			Description of detection	The Scanner Unit Cooling Fan was not driven.
			Remedy	1. Disconnect and then connect the connector. 2. Check if there is open circuit. 3. Replace the corresponding fan. 4. Replace the DADF Driver PCB.
E412	-0002	-04	Title	Failure to stop Scanner Unit Cooling Fan (Reader Assembly)
			Description of detection	The Scanner Unit Cooling Fan was not stopped.
			Remedy	1. Disconnect and then connect the connector. 2. Check if there is open circuit. 3. Replace the corresponding fan. 4. Replace the DADF Driver PCB.
E412	-0003	-04	Title	Failure in drive of the DADF Cooling Fan 3
			Description of detection	DADF Cooling Fan 3 was not driven.
			Remedy	1. Disconnect and then connect the connector. 2. Check if there is open circuit. 3. Replace the corresponding fan. 4. Replace the DADF Driver PCB.
E412	-0004	-04	Title	Failure to stop DADF Cooling Fan 3
			Description of detection	DADF Cooling Fan 3 was not stopped.
			Remedy	1. Disconnect and then connect the connector. 2. Check if there is open circuit. 3. Replace the corresponding fan. 4. Replace the DADF Driver PCB.
E412	-0005	-04	Title	Failure in drive of the DADF Cooling Fan 1 or 2
			Description of detection	DADF Cooling Fan 1 or 2 was not driven.
			Remedy	1. Disconnect and then connect the connector. 2. Check if there is open circuit. 3. Replace the corresponding fan. 4. Replace the DADF Driver PCB.
E412	-0006	-04	Title	Failure to stop DADF Cooling Fan 1 or 2
			Description of detection	DADF Cooling Fan 1 or 2 was not stopped.
			Remedy	1. Disconnect and then connect the connector. 2. Check if there is open circuit. 3. Replace the corresponding fan. 4. Replace the DADF Driver PCB.

E code	Detailed code	Occurance area	Items	Description
E413	-0001	-04	Title	Failure of the DADF detachment motor 1 (M6)
			Description of detection	Even when the DADF detachment motor 1 (M6) is driven, the DADF detachment home position sensor 1 (SR15) is not turned ON within a specified period.
			Measures	1. Displacement/disconnection of the connector of the detachment home position sensor 1 (SR15) 2. Displacement/disconnection of the connector of the detachment motor 1 (M6) 3. Failure of the detachment home position sensor 1 4. Failure of the detachment motor 1 5. Failure of the DADF driver PCB (PCB1)
E413	-0002	-04	Title	Failure of the DADF detachment motor 1 (M6)
			Description of detection	Even when the DADF detachment motor 1 (M6) is driven, the DADF detachment home position sensor 1 (SR15) is not turned OFF within a specified period.
			Measures	1. Displacement/disconnection of the connector of the detachment home position sensor 1 (SR15) 2. Displacement/disconnection of the connector of the detachment motor 1 (M6) 3. Failure of the detachment home position sensor 1 4. Failure of the detachment motor 1 5. Failure of the DADF driver PCB (PCB1)
E413	-0011	-04	Title	Failure of the DADF detachment motor 2 (M7)
			Description of detection	Even when the DADF detachment motor 2 (M7) is driven, the DADF detachment home position sensor 2 (SR16) is not turned ON within a specified period.
			Measures	1. Displacement/disconnection of the connector of the detachment home position sensor 2 (SR16) 2. Displacement/disconnection of the connector of the detachment motor 2 (M7) 3. Failure of the detachment home position sensor 2 4. Failure of the detachment motor 2 5. Failure of the DADF driver PCB (PCB1)
E413	-0012	-04	Title	Failure of the DADF detachment motor 2 (M7)
			Description of detection	Even when the DADF detachment motor 2 (M7) is driven, the DADF detachment home position sensor 2 (SR16) is not turned OFF within a specified period.
			Measures	1. Displacement/disconnection of the connector of the detachment home position sensor 2 (SR16) 2. Displacement/disconnection of the connector of the detachment motor 2 (M7) 3. Failure of the detachment home position sensor 2 4. Failure of the detachment motor 2 5. Failure of the DADF driver PCB (PCB1)
E423	-0001	-04	Title	DADF SDRAM error
			Description of detection	SDRAM access error
			Measures	Failure of the SDRAM (video image memory) located on the reader controller PCB (PCB1)
E423	-0002	-04	Title	DADF SDRAM error
			Description of detection	SDRAM Verify error
			Measures	Failure of the SDRAM (video image memory) located on the reader controller PCB (PCB1)
E490	-0001	-04	Title	DADF model mismatch error
			Description of detection	DADF that is not supported is installed.
			Measures	1. DADF of a different model is installed. 2. Failure of the reader controller PCB (PCB1) 3. Failure of the DC controller PCB 4. Failure of the main controller PCB

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■ E500 to E551

E code	Detailed code	Occurance area	Items	Description
E500	-0000	-05	Title	A. Error in IPC communication(Finisher-K1) B. Communication error(Finisher-L1)
			Description of detection	A. Communication failed between the host machine and the finisher B. The communication with the connected device is interrupted.
			Measures	A: A-1. IPC cable is disconnected. A-2. IPC cable is faulty. A-3. The finisher controller PCB is faulty. A-4. The host machine controller PCB is faulty. B: B-1. The finisher controller PCB is faulty. B-2. The connected device DC controller PCB is faulty.
E503	-0001	-05	Title	A. Communication error with insertion unit (Document Insertion Unitr-J1,Paper Folding Unit-G1) B. Error in communication between the finisher - saddle stitcher (Finisher-K1)
			Description of detection	A. Communication failed, or the communication line has been interrupted for a specified period of time. B. Communication failed between the finisher and the saddle stitcher
			Measures	A: A-1. DC controller PCB is faulty A-2. Disconnection of communication cable A-3. Connector on the DC controller PCB is disconnected B: B-1. The connector on the wiring between the finisher controller PCB and the saddle stitcher controller PCB is disconnected. B-2. The wiring between the finisher controller PCB and the saddle stitcher controller PCB is faulty. B-3. The finisher controller PCB is faulty. B-4. The saddle stitcher controller PCB is faulty.
E503	-0002	-05	Title	A. Error in communication between the finisher - saddle stitcher (Finisher-K1) B. Error in communication between the finisher - saddle stitcher (Finisher-L1)
			Description of detection	A. Communication failed between the finisher and the saddle stitcher B. The communication with the saddle stitcher is interrupted.
			Measures	A: A-1. The connector on the wiring between the finisher controller PCB and the saddle stitcher controller PCB is disconnected. A-2. The wiring between the finisher controller PCB and the saddle stitcher controller PCB is faulty. A-3. The finisher controller PCB is faulty. A-4. The saddle stitcher controller PCB is faulty. B: B-1. The wiring between the finisher controller PCB and saddle controller PCB is faulty. B-2. The finisher controller PCB is faulty. B-3. The saddle stitcher controller PCB is faulty.
E503	-0003	-05	Title	A. Communication error between the integration unit - professional puncher B. Communication error (Finisher-L1)
			Description of detection	A. Communication failed between the integration unit - professional puncher B. The communication with the puncher unit is interrupted.
			Measures	A: A-1. Connector on the integration unit controller PCB is disconnected. A-2. Connector on the professional puncher controller PCB is disconnected. A-3. The integration unit controller PCB is faulty. A-4. The professional puncher controller PCB is faulty. B: B-1. The wiring between the finisher controller PCB and host machine DC controller PCB is faulty. B-2. The punch controller PCB is faulty. B-3. The finisher controller PCB is faulty. B-4. The connected device DC controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E503	-0004	-05	Title	A. Inserter communication error (Finisher-L1) B. Paper Folding Inserter Unit / Inserter Unit Communication error (Finisher-L1)
			Description of detection	A. The communication with the inserter or the folder is interrupted. B. Communication failed for 3 consecutive times, or the communication line has been interrupted for a specified period of time.
			Measures	A: A-1. The wiring between the finisher controller PCB and the connected device controller PCB is faulty. A-2. The finisher controller PCB is faulty. A-3. The connected device controller PCB is faulty. B: B-1. Controller PCB is faulty. B-2. Disconnection of communication cable B-3. DC controller PCB is faulty.
E503	-0021	-05	Title	Error in communication between the finisher - inserter (Finisher-K1)
			Description of detection	Communication failed between finisher - insertion unit
			Measures	1. The connector on the cable between the finisher and the insertion unit is disconnected. 2. The cable between the finisher and the insertion unit is faulty. 3. The finisher controller PCB is faulty. 4. The insertion unit controller PCB is faulty.
E503	-0022	-05	Title	Error in communication between the finisher - inserter (Finisher-K1)
			Description of detection	Communication failed between finisher - insertion unit
			Measures	1. The connector on the cable between the finisher and the insertion unit is disconnected. 2. The cable between the finisher and the insertion unit is faulty. 3. The finisher controller PCB is faulty. 4. The insertion unit controller PCB is faulty.
E503	-0061	-05	Title	Error in communication between the finisher - paper folding unit (Finisher-K1)
			Description of detection	Communication failed between the finisher - paper folding unit
			Measures	1. The connector on the cable between the finisher and the paper folding unit is disconnected. 2. The cable between the finisher and the paper folding unit is faulty. 3. The finisher controller PCB is faulty. 4. The paper folding unit controller PCB is faulty.
E503	-0062	-05	Title	Error in communication between the finisher - paper folding unit (Finisher-K1)
			Description of detection	Communication failed between the finisher - paper folding unit
			Measures	1. The connector on the cable between the finisher and the paper folding unit is disconnected. 2. The cable between the finisher and the paper folding unit is faulty. 3. The finisher controller PCB is faulty. 4. The paper folding unit controller PCB is faulty.
E503	-0081	-05	Title	Error in communication between the saddle stitcher - trimmer (Finisher-K1)
			Description of detection	Communication failed between the saddle stitcher - trimmer
			Measures	1. The connector on the wiring between the saddle stitcher and the trimmer is disconnected. 2. The wiring between the saddle stitcher and the trimmer is faulty. 3. The trimmer controller PCB is faulty. 4. The saddle stitcher controller PCB is faulty. 5. The finisher controller PCB is faulty.
E503	-0082	-05	Title	Error in communication between the saddle stitcher - trimmer (Finisher-K1)
			Description of detection	Communication failed between the saddle stitcher - trimmer
			Measures	1. The connector on the wiring between the saddle stitcher and the trimmer is disconnected. 2. The wiring between the saddle stitcher and the trimmer is faulty. 3. The trimmer controller PCB is faulty. 4. The saddle stitcher controller PCB is faulty. 5. The finisher controller PCB is faulty.
E505	-0001	-05	Title	A. Backup data error (failed data reading) (Document Insertion Unit-J1/Paper Folding Unit-G1) B. EEPRAM error (Finisher-K1/L1)
			Description of detection	A. Data failed to be read properly B. Reading/writing error of EEPROM on the finisher controller PCB (The checksum for the EEPROM data has an error.)
			Measures	A. DC controller PCB is faulty. B. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E505	-0002	-05	Title	A. Backup data error (failed data writing) (Document Insertion Unit-J1/Paper Folding Unit-G1) B. EEPROM error (External 2 Hole Puncher-A1)
			Description of detection	A. Data failed to be written properly B. The checksum for the EEPROM data has an error.
			Measures	A. DC controller PCB is faulty B. Punch controller PCB is faulty
E505	-0003	-05	Title	A. Insertion unit back-up RAM error (Finisher-K1) B. Reading/writing error of EEPROM (Document Folding Insertion Unit / Insertion Unit -H1)
			Description of detection	A. Reading/writing error of EEPROM on the insertion unit controller PCB. B. Reading/writing error of EEPROM
			Measures	A. The insertion unit controller PCB is faulty. B. DC controller PCB is faulty
E505	-0005	-05	Title	Paper folding unit backup RAM error
			Description of detection	Reading/writing error of EEPROM on the paper folding unit controller PCB
			Measures	The paper folding unit controller PCB is faulty.
E509	-0001	-05	Title	Mismatched connection code between the host machine and Finisher (Finisher-K1/L1)
			Description of detection	A wrong host machine has been connected.
			Remedy	1. Connection with a wrong host machine. 2. Failure of Finisher Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E514	-8001	-05	Title	A. Error in the gripper base motor (Finisher-K1) B. Rear end assist home position error (Finisher-L1)
			Description of detection	A. The gripper does not come off the gripper base rear sensor when the gripper base motor has been driven for 3 seconds. B. The stapler does not leave the rear end assist home position when the rear end assist motor has been driven for 3 seconds.
			Measures	A: A-1. The connector of the gripper base rear sensor (S117) or the gripper base motor (M116) are disconnected. A-2. The wiring of the gripper base rear sensor or the gripper base motor are faulty. A-3. The gripper base rear sensor is faulty. A-4. The gripper base motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The rear end assist home position sensor (PI109) is faulty. B-2. The wiring between the finisher controller PCB and rear end assist motor is faulty. B-3. The end assist mechanism is faulty. B-4. The rear end assist motor (M109) is faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E514	-8002	-05	Title	A. Error in the gripper base motor (Finisher-K1) B. Rear end assist home position error (Finisher-L1)
			Description of detection	A. The gripper base rear sensor dose not detect the gripper when the gripper base motor has been driven for 3 seconds. B. The stapler does not return to the rear end assist home position when the rear end assist motor has been driven for 3 seconds.
			Measures	A: A-1. The connector of the gripper base rear sensor (S117) or the gripper base motor (M116) are disconnected. A-2. The wiring of the gripper base rear sensor or the gripper base motor are faulty. A-3. The gripper base rear sensor is faulty. A-4. The gripper base motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The rear end assist home position sensor (PI109) is faulty. B-2. The wiring between the finisher controller PCB and rear end assist motor is faulty. B-3. The end assist mechanism is faulty. B-4. The rear end assist motor (M109) is faulty. B-5. The finisher controller PCB is faulty.
E514	-8003	-05	Title	Error in the gripper motor (Finisher-A1)
			Description of detection	The gripper does not come off the gripper HP sensor when the gripper motor has been driven for 3 seconds.
			Measures	1. The connector of the gripper HP sensor (S140) or the gripper motor (M117) are disconnected. 2. The wiring of the gripper HP sensor) or the gripper motor are faulty. 3. The gripper HP sensor is faulty. 4. The gripper motor is faulty. 5. The finisher controller PCB is faulty.
E514	-8004	-05	Title	Error in the gripper motor (Finisher-K1)
			Description of detection	The gripper HP sensor does not detect the gripper when the gripper motor has been driven for 3 seconds.
			Measures	1. The connector of the gripper HP sensor (S140) or the gripper motor (M117) are disconnected. 2. The wiring of the gripper HP sensor or the gripper motor are faulty. 3. The gripper HP sensor is faulty. 4. The gripper motor is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E514	-8005	-05	Title	Error in the gripper motor (Finisher-K1)
			Description of detection	The gripper does not come off the position sensor when the gripper motor has been driven for 3 seconds.
			Measures	1. The connector of the gripper position sensor (S115) or the gripper motor (M117) are disconnected. 2. The wiring of the gripper position sensor or the gripper motor are faulty. 3. The gripper position sensor is faulty. 4. The gripper motor is faulty. 5. The finisher controller PCB is faulty.
E514	-8006	-05	Title	Error in the gripper motor (Finisher-K1)
			Description of detection	The gripper position sensor does not detect the gripper when the gripper motor has been driven for 3 seconds.
			Measures	1. The connector of the gripper position sensor (S115) or the gripper motor (M117) are disconnected. 2. The wiring of the gripper position sensor or the gripper motor are faulty. 3. The gripper position sensor is faulty. 4. The gripper motor is faulty. 5. The finisher controller PCB is faulty.
E518	-8001	-05	Title	Error in folding feed motor lock (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The fold transport motor (M5/M11) lock signal has been detected for more than the specified period of time.
			Measures	1. Connector of Folding feed motor (M5/M11) is disconnected. 2. Folding feed motor is faulty.
E519	-0002	-05	Title	Gear change home position error (Finisher-L1)
			Description of detection	The gear change home position sensor does not turn ON when the gear change motor has been driven for 387 pulses.
			Measures	1. The gear change home position sensor (PI117) is faulty. 2. The wiring between the finisher controller PCB and gear change motor is faulty. 3. The gear change mechanism is faulty. 4. The gear change motor (M110) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E519	-8001	-05	Title	Gear change home position error (Finisher-L1)
			Description of detection	The gear change home position sensor does not turn OFF when the gear change motor has been driven for 387 pulses.
			Measures	1. The gear change home position sensor (PI117) is faulty. 2. The wiring between the finisher controller PCB and gear change motor is faulty. 3. The gear change mechanism is faulty. 4. The gear change motor (M110) is faulty. 5. The finisher controller PCB is faulty.
E530	-8000	-05	Title	Error in the front or rear alignment motor
			Description of detection	The front or rear alignment motor operate abnormally during initialization.
			Measures	1. The connector of the front/rear alignment HP sensor (S108/S109) or the front/rear alignment motor (M108/M109) are disconnected. 2. The wiring of the front/rear alignment HP sensor or the front/rear alignment motor are faulty. 3. The front/rear alignment HP sensor is faulty. 4. The front/rear alignment motor is faulty. 5. The finisher controller PCB is faulty.
E530	-8001	-05	Title	A. Error in the front alignment motor (Finisher-K1) B. Front aligning plate home position error (Finisher-L1)
			Description of detection	A. The front alignment plate does not come off the front alignment HP sensor when the front alignment motor has been driven for 4 seconds. B. The aligning plate does not leave the aligning plate front home position sensor when the alignment plate front motor has been driven for 4 seconds.
			Measures	A: A-1. The connector of the front alignment HP sensor (S108) or the front alignment motor (M108) are disconnected. A-2. The wiring of the front alignment HP sensor or the front alignment motor are faulty. A-3. The front alignment HP sensor is faulty. A-4. The front alignment motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The front aligning plate home position sensor (PI106) is faulty. B-2. The wiring between the finisher controller PCB and front aligning plate motor is faulty. B-3. The front aligning plate is faulty. B-4. The front aligning plate motor (M103) is faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E530	-8002	-05	Title	A. Error in the front alignment motor (Finisher-K1) B. Front aligning plate home position error (Finisher-L1)
			Description of detection	A. The front alignment HP sensor does not detect the front alignment plate when the front alignment motor has been driven for 4 seconds. B. The aligning plate does not return to aligning plate front home position sensor when the alignment plate front motor has been driven for 4 seconds.
			Measures	A: A-1. The connector of the front alignment HP sensor (S108) or the front alignment motor (M108) are disconnected. A-2. The wiring of the front alignment HP sensor or the front alignment motor are faulty. A-3. The front alignment HP sensor is faulty. A-4. The front alignment motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The front aligning plate home position sensor (PI106) is faulty. B-2. The wiring between the finisher controller PCB and front aligning plate motor is faulty. B-3. The front aligning plate is faulty. B-4. The front aligning plate motor (M103) is faulty. B-5. The finisher controller PCB is faulty.
E531	-8001	-05	Title	A. Error in the staple motor (Finisher-K1) B. Staple home position error (Finisher-L1)
			Description of detection	A. The staple unit does not come off the staple HP sensor when the staple motor has been driven for 0.4 second. B. The stapler does not leave the staple home position when the staple motor has been driven for 0.4 second.
			Measures	A: A-1. The connector of the staple unit is disconnected. A-2. The wiring of the staple unit is faulty. A-3. The staple unit is faulty. A-4. The finisher controller PCB is faulty. B: B-1. The wiring between the finisher controller PCB and stapler is faulty. B-2. The stapler is faulty. B-3. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E531	-8002	-05	Title	A. Error in the staple motor (Finisher-K1) B. Staple home position error (Finisher-L1)
			Description of detection	A. The staple HP sensor does nor detect the staple unit when the staple motor has been driven for 0.4 second. B. The stapler does not return to the staple home position when the staple motor has been driven for 0.4 second.
			Measures	A: A-1. The connector of the staple unit is disconnected. A-2. The wiring of the staple unit is faulty. A-3. The staple unit is faulty. A-4. The finisher controller PCB is faulty. B: B-1. The wiring between the finisher controller PCB and stapler is faulty. B-2. The stapler is faulty. B-3. The finisher controller PCB is faulty.
E532	-8000	-05	Title	Error in the staple shift motor
			Description of detection	The staple shift motor operate abnormally during initialization.
			Measures	1. The connector of the stapler shift HP sensor (S107) or the staple shift motor (M107) are disconnected. 2. The wiring of the stapler shift HP sensor or the staple shift motor are faulty. 3. The stapler shift HP sensor is faulty. 4. The staple shift motor is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E532	-8001	-05	Title	A. Error in the staple motor (Finisher-K1) B. Stapler shift home position error (Finisher-L1)
			Description of detection	A. The staple unit does not come off the stapler shift HP sensor when the staple shift motor has been driven for 5 seconds. B. The stapler does not leave the stapler shift home position when the stapler shift motor has been driven for 5 seconds.
			Measures	A: A-1. The connector of the stapler shift HP sensor (S107) or the staple shift motor (M107) are disconnected. A-2. The wiring of the stapler shift HP sensor or the staple shift motor are faulty. A-3. The stapler shift HP sensor is faulty. A-4. The staple shift motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The stapler drive home position sensor (PI110) is faulty. B-2. The wiring between the finisher controller PCB and stapler shift motor is faulty. B-3. The stapler shift base is faulty. B-4. The stapler shift motor (M105) is faulty. B-5. The finisher controller

E code	Detailed code	Occurance area	Items	Description
E532	-8002	-05	Title	A. Error in the stapler shift motor (Finisher-K1) B. Stapler shift home position error (Finisher-L1)
			Description of detection	A. The stapler shift HP sensor does not detect the staple unit when the staple shift motor has been driven for 5 seconds. B. The stapler does not leave the stapler shift home position when the stapler shift motor has been driven for 5 seconds.
			Measures	A: A-1. The connector of the stapler shift HP sensor (S107) or the staple shift motor (M107) are disconnected. A-2. The wiring of the stapler shift HP sensor or the staple shift motor are faulty. A-3. The stapler shift HP sensor is faulty. A-4. The staple shift motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The stapler drive home position sensor (PI110) is faulty. B-2. The wiring between the finisher controller PCB and stapler shift motor is faulty. B-3. The stapler shift base is faulty. B-4. The stapler shift motor (M105) is faulty. B-5. The finisher controller
E535	-0001	-05	Title	Error in the swing guide motor (Finisher-K1)
			Description of detection	The swing guide does not come off the swing guide HP sensor when the swing guide motor has been driven for 3 seconds.
			Measures	1. The connector of the swing guide HP sensor (S110) or the swing guide motor (M110) are disconnected. 2. The wiring of the swing guide HP sensor or the swing guide motor are faulty. 3. The swing guide HP sensor is faulty. 4. The swing guide motor is faulty. 5. The finisher controller PCB is faulty.
E535	-0002	-05	Title	Error in the swing guide motor (Finisher-K1)
			Description of detection	The swing guide HP sensor does not detect the swing guide when the swing guide motor has been driven for 3 seconds.
			Measures	1. The connector of the swing guide HP sensor (S110) or the swing guide motor (M110) are disconnected. 2. The wiring of the swing guide HP sensor or the swing guide motor are faulty. 3. The swing guide HP sensor is faulty. 4. The swing guide motor is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E535	-0003	-05	Title	Error in the swing guide motor (Finisher-K1)
			Description of detection	The swing guide height detection sensor failed to be ON even though specified period of time has passed when lowering the swing guide.
			Measures	1. The connector of the swing guide height detection sensor (S118) or the swing guide motor (M110) are disconnected. 2. The wiring of the swing guide height detection sensor or the swing guide motor are faulty. 3. The swing guide height detection sensor is faulty. 4. The swing guide motor is faulty. 5. The finisher controller PCB is faulty.
E535	-0004	-05	Title	Error in the swing guide motor (Finisher-K1)
			Description of detection	The swing guide height detection sensor failed to be OFF even though specified period of time has passed when raising the swing unit.
			Measures	1. The connector of the swing guide height detection sensor (S118) or the swing guide motor (M110) are disconnected. 2. The wiring of the swing guide height detection sensor or the swing guide motor are faulty. 3. The swing guide height detection sensor is faulty. 4. The swing guide motor is faulty. 5. The finisher controller PCB is faulty.
E535	-8001	-05	Title	Swing home position error (Finisher-L1)
			Description of detection	The stapler does not leave the swing home position when the swing motor has been driven for 3 seconds.
			Measures	1. The swing home position sensor (PI105) is faulty. 2. The wiring between the finisher controller PCB and swing motor is faulty. 3. The swing mechanism is faulty. 4. The swing motor (M106) is faulty. 5. The finisher controller PCB is faulty.
E535	-8002	-05	Title	Swing home position error (Finisher-L1)
			Description of detection	The stapler does not return to the swing home position when the swing motor has bee driven for 3 seconds.
			Measures	1. The swing home position sensor (PI105) is faulty. 2. The wiring between the finisher controller PCB and swing motor is faulty. 3. The swing mechanism is faulty. 4. The swing motor (M106) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E537	-8001	-05	Title	A. Error in the rear alignment motor (Finisher-K1) B. Rear aligning plate home position error (Finisher-L1)
			Description of detection	A. The rear alignment plate does not come off the rear alignment HP sensor when the rear alignment motor has been driven for 4 seconds. B. The aligning plate does not leave the aligning plate rear home position sensor when the alignment plate rear motor has been driven for 4 seconds.
			Measures	A: A-1. The connector of the rear alignment HP sensor (S109) or the rear alignment motor (M109) are disconnected. A-2. The wiring of the rear alignment HP sensor or the rear alignment motor are faulty. A-3. The rear alignment HP sensor is faulty. A-4. The rear alignment motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The aligning plate rear home position sensor (PI107) is faulty. B-2. The wiring between the finisher controller PCB and aligning plate rear motor is faulty. B-3. The rear aligning plate is faulty. B-4. The rear aligning plate motor (M104) is faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E537	-8002	-05	Title	A. Error in the rear alignment motor (Finisher-K1) B. Rear aligning plate home position error (Finisher-L1)
			Description of detection	A. The rear alignment HP sensor does not detect the rear alignment plate when the rear alignment motor has been driven for 4 seconds. B. The aligning plate does not leave the aligning plate rear home position sensor when the alignment plate rear motor has been driven for 4 seconds.
			Measures	A: A-1. The connector of the rear alignment HP sensor (S109) or the rear alignment motor (M109) are disconnected. A-2. The wiring of the rear alignment HP sensor or the rear alignment motor are faulty. A-3. The rear alignment HP sensor is faulty. A-4. The rear alignment motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The aligning plate rear home position sensor (PI107) is faulty. B-2. The wiring between the finisher controller PCB and aligning plate rear motor is faulty. B-3. The rear aligning plate is faulty. B-4. The rear aligning plate motor (M104) is faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E540	-8001	-05	Title	A. Tray 1 time-out error (Finisher-A1) B. Upper tray time-out error (Finisher-B1)
			Description of detection	A. The tray 1 does not return to home position when the tray 1 shift motor has been driven for 20 seconds. The tray 1 does not come off the tray 1 area sensor at the same area when the tray 1 shift motor has been driven for 4 seconds. B. If the tray does not return to home position when the tray 1 shift motor is driven for the specified period of time. If the tray does not move to other area when tray 1 shift motor is driven for the specified period of time.
			Measures	A: A-1. The connectors of the tray 1 area sensors (S122/S123/S124) or the tray 1 shift motor (M105) are disconnected. A-2. The wiring of the tray 1 area sensors or the tray 1 shift motor are faulty. A-3. The tray 1 area sensors is faulty. A-4. The tray 1 shift motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The tray 1 shift area sensor PCB is faulty. B-2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. B-3. The tray up/down mechanism is faulty. B-4. The tray 1 shift motor (M107) is faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E540	-8002	-05	Title	A. Tray 1 area error (Finisher-K1) B. Upper tray time out error (Finisher-L1)
			Description of detection	A. The tray 1 detects the discontinuous area with the tray 1 area sensors. B. The dangerous area is reached before the tray 1 paper surface sensor detects paper surface during the paper surface detection operation. A discontinuous area is detected during tray operation.
			Measures	A: A-1. The connectors of the tray 1 area sensors (S122/S123/S124) or the tray 1 shift motor (M105) are disconnected. A-2. The wiring of the tray 1 area sensors or the tray 1 shift motor are faulty. A-3. The tray 1 area sensors is faulty. A-4. The tray 1 shift motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The tray 1 shift area sensor PCB is faulty. B-2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. B-3. The tray up/down mechanism is faulty. B-4. The tray 1 shift motor (M107) is faulty. B-5. The finisher controller PCB is faulty.
E540	-8003	-05	Title	A. Error in the tray 1 lower safety switch (Finisher-K1) B. Swing guide switch/Staple safety switch error (Finisher-L1)
			Description of detection	A. The tray 1 lower safety switch is turned ON while the tray 1 operates. B. The swing guide switch or staple safety switch is activated while the tray is operating.
			Measures	A: A-1. The connector of the tray 1 lower safety switch (SW110) or the tray 1 shift motor (M105) are disconnected. A-2. The wiring of the tray 1 lower safety switch or the tray 1 shift motor are faulty. A-3. The tray 1 lower safety switch is faulty. A-4. The tray 1 shift motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The tray 1 shift area sensor PCB is faulty. B-2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. B-3. The tray up/down mechanism is faulty. B-4. The tray 1 shift motor (M107) is faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E540	-8004	-05	Title	The tray 1 closing detect switch error (Finisher-L1)
			Description of detection	The FIG input cannot be detected when the tray 1 shift motor has been driven for 0.2 second.
			Measures	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	-8005	-05	Title	The tray 1 shift motor speed error (Finisher-L1)
			Description of detection	The lock detection signal turns OFF for 200 mseconds after the lock detection signal turned ON 150 mseconds.
			Measures	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	-8006	-05	Title	The tray 1 shift motor acceleration error (Finisher-L1)
			Description of detection	The lock detection signal does not turn ON when the tray 1 shift motor has been driven for 1 second.
			Measures	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.
E540	-8007	-05	Title	The tray 1 shift motor error (Finisher-L1)
			Description of detection	The lock detection signal does not turn OFF when the tray 1 shift motor is at a stop.
			Measures	1. The tray 1 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 1 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 1 shift motor (M107) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E540	-8013	-05	Title	Error in the swing guide safety switch
			Description of detection	The swing guide safety switch is turned ON while the tray 1 operates.
			Measures	1. The connector of the swing guide safety switch (front/rear) (SW102/SW104) or the staple position switch (SW103) are disconnected. 2. The connector of the swing guide solenoid (SL101) or the tray 1 shift motor (M105) are disconnected. 3. The wiring of the swing guide safety switch (front/rear) or the staple position switch are faulty. 4. The wiring of the swing guide solenoid or the tray 1 shift motor are faulty. 5. The swing guide safety switch (front/rear) is faulty. 6. The staple position switch is faulty. 7. The swing guide solenoid is faulty. 8. The tray 1 shift motor is faulty. 9. The finisher controller PCB is faulty.
E542	-8001	-05	Title	A. Tray 2 time-out error (Finisher-K1) B. Upper tray time out error (Finisher-L1)
			Description of detection	A. The tray 2 does not return to home position when the tray 2 shift motor has been driven for 20 seconds. The tray 2 does not come off the tray 2 area sensor at the same area when the tray 2 shift motor has been driven for 4 seconds. B. If the tray does not return to home position when the tray 1 shift motor is driven for 25 seconds. If the tray does not move to other area when tray 2 shift motor is driven for 5 seconds.
			Measures	A: A-1. The connectors of the tray 2 area sensors (S125/S126/S127) or the tray 2 shift motor (M217) are disconnected. A-2. The wiring of the tray 2 area sensors or the tray 2 shift motor are faulty. A-3. The tray 2 area sensors is faulty. A-4. The tray 2 shift motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The tray 2 shift area sensor PCB is faulty. B-2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. B-3. The tray up/down mechanism is faulty. B-4. The tray 2 shift motor (M105) is faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E542	-8002	-05	Title	A. Tray 2 area error (Finisher-K1) B. Upper tray time out error (Finisher-L1)
			Description of detection	A. The tray 2 does not return to home position when the tray 2 shift motor has been driven for 20 seconds. The tray 2 does not come off the tray 2 area sensor at the same area when the tray 2 shift motor has been driven for 4 seconds. B. The upper limit area is reached before the tray 2 paper surface sensor 1 detects the paper surface during paper surface detection operation. A discontinuous area is detected during tray operation. The area beyond the the tray 2 paper surface sensor 2 is reached before the tray 2 paper surface sensor 2 detects the paper surface during evacuation operation.
			Measures	A: A-1. The connectors of the tray 2 area sensors (S125/S126/S127) or the tray 2 shift motor (M217) are disconnected. A-2. The wiring of the tray 2 area sensors or the tray 2 shift motor are faulty. A-3. The tray 2 area sensors is faulty. A-4. The tray 2 shift motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The tray 2 shift area sensor PCB is faulty. B-2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. B-3. The tray up/down mechanism is faulty. B-4. The tray 2 shift motor (M108) is faulty. B-5. The finisher controller PCB is faulty.
E542	-8003	-05	Title	Error in the tray 1 lower safety switch (Finisher-K1)
			Description of detection	The tray 1 lower safety switch is turned ON while the tray 2 operates.
			Measures	1. The connector of the tray 1 lower safety switch (SW110) or the tray 2 shift motor (M217) are disconnected. 2. The wiring of the tray 1 lower safety switch or the tray 2 shift motor are faulty. 3. The tray 1 lower safety switch is faulty. 4. The tray 2 shift motor is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E542	-8004	-05	Title	The tray 2 shift motor clock error (Finisher-L1)
			Description of detection	The FG input cannot be detected when the tray 2 shift motor has been driven for 0.2 second.
			Measures	1. The Tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The Tray 2 shift motor (M108) is faulty. 5. The finisher controller PCB is faulty.
E542	-8005	-05	Title	The tray 2 shift motor speed error (Finisher-L1)
			Description of detection	The lock detection signal turns OFF for 200 mseconds after the lock detection signal turned ON 150 mseconds.
			Measures	1. The tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 2 shift motor (M108) is faulty. 5. The finisher controller PCB is faulty.
E542	-8006	-05	Title	The tray 2 shift motor acceleration error (Finisher-L1)
			Description of detection	The lock detection signal does not turn ON when the tray 2 shift motor has been driven for 1 second.
			Measures	1. The tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 2 shift motor (M108) is faulty. 5. The finisher controller PCB is faulty.
E542	-8007	-05	Title	The tray 2 shift motor error (Finisher-L1)
			Description of detection	The lock detection signal does not turn OFF when the tray 2 shift motor is at a stop.
			Measures	1. The tray 2 shift area sensor PCB is faulty. 2. The wiring between the finisher controller PCB and tray 2 shift motor is faulty. 3. The tray up/down mechanism is faulty. 4. The tray 2 shift motor (M108) is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E542	-8013	-05	Title	Error in the swing guide safety switch
			Description of detection	The swing guide safety switch (front/rear) is turned ON while the tray 2 operates.
			Measures	1. The connector of the swing guide safety switch (front/rear) (SW102/SW104) or the staple position switch (SW103) are disconnected. 2. The connector of the swing guide solenoid (SL101) or the tray 2 shift motor (M217) are disconnected. 3. The wiring of the swing guide safety switch (front/rear) or the staple position switch are faulty. 4. The wiring of the swing guide solenoid or the tray 2 shift motor are faulty. 5. The swing guide safety switch (front/rear) is faulty. 6. The staple position switch is faulty. 7. The swing guide solenoid is faulty. 8. The tray 2 shift motor is faulty. 9. The finisher controller PCB is faulty.
E551	-0001	-05	Title	A. Error in power supply fan (Document Insertion Unit) B. Error in power supply fan (FAN101) (Finisher)
			Description of detection	A. The lock signal ON is detected while the fan operation. B. The lock signal is detected 1.2 seconds or more while the fan operation.
			Measures	A: A-1. Power supply fan is faulty. A-2. Connector of the power supply fan is disconnected B: B-1. The connector of the power supply fan (FAN101) is disconnected. B-2. The wiring of the power supply fan is faulty. B-3. The power supply fan is faulty. B-4. The finisher controller PCB is faulty.
E551	-0002	-05	Title	A. Error in power supply fan (Paper Folding Unit) B. Error in power supply fan (FAN101) (Finisher)
			Description of detection	The lock status is released when the fan stops.
			Measures	A: A-1. Connector of the power supply fan is disconnected. A-2. Power supply fan is faulty. B: B-1. The connector of the power supply fan (FAN101) is disconnected. B-2. The wiring of the power supply fan is faulty. B-3. The power supply fan is faulty. B-4. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E551	-0011	-05	Title	Error in the power supply fan of the insertion unit
			Description of detection	The loch signal is detected for the specified period of times while the fan operates.
			Measures	1. The connector of the fan (F1) is disconnected. 2. The wiring of the fan is faulty. 3. The fan is faulty. 4. The insertion unit controller PCB is faulty.
E551	-0021	-05	Title	Error in the fan of the paper folding unit
			Description of detection	The loch signal is detected for the specified period of times while the fan operates.
			Measures	1. The connector of the fan (F1) is disconnected. 2. The wiring of the fan is faulty. 3. The fan is faulty. 4. The paper folding unit controller PCB is faulty.

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E562 to E5F9

E code	Detailed code	Occurance area	Items	Description
E562	-8001	-05	Title	Error in slowing timing sensor (Paper folding unit (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The receiving-light intensity failed to be within the threshold although the emitting-light intensity is adjusted to be within the threshold when adjusting the sensor.
			Measures	1. Connector of the slowing timing sensor (S24/S30) is disconnected. 2. Slowing timing sensor is faulty.
E562	-8002	-05	Title	Error in the disengagement timing sensor of paper folding unit (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The disengagement timing sensor (S21) adjustment failed.
			Measures	1. Connector of the disengagement timing sensor (S21) is disconnected. 2. Disengagement timing sensor is faulty.
E562	-8003	-05	Title	Error in the folding position accuracy sensor (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The folding position accuracy sensor (S23) adjustment failed.
			Measures	1. Connector of the folding position accuracy sensor (S23) is disconnected. 2. Folding position accuracy sensor is faulty.
E562	-8004	-05	Title	Error in the upper stopper HP sensor (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The upper stopper HP sensor (S16) adjustment failed.
			Measures	1. Connector of the upper stopper HP sensor (S16) is disconnected. 2. Upper stopper HP sensor is faulty.
E568	-8001	-05	Title	Error in the feed roller disengage/buffer flapper motor (Finisher-K1)
			Description of detection	The disengage roller does not come off the feed roller separation HP sensor when the feed roller disengage/buffer flapper motor has been driven for 3 seconds.
			Measures	1. The connector of the feed roller separation HP sensor (S111) or the feed roller disengage/buffer flapper motor (M119) are disconnected. 2. The wiring of the feed roller separation HP sensor or the feed roller disengage/buffer flapper motor are faulty. 3. The feed roller separation HP sensor is faulty. 4. The feed roller disengage/buffer flapper motor is faulty. 5. The finisher controller PCB is faulty.
E568	-8002	-05	Title	Error in the feed roller disengage/buffer flapper motor (Finisher-K1)
			Description of detection	The feed roller separation HP sensor does not detect the disengage roller when the feed roller disengage/buffer flapper motor has been driven for 3 seconds.
			Measures	1. The connector of the feed roller separation HP sensor (S111) or the feed roller disengage/buffer flapper motor (M119) are disconnected. 2. The wiring of the feed roller separation HP sensor or the feed roller disengage/buffer flapper motor are faulty. 3. The feed roller separation HP sensor is faulty. 4. The feed roller disengage/buffer flapper motor is faulty. 5. The finisher controller PCB is faulty.
E568	-8003	-05	Title	Error in the feed roller disengage/buffer flapper motor (Finisher-K1)
			Description of detection	The buffer flapper does not come off the buffer flapper HP sensor when the feed roller disengage/buffer flapper motor has been driven for 3 seconds.
			Measures	1. The connector of the buffer flapper HP sensor (S142) or the feed roller disengage/buffer flapper motor (M119) are disconnected. 2. The wiring of the buffer flapper HP sensor or the feed roller disengage/buffer flapper motor are faulty. 3. The buffer flapper HP sensor is faulty. 4. The feed roller disengage/buffer flapper motor is faulty. 5. The finisher controller PCB is faulty.
E568	-8004	-05	Title	Error in the feed roller disengage/buffer flapper motor (Finisher-K1)
			Description of detection	The buffer flapper HP sensor does not detect the buffer flapper when the feed roller disengage/buffer flapper motor has been driven for 3 seconds.
			Measures	1. The connector of the buffer flapper HP sensor (S142) or the feed roller disengage/buffer flapper motor (M119) are disconnected. 2. The wiring of the buffer flapper HP sensor or the feed roller disengage/buffer flapper motor are faulty. 3. The buffer flapper HP sensor is faulty. 4. The feed roller disengage/buffer flapper motor is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E569	-8001	-05	Title	Upper stopper motor of paper folding unit failed to go through HP (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The upper stopper HP sensor (S16) failed to be OFF despite the drive of specified pulse in the case that the upper stopper motor started to be driven while the upper stopper HP sensor was ON.
			Measures	1. Connector of the upper stopper motor (M7) is disconnected. 2. Upper stopper motor is faulty. 3. Connector of the upper stopper HP sensor (S16) is disconnected. 4. Upper stopper HP sensor is faulty.
E569	-8002	-05	Title	Upper stopper motor of paper folding unit failed to return to HP (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The upper stopper HP sensor (S16) failed to be ON despite the drive of specified pulse in the case that the upper stopper motor started to be driven while the upper stopper HP sensor was OFF.
			Measures	1. Connector of the upper stopper motor (M7) is disconnected. 2. Upper stopper motor is faulty. 3. Connector of the upper stopper HP sensor (S16) is disconnected. 4. Upper stopper HP sensor is faulty.
E56A	-8001	-05	Title	C-fold stopper motor of paper folding unit failed to go through HP (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The C-fold stopper motor HP sensor (S17) failed to be OFF despite the drive of specified pulse in the case that the C-fold stopper motor started to be driven while the C-fold stopper motor HP sensor was ON.
			Measures	1. Connector of the C-fold stopper motor (M8) is disconnected. 2. C-fold stopper motor is faulty. 3. Connector of the C-fold stopper HP sensor (S17) is disconnected. 4. C-fold stopper HP sensor is faulty.

E code	Detailed code	Occurance area	Items	Description
E56A	-8002	-05	Title	C-fold stopper motor of paper folding unit failed to return to HP (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	The C-fold stopper motor HP sensor (S17) failed to be ON despite the drive of specified pulse in the case that the C-fold stopper motor started to be driven while the C-fold stopper motor HP sensor was OFF.
			Measures	1. Connector of the C-fold stopper motor (M8) is disconnected. 2. C-fold stopper motor is faulty. 3. Connector of the C-fold stopper HP sensor (S17) is disconnected. 4. C-fold stopper HP sensor is faulty.
E56B	-8001	-05	Title	Folding belt motor of paper folding unit failed to go through HP (Document InsertionFolding Unit/Paper Folding Unit)
			Description of detection	During initialization or at paper delivery to the Folding upper tray, the Folding belt HP sensor has not turned OFF within the specified pulse.
			Measures	1. Connector of the Folding belt motor is disconnected. 2. Folding belt motor is faulty. 3. Connector of the Folding belt motor HP sensor is disconnected. 4. Folding belt motor HP sensor is faulty.
E56B	-8002	-05	Title	Folding tray motor of paper folding unit failed to return to HP (Document Insertion Folding Unit/Paper Folding Unit)
			Description of detection	During initialization or at paper delivery to the Folding upper tray, the Folding tray motor HP sensor has not turned ON within the specified pulse.
			Measures	1. Connector of the folding tray motor (M6) is disconnected. 2. Folding tray motor is faulty. 3. Connector of the folding tray motor HP sensor (S19) is disconnected. 4. Folding tray motor HP sensor is faulty.

E code	Detailed code	Occurance area	Items	Description
E56D	-8001	-05	Title	Error in the stacking tray paper retainer motor (Finisher-K1)
			Description of detection	The stacking tray paper retainer does not come off the stacking tray paper retainer HP sensor when the stacking tray paper retainer motor has been driven for 3 seconds.
			Measures	1. The connector of the stacking tray paper retainer HP sensor (S114) or the stacking tray paper retainer motor (M114) are disconnected. 2. The wiring of the stacking tray paper retainer HP sensor or the stacking tray paper retainer motor are faulty. 3. The stacking tray paper retainer HP sensor is faulty. 4. The stacking tray paper retainer motor is faulty. 5. The finisher controller PCB is faulty.
E56D	-8002	-05	Title	Error in the stacking tray paper retainer motor (Finisher-K1)
			Description of detection	The stacking tray paper retainer HP sensor does not detect the stacking tray paper retainer when the stacking tray paper retainer motor has been driven for 3 seconds.
			Measures	1. The connector of the stacking tray paper retainer HP sensor (S114) or the stacking tray paper retainer motor (M114) are disconnected. 2. The wiring of the stacking tray paper retainer HP sensor or the stacking tray paper retainer motor are faulty. 3. The stacking tray paper retainer HP sensor is faulty. 4. The stacking tray paper retainer motor is faulty. 5. The finisher controller PCB is faulty.
E56E	-8001	-05	Title	Lead-edge retaining guide motor of paper folding unit failed to go through HP (Paper Folding Unit)
			Description of detection	The lead-edge retaining guide HP sensor failed to be OFF despite the drive of specified pulse in the case that the lead-edge retaining guide motor started to be driven while the lead-edge retaining guide HP sensor was ON.
			Measures	1. Connector of the lead-edge retaining guide motor (M10) is disconnected. 2. Lead-edge retaining guide motor is faulty. 3. Connector of the lead-edge retaining guide HP sensor (S25) is disconnected. 4. Lead-edge retaining guide HP sensor is faulty.

E code	Detailed code	Occurance area	Items	Description
E56E	-8002	-05	Title	Lead-edge retaining guide motor of paper folding unit failed to return to HP (Paper Folding Unit)
			Description of detection	The lead-edge retaining guide HP sensor failed to be ON despite the drive of specified pulse in the case that the lead-edge retaining guide motor started to be driven while the lead-edge retaining guide HP sensor was OFF.
			Measures	1. Connector of the lead-edge retaining guide motor (M10) is disconnected. 2. Lead-edge retaining guide motor is faulty. 3. Connector of the lead-edge retaining guide HP sensor (S25) is disconnected. 4. Lead-edge retaining guide HP sensor is faulty.
E578	-8001	-05	Title	Error in the paper return guide motor (Finisher-K1)
			Description of detection	The paper return guide does not come off the paper return guide HP sensor when the paper return guide motor has been driven for 3 seconds.
			Measures	1. The connector of the paper return guide HP sensor (S112) or the paper return guide motor (M112) are disconnected. 2. The wiring of the paper return guide HP sensor or the paper return guide motor are faulty. 3. The paper return guide HP sensor is faulty. 4. The paper return guide motor is faulty. 5. The finisher controller PCB is faulty.
E578	-8002	-05	Title	Error in the paper return guide motor (Finisher-K1)
			Description of detection	The paper return guide HP sensor does not detect the paper return guide when the paper return guide motor has been driven for 3 seconds.
			Measures	1. The connector of the paper return guide HP sensor (S112) or the paper return guide motor (M112) are disconnected. 2. The wiring of the paper return guide HP sensor or the paper return guide motor are faulty. 3. The paper return guide HP sensor is faulty. 4. The paper return guide motor is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E57B	-8001	-05	Title	Error in the paper trailing edge pushing guide motor (Finisher-K1)
			Description of detection	The paper trailing edge pushing guide does not come off the paper trailing edge pushing guide HP sensor when the paper trailing edge pushing guide motor has been driven for 3 seconds.
			Measures	1. The connector of the paper trailing edge pushing guide HP sensor (S113) or the paper trailing edge pushing guide motor (M113) are disconnected. 2. The wiring of the paper trailing edge pushing guide HP sensor or the paper trailing edge pushing guide motor are faulty. 3. The paper trailing edge pushing guide HP sensor is faulty. 4. The paper trailing edge pushing guide motor is faulty. 5. The finisher controller PCB is faulty.
E57B	-8002	-05	Title	Error in the paper trailing edge pushing guide motor (Finisher-K1)
			Description of detection	The paper trailing edge pushing guide HP sensor does not detect the paper trailing edge pushing guide when the paper trailing edge pushing guide motor has been driven for 3 seconds.
			Measures	1. The connector of the paper trailing edge pushing guide HP sensor (S113) or the paper trailing edge pushing guide motor (M113) are disconnected. 2. The wiring of the paper trailing edge pushing guide HP sensor or the paper trailing edge pushing guide motor are faulty. 3. The paper trailing edge pushing guide HP sensor is faulty. 4. The paper trailing edge pushing guide motor is faulty. 5. The finisher controller PCB is faulty.
E57C	-8001	-05	Title	Error in the processing tray paper retainer motor (Finisher-K1)
			Description of detection	The paper retainer does not come off the paper retainer HP sensor when the processing tray paper retainer motor has been driven for 3 seconds.
			Measures	1. The connector of the paper retainer HP sensor (S135) or the processing tray paper retainer motor (M118) are disconnected. 2. The wiring of the paper retainer HP sensor or the processing tray paper retainer motor are faulty. 3. The paper retainer HP sensor is faulty. 4. The processing tray paper retainer motor is faulty. 5. The finisher controller PCB is faulty.
E57C	-8002	-05	Title	Error in the processing tray paper retainer motor (Finisher-K1)
			Description of detection	The paper retainer HP sensor does not detect the paper retainer when the processing tray paper retainer motor has been driven for 3 seconds.
			Measures	1. The connector of the paper retainer HP sensor (S135) or the processing tray paper retainer motor (M118) are disconnected. 2. The wiring of the paper retainer HP sensor or the processing tray paper retainer motor are faulty. 3. The paper retainer HP sensor is faulty. 4. The processing tray paper retainer motor is faulty. 5. The finisher controller PCB is faulty.
E583	-8001	-05	Title	Error in the tray auxiliary guide motor (Finisher-K1)
			Description of detection	The tray auxiliary guide does not come off the tray auxiliary guide front/rear HP sensors when the tray auxiliary guide motor has been driven for 3 seconds.
			Measures	1. The connector of the tray auxiliary guide front HP sensor (S137) or the tray auxiliary guide rear HP sensor (S136) are disconnected. 2. The connector of the tray auxiliary guide motor (M120) is disconnected. 3. The wiring of the tray auxiliary guide front HP sensor or the tray auxiliary guide rear HP sensor are faulty. 4. The wiring of the tray auxiliary guide motor is faulty. 5. The tray auxiliary guide front HP sensor is faulty. 6. The tray auxiliary guide rear HP sensor is faulty. 7. The tray auxiliary guide motor is faulty. 8. The finisher controller PCB is faulty.
E583	-8002	-05	Title	Error in the tray auxiliary guide motor (Finisher-K1)
			Description of detection	The tray auxiliary guide front/rear HP sensors does nor detect the tray auxiliary guide when the tray auxiliary guide motor has been driven for 3 seconds.
			Measures	1. The connector of the tray auxiliary guide front HP sensor (S137) or the tray auxiliary guide rear HP sensor (S136) are disconnected. 2. The connector of the tray auxiliary guide motor (M120) is disconnected. 3. The wiring of the tray auxiliary guide front HP sensor or the tray auxiliary guide rear HP sensor are faulty. 4. The wiring of the tray auxiliary guide motor is faulty. 5. The tray auxiliary guide front HP sensor is faulty. 6. The tray auxiliary guide rear HP sensor is faulty. 7. The tray auxiliary guide motor is faulty. 8. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E584	-8001	-05	Title	A. Error in the stack delivery lower/shutter motor (Finisher-K1) B. Shutter home position error (Finisher-L1)
			Description of detection	A. The shutter does not come off the shutter HP sensor when the stack delivery lower/shutter motor has been driven for 3 seconds. B. The shutter does not leave the shutter home position when the stack ejection motor has been driven for 3 seconds.
			Measures	A: A-1. The connector of the shutter HP sensor (S106) or the stack delivery lower/shutter motor (M122) are disconnected. A-2. The wiring of the shutter HP sensor or the stack delivery lower/shutter motor are faulty. A-3. The shutter HP sensor is faulty. A-4. The stack delivery lower/shutter motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The shutter home position sensor (PI113) is faulty. B-2. The wiring between the finisher controller PCB and stack ejection motor, and between the finisher controller PCB and shutter clutch is faulty. B-3. The shutter mechanism is faulty. B-4. The stack ejection motor (M102)/the shutter clutch (CL101)/the stack ejection lower roller clutch (CL102) are faulty. B-5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E584	-8002	-05	Title	A. Error in the stack delivery lower/shutter motor (Finisher-K1) B. Shutter home position error (Finisher-L1)
			Description of detection	A. The shutter HP sensor does not detect the shutter when the stack delivery lower/shutter motor has been driven for 3 seconds. B. The shutter does not return to the shutter home position when the stack ejection motor has been driven for 3 seconds.
			Measures	A: A-1. The connector of the shutter HP sensor (S106) or the stack delivery lower/shutter motor (M122) are disconnected. A-2. The wiring of the shutter HP sensor or the stack delivery lower/shutter motor are faulty. A-3. The shutter HP sensor is faulty. A-4. The stack delivery lower/shutter motor is faulty. A-5. The finisher controller PCB is faulty. B: B-1. The shutter home position sensor (PI113) is faulty. B-2. The wiring between the finisher controller PCB and stack ejection motor, and between the finisher controller PCB and shutter clutch is faulty. B-3. The shutter mechanism is faulty. B-4. The stack ejection motor (M102)/the shutter clutch (CL101)/the stack ejection lower roller clutch (CL102) are faulty. B-5. The finisher controller PCB is faulty.
E584	-8003	-05	Title	Error in the stack delivery lower/shutter motor (Finisher-K1)
			Description of detection	The shutter does not come off the shutter close detection sensor when the stack delivery lower/shutter motor has been driven for 3 seconds.
			Measures	1. The connector of the shutter close detection sensor (S148)/the stack delivery lower/shutter motor (M122) are disconnected. 2. The wiring of the shutter close detection sensor / the stack delivery lower/shutter motor are faulty. 3. The shutter close detection sensor is faulty. 4. The stack delivery lower/shutter motor is faulty. 5. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E584	-8004	-05	Title	Error in the stack delivery lower/shutter motor (Finisher-K1)
			Description of detection	The shutter close detection sensor does not detect the shutter when the stack delivery lower/shutter motor has been driven for 3 seconds.
			Measures	1. The connector of the shutter close detection sensor (S148)/the stack delivery lower/shutter motor (M122) are disconnected. 2. The wiring of the shutter close detection sensor / the stack delivery lower/shutter motor are faulty. 3. The shutter close detection sensor is faulty. 4. The stack delivery lower/shutter motor is faulty. 5. The finisher controller PCB is faulty.
E590	-8001	-05	Title	A. Error in the Punch motor (Finisher-K1) B. Punch home position error (External 2 Hole Puncher)
			Description of detection	A. During initialization, the punch HP sensor does not detect the puncher when the punch motor has been driven for 0.5 second after the puncher has come off the punch HP sensor. After initialization, the punch motor does not return to home position. B. The puncher does not detect the punch home position sensor when the puncher motor has been driven for 200 msec.
			Measures	A: A-1. The connector of the punch HP sensor (S104) or the punch motor clock sensor (S105) are disconnected. A-2. The connector of the punch motor (M102) is disconnected. A-3. The wiring of the punch HP sensor or the punch motor clock sensor are faulty. A-4. The wiring of the punch motor is faulty. A-5. The punch HP sensor is faulty. A-6. The punch motor clock sensor is faulty. A-7. The punch motor is faulty. A-8. The puncher driver PCB (PCB1) is faulty. A-9. The finisher controller PCB is faulty. B: B-1. The punch home position sensor (PI63) and punch motor clock sensor (PI62) is faulty. B-2. The wiring between the punch controller PCB and sensor is faulty. B-3. The punch mechanism is faulty. B-4. The punch motor (M61) is faulty. B-5. The punch controller PCB is faulty. B-6. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E590	-8002	-05	Title	A. Error in the Punch motor (Finisher-K1) B. Punch home position error (External 2 Hole Puncher)
			Description of detection	A. The puncher does not come off the punch HP sensor when the punch motor has been driven for 0.2 second. The puncher does not come off the punch HP sensor during initialization. B. After the motor has been stopped at time of punch motor initialization, the puncher does not detect punch home position sensor.
			Measures	A: A-1. The connector of the punch HP sensor (S104) or the punch motor clock sensor (S105) are disconnected. A-2. The connector of the punch motor (M102) is disconnected. A-3. The wiring of the punch HP sensor or the punch motor clock sensor are faulty. A-4. The wiring of the punch motor is faulty. A-5. The punch HP sensor is faulty. A-6. The punch motor clock sensor is faulty. A-7. The punch motor is faulty. A-8. The puncher driver PCB (PCB1) is faulty. A-9. The finisher controller PCB is faulty. B: B-1. The punch home position sensor (PI63) and punch motor clock sensor (PI62) is faulty. B-2. The wiring between the punch controller PCB and sensor is faulty. B-3. The punch mechanism is faulty. B-4. The punch motor (M61) is faulty. B-5. The punch controller PCB is faulty. B-6. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E590	-8003	-05	Title	Error in the Punch motor (Finisher-K1)
			Description of detection	The puncher does not come off the punch HP sensor when the punch motor has been driven for 0.2 second. The puncher does not come off the punch HP sensor during initialization.
			Measures	1. The connector of the punch HP sensor (S104)/the punch motor clock sensor (S105) are disconnected. 2. The connector of the punch motor (M102) is disconnected. 3. The wiring of the punch HP sensor or the punch motor clock sensor are faulty. 4. The wiring of the punch motor is faulty. 5. The punch HP sensor is faulty. 6. The punch motor clock sensor is faulty. 7. The punch motor is faulty. 8. The puncher driver PCB (PCB1) is faulty. 9. The finisher controller PCB is faulty.
E591	-0001	-05	Title	Upper limit error with Punch Waste Sensor (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage was 3.0V or less despite increase in sensor light-emission.
			Remedy	1. Failure of Punch Waste Sensor (PCB2). 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E591	-0002	-05	Title	Lower limit error with Punch Waste Sensor (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage was 2.0V or more despite reduction in sensor light-emission.
			Remedy	1. Failure of Punch Waste Sensor (PCB2). 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E591	-8001	-05	Title	Scrap full detection error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 3.0 V or less even when the light emitting duty of the scrap full detector sensor has been increased to 66 % or more.
			Measures	1. The wiring between the scrap full detector PCB and punch controller PCB is faulty. 2. The scrap full detector PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E591	-8002	-05	Title	Scrap full detection error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.0 V or more even when the light emitting duty of the scrap full detector sensor has been decreased to 0 %.
			Measures	1. The scrap full detector PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.
E592	-0003	-05	Title	Upper limit error with Puncher Side Registration Sensor (B5R) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR5) was 2.5V or less despite increase in sensor light-emission (LED5).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-0004	-05	Title	Lower limit error with Puncher Side Registration Sensor (B5R) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR5) was 2.0V or more despite reduction in sensor light-emission (LED5).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-0005	-05	Title	Upper limit error with Puncher Side Registration Sensor (A4R) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR1) was 2.5V or less despite increase in sensor light-emission (LED1).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-0006	-05	Title	Lower limit error with Puncher Side Registration Sensor (A4R) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR1) was 2.0V or more despite reduction in sensor light-emission (LED1).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E592	-0007	-05	Title	Upper limit error with Puncher Side Registration Sensor (B4) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR2) was 2.5V or less despite increase in sensor light-emission (LED2).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-0008	-05	Title	Lower limit error with Puncher Side Registration Sensor (B4) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR2) was 2.0V or more despite reduction in sensor light-emission (LED2).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-0009	-05	Title	Upper limit error with Puncher Side Registration Sensor (LDR) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR3) was 2.5V or less despite increase in sensor light-emission (LED3).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-000A	-05	Title	Lower limit error with Puncher Side Registration Sensor (LDR) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR3) was 2.0V or more despite reduction in sensor light-emission (LED3).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-000B	-05	Title	Upper limit error with Puncher Side Registration Sensor (A3) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR4) was 2.5V or less despite increase in sensor light-emission (LED4).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.

E code	Detailed code	Occurance area	Items	Description
E592	-000C	-05	Title	Lower limit error with Puncher Side Registration Sensor (A3) (Puncher Unit-BE1/BF1/BG1/BH1)
			Description of detection	The light-receiving voltage (PTR4) was 2.0V or more despite reduction in sensor light-emission (LED4).
			Remedy	1. Failure of Puncher Side Registration Sensor (PCB3/PCB4) 2. Failure of Puncher Driver PCB (PCB1). 3. Failure of Finisher Controller PCB.
E592	-8001	-05	Title	Trailing edge sensor error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.5 V or less even when the light emitting duty of the trailing edge sensor (LED5, PTR5) has been increased to 66 % or more.
			Measures	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB and photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	-8002	-05	Title	Trailing edge sensor error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.0 V or more even when the light emitting duty of the trailing edge sensor has been decreased to 0 %.
			Measures	1. The LED PCB/photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.
E592	-8003	-05	Title	Horizontal registration sensor 1 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 1 (LED1, PTR1) has been increased to 66 % or more.
			Measures	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB/photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	-8004	-05	Title	Horizontal registration sensor 1 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 1 (LED1, PTR1) has been decreased to 0 %.
			Measures	1. The LED PCB/photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E592	-8005	-05	Title	Horizontal registration sensor 2 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 2 (LED2, PTR2) has been increased to 66 % or more.
			Measures	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB/photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	-8006	-05	Title	Horizontal registration sensor 2 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 2 (LED2, PTR2) has been decreased to 0 %.
			Measures	1. The LED PCB and photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.
E592	-8007	-05	Title	Horizontal registration sensor 3 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 3 (LED3, PTR3) has been increased to 66 % or more.
			Measures	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB/photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	-8008	-05	Title	Horizontal registration sensor 3 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 3 (LED3, PTR3) has been decreased to 0 %.
			Measures	1) The LED PCB/photosensor PCB is faulty. 2) The punch controller PCB is faulty. 3) The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E592	-8009	-05	Title	Horizontal registration sensor 4 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.5 V or less even when the light emitting duty of the horizontal registration sensor 4 (LED4, PTR4) has been increased to 66 % or more.
			Measures	1. The wiring between the LED PCB/photosensor PCB and punch controller PCB is faulty. 2. The LED PCB/photosensor PCB is faulty. 3. The punch controller PCB is faulty. 4. The finisher controller PCB is faulty.
E592	-800A	-05	Title	Horizontal registration sensor 4 error (External 2 Hole Puncher)
			Description of detection	The voltage of the light received is 2.0 V or more even when the light emitting duty of the horizontal registration sensor 4 (LED4, PTR4) has been decreased to 0 %.
			Measures	1. The LED PCB/photosensor PCB is faulty. 2. The punch controller PCB is faulty. 3. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E593	-8001	-05	Title	A. Error in the punch slide motor (Finisher-K1) B. Horizontal registration home position error (External 2 Hole Puncher)
			Description of detection	A. The punch unit does not come off the horizontal registration HP sensor when the punch slide motor has been driven for 0.68 second. B. At time of horizontal registration motor initialization, the punch slide unit does not leave the horizontal home position sensor even when it has been driven for 9 mm.
			Measures	A: A-1. The connector of the horizontal registration HP sensor (S101) or the punch slide motor (M101) are disconnected. A-2. The wiring of the horizontal registration HP sensor or the punch slide motor are faulty. A-3. The horizontal registration HP sensor is faulty. A-4. The punch slide motor is faulty. A-5. The puncher driver PCB (PCB1) is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The horizontal registration home position (PI61) is faulty. B-2. The wiring between the punch controller PCB and sensor is faulty. B-3. The horizontal registration mechanism is faulty. B-4. The horizontal registration motor (M62) is faulty. B-5. The punch controller PCB is faulty. B-6. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E593	-8002	-05	Title	A. Error in the punch slide motor (Finisher-K1) B. Horizontal registration home position error (External 2 Hole Puncher)
			Description of detection	A. The horizontal registration HP sensor does not detect the punch unit when the punch slide motor has been driven for 3.3 seconds. B. At time of horizontal registration motor initialization, the punch slide unit does not return to the horizontal registration home position sensor even when the unit has been driven for 37 mm.
			Measures	A: A-1. The connector of the horizontal registration HP sensor (S101) or the punch slide motor (M101) are disconnected. A-2. The wiring of the horizontal registration HP sensor or the punch slide motor are faulty. A-3. The horizontal registration HP sensor is faulty. A-4. The punch slide motor is faulty. A-5. The puncher driver PCB (PCB1) is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The horizontal registration home position (PI61) is faulty. B-2. The wiring between the punch controller PCB and sensor is faulty. B-3. The horizontal registration mechanism is faulty. B-4. The horizontal registration motor (M62) is faulty. B-5. The punch controller PCB is faulty. B-6. The finisher controller PCB is faulty.
E5A3	-0001	-05	Title	Error in the registration motor (Finisher-K1)
			Description of detection	The registration HP sensor does not turn ON when the registration motor has been driven for 2.933 seconds.
			Measures	1. The connector of the registration HP sensor (S105) or the registration motor (M102) are disconnected. 2. The wiring of the registration HP sensor/the registration motor are faulty. 3. The registration HP sensor is faulty. 4. The registration motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.

E code	Detailed code	Occurance area	Items	Description
E5A3	-0002	-05	Title	Error in the registration motor (Finisher-K1)
			Description of detection	The registration HP sensor does not turn OFF when the registration motor has been driven for 0.67 msecond.
			Measures	1. The connector of the registration HP sensor (S105) or the registration motor (M102) are disconnected. 2. The wiring of the registration HP sensor/the registration motor are faulty. 3. The registration HP sensor is faulty. 4. The registration motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5A4	-8001	-05	Title	Error in the press motor (Finisher-K1)
			Description of detection	The press motor HP sensor does not turn ON when the press motor has been driven for 0.926 second.
			Measures	1. The connector of the press motor HP sensor (S106) or the press motor (M105) are disconnected. 2. The wiring of the press motor HP sensor/the press motor are faulty. 3. The press motor HP sensor is faulty. 4. The press motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5A4	-8002	-05	Title	Error in the press motor (Finisher-K1)
			Description of detection	The press motor HP sensor does not turn OFF.
			Measures	1. The connector of the press motor HP sensor (S106) or the press motor (M105) are disconnected. 2. The wiring of the press motor HP sensor/the press motor are faulty. 3. The press motor HP sensor is faulty. 4. The press motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5AA	-8001	-05	Title	Error in the cutter motor (Finisher-K1)
			Description of detection	The home position of the trimming blade is not detected when the cutter motor has been driven for 5 sec.
			Measures	1. The connector of the cutter motor clock sensor (S108) or the cutter motor (M106) are disconnected. 2. The wiring of the cutter motor clock sensor/the cutter motor are faulty. 3. The cutter motor clock sensor is faulty. 4. The cutter motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.

E code	Detailed code	Occurance area	Items	Description
E5AA	-8002	-05	Title	Error in the cutter motor (Finisher-K1)
			Description of detection	The cutter motor clock sensor does not come off the home position of the trimming blade when the cutter motor has been driven for 0.5 second.
			Measures	1. The connector of the cutter motor clock sensor (S108) or the cutter motor (M106) are disconnected. 2. The wiring of the cutter motor clock sensor/the cutter motor are faulty. 3. The cutter motor clock sensor is faulty. 4. The cutter motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5AA	-8003	-05	Title	Cutter motor clock error (Finisher-K1)
			Description of detection	The cutter motor clock sensor does not detect the motor clock when the cutter motor has been driven for 0.625 second.
			Measures	1. The connector of the cutter motor clock sensor (S108) or the cutter motor (M106) are disconnected. 2. The wiring of the cutter motor clock sensor/the cutter motor are faulty. 3. The cutter motor clock sensor is faulty. 4. The cutter motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5AE	-8000	-05	Title	Trimmer stationary paper error
			Description of detection	The inlet sensor detects the stationary paper after performing the paper delivery operation.
			Measures	1. The paper has jammed in the trimmer. 2. The connector of the inlet sensor (S101) is disconnected. 3. The wire of the inlet sensor is faulty. 4. The inlet sensor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5BA	-8001	-05	Title	Error in the front estrangement motor (Finisher-K1)
			Description of detection	The front estrangement motor HP sensor does not turn ON when the front estrangement motor has been driven for 0.191 second.
			Measures	1. The connector of the front estrangement motor HP sensor (S102) or the front estrangement motor (M103) are disconnected. 2. The wiring of the front estrangement motor HP sensor/ the front estrangement motor are faulty. 3. The front estrangement motor HP sensor is faulty. 4. The front estrangement motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.

E code	Detailed code	Occurance area	Items	Description
E5BA	-8002	-05	Title	Error in the front estrangement motor (Finisher-K1)
			Description of detection	The front estrangement motor HP sensor does not turn OFF when the front estrangement motor has been driven for 0.724 second after the front estrangement motor HP sensor has turned ON.
			Measures	1. The connector of the front estrangement motor HP sensor (S102) or the front estrangement motor (M103) are disconnected. 2. The wiring of the front estrangement motor HP sensor/ the front estrangement motor are faulty. 3. The front estrangement motor HP sensor is faulty. 4. The front estrangement motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5BA	-8011	-05	Title	Error in the rear estrangement motor (Finisher-K1)
			Description of detection	The rear estrangement motor HP sensor does not turn ON when the rear estrangement motor has been driven for 0.18 second.
			Measures	1. The connector of the rear estrangement motor HP sensor (S104) or the rear estrangement motor (M104) are disconnected. 2. The wiring of the rear estrangement motor HP sensor/ the rear estrangement motor are faulty. 3. The rear estrangement motor HP sensor is faulty. 4. The rear estrangement motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5BA	-8012	-05	Title	Error in the rear estrangement motor (Finisher-K1)
			Description of detection	The rear estrangement motor HP sensor does not turn OFF when the rear estrangement motor has been driven for 0.537 second.
			Measures	1. The connector of the rear estrangement motor HP sensor (S104) or the rear estrangement motor (M104) are disconnected. 2. The wiring of the rear estrangement motor HP sensor/ the rear estrangement motor are faulty. 3. The rear estrangement motor HP sensor is faulty. 4. The rear estrangement motor is faulty. 5. The trimmer controller PCB (PCB1) is faulty.
E5BB	-8001	-05	Title	Error in the waste paper full sensor (Finisher-K1)
			Description of detection	The A/D input value does not enter into the D/A output upper limit of the waste paper full sensor.
			Measures	1. The connector of the waste paper full sensor (emitting/ receiving) (S011) is disconnected. 2. The wire of the waste paper full sensor is faulty. 3. The waste paper full sensor is faulty. 4. The trimmer controller PCB (PCB1) is faulty.
E5BB	-8002	-05	Title	Error in the waste paper full sensor (Finisher-K1)
			Description of detection	The A/D input value does not enter into the D/A output lower limit of the waste paper full sensor.
			Measures	1. The connector of the waste paper full sensor (emitting/ receiving) (S011) is disconnected. 2. The wire of the waste paper full sensor is faulty. 3. The waste paper full sensor is faulty. 4. The trimmer controller PCB (PCB1) is faulty.
E5E1	-0001	-05	Title	Tray lift motor of paper folding unit failed to go through HP (Document Insertion Unit)
			Description of detection	The paper feed sensor (S3) did not turned ON when the inserter paper feed tray moved up.
			Measures	1. Connector of the motor (M2) is disconnected 2. Upper stopper motor is faulty 3. Connector of the Paper feed sensor (S3) is disconnected 4. Paper feed sensor is faulty
E5E1	-0002	-05	Title	Tray lift motor of paper folding unit failed to return to HP (Document Insertion Unit)
			Description of detection	During initialization or lowering of the inserter paper feed tray, the tray lower limit sensor (S5) has not turned ON within the specified pulses.
			Measures	1. The connector of the tray lift motor (M2) is disconnected. 2. The tray lift motor is faulty. 3. The connector of the tray lower limit sensor (S5) is disconnected. 4. The tray lower limit sensor is faulty.
E5E1	-8001	-05	Title	Tray lift motor of paper folding unit failed to go through HP (Document Insertion Folding Unit)
			Description of detection	The paper feed sensor (S3) did not turned ON when the inserter paper feed tray moved up.
			Measures	1. The connector of the tray lift motor (M2) is disconnected. 2. The tray lift motor is faulty. 3. The connector of the paper feed sensor (S3) is disconnected. 4. The Paper feed sensor is faulty.

E code	Detailed code	Occurance area	Items	Description
E5E1	-8002	-05	Title	Tray lift motor of paper folding unit failed to return to HP (Document Insertion Folding Unit)
			Description of detection	During initialization or lowering of the inserter paper feed tray, the tray lower limit sensor (S5) has not turned ON within the specified pulses.
			Measures	1. The connector of the tray lift motor (M2) is disconnected. 2. The tray lift motor is faulty. 3. The connector of the tray lower limit sensor (S5) is disconnected. 4. The tray lower limit sensor is faulty.
E5F0	-8001	-05	Title	A. Error in the saddle lead edge stopper motor (Finisher-K1) B. Paper positioning plate home position error (Finisher-L1)
			Description of detection	A: The saddle lead edge stopper HP sensor does not detect the saddle lead edge stopper when the saddle lead edge stopper has been moved for 182 mm by saddle lead edge stopper motor. B: The paper positioning plate home position sensor does not turn ON when the paper positioning plate motor has been driven for 1500 pulses.
			Measures	A: A-1. The connector of the saddle lead edge stopper HP sensor (S205) or the saddle lead edge stopper motor (M203) are disconnected. A-2. The wiring of the saddle lead edge stopper HP sensor/the saddle lead edge stopper motor are faulty. A-3. The saddle lead edge stopper HP sensor is faulty. A-4. The saddle lead edge stopper motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The paper positioning plate home position sensor (PI7) is faulty. B-2. The positioning plate drive mechanism is faulty. B-3. The paper positioning plate motor (M4) is faulty. B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F0	-8002	-05	Title	A. Error in the saddle lead edge stopper motor (Finisher-K1) B. Paper positioning plate home position error (Finisher-L1)
			Description of detection	A. The saddle lead edge stopper does not come off the saddle lead edge stopper HP sensor when the saddle lead edge stopper motor has been driven for 50 pulses. B. The paper positioning plate home position sensor does not turn OFF when the paper positioning plate motor has been driven for 300 pulses.
			Measures	A: A-1. The connector of the saddle lead edge stopper HP sensor (S205) or the saddle lead edge stopper motor (M203) are disconnected. A-2. The wiring of the saddle lead edge stopper HP sensor/the saddle lead edge stopper motor are faulty. A-3. The saddle lead edge stopper HP sensor is faulty. A-4. The saddle lead edge stopper motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The paper positioning plate home position sensor (PI7) is faulty. B-2. The positioning plate drive mechanism is faulty. B-3. The paper positioning plate motor (M4) is faulty. B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F1	-8001	-05	Title	A. Saddle folder/feeder motor clock error (Finisher-K1) B. Paper folding motor clock error (Finisher-L1)
			Description of detection	A. The drive speed of the saddle folder/feeder motor is less than 5 mm/sec. B. The feed speed of the paper fold roller reaches 5 mm/sec or less.
			Measures	A: A-1. The connector of the saddle folder/feeder motor sensor (S214) or the saddle folder/feeder motor (M206) are disconnected. A-2. The wiring of the saddle folder/feeder motor sensor or the saddle folder/feeder motor are faulty. A-3. The saddle folder/feeder motor sensor is faulty. A-4. The saddle folder/feeder motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The paper folding motor clock sensor (PI4) and paper folding home position sensor (PI21) is faulty. B-2. The paper folding roller drive mechanism is faulty. B-3. The paper folding motor (M2) is faulty. B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F1	-8002	-05	Title	A. Error in the saddle folder/feeder motor (Finisher-K1) B. Paper fold home position error (Finisher-L1)
			Description of detection	A. The saddle folder HP sensor does not detect the home position of the paper fold roller during initialization. B. The status of the paper fold home position sensor does not change when the paper fold motor has been driven for 3 seconds.
			Measures	A: A-1. The connector of the saddle folder HP sensor (S229) or the saddle folder/feeder motor (M206) are disconnected. A-2. The wiring of the saddle folder HP sensor/the saddle folder/feeder motor are faulty. A-3. The saddle folder HP sensor is faulty. A-4. The saddle folder/feeder motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The paper folding motor clock sensor (PI4) and paper folding home position sensor (PI21) is faulty. B-2. The paper folding roller drive mechanism is faulty. B-3. The paper folding motor (M2) is faulty. B-4. The saddle stitcher controller PCB is faulty.
E5F2	-8001	-05	Title	A. Error in the saddle roller guide motor (Finisher-K1) B. Guide home position error (Finisher-L1)
			Description of detection	A. The saddle roller guide HP sensor does not detect the saddle roller guide when the saddle roller guide has been moved for 20 mm by saddle roller guide motor. B. The guide home position sensor does not turn ON when the guide motor has been driven for 700 pulses.
			Measures	A: A-1. The connector of the saddle roller guide HP sensor (S207) or the saddle roller guide motor (M204) are disconnected. A-2. The wiring of the saddle roller guide HP sensor/the saddle roller guide motor are faulty. A-3. The saddle roller guide HP sensor is faulty. A-4. The saddle roller guide motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The guide home position sensor (PI13) is faulty. B-2. The guide plate drive mechanism is faulty. B-3. The guide Motor (M3) is faulty. B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F2	-8002	-05	Title	A. Error in the saddle roller guide motor (Finisher-K1) B. Guide home position error (Finisher-L1)
			Description of detection	A. The saddle roller guide does not come off the saddle roller guide HP sensor when the saddle roller guide motor has been driven for 50 pulses. B. The guide home position sensor does not turn OFF when the guide motor has been driven for 50 pulses.
			Measures	A: A-1. The connector of the saddle roller guide HP sensor (S207) or the saddle roller guide motor (M204) are disconnected. A-2. The wiring of the saddle roller guide HP sensor/ the saddle roller guide motor are faulty. A-3. The saddle roller guide HP sensor is faulty. A-4. The saddle roller guide motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The guide home position sensor (PI13) is faulty. B-2. The guide plate drive mechanism is faulty. B-3. The guide Motor (M3) is faulty. B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F3	-8001	-05	Title	A. Error in the saddle alignment guide motor (Finisher-K1) B. Aligning plate home position error (Finisher-L1)
			Description of detection	A. The saddle alignment plate HP sensor does not detect the saddle alignment guide when the saddle alignment guide has been moved for 177 mm by saddle alignment guide motor. B. The aligning plate home position sensor does not turn ON when the aligning plate motor has been driven for 500 pulses.
			Measures	A: A-1. The connector of the saddle alignment plate HP sensor (S206) or the saddle alignment guide motor (M202) are disconnected. A-2. The wiring of the saddle alignment plate HP sensor/the saddle alignment guide motor are faulty. A-3. The saddle alignment plate HP sensor is faulty. A-4. The saddle alignment guide motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The aligning plate home position sensor (PI5) is faulty. B-2. The aligning plate drive mechanism is faulty. B-3. The aligning motor (M5) is faulty. B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F3	-8002	-05	Title	A. Error in the saddle alignment guide motor (Finisher-K1) B. Aligning plate home position error (Finisher-L1)
			Description of detection	A. The saddle alignment guide does not come off the saddle alignment plate HP sensor when the saddle alignment guide motor has been driven for 50 pulses. B. The aligning plate home position sensor does not turn OFF when the aligning plate motor has been driven for 50 pulses.
			Measures	A: A-1. The connector of the saddle alignment plate HP sensor (S206) or the saddle alignment guide motor (M202) are disconnected. A-2. The wiring of the saddle alignment plate HP sensor/the saddle alignment guide motor are faulty. A-3. The saddle alignment plate HP sensor is faulty. A-4. The saddle alignment guide motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The aligning plate home position sensor (PI5) is faulty. B-2. The aligning plate drive mechanism is faulty. B-3. The aligning motor (M5) is faulty. B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F4	-8001	-05	Title	A. Error in the saddle stitcher motor (Finisher-K1) B. Stitcher (rear) home position error (Finisher-L1)
			Description of detection	A. The saddle stitcher HP sensor does not detect the saddle stitcher unit when the saddle stitcher motor has been driven for 0.48 second. B. The stitching home position sensor does not turn ON when the stitch motor (rear) has been driven backward for 0.5 second.
			Measures	A: A-1. The connector of the saddle stitcher HP sensor (S223) or the saddle stitcher motor (M209) are disconnected. A-2. The wiring of the saddle stitcher HP sensor/the saddle stitcher motor are faulty. A-3. The saddle stitcher HP sensor is faulty. A-4. The saddle stitcher motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The stitcher home position sensor (rear) (SW5) is faulty. B-2. The stitcher (rear) is faulty. B-3. The saddle stitcher controller PCB is faulty.
E5F4	-8002	-05	Title	A. Error in the saddle stitcher motor (Finisher-K1) B. Stitcher (rear) home position error (Finisher-L1)
			Description of detection	A. The saddle stitcher unit does not come off the saddle stitcher HP sensor when the saddle stitcher motor has been driven for 0.48 second. B. The stitching home position sensor does not turn OFF when the stitch motor (rear) has been driven forward for 0.5 second.
			Measures	A: A-1. The connector of the saddle stitcher HP sensor (S223) or the saddle stitcher motor (M209) are disconnected. A-2. The wiring of the saddle stitcher HP sensor/the saddle stitcher motor are faulty. A-3. The saddle stitcher HP sensor is faulty. A-4. The saddle stitcher motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The stitcher home position sensor (rear) (SW5) is faulty. B-2. The stitcher (rear) is faulty. B-3. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F5	-8001	-05	Title	A. Error in the saddle trailing edge retainer motor (Finisher-K1) B. Stitcher (front) home position error (Finisher-L1)
			Description of detection	A. The saddle trailing edge retainer move HP sensor does not detect the saddle trailing edge retainer when the saddle trailing edge retainer has been moved for 96 mm by saddle trailing edge retainer motor. B. The stitching home position sensor does not turn ON when the stitch motor (front) has been driven forward for 0.5 second.
			Measures	A: A-1. The connector of the saddle trailing edge retainer move HP sensor (S219) or the saddle trailing edge retainer motor (M210) are disconnected. A-2. The wiring of the saddle trailing edge retainer move HP sensor/the saddle trailing edge retainer motor are faulty. A-3. The saddle trailing edge retainer move HP sensor is faulty. A-4. The saddle trailing edge retainer motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The stitcher home position sensor (front) (SW7) is faulty. B-2. The stitcher (front) is faulty. B-3. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F5	-8002	-05	Title	A. Error in the saddle trailing edge retainer motor (Finisher-K1) B. Stitcher (front) home position error (Finisher-L1)
			Description of detection	A. The saddle trailing edge retainer does not come off the saddle trailing edge retainer move HP sensor when the saddle trailing edge retainer motor has been driven for 50 pulses. B. The stitching home position sensor does not turn OFF when the stitch motor (front) has been driven backward for 0.5 second.
			Measures	A: A-1. The connector of the saddle trailing edge retainer move HP sensor (S219) or the saddle trailing edge retainer motor (M210) are disconnected. A-2. The wiring of the saddle trailing edge retainer move HP sensor/the saddle trailing edge retainer motor are faulty. A-3. The saddle trailing edge retainer move HP sensor is faulty. A-4. The saddle trailing edge retainer motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The stitcher home position sensor (front) (SW7) is faulty. B-2. The stitcher (front) is faulty. B-3. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F6	-8001	-05	Title	A. Error in the saddle paper push-on plate motor (Finisher-K1) B. Paper pushing plate home position error (Finisher-L1)
			Description of detection	A. The saddle paper push-on plate HP sensor does not detect the saddle paper push-on plate when the saddle paper push-on plate motor has been driven for 0.5 second. B. The paper pushing plate home position sensor does not turn ON when the paper pushing plate motor has been driven for 0.5 second.
			Measures	A: A-1. The connector of the saddle paper push-on plate HP sensor (S218) or the saddle paper push-on plate motor (M205) are disconnected. A-2. The wiring of the saddle paper push-on plate HP sensor/the saddle paper push-on plate motor are faulty. A-3. The saddle paper push-on plate HP sensor is faulty. A-4. The saddle paper push-on plate motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. B-2. The paper pushing plate drive mechanism is faulty. B-3. The paper pushing plate motor (M8) B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F6	-8002	-05	Title	A. Error in the saddle paper push-on plate motor (Finisher-K1) B. Paper pushing plate home position error (Finisher-L1)
			Description of detection	A. The saddle paper push-on plate does not come off the saddle paper push-on plate HP sensor when the saddle paper push-on plate motor has been driven for 0.15 second. B. The paper pushing plate home position sensor does not turn OFF when the paper pushing plate motor has been driven for 150 msecond.
			Measures	A: A-1. The connector of the saddle paper push-on plate HP sensor (S218) or the saddle paper push-on plate motor (M205) are disconnected. A-2. The wiring of the saddle paper push-on plate HP sensor/the saddle paper push-on plate motor are faulty. A-3. The saddle paper push-on plate HP sensor is faulty. A-4. The saddle paper push-on plate motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. B-2. The paper pushing plate drive mechanism is faulty. B-3. The paper pushing plate motor (M8) B-4. The saddle stitcher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F6	-8003	-05	Title	A. Saddle paper push-on plate motor clock error (Finisher-K1) B. Paper pushing plate motor clock error (Finisher-L1)
			Description of detection	A. The drive speed of the saddle paper push-on plate motor is less than 6 clocks. B. The number of pulses detected by the paper pushing plate motor clock sensor is 6 pulses or less.
			Measures	A: A-1. The connector of the saddle paper push-on plate motor sensor (S213) or the saddle paper push-on plate motor (M205) are disconnected. A-2. The wiring of the saddle paper push-on plate motor sensor/the saddle paper push-on plate motor are faulty. A-3. The saddle paper push-on plate motor sensor is faulty. A-4. The saddle paper push-on plate motor is faulty. A-5. The saddle stitcher controller PCB is faulty. A-6. The finisher controller PCB is faulty. B: B-1. The paper pushing plate home position sensor (PI14), paper pushing plate top position sensor (PI15), and paper pushing plate motor clock sensor (PI1) is faulty. B-2. The paper pushing plate drive mechanism is faulty. B-3. The paper pushing plate motor (M8) is faulty. B-4. The saddle stitcher controller PCB is faulty.
E5F6	-8004	-05	Title	Pushing position error (Finisher-L1)
			Description of detection	The paper pushing plate leading edge position sensor does not turn ON when the paper pushing plate motor has been driven for 0.1 second.
			Measures	1. The paper pushing plate home position sensor (PI14)/ paper pushing plate top position sensor (PI15)/paper pushing plate motor clock sensor (PI1) are faulty. 2. The paper pushing plate drive mechanism is faulty. 3. The paper pushing plate motor (M8) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F6	-8005	-05	Title	Pushing position error (Finisher-L1)
			Description of detection	The paper pushing plate leading edge position sensor does not turn OFF when the paper pushing plate motor has been driven for 0.5 second.
			Measures	1. The paper pushing plate home position sensor (PI14)/ paper pushing plate top position sensor (PI15)/paper pushing plate motor clock sensor (PI1) are faulty. 2. The paper pushing plate drive mechanism is faulty. 3. The paper pushing plate motor (M8) is faulty. 4. The saddle stitcher controller PCB is faulty.
E5F7	-8001	-05	Title	Error in the saddle trailing edge retainer motor (Finisher-K1)
			Description of detection	The saddle trailing edge retainer HP sensor does not detect the saddle trailing edge retainer when the saddle trailing edge retainer motor has been driven for 80 pulses.
			Measures	1. The connector of the saddle trailing edge retainer HP sensor (S221) or the saddle trailing edge retainer motor (M210) are disconnected. 2. The wiring of the saddle trailing edge retainer HP sensor/the saddle trailing edge retainer motor are faulty. 3. The saddle trailing edge retainer HP sensor is faulty. 4. The saddle trailing edge retainer motor is faulty. 5. The saddle stitcher controller PCB is faulty. 6. The finisher controller PCB is faulty.
E5F7	-8002	-05	Title	Error in the saddle trailing edge retainer motor (Finisher-K1)
			Description of detection	The saddle trailing edge retainer does not come off the saddle trailing edge retainer HP sensor when the saddle trailing edge retainer motor has been driven for 50 pulses.
			Measures	1. The connector of the saddle trailing edge retainer HP sensor (S221) or the saddle trailing edge retainer motor (M210) are disconnected. 2. The wiring of the saddle trailing edge retainer HP sensor/the saddle trailing edge retainer motor are faulty. 3. The saddle trailing edge retainer HP sensor is faulty. 4. The saddle trailing edge retainer motor is faulty. 5. The saddle stitcher controller PCB is faulty. 6. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F8	-8001	-05	Title	Error in the saddle tapping motor (Finisher-K1)
			Description of detection	The saddle paper tapping HP sensor does not detect the saddle tapping plate when the saddle tapping motor has been driven for 50 pulses.
			Measures	1. The connector of the saddle paper tapping HP sensor (S215) or the saddle tapping motor (M213) are disconnected. 2. The wiring of the saddle paper tapping HP sensor/the saddle tapping motor are faulty. 3. The saddle paper tapping HP sensor is faulty. 4. The saddle tapping motor is faulty. 5. The saddle stitcher controller PCB is faulty. 6. The finisher controller PCB is faulty.
E5F8	-8002	-05	Title	Error in the saddle tapping motor (Finisher-K1)
			Description of detection	The saddle tapping plate does not come off the saddle paper tapping HP sensor when the saddle tapping motor has been driven for 50 pulses.
			Measures	1. The connector of the saddle paper tapping HP sensor (S215) or the saddle tapping motor (M213) are disconnected. 2. The wiring of the saddle paper tapping HP sensor/the saddle tapping motor are faulty. 3. The saddle paper tapping HP sensor is faulty. 4. The saddle tapping motor is faulty. 5. The saddle stitcher controller PCB is faulty. 6. The finisher controller PCB is faulty.
E5F9	-8001	-05	Title	Error in the saddle lead-in roller disengage motor (Finisher-K1)
			Description of detection	The saddle lead-in roller HP sensor does not detect the saddle lead-in roller when the saddle lead-in roller disengage motor has been driven for 50 pulses.
			Measures	1. The connector of the saddle lead-in roller HP sensor (S222) or the saddle lead-in roller disengage motor (M214) are disconnected. 2. The wiring of the saddle lead-in roller HP sensor/the saddle lead-in roller disengage motor are faulty. 3. The saddle lead-in roller HP sensor is faulty. 4. The saddle lead-in roller disengage motor is faulty. 5. The saddle stitcher controller PCB is faulty. 6. The finisher controller PCB is faulty.

E code	Detailed code	Occurance area	Items	Description
E5F9	-8002	-05	Title	Error in the saddle lead-in roller disengage motor (Finisher-K1)
			Description of detection	The saddle lead-in roller does not come off the saddle lead-in roller HP sensor when the saddle lead-in roller disengage motor has been driven for 50 pulses.
			Measures	1. The connector of the saddle lead-in roller HP sensor (S222) or the saddle lead-in roller disengage motor (M214) are disconnected. 2. The wiring of the saddle lead-in roller HP sensor/the saddle lead-in roller disengage motor are faulty. 3. The saddle lead-in roller HP sensor is faulty. 4. The saddle lead-in roller disengage motor is faulty. 5. The saddle stitcher controller PCB is faulty. 6. The finisher controller PCB is faulty.

T-7-11

■ E602

E code	Detailed code	Occurance area	Items	Description
E602	-0001	-00	Title	Error in HDD
			Description	HDD failed to be recognized. Startup partition (BOOTDEV) failed to be found at startup.
			Remedy	1. Turn OFF the main switch and check connection of HDD cable, and then turn ON the main switch. 2. If the Encryption Board has been installed, there may be an Encryption Board failure. In this case, disconnect the signal cable connecting to the Encryption Board and directly connect to the HDD. (It cannot be connected from the back side. Open the Main Controller Cover, and connect by going over the Main Controller PCB 1.) After connecting, power on by the safe mode. If the machine starts normally, replace the Encryption Board as the Encryption Board had failed. 3. Be sure that HDD spins stably (no problem in drive sound) and 5V/12V power is supplied when the main power is turned ON. (If the drive sound is abnormal, replace the HDD.) 4. Replace the HDD and reinstall the system. (In the case of using a USB memory device, insert a USB memory device where the system software has been registered to the slot of the host machine, and then execute main menu [3]: Upgrade (Overwrite all).) 5. Replace the Main Controller PCB 1.
E602	-0002	-00	Title	Error in HDD
			Description	There is no system for the main CPU
			Remedy	1. Start in Safe Mode, then perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Switch. (Prepare the USB memory which system software was registered. Insert the USB memory to the equipment. Execute [3]: Upgrade (Overwrite All) in the main menu.) 2. If the above measures do not solve the problem, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system.
E602	-0003	-00	Title	Error in HDD
			Description	WriteAbort was detected with BootDevice
			Remedy	1. Execute detection and recovery of WriteAbortSector <In the case of display of B/W E-code> 1-1. Perform the following steps because Service Mode is not available. 1-2. Turn OFF the power. Then, while pressing 1+9 keys, turn ON the power. WriteAbortSector recovery routine is automatically started which makes the screen black. 1-3. After a while, progress is displayed because the process takes time (40 to 50 min.). The process is complete when the screen turns white. <In the case of official display of wrench-mark> 1-1. Set as follows: CHK-TYPE=0; and execute HD-CHECK (40 to 50 min.), and then turn OFF and then ON the main switch. 2. If the above measures do not solve the problem, start up in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the main switch. 3. If no improvement is found despite the above measures, it can be caused by failure with HDD; therefore, replace the HDD and reinstall the system.

E code	Detailed code	Occurance area	Items	Description
E602	-0006	-00	Title	Error in HDD
			Description	There is no system for the sub CPU
			Remedy	Reinstall the system software. For details, see “Chapter 6: Upgrading”. For your reference, the method using USB memory is described below. 1. Prepare the USB memory which system software was registered. 2. Execute the following service mode: COPIER>FUNCTION>SYSTEM>DOWNLOAD to enter the download mode. (When it is not operated normally, start the safe mode.) 3. Insert the USB memory to the equipment. 4. Execute [3]: Upgrade (Overwrite All) in the main menu. (Be sure to download SYSTEM, LANGUAGE and RUI.) 5. System software is downloaded and the machine restarts automatically. At this time, if the machine restarts with the safe mode, E753 might occurs. Check the log. In case of the system software of the options which are not connected, turn OFF and then ON the power supply to restore. (For details, see the description for E753.) If the measures above do not solve the problem, replace the HDD and download the system software with the foregoing method.
E602	-0007	-00	Title	Error in HDD
			Description	There is no ICCProfile
			Remedy	1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	-0009	-00	Title	Error in HDD
			Description	There is no Font file in /BOOTDEV/BOOT
			Remedy	1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detailed code	Occurance area	Items	Description
E602	-0010	-00	Title	Error in HDD
			Description	There is no Chinese, Korean, and Taiwan font files
			Remedy	1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	-0011	-00	Title	Error in HDD
			Description	There is no Chinese, Korean, and Taiwan font files
			Remedy	1. Start up in Safe Mode and reinstall the system using SST; and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	-0012	-00	Title	Error in HDD
			Description	There is no file in which the Web browser refers to
			Remedy	1. Start up in Safe Mode and reinstall the Web browser using SST, and then turn OFF and then ON the main power switch. 2. If the above measures do not solve the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.

E code	Detailed code	Occurance area	Items	Description
E602	-0101	-00	Title	Error in HDD
			Description	Error in storage area of image data (Inbox, etc.) (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=1, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power.(Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0111	-00	Title	Error in HDD
			Description	Error in storage area of image data (Inbox, etc.) (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=1, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=1, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0201	-00	Title	Error in HDD
			Description	Error in management data area of image (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=2, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0211	-00	Title	Error in HDD
			Description	Error in management data area of image (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=2, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=2, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0301	-00	Title	Error in HDD
			Description	Storage area of image data (temporary data) (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=3, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0311	-00	Title	Error in HDD
			Description	Storage area of image data (temporary data) (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=3, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=3, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0401	-00	Title	Error in HDD
			Description	Error in thumbnail area (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=4, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0411	-00	Title	Error in HDD
			Description	Error in thumbnail area (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=4, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=4, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0501	-00	Title	Error in HDD
			Description	Error in storage area of universal data (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=5, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0511	-00	Title	Error in HDD
			Description	Error in storage area of universal data (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=5, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=5, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0601	-00	Title	Error in HDD
			Description	Error in storage area of universal data (temporary data) (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=6, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0611	-00	Title	Error in HDD
			Description	Error in storage area of universal data (temporary data) (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=6, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=6, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0701	-00	Title	Error in HDD
			Description	Error in storage area of fax (temporary data) (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=7, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0711	-00	Title	Error in HDD
			Description	Error in storage area of fax (temporary data) (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=7, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=7, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0801	-00	Title	Error in HDD
			Description	Error in storage area of PSS (temporary data) (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=8, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0811	-00	Title	Error in HDD
			Description	Error in storage area of PSS (temporary data) (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=8, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=8, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0901	-00	Title	Error in HDD
			Description	Error in storage area of PDL-related file (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=9, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-0911	-00	Title	Error in HDD
			Description	Error in storage area of PDL-related file (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=9, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=9, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1001	-00	Title	Error in HDD
			Description	Error in storage area of firmware (BOOTDEV) (at startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Format the BOOTDEV using SST or USB, and download the firmware. 2. Replace the HDD.
E602	-1011	-00	Title	Error in HDD
			Description	Error in storage area of firmware (BOOTDEV) (after startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Format the BOOTDEV using SST or USB, and download the firmware. 2. Replace the HDD.

E code	Detailed code	Occurance area	Items	Description
E602	-1101	-00	Title	Error in HDD
			Description	Error in MEAP area (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=11, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1111	-00	Title	Error in HDD
			Description	Error in MEAP area (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=11, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=11, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1201	-00	Title	Error in HDD
			Description	Error in Send area (at startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=12, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.
E602	-1211	-00	Title	Error in HDD
			Description	Error in Send area (after startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=12, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.
E602	-1301	-00	Title	Error in HDD
			Description	Error in MEAP area (at startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=13, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.
E602	-1311	-00	Title	Error in HDD
			Description	Error in MEAP area (after startup)
			Remedy	If the problem is not solved by turning OFF and then ON the power, 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=13, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Format the all using SST or USB, and download the firmware. 4. Replace the HDD.

E code	Detailed code	Occurance area	Items	Description
E602	-1401	-00	Title	Error in HDD
			Description	Error in storage area of system log (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=14, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1411	-00	Title	Error in HDD
			Description	Error in storage area of system log (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=14, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=14, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1501	-00	Title	Error in HDD
			Description	Error in Advanced Box area (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=15, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1511	-00	Title	Error in HDD
			Description	Error in Advanced Box area (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=15, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=15, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1601	-00	Title	Error in HDD
			Description	Error in CDS area (at startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=16, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-1611	-00	Title	Error in HDD
			Description	Error in CDS area (after startup)
			Remedy	When the problem is not solved by turning OFF and then ON the power, ask the followings to user. A. Preferring to give priority on recovery time although data is deleted B. Preferring to wait for tens of minutes with possibility that data can be protected (Tell the user that data may not be able to be protected in the worst case.) Case A 1. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) 2. If the problem is not solved with step 1, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 3. If the problem is not solved with step 2, format the HDD using SST or USB, and download the firmware. 4. Replace the HDD. Case B 1. Try to recover the corresponding file/partition. → Enter CHK-TYPE=16, execute HD-CHECK, and then turn OFF and then ON the power. 2. Back up necessary data. 3. Enter CHK-TYPE=16, execute HD-CLEAR, and then turn OFF and then ON the power. (Deletion of the corresponding partition) After that, restore the backup data. 4. If the problem is not solved with step 3, enter CHK-TYPE=0, execute HD=CLEAR, and then turn OFF and then ON the power. (Deletion of HDDALL) 5. If the problem is not solved with step 4, format the HDD using SST or USB, and download the firmware. 6. Replace the HDD. Note: Although the problem can be solved with step 1 in some cases, there is a possibility that the error may occur again; therefore, be sure to perform the steps 1 through 3.

E code	Detailed code	Occurance area	Items	Description
E602	-2000	-00	Title	Error in HDD Encryption Board
			Description	Authentication error between the host machine and the Encryption Board.
			Remedy	1. After checking connection of the Encryption Board, disconnect and connect the connector and, turn OFF and then ON the power. 2. Execute the key clear procedure. * Key clear: system recovery procedure 1. Execute the key clear procedure with SST. → As a result, the disk becomes unformatted disk. Thus, it is necessary to execute step 2. → E602-0001 will be indicated if activating the machine with the unformatted disk. 2. Execute HDD format and system reinstallation with SST.
E602	-4000	-00	Title	Error in HDD
			Description	Unable to mount the Linux system.
			Remedy	1. Check the cable and the power connector. 2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch. 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	-4001	-00	Title	Error in HDD
			Description	No Linux system start script.
			Remedy	1. Check the cable and the power connector. 2. If the above measures do not solve the problem, start in Safe Mode to perform overall format using SST or USB memory and reinstall the system, and then turn OFF and then ON the Main Power Switch. 3. If there still remains the problem, it can be caused by failure with the HDD; therefore, replace the HDD and reinstall the system.
E602	-FF01	-00	Title	Error in HDD
			Description	HDD error (unidentified) (at startup)
			Remedy	1. Turn OFF and then ON the power. 2. Disconnect and then connect the HDD connector. 3. Format the HDD using SST or USB, and download the firmware. 4. Replace the HDD.
E602	-FF11	-00	Title	Error in HDD
			Description	HDD error (unidentified) (after startup)
			Remedy	1. Turn OFF and then ON the power. 2. Disconnect and then connect the HDD connector. 3. Format the HDD using SST or USB, and download the firmware. 4. Replace the HDD.

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E604 to E753

E code	Detailed code	Occurance area	Items	Description
E604	-1024	-00	Title	Lack of memory
			Description of detection	Lack of memory (1,024MB required)
			Measures	Add the DDR2-SDRAM
E611	-0000	-00	Title	Re-reboot due to failures such as SRAM damage when executing the power shutdown safeguard transmission job
			Description of detection	SRAM data is damaged and stored job data cannot be read. If this causes the repeated reboot execution after recovery from power shutdown, a transmission is also repeated. Therefore “E code” is displayed.
			Measures	Execute SRAM clear and delete power shutdown safeguard job
E613	-1536	-00	Title	Bildspeicher ist fehlerhaft oder nicht ausreichend
			Description of detection	Kein verfügbarer Speicher auf seiten des Hauptcontroller PCB 2
			Measures	Ein 1536MB Speicher auf seiten des Hauptcontroller PCB 2 erstellen
E615	-0001	-00	Title	Self test error of encryption module
			Description of detection	A self test of the Ipsec Board was conducted, and an error was detected.
			Measures	1. Upgrade the system after HDD format. 2. Replace the HDD.
E674	-0001	-00	Title	FAX is abnormal
			Description of detection	Communication error with the FAX board
			Measures	1. Cable connection check 2. FAX board replacement 3. Main controller board replacement
E674	-0004	-00	Title	FAX is abnormal
			Description of detection	Modem IC access is abnormal
			Measures	1. Cable connection check 2. FAX board replacement 3. Main controller board replacement
E674	-0008	-00	Title	FAX is abnormal
			Description of detection	Port IC access is abnormal
			Measures	1. Cable connection check 2. FAX board replacement 3. Main controller board replacement
E674	-000C	-00	Title	FAX is abnormal
			Description of detection	Modem IC/ port IC access is abnormal
			Measures	1. Cable connection check 2. FAX board replacement 3. Main controller board replacement
E674	-0010	-00	Title	FAX is abnormal
			Description of detection	FAX is abnormal
			Measures	Main controller board replacement
E674	-0011	-00	Title	FAX is abnormal
			Description of detection	FAX is abnormal
			Measures	Main controller board replacement
E674	-0030	-00	Title	FAX is abnormal
			Description of detection	Check sum error
			Measures	System software download for 2 line FAX
E677	-0001	-00	Title	Print server failure
			Description of detection	Abnormality detected on the exhaust fan operation of printer server
			Measures	1. Check supplying power to the exhaust fan 2. Exhaust fan replacement
E677	-0003	-00	Title	Print server failure
			Description of detection	Abnormality is detected during configuration check in start up
			Measures	1. Cable connection check 2. Reinstallation system
E677	-0004	-00	Title	Print server failure
			Description of detection	Abnormality detected on the CPU fan operation of printer server
			Measures	1. Check supplying power to the CPU fan 2. CPU fan replacement
E677	-0010	-00	Title	Print server failure
			Description of detection	Unsupported print server is connected
			Measures	Change for regular print server
E677	-0080	-00	Title	Print server failure
			Description of detection	Communication error in start-up
			Measures	1. Cable connection check 2. Reinstallation system

E code	Detailed code	Occurance area	Items	Description
E710	-0001	-00	Title	Printer IPC error
			Description of detection	In case that IPC communication IC in the printer engine detected a failure when turning power ON
			Measures	Check the cable.
E711	-0001	-00	Title	IPC communication is abnormal
			Description of detection	When 4 or more error occurrence is set to the error register in IPC chip within 1.5 seconds.
			Measures	Check the cable.
E711	-0001	-05	Title	IPC communication failure
			Description of detection	Occurrence of an error was set in the error resistor of the IPC chip more than four times in 1.5 seconds.
			Measures	Check the cable.
E713	-0001	-05	Title	Finisher communication error
			Description of detection	Communication failed between the finisher and the host machine.
			Measures	1. Check the cable connection. 2. Replace the finisher controller circuit PCB. 3. Replace the DC controller circuit PCB.
E717	-0001	-00	Title	Communication with the NE controller is abnormal
			Description of detection	Error in the NE controller start When the NE controller which should have been connected is not connected before the power off at power supply time to turn on
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable check
E717	-0002	-00	Title	Communication with the NE controller is abnormal
			Description of detection	IPC error in the NE controller operation In the case of the errors that disconnection of IPC, or IPC communication is unrecoverable.
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable check
E719	-0001	-00	Title	Coin vendor failure
			Description of detection	Error in the Coin vendor start When the Coin vendor which should have been connected is not connected before the power off at power supply time to turn on
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable check

E code	Detailed code	Occurance area	Items	Description
E719	-0002	-00	Title	Coin vendor failure
			Description of detection	IPC error in the Coin vendor operation In the case of the errors that disconnection of IPC, or IPC communication is unrecoverable. In the case of connection failure detection for a signal of paper pickup/delivery In the case of the detection of improper connection
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable check
E719	-0003	-00	Title	Coin vendor failure
			Description of detection	In the case of communication error with the Coin vendor during the unit price acquisition in startup
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable check
E719	-0011	-00	Title	Error in the card reader startup
			Description of detection	When the card reader, which should have been connected before the power off, is not connected at power ON.
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable check
E719	-0012	-00	Title	IPC error in the card reader operation
			Description of detection	In the case of the errors that disconnection of IPC, or IPC communication is unrecoverable.
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable check
E719	-0031	-00	Title	Communication error in the card reader (a serial number) startup
			Description of detection	In case a communication with card reader cannot start in startup
			Measures	1. Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable connection check for card reader (Connector connection, pinching wire) 2. Execute the following service mode after card reader removal, and re-install card reader. • COPIER> FUNCTION> CLEAR> CARD • COPIER> FUNCTION> CLEAR> ERR
E719	-0032	-00	Title	Communication error after the card reader (a serial number) startup
			Description of detection	Communicate with card reader is succeeded in the startup, but it became impossible.
			Measures	Recover with service mode COPIER> FUNCTION> CLEAR> ERR after cable connection check for card reader (Connector connection, pinching wire)

E code	Detailed code	Occurance area	Items	Description
E720	-0001	-05	Title	Model mismatch error
			Description of detection	An accessory that is not supported is connected.
			Measures	Check the configuration of accessories. Staple Finisher-K1 is connected with iR ADV C9280.
E720	-0002	-05	Title	Model mismatch error
			Description of detection	An accessory that is not supported is connected.
			Measures	Check the configuration of accessories. Staple Finisher-K1 is connected with iR ADV C9270.
E720	-0003	-05	Title	Model mismatch error
			Description of detection	An accessory that is not supported is connected.
			Measures	Check the configuration of accessories. A wrong Finisher is connected.
E720	-0004	-05	Title	Model mismatch error
			Description of detection	A Finisher that is not supported is connected.
			Measures	Check the configuration of accessories. A Finisher that is not supported is connected to the host machine.
E720	-0005	-05	Title	Different model error
			Description of detection	A wrong accessory is connected.
			Remedy	Check the configuration of accessories. A wrong Finisher is connected.
E720	-0006	-05	Title	Different model error
			Description of detection	A wrong accessory is connected.
			Remedy	Check the configuration of accessories. A wrong Finisher is connected.
E730	-1001	-00	Title	PDL software failure
			Description of detection	Initialization error
			Measures	1. PDL reset processing 2. Power cycle (Power OFF/ON)
E730	-100A	-00	Title	PDL software failure
			Description of detection	In case system fatal error such as initialization failure occurs
			Measures	1. PDL reset processing 2. Power cycle (Power OFF/ON)

E code	Detailed code	Occurance area	Items	Description
E730	-A006	-00	Title	PDL software failure
			Description of detection	No response from PDL. In the case of no response from PDL due to Subbootable failure or no existence.
			Measures	1. PDL reset processing 2. Power cycle (Power OFF/ON) 3. Main controller board connection check 4. Re-installation of firmware 5. Main controller board replacement
E730	-A007	-00	Title	PDL software failure
			Description of detection	In case of discrepancy of the version between the control software in main unit and PDL control software.
			Measures	1. PDL reset processing 2. Power cycle (Power OFF/ON) 3. System full-format and installation
E730	-B013	-00	Title	PDL software failure
			Description of detection	Font data is damaged
			Measures	1. Power cycle (Power OFF/ON) 2. System re-installation 3. System full-format and installation
E730	-C000	-00	Title	PDL software failure
			Description of detection	Memory acquisition error in the initialization
			Measures	1. System full-format and installation 2. Main controller board 1 replacement
E730	-C001	-00	Title	PDL software failure
			Description of detection	HDD access error
			Measures	1. System full-format and installation 2. HDD replacement 3. Main controller board 1 replacement
E731	-3000	-00	Title	Image processing module failure
			Description of detection	Image processing module failure
			Measures	Main controller board 2 replacement
E731	-3001	-00	Title	Image processing module failure
			Description of detection	Image processing module failure
			Measures	Main controller board 2 replacement
E731	-3002	-00	Title	Image processing module failure
			Description of detection	Image processing module failure
			Measures	Main controller board 2 replacement

E code	Detailed code	Occurance area	Items	Description
E731	-3015	-00	Title	Image processing module failure
			Description of detection	Image processing module failure
			Measures	Main controller board 2 replacement
E732	-0000	-00	Title	Reader communication is abnormal
			Description of detection	Negotiation failure
			Measures	1. Connected connector check with the reader 2. Power supply check for the reader (check if initialization is executed in startup) 3. Replacement of the reader controller board and main controller board
E732	-0001	-00	Title	Reader communication is abnormal
			Description of detection	Communication error
			Measures	1. Connected connector check with the reader 2. Power supply check for the reader (check if initialization is executed in startup) 3. Replacement of the reader controller board and main controller board
E732	-8888	-00	Title	Error in the reader type
			Description of detection	When a scanner for the different model is detected during the communication with the reader.
			Measures	Replace to the proper reader.
E732	-9999	-00	Title	The Reader detection
			Description of detection	In case of first detection of the reader on printer model ('Please power cycle' message is only displayed on the user screen instead of an error code. Service mode> DISPLAY> ERR is recorded in error log.)
			Measures	---
E733	-0000	-00	Title	Printer communication is abnormal
			Description of detection	Cannot communicate with a printer in startup
			Measures	---
E733	-0001	-00	Title	Printer communication is abnormal
			Description of detection	Failure of communication between the controller and DC controller
			Measures	1. Connected connector check with the printer 2. The power supply check (check if initialization is executed in startup) of the printer 3. Replacement of DC controller or main controller board

E code	Detailed code	Occurance area	Items	Description
E733	-0002	-00	Title	Printer communication error
			Description of detection	An error occurred to detect printer vertical synchronous signal.
			Measures	1. Check the connection to the printer. → Connect the connector/replace the harness. 2. Check the power of the printer (check if the initialization operation is executed at startup). 3. Replace the DC Controller PCB/Main Controller PCB.
E733	-0010	-00	Title	Printer communication is abnormal
			Description of detection	Printer vertical synchronizing signal detection failure
			Measures	1. Connected connector check with the printer 2. The power supply check (check if initialization is executed in startup) of the printer 3. Replacement of DC controller or main controller board
E733	-0020	-00	Title	Printer communication is abnormal
			Description of detection	Communication error
			Measures	1. Connected connector check with the printer 2. The power supply check (check if initialization is executed in startup) of the printer 3. Replacement of DC controller or main controller board
E733	-0021	-00	Title	Printer communication is abnormal
			Description of detection	Communication error
			Measures	1. Connected connector check with the printer 2. The power supply check (check if initialization is executed in startup) of the printer 3. Replacement of DC controller or main controller board
E743	-0000	-04	Title	DDI communication error
			Description of detection	The reader controller PCB detected a failure in communication between the main controller PCB and the reader controller PCB.
			Measures	1. Failure of the connection between the main controller PCB and the reader controller PCB 2. Failure of the reader controller PCB (PCB1) 3. Failure of the main controller PCB
E743	-0003	-04	Title	DDI communication error
			Description of detection	The reader controller PCB detected a failure in communication between the main controller PCB and the reader controller PCB.
			Measures	1. Failure of the connection between the main controller PCB and the reader controller PCB 2. Failure of the reader controller PCB (PCB1) 3. Failure of the main controller PCB

E code	Detailed code	Occurance area	Items	Description
E743	-0004	-04	Title	DDI communication error
			Description of detection	The reader controller PCB detected a failure in communication between the main controller PCB and the reader controller PCB.
			Measures	1. Failure of the connection between the main controller PCB and the reader controller PCB 2. Failure of the reader controller PCB (PCB1) 3. Failure of the main controller PCB
E744	-0001	-00	Title	Language file /BootROM is abnormal
			Description of detection	In case of discrepancy in the version between Bootable and the language in the HDD
			Measures	Download the language file of correct version
E744	-0002	-00	Title	Language file /BootROM is abnormal
			Description of detection	When Size of the language in the HDD is too big
			Measures	Download the language file of correct version
E744	-0003	-00	Title	Language file /BootROM is abnormal
			Description of detection	When a language to switch, which stated in Config.txt, is not found in the HDD.
			Measures	Download the language file of correct version
E744	-0004	-00	Title	Language file /BootROM is abnormal
			Description of detection	When cannot switch to the language in the HDD
			Measures	Download the language file of correct version
E744	-1000	-00	Title	Language file /BootROM is abnormal
			Description of detection	In case wrong Boot ROM (for different model) is installed
			Measures	Replace with the Boot ROM for correct model
E744	-2000	-00	Title	Language file /BootROM is abnormal
			Description of detection	When engine ID in Soft ID is invalid
			Measures	Replace with the Soft ID for correct model
E746	-0021	-00	Title	Image analysis board self-check failure detection
			Description of detection	Image analysis board self-check failure detection
			Measures	1. Connection check of the image analysis board 2. Image analysis board replacement
E746	-0022	-00	Title	Image analysis board version is invalid
			Description of detection	Image analysis board version is invalid
			Measures	1. Upgrading of the image analysis board software 2. Image analysis board replacement

E code	Detailed code	Occurance area	Items	Description
E746	-0023	-00	Title	No response from image analysis board
			Description of detection	No response from image analysis board
			Measures	1. Connection check of the image analysis board 2. Image analysis board replacement
E746	-0024	-00	Title	Image analysis board operation abnormality
			Description of detection	Image analysis board operation abnormality
			Measures	1. Connection check of the image analysis board 2. Image analysis board replacement
E746	-0031	-00	Title	Hardware error (TPM)
			Description of detection	Hardware error (TPM)
			Measures	1. TPM board non-installation 2. Installation of TPM board from other units 3. TPM chip broken
E746	-0032	-00	Title	The error that system restoration is impossible occurred (TPM)
			Description of detection	The error that system restoration is impossible occurred (TPM)
			Measures	The location of the security information in HDD/SRAM is unidentified Execute “Initialization of all data / setting”
E746	-0033	-00	Title	Error occurred; but possible for system restoration (TPM)
			Description of detection	Error occurred; but possible for system restoration (TPM)
			Measures	Discrepancy of the key Execute the re-store of the TPM key
E746	-0034	-00	Title	Error occurred; but possible for automatic system restoration (TPM)
			Description of detection	Error occurred; but possible for automatic system restoration (TPM)
			Measures	Discrepancy of the key occurred. But restoration is possible when reboot. Power cycle (Power OFF/ON)
E746	-0035	-00	Title	TPM version error
			Description of detection	TPM which cannot be used in this machine was installed.
			Measures	Install the supported TPM.
E747	-7f00	-00	Title	Bypass board is not connected
			Description of detection	Bypass board is not connected
			Measures	Bypass board is not connected

E code	Detailed code	Occurance area	Items	Description
E747	-ff01	-00	Title	DDR - SDRAM (P) is not connected
			Description of detection	DDR - SDRAM (P) is not connected
			Measures	DDR - SDRAM (P) is not connected
E747	-xxxx	-00	Title	Image processing IC failure
			Description of detection	Image processing IC failure
			Measures	Main controller board 2 replacement
E748	-2010	-00	Title	Flash board error
			Description of detection	---
			Measures	Contact each sale company bases
E748	-2011	-00	Title	Flash board error
			Description of detection	---
			Measures	Contact each sale company bases
E748	-2012	-00	Title	Flash board error
			Description of detection	---
			Measures	Contact each sale company bases
E748	-2021	-00	Title	Main controller board 2 access errors
			Description of detection	Main controller board 2 access errors
			Measures	Main controller board 1/2 removing and inserting, replacement
E748	-2022	-00	Title	Main controller board 2 access errors
			Description of detection	Main controller board 2 access errors
			Measures	Main controller board 1/2 removing and inserting, replacement
E748	-2023	-00	Title	Main controller board 2 access errors
			Description of detection	Main controller board 2 access errors
			Measures	DDR2-SDRAM (M0/M1/P) removing and inserting, replacement
E748	-2024	-00	Title	Main controller board 2 access errors
			Description of detection	Main controller board 2 access errors
			Measures	Main controller board 1/2 removing and inserting, replacement
E748	-2025	-00	Title	Main Controller PCB 2 access error
			Description of detection	Disconnection of the Bypass PCB was detected.
			Measures	Remove and then install the Bypass PCB.
E748	-2026	-00	Title	Main Controller PCB 2 access error
			Description of detection	Disconnection of the Image Processing Sub PCB was detected.
			Measures	Remove and then install the Image Processing Sub PCB.
E748	-4xxx	-00	Title	Main controller board 2 errors
			Description of detection	Main controller board 2 errors
			Measures	Main controller board replacement
E748	-9000	-00	Title	System error
			Description of detection	---
			Measures	Contact each sale company bases
E749	-0006	-06	Title	Restart direction due to configuration change.
			Description of detection	The option such as the Finisher and Paper Deck was installed or removed when all of following conditions were met and the machine configuration is changed when the main power switch is turned ON. • Settings/Registration > Preferences > Timer/Energy Settings > Quick Startup at Power-on > ON • The Main Power Switch is turned OFF • The power plug of the machine is connected to the output. • The breaker is ON
			Measures	It is recovered by turning OFF and then ON the main power. CAUTION This machine provides power to some PCBs even when in the main power OFF status. The power supply is not completely OFF by just turning OFF the main power switch and therefore, the machine is unable to detect a configuration change. When disconnecting and then connecting a connector, always disconnect the power plug or turn the breaker OFF. Refer to the Service Manual > Chapter 2 > External and Controls > Quick Startup for details.
E753	-0001	-00	Title	Error in Finisher Boot software
			Description of detection	The Boot software has not been written in ROM of the finisher controller.
			Measures	1. The finisher controller PCB is faulty. 2. The host machine controller PCB is faulty.

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E804 to E991

E code	Detailed code	Occurance area	Items	Description
E804	-0000	-00	Title	Power supply cooling fan (FM3) error
			Description of detection	When detect a failure of the power supply cooling fan
			Measures	1. Connector disconnection 2. Power supply cooling fan failure
E804	-0001	-05	Title	Fan error
			Description of detection	A failure was detected at the pre-fixing feed suction fan (FM1).
			Measures	1. Check the connection of the connector. 2. Replace the pre-fixing feed suction fan (FM1).
E804	-0002	-05	Title	Fan error
			Description of detection	A failure was detected at the primary charging suction fan (FM2).
			Measures	1. Check the connection of the connector. 2. Replace the primary charging suction fan (FM2).
E804	-0003	-05	Title	Fan error
			Description of detection	A failure was detected at the primary charging suction fan (FM3).
			Measures	1. Check the connection of the connector. 2. Replace the primary charging suction fan (FM3).
E804	-0004	-05	Title	Fan error
			Description of detection	A failure was detected at the developing/pre-transfer charging fan (FM4).
			Measures	1. Check the connection of the connector. 2. Replace the developing/pre-transfer charging fan (FM4).
E804	-0005	-05	Title	Fan error
			Description of detection	A failure was detected at the color cleaning fan (FM5).
			Measures	1. Check the connection of the connector. 2. Replace the color cleaning fan (FM5).
E804	-0006	-05	Title	Fan error
			Description of detection	A failure was detected at the fixing heat fan (FM6).
			Measures	1. Check the connection of the connector. 2. Replace the fixing heat fan (FM6).
E804	-0007	-05	Title	Fan error
			Description of detection	A failure was detected at the IH power supply fan (FM7).
			Measures	1. Check the connection of the connector. 2. Replace the IH power supply fan (FM7).
E804	-0010	-05	Title	Fan error
			Description of detection	A failure was detected at the delivery heat fan 1 (FM10).
			Measures	1. Check the connection of the connector. 2. Replace the delivery heat fan 1 (FM10).
E804	-0011	-05	Title	Fan error
			Description of detection	A failure was detected at the delivery heat fan 2 (FM11).
			Measures	1. Check the connection of the connector. 2. Replace the delivery heat fan 2 (FM11).
E804	-0012	-05	Title	Fan error
			Description of detection	A failure was detected at the delivery heat fan 3 (FM12).
			Measures	1. Check the connection of the connector. 2. Replace the delivery heat fan 3 (FM12).
E804	-0013	-05	Title	Fan error
			Description of detection	A failure was detected at the delivery heat fan 4 (FM13).
			Measures	1. Check the connection of the connector. 2. Replace the delivery heat fan 4 (FM13).
E804	-0015	-05	Title	Fan error
			Description of detection	Error in Heat Soaking Roller Cooling Fan (Front) (FM15)
			Measures	1. Check connection of the connector. 2. Replace the Heat Soaking Roller Cooling Fan (Front) (FM15).
E804	-0016	-05	Title	Fan error
			Description of detection	Error in Heat Soaking Roller Cooling Fan (Rear) (FM16)
			Measures	1. Check connection of the connector. 2. Replace the Heat Soaking Roller Cooling Fan (Rear) (FM16).
E804	-0017	-05	Title	Fan error
			Description of detection	Error in Fixing Feed Cooling Fan (Front) (FM27)
			Measures	1. Check connection of the connector. 2. Replace the Fixing Feed Cooling Fan (Front) (FM27).
E804	-0018	-05	Title	Fan error
			Description of detection	A failure was detected at the hopper cooling fan (FM18).
			Measures	1. Check the connection of the connector. 2. Replace the hopper cooling fan (FM18).

E code	Detailed code	Occurance area	Items	Description
E804	-0022	-05	Title	Fan error
			Description of detection	A failure was detected at the hopper cooling suction fan (FM22).
			Measures	1. Check the connection of the connector. 2. Replace the hopper cooling suction fan (FM22).
E804	-0023	-05	Title	Fan error
			Description of detection	A failure was detected at the anti-adhesion fan 1 (FM23).
			Measures	1. Check the connection of the connector. 2. Replace the anti-adhesion fan 1 (FM23).
E804	-0024	-05	Title	Fan error
			Description of detection	A failure was detected at the anti-adhesion fan 2 (FM24).
			Measures	1. Check the connection of the connector. 2. Replace the anti-adhesion fan 2 (FM24).
E804	-0030	-05	Title	Fan error
			Description of detection	A failure was detected at the decurler suction fan (FM30).
			Measures	1. Check the connection of the connector. 2. Replace the decurler suction fan (FM30).
E804	-0031	-05	Title	Fan error
			Description of detection	A failure was detected at the decurler side exhaust fan (FM31).
			Measures	1. Check the connection of the connector. 2. Replace the decurler side exhaust fan (FM31).
E804	-0032	-05	Title	Fan error
			Description of detection	A failure was detected at the decurler lower side exhaust fan (FM32).
			Measures	1. Check the connection of the connector. 2. Replace the decurler lower side exhaust fan (FM32).
E840	-0001	-05	Title	Fixing Core/Shield Plate HP error
			Description of detection	At the Fixing Core/Shield Plate home position detection operation, move from inside the home position range to outside the range is not completed after the specified period of time has passed.
			Remedy	1. Check the connection of connectors of the Core Shutter Motor (M56) and Core HP Sensor (PS98). 2. Check the harness of the target parts. -> Replace the harness if it is disconnected. 3. Replace the Core Shutter Motor (M56) and Core HP Sensor (PS98). 4. Clean the IH Unit. (Refer to the Service Manual.) 5. Replace the IH Unit. 6. Replace the Fixing Feed Driver PCB (UN5).

E code	Detailed code	Occurance area	Items	Description
E840	-0002	-05	Title	Fixing Core/Shield Plate HP error
			Description of detection	At the Fixing Core/Shield Plate home position detection operation, move from outside the home position range to inside the range is not completed after the specified period of time has passed.
			Remedy	1. Check the connection of connectors of the Core Shutter Motor (M56) and Core HP Sensor (PS98). 2. Check the harness of the target parts. -> Replace the harness if it is disconnected. 3. Replace the Core Shutter Motor (M56) and Core HP Sensor (PS98). 4. Check the Fixing Film Unit. -> Replace the unit if it is damaged. 5. Clean the IH Unit. (Refer to the Service Manual.) 6. Replace the IH Unit. 7. Replace the Fixing Feed Driver PCB (UN5).
E840	-0011	-05	Title	Fixing Core/Shield Plate HP error
			Description of detection	At the Fixing Core/Shield Plate move operation during a job, move from inside the home position range to outside the range is not completed after the specified period of time has passed.
			Remedy	1. Check the harness of the target parts. -> Replace the harness if it is 1disconnected. 2. Replace the Core Shutter Motor (M56) and Core HP Sensor (PS98). 3. Clean the IH Unit. (Refer to the Service Manual.) 4. Replace the IH Unit. 5. Replace the Fixing Feed Driver PCB (UN5).
E840	-0012	-05	Title	Fixing Core/Shield Plate HP error
			Description of detection	At the Fixing Core/Shield Plate move operation during a job, move from outside the home position range to inside the range is not completed after the specified period of time has passed.
			Remedy	1. Check the harness of the target parts. -> Replace the harness if it is 1disconnected. 2. Replace the Core Shutter Motor (M56) and Core HP Sensor (PS98). 3. Check the Fixing Film Unit. -> Replace the unit if it is damaged. 4. Replace the IH Unit. 5. Replace the Fixing Feed Driver PCB (UN5).

E code	Detailed code	Occurance area	Items	Description
E840	-0215	-05	Title	Fixing Core/Shield Plate HP error due to displacement of the Fixing Film
			Description of detection	Home position of the Fixing Core/Shield Plate could not be detected due to displacement of the Fixing Film.
			Remedy	1. Check connection of the connectors of Core Shutter Motor (M56) and Core Shift HP Sensor (PS98). 2. Check harness of the corresponding parts. → Replace the harness when it is disconnected. 3. Check the Fixing Film Unit. → Replace the Fixing Film Unit when it is damaged. 4. Replace the Core Shift Motor (M56) and Core Shift HP Sensor (PS98). 5. Replace the IH Unit. 6. Replace the Fixing Feed Driver PCB. NOTE: After performing the remedy work above, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR.
E841	-0001	-05	Title	Fixing Assembly reciprocation operation error
			Description of detection	Home position could not be detected although 5 seconds have passed since the reciprocation operation of the Fixing Assembly started.
			Remedy	1. Check connection of the connectors of the Reciprocation Motor (M57) and the Fixing Reciprocation HP Sensor (PS100). 2. Check harness of the corresponding parts. => Replace the harness when it is disconnected. 3. Replace the Reciprocation Motor (M57) and the Fixing Reciprocation HP Sensor (PS100). 4. Check the Fixing Drive Gear.=>Replace the gear when it is damaged. 5. Replace the Fixing Feed Driver PCB. 6. Replace the Fixing Unit. (Contact the sales company)

E code	Detailed code	Occurance area	Items	Description
E842	-0001	-05	Title	Heat Soaking Roller HP error
			Description of detection	Home position could not be detected although 10 seconds have passed since engagement/disengagement of the Heat Soaking Roller started.
			Remedy	1. Check connection of the connectors of the Heat Soaking Roller disengagement or engagement Motor (M55) and the Heat Soaking Roller HP Sensor (PS99). 2. Check harness of the corresponding parts. => Replace the harness when it is disconnected. 3. Replace the Heat Soaking Roller disengagement or engagemen Motor (M55) and the Heat Soaking Roller HP Sensor (PS99). 4. Check the Fixing Drive Gear.=>Replace the gear when it is damaged. 5. Replace the Fixing Feed Driver PCB. 6. Replace the Fixing Unit. (Contact the sales company)
E843	-0001	-05	Title	Disconnection of the power supply plug for fixing
			Description of detection	The product has two plugs, and the plug used to supply power to the fixing assembly was disconnected. When this error occurs, a message indicating that the plug is disconnected is displayed.
			Measures	Check the power supply plug for fixing.
E880	-0001	-00	Title	Controller fan1 (FM19) Error
			Description of detection	When detect a failure of the power supply cooling fan
			Measures	1. Connector disconnection 2. Controller fan 1 (FM19) failure
E880	-0004	-00	Title	Controller fan2 (FM20) error
			Description of detection	When detect a failure of the power supply cooling fan
			Measures	1. Connector disconnection 2. Controller fan 2 (FM20) failure
E880	-0005	-00	Title	HDD cooling fan (FM21) error
			Description of detection	When detect a failure of the power supply cooling fan
			Measures	1. Connector disconnection 2. HDD cooling fan (FM21) failure

E code	Detailed code	Occurance area	Items	Description
E881	-0001	-00	Title	CPU abnormal temperature rising error
			Description of detection	It was detected that CPU was 100 deg C or more.
			Remedy	When it is detected that the temperature of the CPU is 100 deg C or more, forcible shutdown is executed. After that, the error is recorded in the error log. • If the error occurred during a service visit and then occurred again: Replace the Main Controller PCB 1. • If the error does not occur during a service visit but is found in the log: 1. Check the space behind the host machine. If the space behind the host machine is less than 10 cm, ask the user to secure enough space. 2. Clean the inlet on the rear of the host machine. Remove dust.
E905	-0001	-05	Title	POD deck light air assist fan error
			Description of detection	Even when the maximum LOW interval was passed, there was no change in the signal.
			Measures	1. Failure of the shutter 2. Failure of the swing sensor (PS11) 3. Failure of the swing motor (M3) 4. Failure of the deck controller PCB (UN1)
E905	-0002	-05	Title	POD deck pickup motor cooling fan error
			Description of detection	The pickup motor cooling fan is not placed at LOCK ON status.
			Measures	1. Check the connector of the pickup motor cooling fan (FM4). 2. Replace the pickup motor cooling fan. 3. Replace the deck controller PCB.
E905	-0003	-05	Title	POD deck pickup motor cooling fan error
			Description of detection	The pickup motor cooling fan is not placed at LOCK OFF status.
			Measures	1. Check the connector of the pickup motor cooling fan (FM4). 2. Replace the pickup motor cooling fan. 3. Replace the deck controller PCB.

E code	Detailed code	Occurance area	Items	Description
E906	-0001	-05	Title	POD deck light air heater high temperature error
			Description of detection	A temperature over 120 degreeC was detected for 1 second consecutively.
			Measures	1. Failure of the environment sensor (SR1) 2. Failure of the warm air fan (FAN1) 3. Failure of the cool air fan (FAN2) 4. Failure of the additional fan (FAN3) 5. Failure of the air heater (H1) 6. Failure of the deck controller PCB (UN1)
E906	-0002	-05	Title	POD deck light air heater low temperature error
			Description of detection	The heater is not placed in the Ready status even when a specified period of time has elapsed.
			Measures	1. Failure of the environment sensor (SR1) 2. Failure of the warm air fan (FAN1) 3. Failure of the cool air fan (FAN2) 4. Failure of the additional fan (FAN3) 5. Failure of the air heater (H1) 6. Failure of the deck controller PCB (UN1)
E991	-0000	-05	Title	Backup RAM error
			Description of detection	SRAM in the DCON detected data error.
			Measures	Replace the DCON PCB
E996	-0071	-05	Title	Error avoidance jam (DADF)
			Description of detection	Error avoidance jam occurred.(DADF)
			Remedy	Depending on the setting of JM-ERR-R in service mode, “010071” jam is displayed as an error. Collect log and contact to the sales companies. To cancel the setting, select COPIER> OPTION> FNC-SW> J M-ERR-R, and set JM-ERR-R to 0.

T-7-14

Jam Code

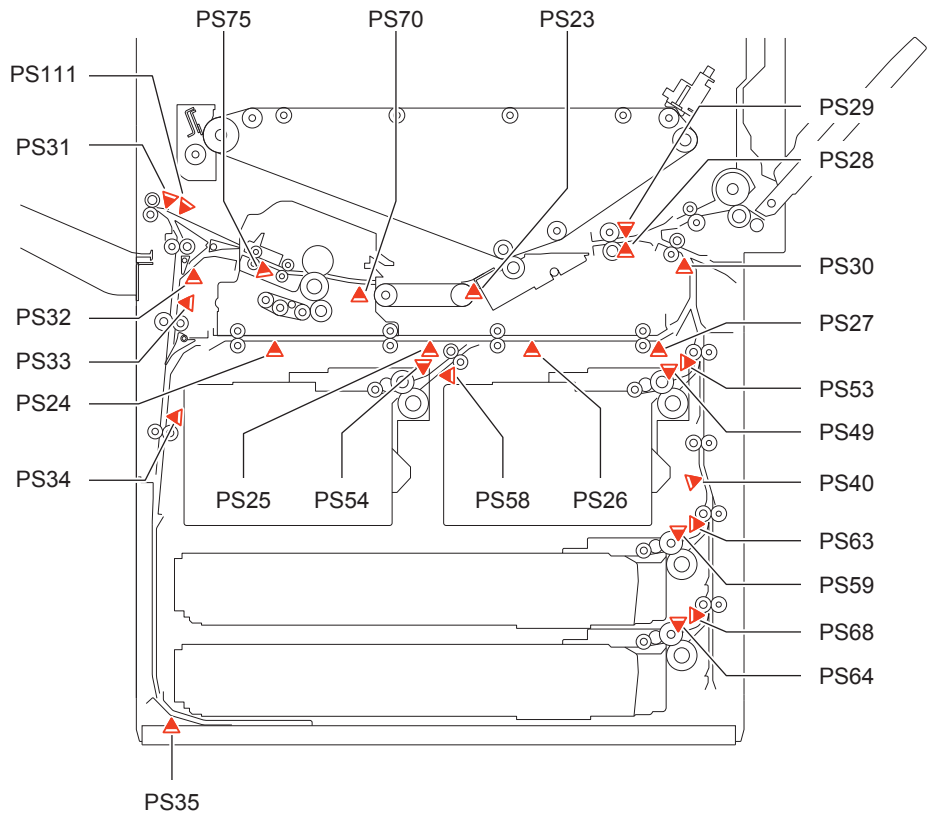
Jam Type

Jam types are shown below.

Type	Meaning
DELAY	Delay jam
STNRY	Stationary jam
OVERLAP	Double feed detection
TIMING NG	Timing error
OHP NG	Incorrect paper
ADF OP	ADF open
COVER OP	Cover open
RESIDUAL	Residual jam
PICKUP NG	Pickup error
POWER ON	Power ON
DOOR OP	Door open
SEQ NG	Sequence jam
DELAY ESC	Delay jam while ejecting to the escape delivery tray
OTH JAM	Other jams
STNRY ESC	Stationary jam while ejecting to the escape delivery tray
STP	Staple
SDL STP	Saddle stitch staple
INIT ROT	Residual (at initial rotation)
UP DEVICE	Upper stream device jam
OTHER	Others
ERROR	Error
RETRY ERR	Retry error
STOP	Press Stop key
ROT	Keeps rotating
PROGRAM	Program
TIME OUT	Time-out
PUNCH	Punch
MEDIA NG	Misprint

T-7-15

Main Unit



F-7-1

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
00	0101	DELAY	Right Deck Pickup Sensor	PS49
00	0102	DELAY	Left Deck Pickup Sensor	PS54
00	0103	DELAY	Cassette 3 Pickup Sensor	PS59
00	0104	DELAY	Cassette 4 Pickup Sensor	PS64
00	0105	DELAY	Vertical Path Sensor 1	PS53
00	0106	DELAY	Left Deck Pullout Sensor	PS58
00	0107	DELAY	Vertical Path Sensor 2	PS40
00	0108	DELAY	Vertical Path Sensor 3	PS63
00	0109	DELAY	Vertical Path Sensor 4	PS68
00	010A	DELAY	Vertical Path Merging Sensor	PS30
00	010B	DELAY	Transparency Sensor	PS29
00	010C	DELAY	Registration Sensor	PS28
00	010D	DELAY	Post-secondary Transfer Sensor	PS23
00	010E	DELAY	Fixing Inlet Sensor	PS70
00	0110	DELAY	Fixing Inner Delivery Sensor	PS75
00	0111	DELAY	Outer Delivery Sensor	PS31
00	0112	DELAY	Reverse Sensor	PS32
00	0113	DELAY	Reverse Vertical Path Sensor 1	PS33
00	0114	DELAY	Reverse Vertical Path Sensor 2	PS34
00	0115	DELAY	Reverse Vertical Path Sensor 3	PS35
00	0116	DELAY	Duplex Sensor 1	PS24
00	0117	DELAY	Duplex Sensor 2	PS25
00	0118	DELAY	Duplex Sensor 3	PS26
00	0119	DELAY	Duplex Sensor 4	PS27
00	0130	DELAY	Outer Delivery Transparency Sensor	PS111
00	0191	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Right Deck pickup (Check the feed path from the Right Deck Pickup Assembly to the Registration Assembly.)	OTHER
00	0192	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Left Deck pickup (Check the feed path from the Left Deck Pickup Assembly to the Registration Assembly.)	OTHER
00	0193	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Cassette 3 pickup (Check the feed path from the Cassette 3 Pickup Assembly to the Registration Assembly.)	OTHER
00	0194	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Cassette 4 pickup (Check the feed path from the Cassette 4 Pickup Assembly to the Registration Assembly.)	OTHER

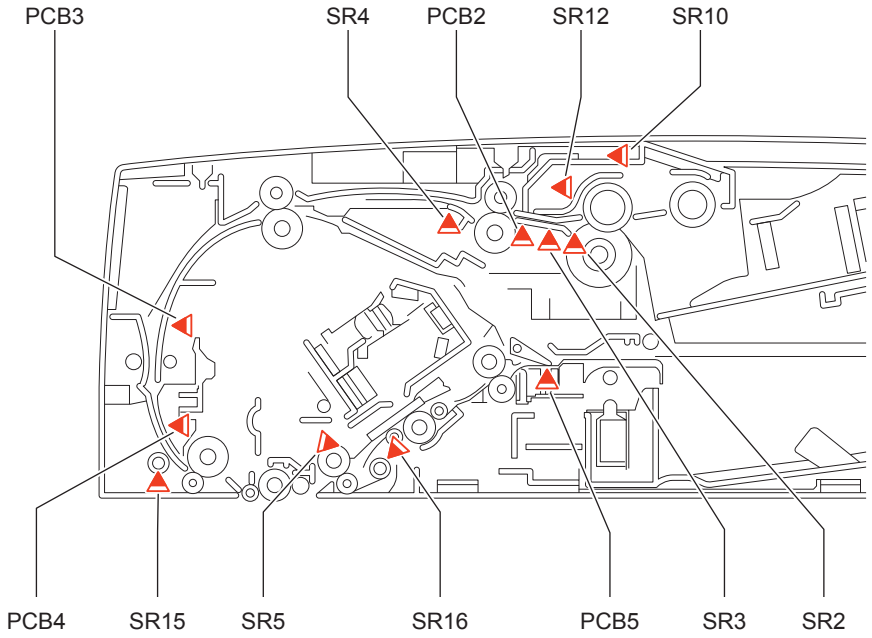
ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
00	0195	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Option Deck pickup (Check the feed path from the Option Deck Pickup Assembly to the Registration Assembly of the host machine.)	OTHER
00	0196	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Multi-purpose Tray pickup (Check the feed path from the Multi-purpose Tray Pickup Assembly to the Registration Assembly.)	OTHER
00	0197	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Multi Deck Upper Deck pickup (Check the feed path from the Upper Deck Pickup Assembly of the Multi Deck to the Registration Assembly of the host machine.)	OTHER
00	0198	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Multi Deck Middle Deck pickup (Check the feed path from the Middle Deck Pickup Assembly of the Multi Deck to the Registration Assembly of the host machine.)	OTHER
00	0199	OTHER	Jam due to mismatch of paper feed timing and image formation timing at Multi Deck Lower Deck pickup (Check the feed path from the Lower Deck Pickup Assembly of the Multi Deck to the Registration Assembly of the host machine.)	OTHER
00	019A	OTHER	Jam due to mismatch of paper feed timing and image formation timing at 2-sided printing (Check the feed path around the Registration Assembly of the host machine.)	OTHER
00	0201	STNRY	Right Deck Pickup Sensor	PS49
00	0202	STNRY	Left Deck Pickup Sensor	PS54
00	0203	STNRY	Cassette 3 Pickup Sensor	PS59
00	0204	STNRY	Cassette 4 Pickup Sensor	PS64
00	0205	STNRY	Vertical Path Sensor 1	PS53
00	0206	STNRY	Left Deck Pullout Sensor	PS58
00	0207	STNRY	Vertical Path Sensor 2	PS40
00	0208	STNRY	Vertical Path Sensor 3	PS63
00	0209	STNRY	Vertical Path Sensor 4	PS68
00	020A	STNRY	Vertical Path Merging Sensor	PS30
00	020B	STNRY	Transparency Sensor	PS29
00	020C	STNRY	Registration Sensor	PS28
00	020D	STNRY	Post-secondary Transfer Sensor	PS23
00	020E	STNRY	Fixing Inlet Sensor	PS70
00	0210	STNRY	Fixing Inner Delivery Sensor	PS75
00	0211	STNRY	Outer Delivery Sensor	PS31
00	0212	STNRY	Reverse Sensor	PS32
00	0213	STNRY	Reverse Vertical Path Sensor 1	PS33
00	0214	STNRY	Reverse Vertical Path Sensor 2	PS34
00	0215	STNRY	Reverse Vertical Path Sensor 3	PS35
00	0216	STNRY	Duplex Sensor 1	PS24
00	0217	STNRY	Duplex Sensor 2	PS25
00	0218	STNRY	Duplex Sensor 3	PS26
00	0219	STNRY	Duplex Sensor 4	PS27
00	0230	STNRY	Outer Delivery Transparency Sensor	PS111
00	0A01	POWER ON	Right Deck Pickup Sensor	PS49
00	0A02	POWER ON	Left Deck Pickup Sensor	PS54
00	0A03	POWER ON	Cassette 3 Pickup Sensor	PS59
00	0A04	POWER ON	Cassette 4 Pickup Sensor	PS64
00	0A05	POWER ON	Vertical Path Sensor 1	PS53
00	0A06	POWER ON	Left Deck Pullout Sensor	PS58
00	0A07	POWER ON	Vertical Path Sensor 2	PS40
00	0A08	POWER ON	Vertical Path Sensor 3	PS63
00	0A09	POWER ON	Vertical Path Sensor 4	PS68
00	0A0A	POWER ON	Vertical Path Merging Sensor	PS30
00	0A0B	POWER ON	Transparency Sensor	PS29
00	0A0C	POWER ON	Registration Sensor	PS28
00	0A0D	POWER ON	Post-secondary Transfer Sensor	PS23
00	0A0E	POWER ON	Fixing Inlet Sensor	PS70
00	0A10	POWER ON	Fixing Inner Delivery Sensor	PS75
00	0A11	POWER ON	Outer Delivery Sensor	PS31
00	0A12	POWER ON	Reverse Sensor	PS32
00	0A13	POWER ON	Reverse Vertical Path Sensor 1	PS33
00	0A14	POWER ON	Reverse Vertical Path Sensor 2	PS34
00	0A15	POWER ON	Reverse Vertical Path Sensor 3	PS35
00	0A16	POWER ON	Duplex Sensor 1	PS24
00	0A17	POWER ON	Duplex Sensor 2	PS25
00	0A18	POWER ON	Duplex Sensor 3	PS26
00	0A19	POWER ON	Duplex Sensor 4	PS27
00	0A30	POWER ON	Outer Delivery Transparency Sensor	PS111
00	0B00	OTHER	Waste Toner Container Sensor (Check that the Waste Toner Container is installed.)	PS112
00	0B01	COVER OP	Front Cover Sensor	PS80
00	0B02	COVER OP	Multi-purpose Tray Cover Sensor	PS79
00	0B03	COVER OP	Lower Right Cover Sensor	PS39
00	0B04	COVER OP	Lower Left Cover Sensor	PS36
00	0B05	COVER OP	Buffer Front Cover Sensor	PS87
00	0B06	COVER OP	Deck Left Front Cover Sensor	S006

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
00	0C00	ERROR*1	Recovered by opening and closing the Door	----
00	0CA0	ERROR*1	Recovered by opening and closing the Door	----
00	0CA2	ERROR*1	Recovered by opening and closing the Door	----
00	0CA3	ERROR*1	Recovered by opening and closing the Door	----
00	0CA4	ERROR*1	Recovered by opening and closing the Door	----
00	0CA5	ERROR*1	Recovered by opening and closing the Door	----
00	0CA6	ERROR*1	Recovered by opening and closing the Door	----
00	0CA7	ERROR*1	Recovered by opening and closing the Door	----
00	0CA8	ERROR*1	Recovered by opening and closing the Door	----
00	0CA9	ERROR*1	Recovered by opening and closing the Door	----
00	0CAF	OTHER	Finisher sequence error jam	----
00	0CF1	ERROR*1	Recovered by opening and closing the Door	----
00	0D91	MEDIA NG	Misprint (paper length is short)	LENGTH NG
00	0D92	MEDIA NG	Misprint (Although transparency setting is set, paper other than transparency is fed)	OHP NG
00	0D93	MEDIA NG	Misprint (Although transparency setting is not set, transparency is fed)	MEDIA NG
00	1E00	OTHER	Finisher sequence error jam	OTHER

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If the same jam is detected regardless of the operation above, the error code is displayed.
The error that a machine detected is either following items.
E012, E021, E074, E100, E197, E733, E808

FY7-16

Duplex Color Image Reader-F1



F-7-2

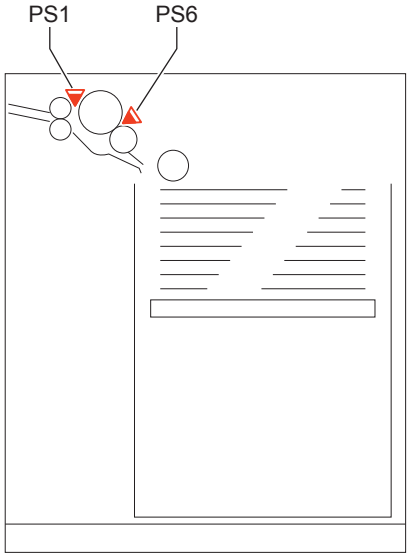
ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
01	0001	DELAY	Post-separation sensor 3	PCB2
01	0002	STNRY	Post-separation sensor 3	PCB2
01	0003	DELAY	Delay detection sensor	SR4
01	0004	STNRY	Delay detection sensor	SR4
01	0005	DELAY	Registration sensor	PCB3
01	0006	STNRY	Registration sensor	PCB3
01	0007	DELAY	Lead sensor 1	PCB4
01	0008	STNRY	Lead sensor 1	PCB4
01	0009	DELAY	Lead sensor 2	SR5
01	0010	STNRY	Lead sensor 2	SR5
01	0011	DELAY	Delivery sensor	PCB5
01	0012	STNRY	Delivery sensor	PCB5
01	0042	STNRY	Post-separation sensor 3	PCB2
01	0043	DELAY	Delay detection sensor	SR4
01	0044	STNRY	Delay detection sensor	SR4
01	0045	DELAY	Registration sensor	PCB3
01	0046	STNRY	Registration sensor	PCB3
01	0047	DELAY	Lead sensor 1	PCB4
01	0048	STNRY	Lead sensor 1	PCB4
01	0049	DELAY	Lead sensor 2	SR5
01	0050	STNRY	Lead sensor 2	SR5
01	0051	DELAY	Delivery sensor	PCB5
01	0052	STNRY	Delivery sensor	PCB5
01	0071	SEQ NG*2	-	-
01	0073	ERROR*1	Disengaging HP sensor 1	SR15
01	0074	ERROR*1	Disengaging HP sensor 2	SR16
01	0075	ERROR*1	Pickup roller unit lifter HP sensor	SR12
01	0090	ADF OP	DADF open/closed sensor 1/2	SR1, SR3
01	0091	ADF OP	DADF open/closed sensor 1/2	SR1, SR3
01	0092	COVER OP	Cover open/closed sensor	SR10
01	0093	COVER OP	Cover open/closed sensor	SR10
01	0094	RESIDUAL	All feed type sensor	-
01	0095	PICKUP NG	Post-separation sensor 1/2/3	SR2, SR3, PCB2
01	0096	LIMITED FUNCTION		-

F-7-17

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If the same jam is detected although the above operation is performed, an error code will be notified.

*2 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If it is not recovered by the above operation, it is considered an error near the target sensor. Disconnect and then connect the connectors around the target sensor, check if the cable is open circuit, and replace the sensor.

Paper Deck Unit – C1

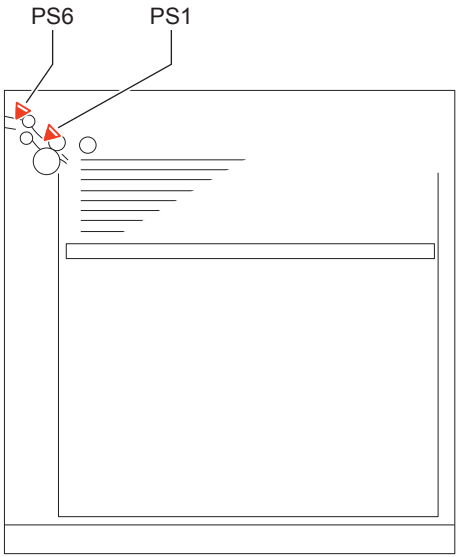


F-7-3

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
00	011A	DELAY	deck pickup sensor	PS6
00	011B	DELAY	deck feed sensor	PS1
00	021A	STNRY	deck pickup feed sensor	PS6
00	021B	STNRY	deck feed sensor	PS1
00	0A1A	POWER ON	deck pickup feed sensor	PS6
00	0A1B	POWER ON	deck feed sensor	PS1

T-7-18

POD Deck Light – A1

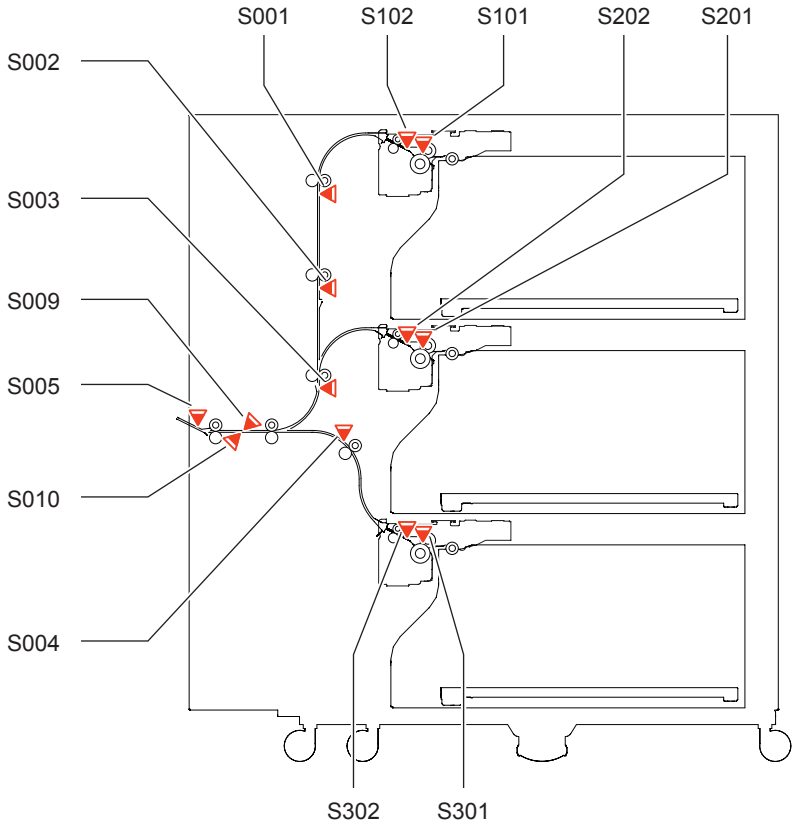


F-7-4

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
00	011A	DELAY	Deck pickup sensor	PS1
00	011B	DELAY	Deck pull-out sensor	PS6
00	021A	STNRY	Deck pickup sensor	PS1
00	021B	STNRY	Deck pull-out sensor	PS6
00	0A1A	POWER ON	Deck pickup sensor	PS1
00	0A1B	POWER ON	Deck pull-out sensor	PS6

T-7-19

Multi-drawer Paper Deck – A1

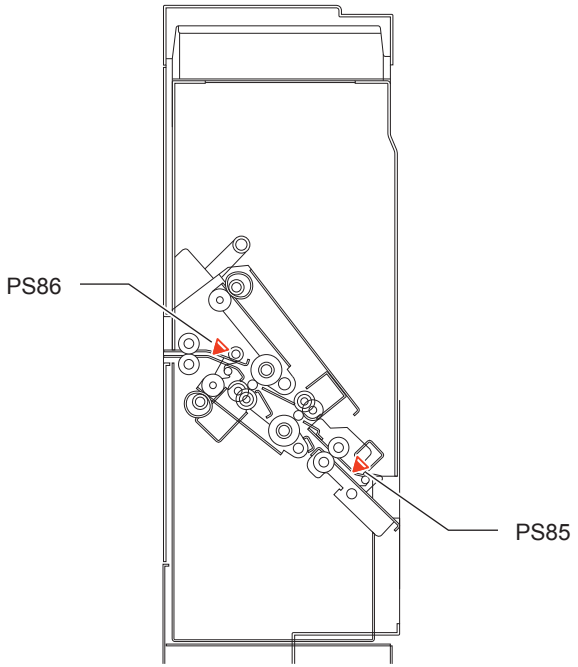


F-7-5

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
00	011E	DELAY	Upper deck pickup sensor	S101
00	011F	DELAY	Upper deck pull-out sensor	S102
00	0120	DELAY	Middle deck pickup sensor	S201
00	0121	DELAY	Middle deck pull-out sensor	S202
00	0122	DELAY	Lower deck pickup sensor	S301
00	0123	DELAY	Lower deck pull-out sensor	S302
00	0124	DELAY	Lower deck feed sensor	S004
00	0125	DELAY	Vertical path upper sensor	S001
00	0126	DELAY	Vertical path middle sensor	S002
00	0127	DELAY	Vertical path lower sensor	S003
00	0129	DELAY	Delivery sensor	S005
00	021E	STNRY	Upper deck pickup sensor	S101
00	021F	STNRY	Upper deck pull-out sensor	S102
00	0220	STNRY	Middle deck pickup sensor	S201
00	0221	STNRY	Middle deck pull-out sensor	S202
00	0222	STNRY	Lower deck pickup sensor	S301
00	0223	STNRY	Lower deck pull-out sensor	S302
00	0224	STNRY	Lower deck feed sensor	S004
00	0225	STNRY	Vertical path upper sensor	S001
00	0226	STNRY	Vertical path middle sensor	S002
00	0227	STNRY	Vertical path lower sensor	S003
00	0229	STNRY	Delivery sensor	S005
00	0A1E	POWER ON	Upper deck pickup sensor	S101
00	0A1F	POWER ON	Upper deck pull-out sensor	S102
00	0A20	POWER ON	Middle deck pickup sensor	S201
00	0A21	POWER ON	Middle deck pull-out sensor	S202
00	0A22	POWER ON	Lower deck pickup sensor	S301
00	0A23	POWER ON	Lower deck pull-out sensor	S302
00	0A24	POWER ON	Lower deck feed sensor	S004
00	0A25	POWER ON	Vertical path upper sensor	S001
00	0A26	POWER ON	Vertical path middle sensor	S002
00	0A27	POWER ON	Vertical path lower sensor	S003
00	0A29	POWER ON	Delivery sensor	S005
00	2828	OVERLAP	Double feeding sensor	S009, S010

T-7-20

Buffer Path Unit - J1

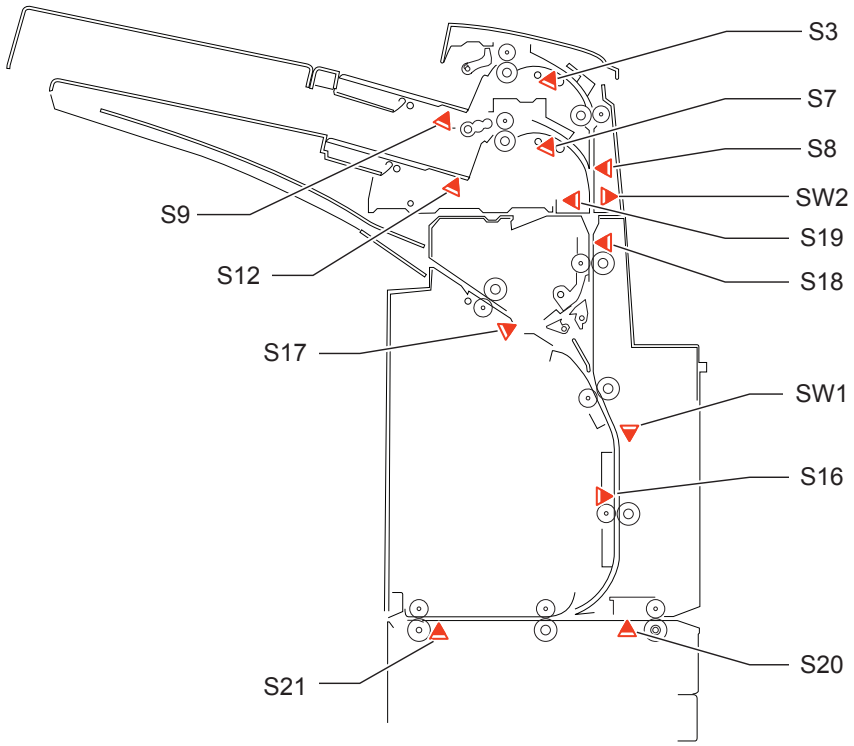


F-7-6

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
00	011C	DELAY	Buffer Sensor 1	PS85
00	011D	DELAY	Buffer Sensor 2	PS86
00	021C	STNRY	Buffer Sensor 1	PS85
00	021D	STNRY	Buffer Sensor 2	PS86
00	0A1C	RESIDUAL	Buffer Sensor 1	PS85
00	0A1D	RESIDUAL	Buffer Sensor 2	PS86

T-7-21

Insertion Unit -H1



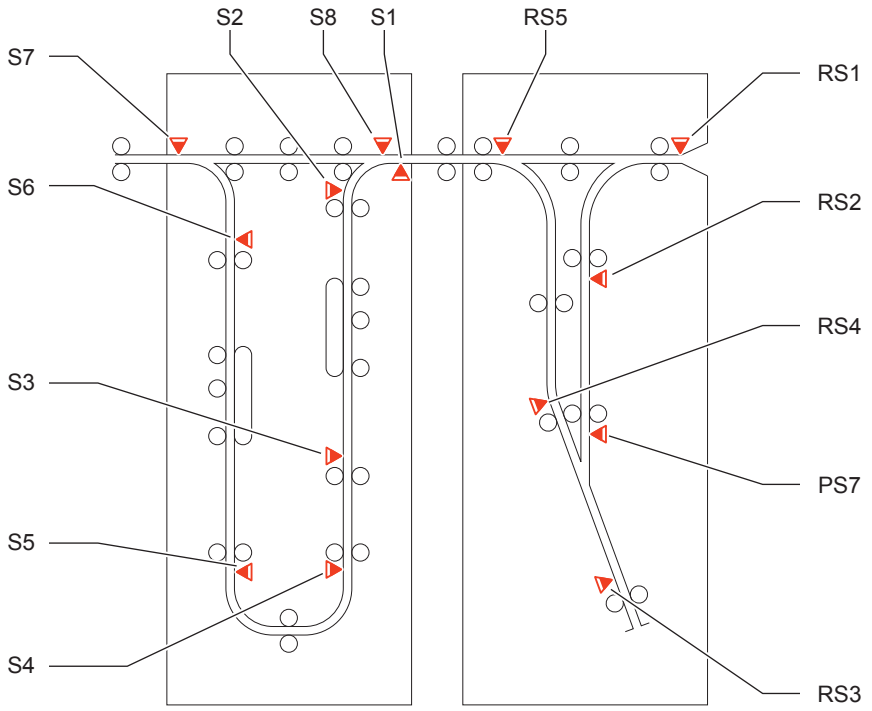
F-7-7

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	10E0	DELAY	Entrance sensor	S20
02	10E2	DELAY	Entrance sensor, Delivery sensor 2	S20, S21
02	10E4	DELAY	Upper tray registration sensor, Lower tray registration sensor	S3, S7
02	10E5	DELAY	Middle feed sensor	S8
02	10E6	DELAY	Middle feed sensor, Reverse entrance sensor	S8, S18
02	10E7	DELAY	Reverse sensor, Reverse entrance sensor	S17, S18
02	10E8	DELAY	Reverse timing sensor, Reverse entrance sensor	S16, S18
02	11F0	STNRY	Entrance sensor	S20
02	11F2	STNRY	Delivery sensor 2	S21
02	11F4	STNRY	Upper tray registration sensor, Lower tray registration sensor	S3, S7
02	11F5	STNRY	Middle feed sensor	S8
02	11F6	STNRY	Middle feed sensor, Reverse entrance sensor	S8, S18
02	11F7	STNRY	Reverse sensor	S17
02	11F8	STNRY	Reverse timing sensor	S16
02	13CD	POWER ON	Power ON jam	-
02	14CC	COVER OP	Front upper cover open/close switch, Upper cover open/close switch, Inserter open/close sensor	SW1, SW2, S19
02	1FC0	TIME OUT	Failed to detect OFF of EntryStart although a specified period of time has passed after replying ON of EntryStartAck	-
02	1FC1	TIME OUT	• Failed to detect ON of EjectStartAck although a specified period of time has passed after notifying ON of EjectStart • Failed to detect OFF of EjectStartAck although a specified period of time has passed after notifying OFF of EjectStart	-
02	1FC2	OTHER	Upper tray empty sensor	S9
02	1FC3	OTHER	Lower tray empty sensor	S12
02	1FCE	ERROR*1	Recovered by opening and closing the Door	-
02	1FCF	STOP	Press Stop key	-

F-7-22

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If the same jam is detected although the above operation is performed, an error code will be notified.

Professional Puncher - C1/Professional Puncher Integration Unit - B1

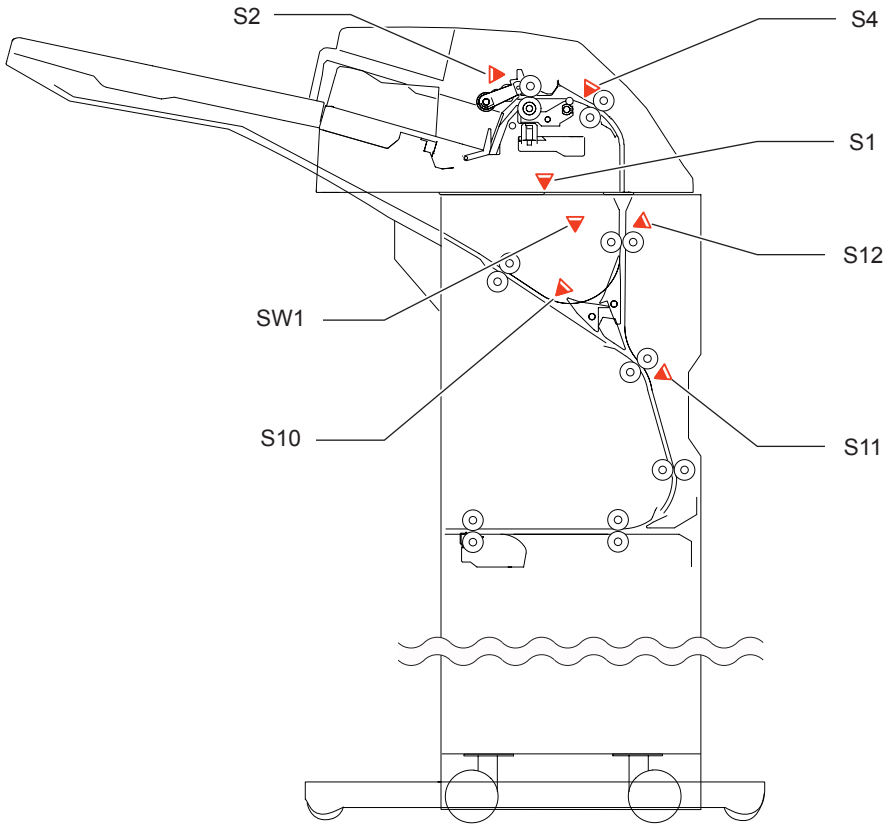


F-7-8

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	1051	DELAY	bypass 1 sensor	RS1
02	1052	DELAY	reverse path 1 sensor	RS2
02	1055	DELAY	reverse path 2 sensor	RS3
02	1057	DELAY	reverse path 3 sensor	RS4
02	1059	DELAY	bypass 2 sensor	RS5
02	1152	STNRY	bypass 1 sensor	RS1
02	1154	STNRY	reverse path 1 sensor	RS2
02	1156	STNRY	reverse path 2 sensor	RS3
02	1158	STNRY	reverse path 3 sensor	RS4
02	115A	STNRY	bypass 2 sensor	RS5
02	1161	STNRY	Bypass 1 Sensor	S1
02	1162	STNRY	Bypass 2 Sensor	S8
02	1163	STNRY	Bypass 3 Sensor	S7
02	1164	STNRY	Punch Path 1 Sensor	S2
02	1165	STNRY	Punch Path 2 Sensor	S3
02	1166	STNRY	Punch Path 3 Sensor	S4
02	1167	STNRY	Punch Path 4 Sensor, Punch Path 5 Sensor	S5, S6
02	1370	POWER ON	Power ON jam	-
02	1472	DOOR OP	front cover sensor	PS6
02	1F5E	TIMING NG	reverse path 2 sensor	RS3
02	1F5F	OTHER	reverse flapper HP sensor	PS7
02	1F71	RESIDUAL	Idle rotation jam	-
02	1F73	TIMING NG	Jam during receipt from upstream installation	-
02	1F74	ERROR	Failure of a receiving/sending signal from the upstream unit (only when connected to the finisher)	-
02	1F75	ERROR	Failure of a receiving/sending signal from the downstream unit (only when connected to the finisher)	-
02	1F76	OTHER	Punch Die comes off	-
02	1F77	TIMING NG	The paper doesn't come from puncher after the specified time	-
02	1F78	TIME OUT	Time out jam	-
02	1F79	SEQ NG	Abnormality during receipt from upstream installation	-
02	1F7A	TIMING NG	Early arrival jam	-
02	1F7B	UP DEVICE	Jam caused by other installation	-
02	1F7F	STOP	Press Stop key (only if the finisher is connected)	-

T-7-23

Insertion Unit -J1

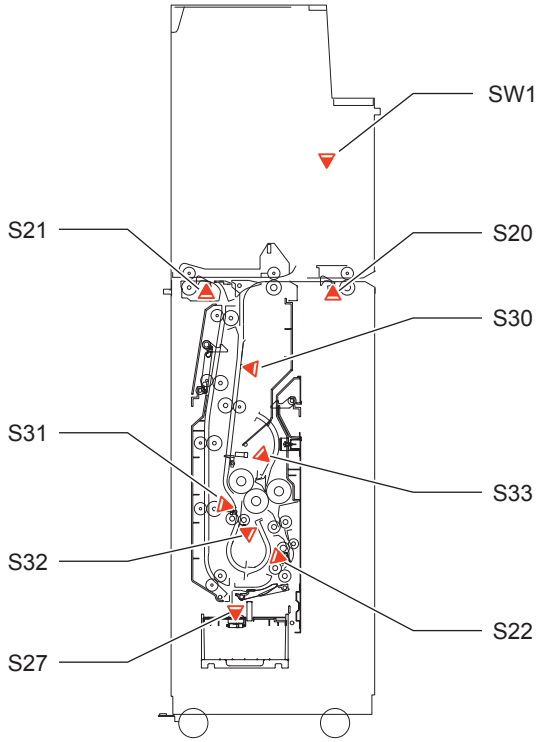


F-7-9

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	10B1	DELAY	Paper registration sensor	S4
02	10B2	DELAY	Reverse entrance sensor	S12
02	10B3	DELAY	Reverse sensor	S10
02	10B4	DELAY	Reverse timing sensor	S11
02	11C1	STNRY	Paper registration sensor	S4
02	11C2	STNRY	Reverse entrance sensor	S12
02	11C3	STNRY	Reverse sensor	S10
02	11C4	STNRY	Reverse timing sensor	S11
02	1FD1	OTHER	No papers at the time of Inserter Tray pickup. Tray paper sensor 1, Tray paper sensor 2	S7,S8
02	1FD7	POWER ON	Paper registration sensor, Reverse sensor, Reverse timing sensor, Reverse entrance sensor	S4,S10,S11, S12
02	1FD8	DOOR OP	Front upper cover open/close sensor, Inserter open/close sensor, Top cover open/close sensor	SW1,S1,S2

T-7-24

Paper Folding Unit - G1



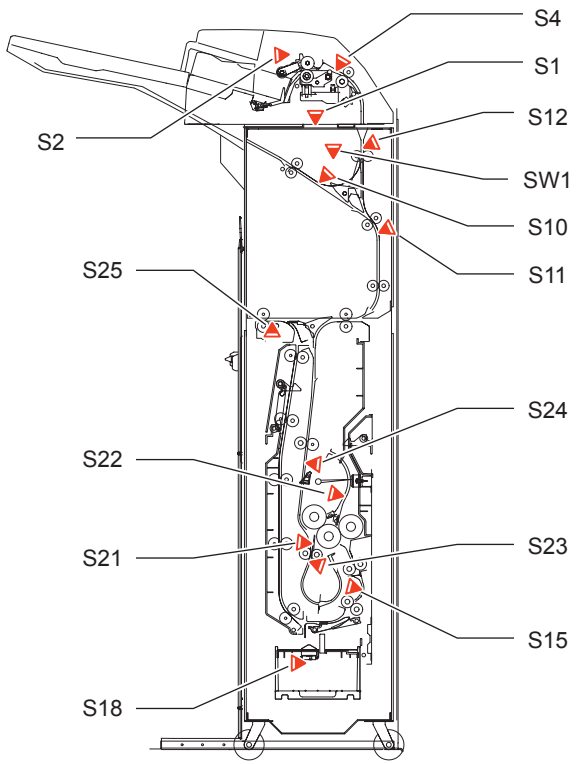
F-7-10

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	10E1	DELAY	Entrance sensor	S20
02	10E3	DELAY	Entrance sensor, Delivery sensor 2	S20, S21
02	10E9	DELAY	Entrance sensor, Slowdown timing sensor	S20, S30
02	10EA	DELAY	Release timing sensor	S31
02	10EB	DELAY	Fold position sensor	S32
02	10EC	DELAY	Upper stopper paper sensor	S33
02	10ED	DELAY	Delivery sensor 1, Upper stopper paper sensor	S22, S33
02	10EE	DELAY	Fold tray paper sensor	S27
02	1FDF	STOP	Press Stop key	-
02	11F1	STNRY	Entrance sensor	S20
02	11F3	STNRY	Delivery sensor 2	S21
02	11F9	STNRY	Slowdown timing sensor	S30
02	11FA	STNRY	Release timing sensor	S31
02	11FB	STNRY	Fold position sensor	S32
02	11FC	STNRY	Upper stopper paper sensor	S33
02	11FD	STNRY	Delivery sensor 1	S22
02	11FE	STNRY	Fold tray paper sensor	S27
02	1FD0	TIME OUT	Failed to detect OFF of EntryStart although a specified period of time has passed after replying ON of EntryStartAck	-
02	13DD	POWER ON	Detected presence of paper at power-on/ at initialization/at warm-up rotation by any sensors on the feed path	-
02	14DC	COVER OP	Front upper cover switch	SW1
02	1FDE	ERROR*1	Detected error (E569/E56A/E56B/E56E)	-
02	1FD1	TIME OUT	• Failed to detect ON of EjectStartAck although a specified period of time has passed after notifying ON of EjectStart • Failed to detect OFF of EjectStartAck although a specified period of time has passed after notifying OFF of EjectStart	-

F-7-25

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If the same jam is detected although the above operation is performed, an error code will be notified.

Paper Folding Insertion Unit - G1

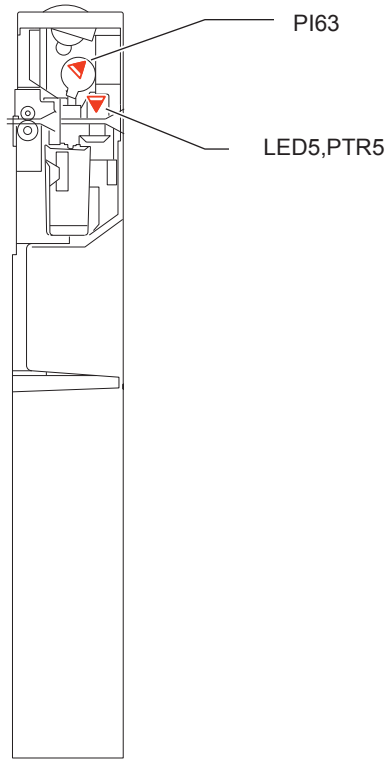


F-7-11

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	10B1	DELAY	Paper registration sensor	S4
02	10B2	DELAY	Reverse entrance sensor	S12
02	10B3	DELAY	Reverse sensor	S10
02	10B4	DELAY	Reverse timing sensor	S11
02	10B5	DELAY	Slowdown timing sensor	S24
02	10B6	DELAY	Release timing sensor	S21
02	10B7	DELAY	Fold position sensor	S23
02	10B8	DELAY	Upper stopper sensor	S22
02	10B9	STNRY	Delivery sensor	S25
02	10BA	STNRY	C fold delivery sensor	S15
02	10BB	DELAY	C fold tray empty sensor	S18
02	11C1	STNRY	Paper registration sensor	S4
02	11C2	STNRY	Reverse entrance sensor	S12
02	11C3	STNRY	Reverse sensor	S10
02	11C4	STNRY	Reverse timing sensor	S11
02	11C5	STNRY	Slowdown timing sensor	S24
02	11C6	STNRY	Release timing sensor	S21
02	11C7	STNRY	Fold position sensor	S23
02	11C8	STNRY	Upper stopper sensor	S22
02	11C9	STNRY	Delivery sensor	S25
02	11CA	STNRY	C fold delivery sensor	S15
02	11CB	STNRY	C fold tray empty sensor	S18
02	1FD1	OTHER	No papers at the time of Inserter Tray pickup	-
02	13D7	POWER ON	Detected presence of paper at power-on by any sensors on the feed path	-
02	14D8	COVER OP	Front upper cover open/close sensor, Inserter open/close sensor, Top cover open/close sensor	SW1, S1, S2

T-7-26

External Hole Puncher - A1

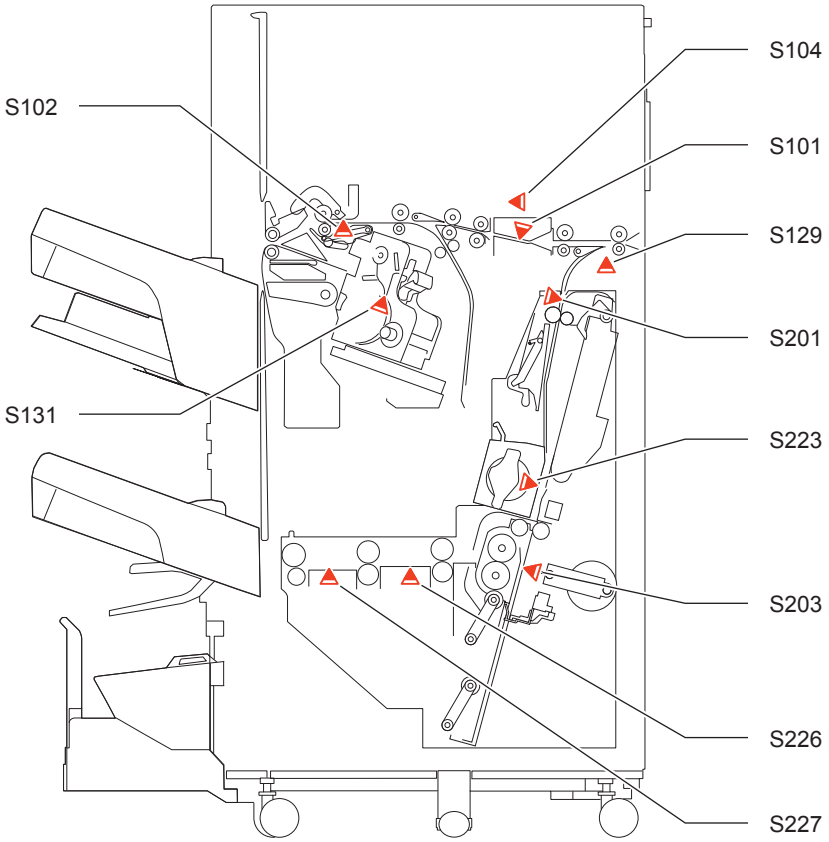


F-7-12

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	1012	DELAY	Trailing edge sensor	LED5, PTR5
02	1122	STNRY	Trailing edge sensor	LED5, PTR5
02	1F44	PUNCH	Punch home position sensor	PI63
02	1F45	POWER ON	Trailing edge sensor	LED5, PTR5

T-7-27

Staple Finisher-K1/Booklet Finisher-K1



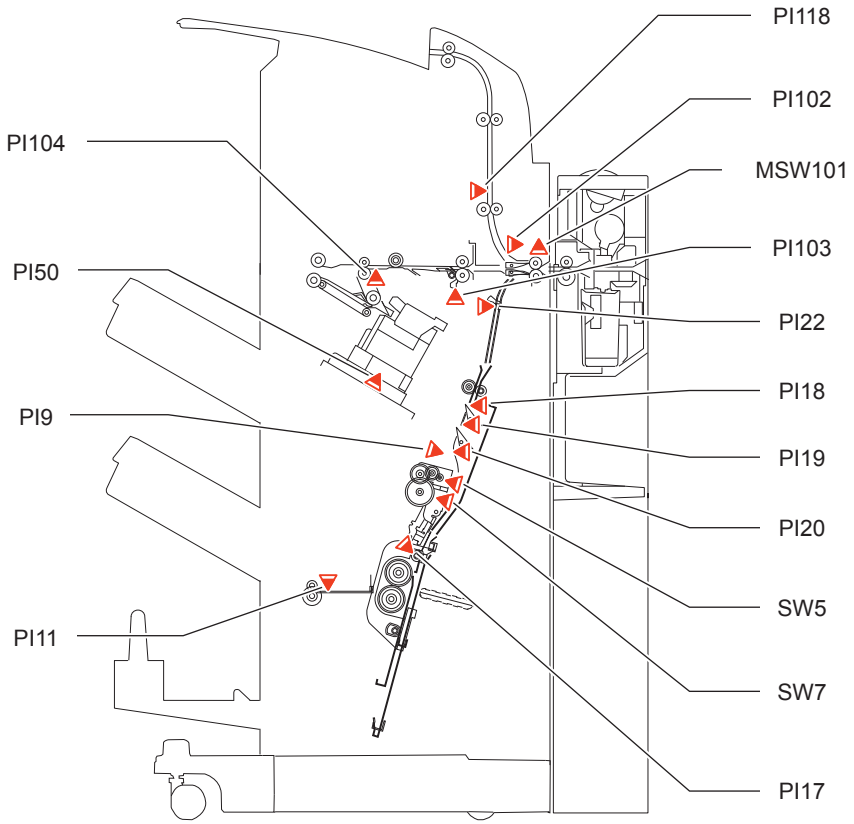
F-7-13

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	0CAF	OTHER	Finisher sequence error jam	-
02	1011	DELAY	Inlet sensor	S101
02	1012	DELAY	Feed path senor	S102
02	1091	DELAY	Saddle delivery sensor 1	S226
02	1092	DELAY	Saddle delivery sensor 2	S227
02	1093	DELAY	Saddle inlet sensor	S201
02	1094	DELAY	Trimmer inlet sensor	S101
02	1096	DELAY	Saddle vertical path sensor	S203
02	1121	STNRY	Inlet sensor	S101
02	1122	STNRY	Feed path senor	S102
02	112E	OTH JAM	Finisher Sequence Error janm	-
02	112F	ERROR*1	Detected error(E514/E530/E532/E535/ E537 /E540/E542/E568/E56D/E578/E57B/E57C /E583/E584) during paper feed	-
02	11A1	STNRY	Saddle delivery sensor 1	S226
02	11A2	STNRY	Saddle delivery sensor 2	S227
02	11A3	STNRY	Saddle inlet sensor	S201
02	11A4	STNRY	Trimmer inlet sensor	S101
02	11AF	ERROR*1	Detected error (E5A3/E5A4/E5AA/E5BA/ E5BA) during paper feed	-
02	1205	TIMING	Inlet sensor	S101
02	1307	POWER ON	Inlet sensor, Feed path senor	S101, S102
02	1387	POWER ON	Saddle inlet sensor, Saddle vertical path sensor, Saddle delivery sensor 1, Saddle delivery sensor 2	S201, S203, S226, S227
02	138A	POWER ON	Detected presence of paper at power-on /after opening and then closing the door by any sensors on the feed path	-
02	1408	DOOR OP	Front door sensor	S129
02	1488	DOOR OP	Front door sensor	S129
02	148B	DOOR OP	Front door sensor	S129
02	1506	STP	Staple hp sensor	S131
02	1586	SDL STP	Saddle stitcher hp senso	S223
02	1F45	PUNCH	Punch hp sensor	S104
02	1F4F	ERROR*1	Detected Punch Motor error/Punch Slide Motor error during paper feed	-
02	1F8F	ERROR*1	Detected error (E5F0/E5F1/E5F2/E5F3/ E5F4 /E5F5/E5F6/E5F7/E5F8/E5F9) during paper feed	-

F-7-28

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If the same jam is detected although the above operation is performed, an error code will be notified.

Staple Finisher-L1/Booklet Finisher-L1



F-7-14

ACC ID	Jam Code	Type	Sensor Name / Description	Sensor ID
02	0CAF	OTHER	Finisher sequence error jam	----
02	1011	DELAY	Inlet sensor	PI103
02	1013	DELAY	Escape tray path sensor	PI118
02	1014	DELAY	Delivery sensor	PI104
02	1091	DELAY	No.1 paper sensor	PI18
02	1092	DELAY	Delivery sensor	PI11
02	1093	DELAY	Saddle inlet sensor	PI22
02	109F	OTHER	Saddle time out	-
02	1121	STNRY	Inlet sensor	PI103
02	1123	STNRY	Escape tray path sensor	PI118
02	1124	STNRY	Delivery sensor	PI104
02	112E	OTH JAM	Finisher Sequence Error janm	-
02	112F	ERROR*1	Detected error (E540/E514/E519/E530 /E532/E535/E537/E540/E542/E584)	-
02	11A1	STNRY	No.1 paper sensor, No.2 paper sensor, No.3 paper sensor	PI18, PI19, PI20
02	11A2	STNRY	Delivery sensor,Vertical path paper sensor	PI11, PI17
02	11A3	STNRY	Saddle inlet sensor	PI22
02	1307	POWER ON	Inlet sensor, Delivery sensor, Escape tray path sensor	PI103, PI104, PI118
02	1387	POWER ON	Delivery sensor,Vertical path paper sensor, No.1 paper sensor, No.2 paper sensor, No.3 paper sensor, Saddle inlet sensor	PI11, PI17, PI18, PI19, PI20, PI22
02	1408	COVER OP	Front cover sensor, Front cover switch	PI102, MSW101
02	1488	COVER OP	Inlet cover sensor, Front cover sensor	PI9, PI102
02	1506	STP	Staple home position sensor	PI50
02	1586	SDL STP	Stitcher HP sensor (front), Stitcher HP sensor (rear)	SW5, SW7
02	1F8F	ERROR*1	Detected error (E5F0/E5F1/E5F2/E5F3/ E5F6)	-

T-7-29

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.
If the same jam is detected although the above operation is performed, an error code will be notified.

Alarm Code

Alarm Code Details

Alarm Code	Level	Title	A. movement /B. cause /C. measures
00-0246	1	Error code display (4-digit)	Soft counter PCB cannot write normally
00-0247	1	Error code display (4-digit)	Soft counter PCB cannot restore data
02-0025	3	Insufficient LED light intensity error in Scanner Unit for reading the front side (DADF)	The light intensity is insufficient at LED light-on.
04-0031	3	Right deck lifter error	Movement: The right deck pickup motor (M43) stops. The right deck is not used. Cause: The right deck lifter does not move up. A failure occurred in the right deck paper surface sensor (PS52). Measures: Turn OFF/ON the power to eliminate the problem.
04-0131	3	Left deck lifter error	Movement: The left deck pickup motor (M42) stops. The left deck is not used. Cause: The left deck lifter does not move up. A failure occurred in the left deck paper surface sensor (PS57). Measures: Turn OFF/ON the power to eliminate the problem.
04-0231	3	Cassette 3 lifter error	Movement: The cassette 3 pickup motor (M44) stops. The cassette 3 is not used. Cause: The cassette 3 lifter does not move up. A failure occurred in the cassette 3 paper surface sensor (PS62). Measures: Turn OFF/ON the power to eliminate the problem.
04-0331	3	Cassette 4 lifter error	Movement: The cassette 4 pickup motor (M45) stops. The cassette 4 is not used. Cause: The cassette 4 lifter does not move up. A failure occurred in the cassette 4 paper surface sensor (PS67). Measures: Turn OFF/ON the power to eliminate the problem.
04-0431	3	Option deck lifter error	Movement: The option deck lifter motor stops. Option deck is not used. Cause: The option deck lifter does not move up. A failure occurred in the Option deck paper surface sensor. Measures: Turn OFF/ON the power to eliminate the problem.
04-3039	3	Upper multi-cassette deck lifter error	Movement: The upper deck lifter motor (M101) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3040	3	Upper multi-cassette deck lifter lower limit sensor error	Movement: The upper deck lifter motor (M101) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3041	3	Upper multi-cassette deck paper surface sensor error	Movement: The upper deck lifter motor (M101) stops. The upper deck is not used. Measures: Check the motor ,sensor and wire
04-3042	3	The upper limit of the upper multi-cassette deck lifter upper limit sensor has been exceeded.	Movement: The lifter moves down to the lower limit position. The upper deck is not used. Measures: Check the motor ,sensor and wire
04-3043	3	The lower limit of the upper multi-cassette deck lifter lower limit sensor has been exceeded.	Movement: The lifter moves up to the lower limit position. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3044	3	The upper limit of the value of counting the paper remaining on the upper multi-cassette deck has been exceeded.	Movement: The upper deck lifter motor (M101) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3045	3	The lower limit of the value of counting the paper remaining on the upper multi-cassette deck has been exceeded.	Movement: The upper deck lifter motor (M101) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3053	3	Reaching the life of the upper multi-cassette deck left separation fan / Failure of the fan	Movement: The fan stops.The air floatation fan stops.Not use the corresponding receptacle (handle as there is no paper) Measures: Turn OFF/ON the power to eliminate the problem.
04-3055	3	Reaching the life of the upper multi-cassette deck right separation fan / Failure of the fan	Movement: The fan stops.The air floatation fan stops.Not use the corresponding receptacle (handle as there is no paper) Measures: Turn OFF/ON the power to eliminate the problem.
04-3060	3	Error in home position detection with Multi Deck Upper Deck Swing Motor	An error in the Swing Motor was detected.
04-3061	3	Error in Multi Deck Upper Deck Power Supply Fan	Multi Deck Fan failed to rotate.
04-3062	3	Multi Deck Upper Deck Air Heater high temperature error	Air Heater detected abnormal high temperature.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
04-3063	3	Multi Deck Upper Deck Air Heater low temperature error	Air Heater detected abnormal low temperature.
04-3064	3	Multi Deck Upper Deck Pickup Motor error	Deck Pickup Motor failed to rotate.
04-3139	3	Middle multi-cassette deck lifter error	Movement: The middle deck lifter motor (M201) stops. The middle deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3140	3	Middle multi-cassette deck lifter lower limit sensor error	Movement: The middle deck lifter motor (M201) stops. The middle deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3141	3	Middle multi-cassette deck paper surface sensor error	Movement: The middle deck lifter motor (M201) stops. The middle deck is not used. Measures: Check the motor ,sensor and wire
04-3142	3	The upper limit of the middle multi-cassette deck lifter upper limit sensor has been exceeded.	Movement: The lifter moves down to the lower limit position. The middle deck is not used. Measures: Check the motor ,sensor and wire
04-3143	3	The lower limit of the middle multi-cassette deck lifter lower limit sensor has been exceeded.	Movement: The lifter moves up to the lower limit position. The middle deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3144	3	The upper limit of the value of counting the paper remaining on the middle multi-cassette deck has been exceeded.	Movement: The middle deck lifter motor (M201) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3145	3	The lower limit of the value of counting the paper remaining on the middle multi-cassette deck has been exceeded.	Movement: The middle deck lifter motor (M201) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3153	3	Reaching the life of the middle multi-cassette deck left separation fan / Failure of the fan	Movement: The fan stops.The air floatation fan stops.Not use the corresponding receptacle (handle as there is no paper) Measures: Turn OFF/ON the power to eliminate the problem.
04-3155	3	Reaching the life of the middle multi-cassette deck right separation fan / Failure of the fan	Movement: The fan stops.The air floatation fan stops.Not use the corresponding receptacle (handle as there is no paper) Measures: Turn OFF/ON the power to eliminate the problem.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
04-3160	3	Error in home position detection with Multi Deck Middle Deck Swing Motor	An error in the Swing Motor was detected.
04-3161	3	Error in Multi Deck Middle Deck Power Supply Fan	Multi Deck Fan failed to rotate.
04-3162	3	Multi Deck Middle Deck Air Heater high temperature error	Air Heater detected abnormal high temperature.
04-3163	3	Multi Deck Middle Deck Air Heater low temperature error	Air Heater detected abnormal low temperature.
04-3164	3	Multi Deck Middle Deck Pickup Motor error	Deck Pickup Motor failed to rotate.
04-3239	3	Lower multi-cassette deck lifter error	Movement: The lower deck lifter motor (M301) stops. The lower deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3240	3	Lower multi-cassette deck lifter lower limit sensor error	Movement: The lower deck lifter motor (M301) stops. The lower deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3241	3	Lower multi-cassette deck paper surface sensor error	Movement: The lower deck lifter motor (M301) stops. The lower deck is not used. Measures: Check the motor ,sensor and wire
04-3242	3	The upper limit of the lower multi-cassette deck lifter upper limit sensor has been exceeded.	Movement: The lifter moves down to the lower limit position. The middle deck is not used. Measures: Check the motor ,sensor and wire
04-3243	3	The lower limit of the lower multi-cassette deck lifter lower limit sensor has been exceeded.	Movement: The lifter moves up to the lower limit position. The lower deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3244	3	The upper limit of the value of counting the paper remaining on the lower multi-cassette deck has been exceeded.	Movement: The lower deck lifter motor (M301) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.
04-3245	3	The lower limit of the value of counting the paper remaining on the lower multi-cassette deck has been exceeded.	Movement: The lower deck lifter motor (M301) stops. The upper deck is not used. Measures: Turn OFF/ON the power to eliminate the problem.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
04-3253	3	Reaching the life of the lower multi-cassette deck left separation fan / Failure of the fan	Movement: The fan stops.The air floatation fan stops.Not use the corresponding receptacle (handle as there is no paper) Measures: Turn OFF/ON the power to eliminate the problem.
04-3255	3	Reaching the life of the lower multi-cassette deck right separation fan / Failure of the fan	Movement: The fan stops.The air floatation fan stops.Not use the corresponding receptacle (handle as there is no paper) Measures: Turn OFF/ON the power to eliminate the problem.
04-3260	3	Error in home position detection with Multi Deck Lower Deck Swing Motor	An error in the Swing Motor was detected.
04-3261	3	Error in Multi Deck Lower Deck Power Supply Fan	Multi Deck Fan failed to rotate.
04-3262	3	Multi Deck Lower Deck Air Heater high temperature error	Air Heater detected abnormal high temperature.
04-3263	3	Multi Deck Lower Deck Air Heater low temperature error	Air Heater detected abnormal low temperature.
04-3264	3	Multi Deck Lower Deck Pickup Motor error	Deck Pickup Motor failed to rotate.
04-9090	3	OHT sensor (PS29) adjustment failure	Movement: OHT detection cannot be performed. Cause: An adjustment of the OHT sensor (PS29) failed at initial rotation. Measures: Re-adjust during pre-rotation.
06-0002	3	Fixing Film life alarm 1	Total number of sheets fed through the Fixing Film Unit exceeded the specified number.
06-0003	3	Fixing Web absence notice alarm	Fixing Web level is low. (Fixing Web Sensor detected low web level.)
06-0010	3	Fixing reciprocation drive alarm	Home position could not be detected despite a reciprocation drive operation of Fixing Assembly.
06-0011	3	Fixing Film life alarm 2	Rotation time of the Fixing Film Unit exceeded the specified time.
10-0001	3	Toner low(Bk)(This alarm code issued by RDS.)	
10-0002	3	Toner low(Cy)(This alarm code issued by RDS.)	
10-0003	3	Toner low(M)(This alarm code issued by RDS.)	
10-0004	3	Toner low(Ye)(This alarm code issued by RDS.)	
10-0017	3	Toner (Y) prior delivery alarm	
10-0018	3	Toner (M) prior delivery alarm	
10-0019	3	Toner (C) prior delivery alarm	
10-0020	3	Toner (BK) prior delivery alarm	
10-0022	3	Patch detection light intensity abnormal change alarm	
10-0100	3	Toner bottle change notification alarm	
11-0001	3	Waste Toner Container full level alarm (waste toner full)	Full level of the Waste Toner Container was detected.
11-0010	3	Waste Toner Container near full level alarm (waste toner near full)	Near full level alert of the Waste Toner Container was detected.
31-0006	3	HDD failure when equipped with the mirroring function	HDD failure when equipped with the mirroring function
31-0008	3	HDD abnormality of S.M.A.R.T. value alarm	
33-0010	3	Stream reading fan alarm	A failure occurred in the fan at the time of job completion.
33-0011	3	Alarm for delivery fan heat dischare failure	
33-0023	3	Optical unit (DADF) cooling fan alarm	A failure occurred in the fan during job operation.
33-0025	3	Optical unit (reader) cooling fan alarm	A failure occurred in the fan during job operation.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
34-0001	3	Image position correction patch detection alarm 1	Movement: None Cause: The detection data of the average value of the image position correction patch pattern has exceeded the permitted range. • Scraches on the ITB • Failure of the photosensitive drum • Noise due to contact failure of the ITB guide (The ITB unit is not installed correctly.) Measures: 1. Check whether the color image is formed correctly for 4 colors. a. Perform test print in the following condition. COPIER>TEST>PG>TYPE: 5 Output one sheet for each color in the paper of LTR/A4/A3 size (more than 290mm in a horizontal scanning direction). b. Check the following points. • Check whether the image is formed in the printing field except a margin. Check whether the image density is not low. • Check whether an unexpected image is not formed. If a correct image is not formed, check the following points. • Developing assembly: Check whether dirt is not applied to the developing. • Drum: Check whether dirt is not applied to the drum. Check whether there are no scratches on the drum. • ITB cleaning unit: Check whether an ITB cleaning failure has not occurred. (Check whether the previous image does not remain.) • Check whether there are a lot of scratches or dents on the ITB or not. Based on the checking results and frequency of occurrence of the alarm, make a judgment of whether or not to replace the corresponding parts.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
34-0002	3	Image position correction patch detection alarm 2	Movement: None Cause: The image position correction patch pattern cannot be detected at all. • Failure of the patch sensor • Failure of the shutter • Image failure 1. Check whether the color image is formed correctly for 4 colors. a. Perform test print in the following condition. COPIER>TEST>PG>TYPE: 5 Output one sheet for each color in the paper of LTR/A4/A3 size (more than 290mm in a horizontal scanning direction). b. Check the following points. • Check whether the image is formed in the printing field except a margin. Check whether the image density is not low. • Check whether an unexpected image is not formed. If a correct image is not formed, take measures to be taken for prevention of an image failure. (Check the developing assembly and drum unit.) • Developing assembly: Check whether dirt is not applied to the developing. • Drum: Check whether dirt is not applied to the drum. Check whether there are no scratches on the drum. • ITB cleaning unit: Check whether an ITB cleaning failure has not occurred. (Check whether the previous image does not remain.) • Check whether there are a lot of scratches or dents on the ITB or not. • Based on the checking results and frequency of occurrence of the alarm, make a judgment of whether or not to replace the corresponding parts. 2. Damage or dirt of/on the patch sensor a. Check whether the shutter of the patch sensor operates correctly. b. Check whether dirt is not applied to the patch sensor. If dirt is applied, clean the sensor surface with alcohol. After cleaning, execute patch light intensity correction and base correction (COPIER>FUNCTION>MISC-P>PT-LPADJ). c. If the problem is not eliminated even after cleaning, replace the registration patch sensor unit. d. Check whether shorting has occurred to the patch sensor harness. If it occurred, replace both of the harness and the DC controller interface PCB. (It is necessary to replace the PCB because the DC controller interface PCB burns when shorting occurs.)

Alarm Code	Level	Title	A. movement /B. cause /C. measures
34-0003	3	An attempt to read 10 sets of auto registration patterns has failed, ending in a time-out condition.	The registration sensor is faulty, the registration sensor cleaning member is blocking the registration sensor, or no image has been drawn on the belt.
34-0004	3	Image position correction patch correction alarm 1	Movement: None Cause: The correction amount of the skew correction motor has exceeded the limit. • Failure of the laser scanner unit • Failure of installation of the laser scanner unit • Incorrect detection by the registration sensor (Scratches on the belt) Measures: 1. Check whether a color image is formed correctly for 4 colors. a. Perform test print in the following condition. COPIER>TEST>PG>TYPE: 6 Output one sheet for each color in the paper of LTR/A4/A3 size (more than 290mm in a horizontal scanning direction). b. Check the following points. • Check whether there is color displacement in a horizontal scanning direction based on the Bk standard, and check whether there is a color which is extremely displaced. Replace the laser scanner unit for the color in which significant color displacement occurred. 2. Check whether there are a lot of scratches or dents on the ITB or not. If there are a lot of them and this alarm occurs frequently, replace the ITB.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
34-0005	3	Image position correction patch correction alarm 2	Movement: None Cause: The vertical scanning direction writing correction limiter has been exceeded. • Incorrect detection by the registration sensor (Scratches on the belt) • Patch image failure Measures: 1. Check whether a color image is formed correctly for 4 colors. a. Perform test print in the following condition. COPIER>TEST>PG>TYPE: 6 Output more than 2 sheets of A3-size paper consecutively. Or, output 4 sheets of A4-size paper consecutively. b. Check the following points. • Check whether an unexpected image is not formed. (Color displacement in a vertical scanning direction) If a correct image is not formed, take measures to be taken for prevention of an image failure. (Check the developing assembly and drum unit.) 2. Check whether there are a lot of scratches or dents on the ITB or not. If there are a lot of them and this alarm occurs frequently, replace the ITB.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
34-0006	3	Image position correction patch correction alarm 3	Movement: None Cause: The horizontal scanning direction magnification correction limiter has been exceeded. • Incorrect detection by the registration sensor (Scratches on the belt) • Failure of the laser scanner unit • Failure of installation of the laser scanner unit • Patch image failure Measures: 1. Check whether a color image is formed correctly for 4 colors. a. Perform test print in the following condition. COPIER>TEST>PG>TYPE: 6 Output one sheet for each color in the paper of LTR/A4/A3 size (more than 290mm in a horizontal scanning direction). b. Check the following points. • Check whether there is color displacement in a horizontal scanning direction based on the Bk standard, and check whether there is a color which is extremely displaced. Reinstall the laser scanner unit where significant color displacement occurred. If the problem cannot be still eliminated, replace the unit. If a correct image is not formed, take measures to be taken for prevention of an image failure. (Replace the drum unit, etc.) 2. Check whether there are a lot of scratches or dents on the ITB or not. If there are a lot of them and this alarm occurs frequently, replace the ITB.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
34-0007	3	Image position correction patch correction alarm 4	Movement: None Cause: The horizontal scanning direction writing correction limiter has been exceeded. • Incorrect detection by the registration sensor (Scratches on the belt) • Failure of the laser scanner unit • Failure of installation of the laser scanner unit • Patch image failure Measures: 1. Check whether a color image is formed correctly for 4 colors. a. Perform test print in the following condition. COPIER>TEST>PG>TYPE: 6 Output one sheet for each color in the paper of LTR/A4/A3 size (more than 290mm in a horizontal scanning direction). b. Check the following points. • Check whether there is color displacement in a horizontal scanning direction based on the Bk standard, and check whether there is a color which is extremely displaced. Reinstall the laser scanner unit where significant color displacement occurred. If the problem cannot be still eliminated, replace the unit. If a correct image is not formed, take measures to be taken for prevention of an image failure. (Replace the drum unit, etc.) 2. Check whether there are a lot of scratches or dents on the ITB or not. If there are a lot of them and this alarm occurs frequently, replace the ITB.
34-0010	3	ITB home position error	An error was detected at ITB home position.
34-1001	3	ITB Steering Motor retry error	Retry occurred when detecting home position of the ITB Steering Motor.
37-0001	3	For R&D	For R&D
37-0002	3	For R&D	For R&D
37-0003	3	For R&D	For R&D
37-0004	3	For R&D	For R&D
37-0005	3	For R&D	For R&D
37-0006	3	For R&D	For R&D
37-0007	3	For R&D	For R&D
37-1000	3	For R&D	For R&D
37-2000	3	For R&D	For R&D
38-0001	3	For R&D	For R&D
38-0002	3	For R&D	For R&D

Alarm Code	Level	Title	A. movement /B. cause /C. measures
50-0007	3	Lack of light intensity in the post-separation sensor 3	A failure of lack of light intensity occurred when adjusting the output of the post-separation sensor 3.
50-0008	3	Lack of light intensity in the read sensor 1	A failure of lack of light intensity occurred when adjusting the output of the read sensor 1.
50-0009	3	Lack of light intensity in the delivery sensor	A failure of lack of light intensity occurred when adjusting the output of the delivery sensor.
50-0010	3	A separation alarm occurred consecutively.	A failure occurred.
50-0013	3	Lack of light intensity in the registration sensor	A failure of lack of light intensity occurred when adjusting the output of the registration sensor.
50-0014	3	Insufficient LED light intensity error in Scanner Unit for reading the back side (DADF)	Light intensity was insufficient at LED lighting.
70-1	3	Memory overflow	-
70-2	3	Font memory overflow	-
70-3	3	Micromemory overflow	-
70-4	3	Image memory overflow	-
70-5	3	Pattern memory overflow	-
70-6	3	Hard disk error	-
70-7	2	Detect operation abnormality for the HDD access request	
73-0004	3	LIPS	Overflow of work memory for translator
73-0006	3	LIPS	Error in configuration acquisition/management
73-0007	3	LIPS	Memory management error in LIPS
73-0008	3	LIPS	File management error in LIPS
73-0009	3	LIPS	Reception data management error
73-0010	3	LIPS	Page control error
73-0011	3	LIPS	Macro management error
73-0012	3	LIPS	Color management error
73-0013	3	LIPS	Layout control error
73-0014	3	LIPS	Font management error
73-0015	3	LIPS	Letter drawing error
73-0016	3	LIPS	Graphic drawing error
73-0017	3	LIPS	Image drawing error
73-0018	3	LIPS	Display error to LCD
73-0019	3	LIPS	Text mode command error layer error
73-0020	3	LIPS	Vector mode command error layer error
73-0021	3	LIPS	Utility execution control error
73-0022	3	LIPS	Database management error in LIPS
73-0023	3	LIPS	Menu control error in LIPS
73-0024	3	LIPS	Boot error in LIPS
73-0025	3	LIPS	When the graphic library is in use for image processing, if the memory allocation is failed.
73-0026	3	LIPS	Data format error of image mode
75-0001	3	Error occurred in external controller	-
75-0002	3	Error occurred due to invalid SVG analysis from external controller	-
75-9101	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9102	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9103	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9104	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9105	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9106	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
75-9107	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9108	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9109	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9110	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9111	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9112	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9113	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9114	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9115	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
75-9116	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9117	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9118	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9119	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-9120	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-910A	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-910B	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-910C	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-910D	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
75-910E	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-910F	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-911A	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-911B	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-911C	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-911D	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-911E	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-911F	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B101	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B102	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B103	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B104	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B105	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B106	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B107	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B108	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B109	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B10A	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
75-B10B	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B10C	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B10D	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B10E	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B10F	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B110	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B111	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B112	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B113	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
75-B114	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B115	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B116	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B117	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B118	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B119	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B11A	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B11B	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B11C	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.

Alarm Code	Level	Title	A. movement /B. cause /C. measures
75-B11D	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B11E	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B11F	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
75-B120	3	Failure in transfer of video data from an external controller	When a video data transfer error occurred, retransmission of the video data is internally performed, so no measures need to be taken. However, when retransmission is performed over a specified number of times, the corresponding job is cancelled.
76-0001	3	Font	No memory for internal font
76-0002	3	Font	Fails to assure the work area to analyze the font that is downloaded at “Resource Download”.
76-0003	2	Font	Fails to access the file that stores the font.
76-0004	2	Font	Fails to allocate the FM work memory.
76-0005	2	Font	Fails to analyze the internal font.
76-0006	2	Font	Alignment of font data is wrong.
76-0007	2	Font	Failed to allocate work memory with scaler. There are 3 types depending on where to occur
76-0008	2	Font	Failed to allocate work memory with scaler. There are 3 types depending on where to occur
77-0001	2	PDL	Fails to allocate the memory
77-0002	2	PDL	Failure of rendering
77-0003	2	PDL	DGL entry invalid
77-0005	2	PDL	Other errors
77-0006	1	PDL	DLG memory insufficient
78-0003	3	GL	GL entry invalid
78-0005	1	GL	System memory full
79-0001	3	In-house developed PCL	A PCL initialization error
79-0002	3	In-house developed PCL	A PCL processing error
79-0003	1	In-house developed PCL	Overflow of work memory for translator
79-0004	1	In-house developed PCL	Download overflow

Alarm Code	Level	Title	A. movement /B. cause /C. measures
80-0001	3	BDL	Admin error
80-0003	3	BDL	DataArea error
80-0010	3	BDL	Graphics error
80-0011	3	BDL	Char error
80-0015	1	BDL	Print data cannot process this version.
80-0016	1	BDL	Overflow of work memory for translator
80-0018	1	BDL	Syntax error
80-0019	1	BDL	In case of invalid data format in BDL custom mode.
81-0001	1	Imaging	Fails to allocate the memory
81-0002	1	Imaging	Failure of rendering
81-0003	3	Imaging	Overflow of work memory for translator
81-0004	3	Imaging	Imaging initialization error
81-0005	1	Imaging	Imaging processing error
82-0001	3	RIP	H/W Dart hangup by the DisplayList injustice
83-0001	3	CanonPDF	PDF data error
83-0002	1	CanonPDF	PDF compression analysis error
83-0003	1	CanonPDF	PDF page compression error
83-0004	1	CanonPDF	PDF data processing error
83-0005	3	CanonPDF	PDF memory full
83-0006	3	CanonPDF	PDF temporary file error
83-0007	3	CanonPDF	PDF color analysis error
83-0008	3	CanonPDF	PDF data reading error
83-0009	3	CanonPDF	PDF output selection error
83-0010	3	CanonPDF	PDF process file error
83-0011	3	CanonPDF	PDF access error
83-0012	3	CanonPDF	PDF analysis access error
83-0013	3	CanonPDF	PDF font error
83-0014	3	CanonPDF	PDF rendering error
83-0015	1	CanonPDF	PDF data decode error
83-0016	1	CanonPDF	PDF print range error
83-0017	3	CanonPDF	PDF error
83-0018	1	CanonPDF	PDF analysis error There is un-supported transparent object
84-0001	3	XPS memory full error	-
84-0002	3	XPS spool full error	-
84-0003	3	XPS print range error	-
84-0004	3	XPS document data error	-
84-0005	3	XPS page data error	-
84-0006	3	XPS image data error	-
84-0007	3	XPS font data error	-
84-0008	3	XPS non-support image error	-

Alarm Code	Level	Title	A. movement /B. cause /C. measures
84-0009	3	XPS rendering error	-
85-0001	3	Scanning input timeout error	Remove and place the document, decrease the sharpness level, and perform printing again. If this alarm occurs frequently, check the connection of the DDIS video cable, replace the reader, and replace the video controller 2.
85-0002	3	Scanning input encode error	Remove and place the document, decrease the sharpness level, and perform printing again. If this alarm occurs frequently, check the connection of the DDIS video cable, replace the reader, and replace the video controller 2.
85-0003	3	Scanning input encode error 2	Remove and place the document, decrease the sharpness level, and perform printing again. If this alarm occurs frequently, check the connection of the DDIS video cable, replace the reader, and replace the video controller 2.
85-0004	3	Scanning input VSync error	Remove and place the document, decrease the sharpness level, and perform printing again. If this alarm occurs frequently, check the connection of the DDIS video cable, replace the reader, and replace the video controller 2.
85-0005	3	Scanning input HSync error	Remove and place the document, decrease the sharpness level, and perform printing again. If this alarm occurs frequently, check the connection of the DDIS video cable, replace the reader, and replace the video controller 2.
85-0006	3	Image processing timeout error	When an error retry failed three times, E747-6xxx/7xxx is displayed.
85-0007	3	Image processing transfer error	When an error retry failed three times, E747-6xxx/8xxx is displayed.
85-0008	3	Illegal packet error	When an error retry failed three times, E747-3xxx is displayed.
85-0009	3	Process instruction error	When an error retry failed three times, E747-3xxx is displayed.

T-7-30

8 Service Mode

- Overview
- COPIER
- FEEDER
- SORTER
- BOARD

Overview

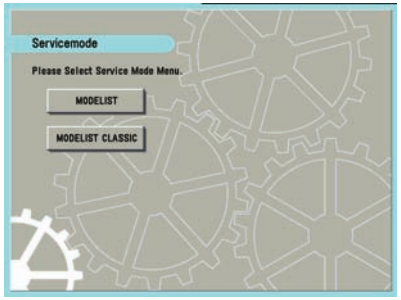
Instructions on how to use service mode items can be found within the service mode itself.
The information explains what items have been added or changed from previous models.

Entering Service Mode

Contact the sales company for the method to enter service mode.

Service Mode Menu

TOP Screen



F-8-1

"MODELIST" — A brand new additional mode in the host machine. A function that can be used as a reference on how to use each item in Service Mode is installed. The new function, which will be described later, is available in MODELIST Mode.

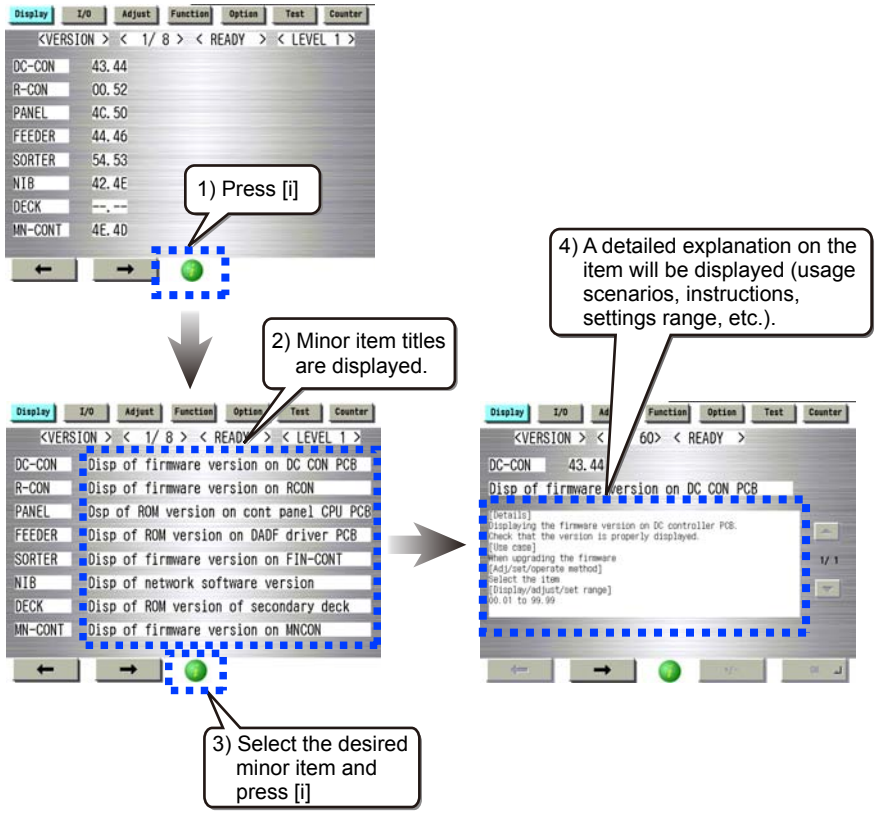
"MODELIST CLASSIC" — This mode is same as the old machine. The new function, which will be described later, is not available in the MODELIST CLASSIC Mode.

If " MODELIST " or " MODELIST CLASSIC " is pressed, the screen will switch to initial screen for each mode.

Service mode item explanations

Explanatory texts for the initial window, main items, sub items and minor items can be displayed.
Select the desired initial window, main item, sub item or minor item, then pres [i] (Information button) to display an explanatory text (hereafter, service mode contents) on the selected item.

E.g., COPIER > DISPLAY > Version window

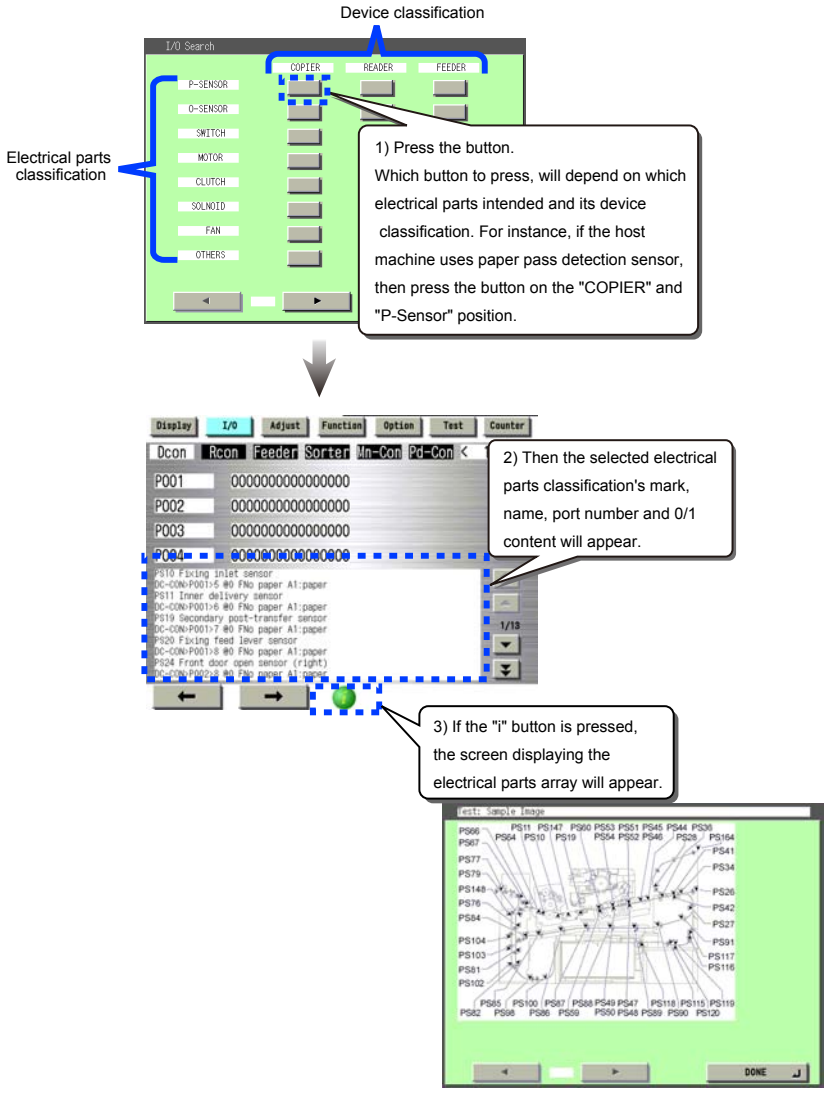


F-8-2

- The service mode contents can be displayed in J/E/F/I/G/S languages.
- Service mode contents, like system software, can be upgraded by SST.

I/O information enhancement

On the COPIER > I/O, the mode to confirm input output signal of electrical parts used (sensor, motor, fan, etc), makes it easier to look for the intended electrical part.
And the screen will also display the input output signal.

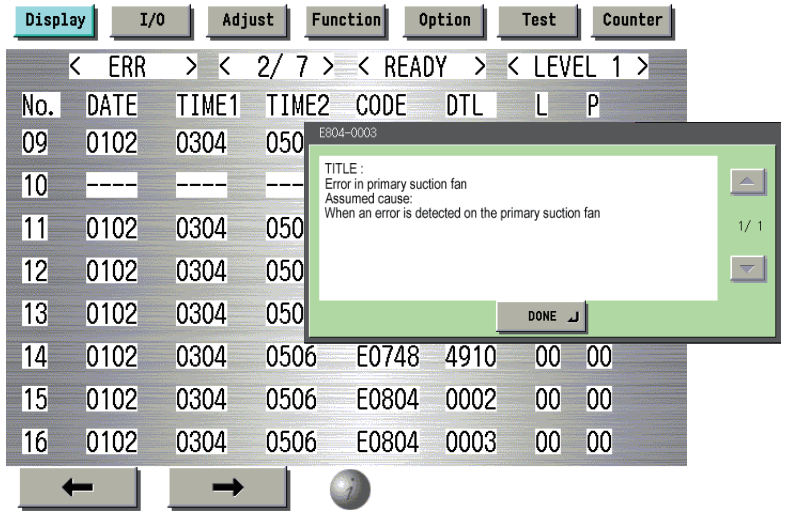


F-8-3

Display of Error Code/Alarm Code description

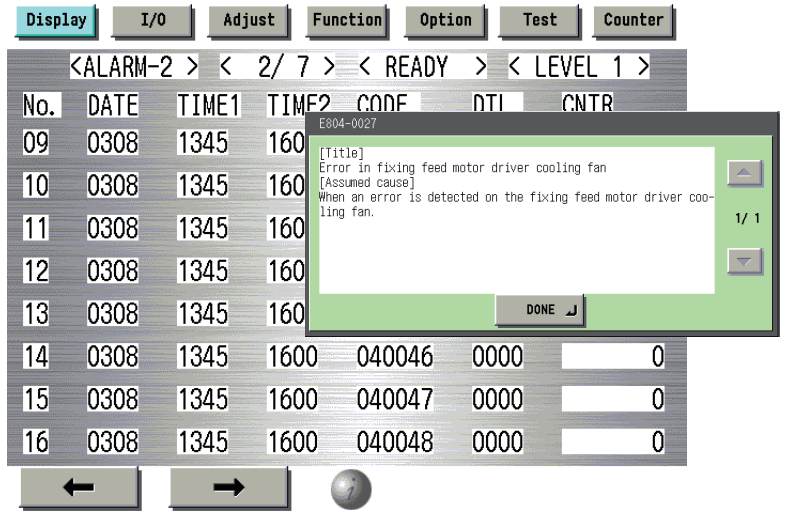
The detail description of each code can be viewed on the error code and alarm code occurrence record screen.

ERROR CODE : COPIER > DISPLAY >ERR



F-8-4

ALARM CODE : COPIER > DISPLAY >ERR



F-8-5

COPIER > OPTION > BODY, Item Segmentation

On the current machine, there are extremely many items in the COPIER > OPTION > BODY (in related to host machine specification), that it is difficult to reach the intended item.
In order to reach the intended item in shorter time, all items inside the BODY is classified to 15 categories.

Classification	Name	Description
Function switching	**FNC-SW**	Language, cassette, paper size type, NAVI/ DA connection, count-up spec., document size detection, dirt detection level
Display switching/ display timing	DSPLY-SW	UI (User Interface) display related
Image related (fixing)	**IMG-FIX**	Fixing related
Image related (transfer)	**IMG-TR**	Primary transfer, secondary transfer, ITB
Image related (developing)	**IMG-DEV**	Developer related
Image related (laser/ latent image)	**IMG-LSR**	Laser, latent image related
Image related (reader/ ADF)	**IMG-RDR**	Reader, ADF image related
Image related (controller, other general items)	**IMG-MCON**	MN-CON image related, and image related items other than those referred to above.
Image quality/ copy speed	**IMG-SPD**	Power down sequence
Cleaning	**CLEANING**	Cleaning of charging unit, drum, transfer roller, ITB, etc.
Environment settings	**ENV-SET**	Temperature, humidity, environmental heater, condensation, log acquisition
Paper feed (pickup, delivery)	**FEED-SW**	Stack performance, motor speed adjustment, delivery functions, etc.
Noise reduction	**SOUND**	Noise related
Network	**NETWORK**	Network settings, IFAX, SEND, E-RDS, etc.
Customization	**CUSTOM**	Customization

T-8-1

Security features

To prevent unauthorized access to Service Mode, Password set is enabled.

Related service modes

- COPIER > OPTION > FNC-SW > PSWD-SW (Level1)
  Set password type for transition to service mode.
  <Setting range>
  0: No password (default)
  1: Service engineer
  2: System administrator and Service engineer.

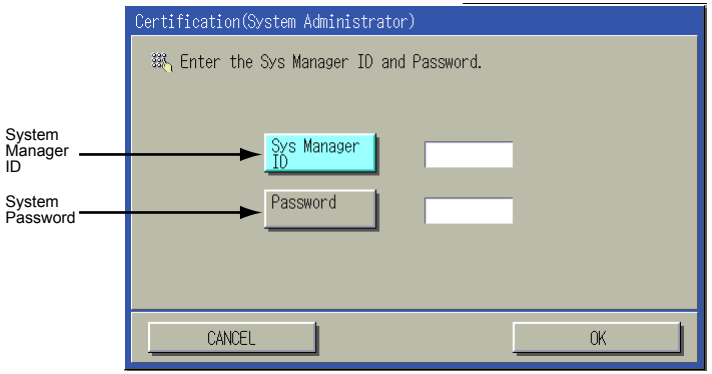
- COPIER > OPTION > FNC-SW > SM-PSWD (Level2)
  Password for service engineer for transition to service mode.
  <Setting range>

  To reinforce the security, change the password from a default.

  ******** (eight digit numeral) [default: 11111111]

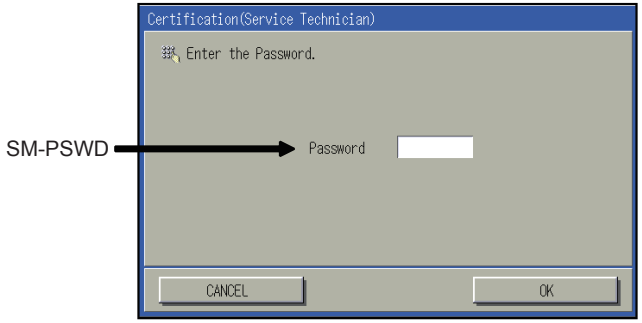
After the above setting, to enter Service Mode, enter password screen will appear.

1) Additional Functions > System Settings > System Manager Settings > enter System Manager ID > enter System Password Settings > press OK button.



F-8-6

2) After entering the password for service technician (Service mode: COPIER > Option > FNC-SW > SM-PSWD), press OK button.

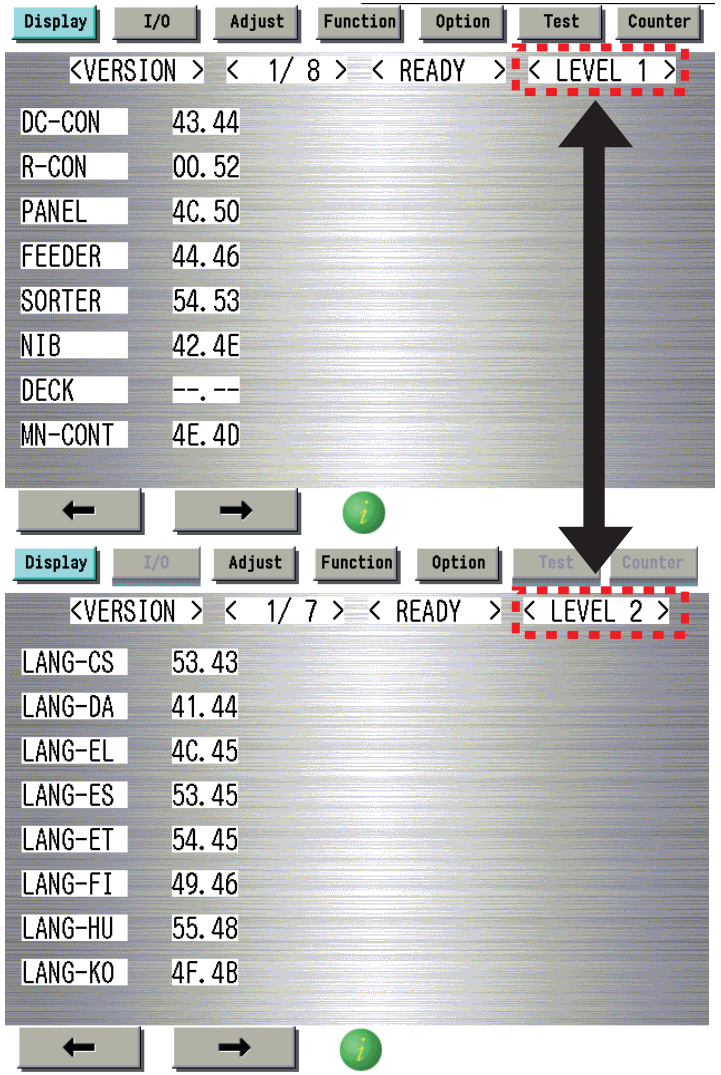


F-8-7

NOTE :
If Service Engineer's password is forgotten, password function is cancelable by using Service Support Tool (SST).

Switching Screen (Level 1 < - > 2)

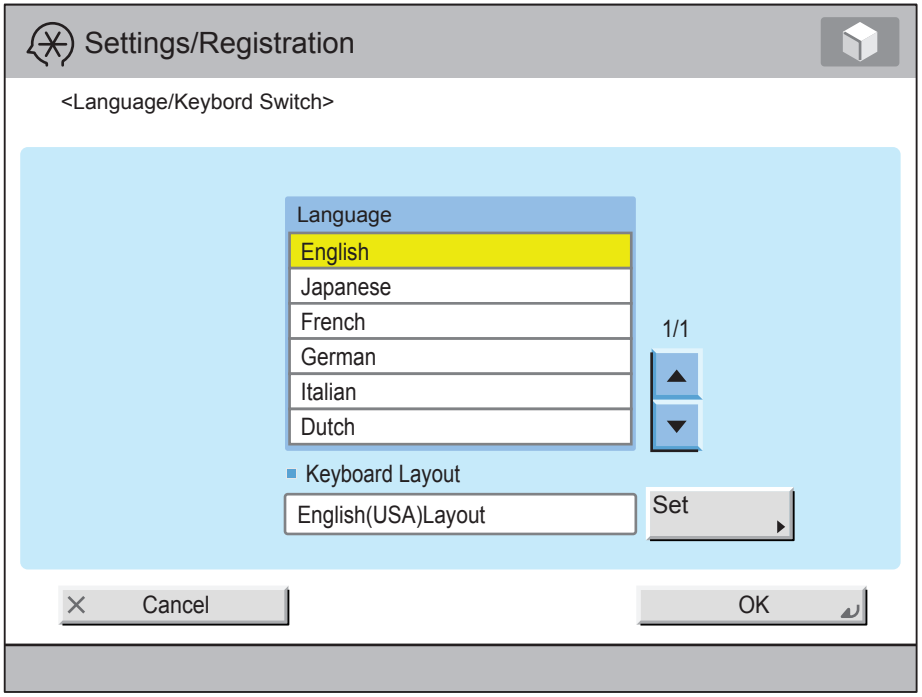
Switching screens between level 1 and 2 has been made easier.
When level 1 screen is displayed, press <LEVEL 1> in the right upper side of the screen, and it will switch to level 2.



F-8-8

Language switch

The language of the explanatory text displayed in the Service Mode can be switched by performing the below languange switch operation in User Mode
The explanatory text can be displayed by installing the Service Mode Content (SCMNT) in HDD.
Service Mode Content (SCMNT) can be installed and upgraded on SST.
Additional Functions > Common Settings > Language Switch

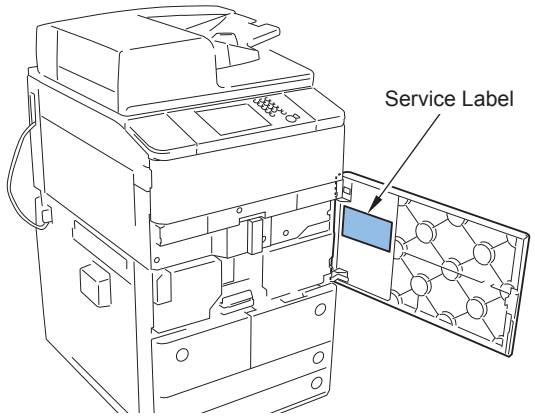


F-8-9

NOTE :
If the Service Mode Content (SMCNT) of the concerned language is not installed, English explanatory text will be displayed.
If English-language Service Mode Content (SMCNT) is not installed either, explanatory text can't be displayed.

Back-up of service mode

In factory setting, adjustments are made for each machine, and adjustment values are written in the service label.
When you replaced the DC controller PCB, or executed the RAM clear function, adjustment values for ADJUST or OPTION return to default. Therefore, when you made adjustments and changed values of the Service Mode in the field, be sure to write down the changed values in the service label. When there is no relevant field in the service label, write down the values in a blank field.



F-8-10

COPIER

DISPLAY

VERSION

COPIER > DISPLAY > VERSION		
DC-CON		Display of DCON firmware version
Lv.1	Details	To display the firmware version of DC Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
R-CON		Display of RCON firmware version
Lv.1	Details	To display the firmware version of Reader Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
PANEL		Dspl Control Panel CPU PCB ROM version
Lv.1	Details	To display the ROM version of Control Panel CPU PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ECO		Display of ECO-ID PCB ROM version
Lv.1	Details	To display the ROM version of ECO-ID PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
FEEDER		Display of DADF Driver PCB ROM version
Lv.1	Details	To display the firmware version of DADF Driver PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SORTER		Display of FIN-CONT firmware version
Lv.1	Details	To display the firmware version of Finisher Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NIB		Display of network software version
Lv.1	Details	To display the version of the network software.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
PS/PCL		Display of PS/PCL function version
Lv.1	Details	Display of PS/PCL function version
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SDL-STCH		Dspl of Saddle Stch Ctrollr PCB ROM ver
Lv.1	Details	To display the ROM version of the Saddle Stitcher Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
OP-CON		Display of Option Controller PCB ROM ver
Lv.1	Details	To display the ROM ver of Option Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MN-CONT		Display of MNCON firmware version
Lv.1	Details	To display the firmware version of Main Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
RUI		Display of remote UI version
Lv.1	Details	To display the version of remote UI.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
PUNCH		Display of Puncher Unit version
Lv.1	Details	To display the version of Puncher Unit.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-EN		Display of English language file version
Lv.1	Details	To display the version of English language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-FR		Display of French language file version
Lv.1	Details	To display the version of French language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-DE		Display of German language file version
Lv.1	Details	To display the version of German language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-IT		Display of Italian language file version
Lv.1	Details	To display the version of Italian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-JP		Display of Japanese language file ver
Lv.1	Details	To display the version of Japanese language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-CS		Display of Czech language file version
Lv.2	Details	To display the version of Czech language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-DA		Display of Danish language file version
Lv.2	Details	To display the version of Danish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
LANG-EL		Display of Greek language file version
Lv.2	Details	To display the version of Greek language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-ES		Display of Spanish language file version
Lv.1	Details	To display the version of Spanish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-ET		Display of Estonian language file ver
Lv.2	Details	To display the version of Estonian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-FI		Display of Finnish language file version
Lv.2	Details	To display the version of Finnish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-HU		Display of Hungarian language file ver
Lv.2	Details	To display the version of Hungarian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-KO		Display of Korean language file version
Lv.2	Details	To display the version of Korean language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-NL		Display of Dutch language file version
Lv.2	Details	To display the version of Dutch language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-NO		Display of Norwegian language file ver
Lv.2	Details	To display the version of Norwegian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-PL		Display of Polish language file version
Lv.2	Details	To display the version of Polish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-PT		Display of Portuguese language file ver
Lv.2	Details	To display the version of Portuguese language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-RU		Display of Russian language file version
Lv.2	Details	To display the version of Russian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
LANG-SL		Display of Slovenian language file ver
Lv.2	Details	To display the version of Slovenian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-SV		Display of Swedish language file version
Lv.2	Details	To display the version of Swedish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-TW		Dspl of Chinese language file ver: trad
Lv.2	Details	To display the version of Chinese language file (traditional).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-ZH		Dspl of Chinese language file ver: smpl
Lv.2	Details	To display the version of Chinese language file (simplified).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ECO-ID		Display of ECO-ID code
Lv.2	Details	To display the ECO-ID code.
	Use case	When upgrading the firmware
	Display/adj/set range	ASCII character string (12 digits)
GDI-UFR		Display of UFR function version
Lv.1	Details	To display the version of UFR function.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-BU		Display of Bulgarian language file ver
Lv.2	Details	To display the version of Bulgarian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-CR		Display of Croatian language file ver
Lv.2	Details	To display the version of Croatian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-RM		Display of Romanian language file ver
Lv.2	Details	To display the version of Romanian language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-SK		Display of Slovak language file version
Lv.2	Details	To display the version of Slovak language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-TK		Display of Turkish language file version
Lv.2	Details	To display the version of Turkish language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
MEAP		Display of MEAP contents version
Lv.1	Details	To display the version of MEAP contents in HDD.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
OCR-CN		Display of Chinese OCR: simplified
Lv.1	Details	To display the version of Chinese OCR (simplified). "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
OCR-JP		Display of Japanese OCR version
Lv.1	Details	To display the version of Japanese OCR. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
OCR-KR		Display of Korean OCR version
Lv.1	Details	To display the version of Korean OCR. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
OCR-TW		Display of Chinese OCR ver: traditional
Lv.1	Details	"--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOOTROM		Display of BOOTROM version
Lv.1	Details	To display the version of BOOTROM.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-JA		Dspl Japanese voice dictionary version
Lv.1	Details	To display the version of Japanese voice dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-EN		Dspl of English voice dictionary version
Lv.1	Details	To display the version of English voice dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-IT		Dspl of Italian voice dictionary version
Lv.1	Details	To display the version of Italian voice dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
TTS-FR		Dspl of French voice dictionary version
Lv.1	Details	To display the version of French voice dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-ES		Dspl of Spanish voice dictionary version
Lv.1	Details	To display the version of Spanish voice dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TTS-DE		Dspl of German voice dictionary version
Lv.1	Details	To display the version of German voice dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
WEB-BRWS		Display of Web browser version
Lv.1	Details	To display the version of Web browser. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HELP		Display of Easy NAVI version
Lv.1	Details	To display the version of "Easy NAVI" file. Version should be displayed for Easy NAVI function because it is an external file.
	Use case	When upgrading the firmware
	Caution	Version should be displayed for EASY NAVI function because it is an external file.
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	EASY NAVI function is equipped as standard instead of the conventional HELP function.
LANG-CA		Display of Catalan language file version
Lv.2	Details	To display the version of Catalan language file. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
WEBDAV		Display of WebDAV version
Lv.1	Details	To display the version of "WebDAV" file. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TIMESTMP		Display of timestamp version
Lv.1	Details	To display the version of "Time Stamp" file. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
ASR-JA		Dspl of Japanese ASR dictionary version
Lv.1	Details	To display the version of Japanese automatic speech recognition dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ASR: Automatic Speech Recognition
ASR-EN		Dspl of English ASR dictionary version
Lv.1	Details	To display the version of English automatic speech recognition dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ASR: Automatic Speech Recognition
MEDIA-JA		Dspl of Japanese media information ver
Lv.2	Details	To display the version of Japanese media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-EN		Dspl English media information version
Lv.2	Details	To display the version of English media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-DE		Dspl of German media information version
Lv.2	Details	To display the version of German media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-IT		Dspl Italian media information version
Lv.2	Details	To display the version of Italian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-FR		Dspl of French media information version
Lv.2	Details	To display the version of French media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-ZH		Dspl of Chinese media info ver: smpl
Lv.2	Details	To display the version of Chinese media information (simplified).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-SK		Dspl of Slovak media information version
Lv.2	Details	To display the version of Slovak media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
MEDIA-TK		Dspl Turkish media information version
Lv.2	Details	To display the version of Turkish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-CS		Dspl of Czech media information version
Lv.2	Details	To display the version of Czech media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-EL		Dspl of Greek media information version
Lv.2	Details	To display the version of Greek media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-ES		Dspl Spanish media information version
Lv.2	Details	To display the version of Spanish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-ET		Dspl of Estonian media information ver
Lv.2	Details	To display the version of Estonian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-FI		Dspl Finnish media information version
Lv.2	Details	To display the version of Finnish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-HU		Dspl of Hungarian media information ver
Lv.2	Details	To display the version of Hungarian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-KO		Dspl of Korean media information version
Lv.2	Details	To display the version of Korean media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-NL		Dspl of Dutch media information version
Lv.2	Details	To display the version of Dutch media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-NO		Dspl of Norwegian media information ver
Lv.2	Details	To display the version of Norwegian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-PL		Dspl of Polish media information version
Lv.2	Details	To display the version of Polish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
MEDIA-PT		Dspl of Portuguese media information ver
Lv.2	Details	To display the version of Portuguese media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-RU		Dspl Russian media information version
Lv.2	Details	To display the version of Russian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-SL		Dspl of Slovenian media information ver
Lv.2	Details	To display the version of Slovenian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-SV		Dspl Swedish media information version
Lv.2	Details	To display the version of Swedish media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-TW		Dspl of Chinese media info version:trad
Lv.2	Details	To display the version of Chinese media information (traditional).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-BU		Dspl of Bulgarian media information ver
Lv.2	Details	To display the version of Bulgarian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-CR		Dspl of Croatian media information ver
Lv.2	Details	To display the version of Croatian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-RM		Dspl of Romanian media information ver
Lv.2	Details	To display the version of Romanian media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
MEDIA-CA		Dspl Catalan media information version
Lv.2	Details	To display the version of Catalan media information.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ECO2		Dspl of ECO-ID PCB ROM ver (paper back)
Lv.1	Details	To display the ROM version of ECO-ID PCB (for paper back) when the 1-path DADF is connected. "--.--" is displayed when the 1-path DADF is not connected.
	Use case	When upgrading the firmware
	Display/adj/set range	ECO2 00.01 to 99.99

COPIER > DISPLAY > VERSION		
FAX1		Display of 1-line FAX PCB ROM version
Lv.1	Details	To display the ROM version of 1-line FAX PCB. "NULL" is displayed if the PCB is not connected.
	Use case	When upgrading the firmware
	Display/adj/set range	ASCII character string (21 digits)
FAX2/3/4		Dspl of 2/3/4-line FAX PCB ROM version
Lv.1	Details	To display the ROM version of 2/3/4-line FAX PCB. "NULL" is displayed if the PCB is not connected.
	Use case	When upgrading the firmware
	Display/adj/set range	ASCII character string (21 digits)
IOCS		Display of BIOS version
Lv.1	Details	To display the BIOS version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SYSTEM		Dspl Linux kernel/tool/driver/file ver
Lv.1	Details	To display the version of Linux kernel/tool/driver/file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ROOT		Display of ROOT version
Lv.1	Details	To display the ROOT version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TRIM		Display of Trimmer ROM version
Lv.1	Details	To display the ROM version of Trimmer.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
FOLD		Dspl of Paper Folding Unit ROM version
Lv.1	Details	To display the ROM version of Paper Folding Unit.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INS		Display of Inserter ROM version
Lv.1	Details	To display the ROM version of Inserter.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
PUNCH-IF		Dspl of Multi-hole Puncher IFU ROM ver
Lv.1	Details	To display the ROM version of Interface Unit for Multi-hole Puncher.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-JP		Dspl of service mode Japanese file ver
Lv.1	Details	To display the version of Japanese language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
S-LNG-EN		Dspl service mode English file version
Lv.1	Details	To display the version of English language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-FR		Dspl of service mode French file version
Lv.1	Details	To display the version of French language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-IT		Dspl service mode Italian file version
Lv.1	Details	To display the version of Italian language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-GR		Dspl of service mode German file version
Lv.1	Details	To display the version of German language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
S-LNG-SP		Dspl service mode Spanish file version
Lv.1	Details	To display the version of Spanish language file in service mode.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
UI-RES		Display of UI resource file version
Lv.1	Details	To display the UIRES version. UIRES consists of the resource file which is necessary to display the native screen (top screen and software keyboard screen) of UI.
	Use case	When checking the version at the time of downloading UIRES to MFP
	Display/adj/set range	00.01 to 99.99
COPY-AP		Display of COPY (JAVA UI) version
Lv.1	Details	To display the version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-AP		Display of SEND (JAVA UI) version
Lv.1	Details	To display the version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-AP		Display of BOX (JAVA UI) version
Lv.1	Details	To display the version of BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
RPTL-AP		Display of RUI portal version
Lv.1	Details	To display the RUI portal version.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
INTRO-AP		Dspl of useful func introduce appli ver
Lv.1	Details	To display the version of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
TSP-JLK		Dspl of Image Data Analyzer PCB version
Lv.1	Details	To display the version of Image Data Analyzer PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-FR		Dspl of COPY appli French file version
Lv.1	Details	To display the French language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-IT		Dspl of COPY appli Italian file version
Lv.1	Details	To display the Italian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-DE		Dspl of COPY appli German file version
Lv.1	Details	To display the German language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-ES		Dspl of COPY appli Spanish file version
Lv.1	Details	To display the Spanish language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-ZH		Dspl COPY appli Chinese file ver: smpl
Lv.2	Details	To display the simplified Chinese language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-TW		Dspl of COPY appli Chinese file ver:trad
Lv.2	Details	To display the traditional Chinese language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-KO		Dspl of COPY appli Korean file version
Lv.2	Details	To display the Korean language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
COPY-CS		Dspl of COPY appli Czech file version
Lv.2	Details	To display the Czech language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-DA		Dspl of COPY appli Danish file version
Lv.2	Details	To display the Danish language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-EL		Dspl of COPY appli Greek file version
Lv.2	Details	To display the Greek language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-ET		Dspl of COPY appli Estonian file version
Lv.2	Details	To display the Estonian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-FI		Dspl of COPY appli Finnish file version
Lv.2	Details	To display the Finnish language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-HU		Dspl COPY appli Hungarian file version
Lv.2	Details	To display the Hungarian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-NL		Dspl of COPY appli Dutch file version
Lv.2	Details	To display the Dutch language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-NO		Dspl COPY appli Norwegian file version
Lv.2	Details	To display the Norwegian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-PL		Dspl of COPY appli Polish file version
Lv.2	Details	To display the Polish language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
COPY-PT		Dspl of COPY appli Portuguese file ver
Lv.2	Details	To display the Portuguese language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-RU		Dspl of COPY appli Russian file version
Lv.2	Details	To display the Russian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-SL		Dspl COPY appli Slovenian file version
Lv.2	Details	To display the Slovenian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-SV		Dspl of COPY appli Swedish file version
Lv.2	Details	To display the Swedish language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-ID		Dspl of COPY appli Indonesian file ver
Lv.2	Details	To display the Indonesian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-BU		Dspl COPY appli Bulgarian file version
Lv.2	Details	To display the Bulgarian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-CR		Dspl of COPY appli Croatian file version
Lv.2	Details	To display the Croatian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-RM		Dspl of COPY appli Romanian file version
Lv.2	Details	To display the Romanian language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-SK		Dspl of COPY appli Slovak file version
Lv.2	Details	To display the Slovak language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
COPY-TK		Dspl of COPY appli Turkish file version
Lv.2	Details	To display the Turkish language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-CA		Dspl of COPY appli Catalan file version
Lv.2	Details	To display the Catalan language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-TH		Dspl of COPY appli Thai file version
Lv.2	Details	To display the Thai language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
COPY-VN		Dspl of COPY appli Vietnamese file ver
Lv.2	Details	To display the Vietnamese language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-FR		Dspl of SEND appli French file version
Lv.1	Details	To display the French language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-IT		Dspl of SEND appli Italian file version
Lv.1	Details	To display the Italian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-DE		Dspl of SEND appli German file version
Lv.1	Details	To display the German language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-ES		Dspl of SEND appli Spanish file version
Lv.1	Details	To display the Spanish language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-ZH		Dspl SEND appli Chinese file ver: smpl
Lv.2	Details	To display the simplified Chinese language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
SEND-TW		Dspl of SEND appli Chinese file ver:trad
Lv.2	Details	To display the traditional Chinese language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-KO		Dspl of SEND appli Korean file version
Lv.2	Details	To display the Korean language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-CS		Dspl of SEND appli Czech file version
Lv.2	Details	To display the Czech language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-DA		Dspl of SEND appli Danish file version
Lv.2	Details	To display the Danish language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-EL		Dspl of SEND appli Greek file version
Lv.2	Details	To display the Greek language file version of the SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-ET		Dspl of SEND appli Estonian file version
Lv.2	Details	To display the Estonian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-FI		Dspl of SEND appli Finnish file version
Lv.2	Details	To display the Finnish language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-HU		Dspl SEND appli Hungarian file version
Lv.2	Details	To display the Hungarian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-NL		Dspl of SEND appli Dutch file version
Lv.2	Details	To display the Dutch language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
SEND-NO		Dsp SEND appli Norwegian file version
Lv.2	Details	To display the Norwegian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-PL		Dspl of SEND appli Polish file version
Lv.2	Details	To display the Polish language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-PT		Dspl of SEND appli Portuguese file ver
Lv.2	Details	To display the Portuguese language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-RU		Dspl of SEND appli Russian file version
Lv.2	Details	To display the Russian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-SL		Dspl SEND appli Slovenian file version
Lv.2	Details	To display the Slovenian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-SV		Dspl of SEND appli Swedish file version
Lv.2	Details	To display the Swedish language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-ID		Dspl of SEND appli Indonesian file ver
Lv.2	Details	To display the Indonesian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-BU		Dspl SEND appli Bulgarian file version
Lv.2	Details	To display the Bulgarian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-CR		Dspl of SEND appli Croatian file version
Lv.2	Details	To display the Croatian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
SEND-RM		Dspl of SEND appli Romanian file version
Lv.2	Details	To display the Romanian language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-SK		Dspl of SEND appli Slovak file version
Lv.2	Details	To display the Slovak language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-TK		Dspl of SEND appli Turkish file version
Lv.2	Details	To display the Turkish language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-CA		Dspl of SEND appli Catalan file version
Lv.2	Details	To display the Catalan language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-TH		Dspl of SEND appli Thai file version
Lv.2	Details	To display the Thai language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SEND-VN		Dspl of SEND appli Vietnamese file ver
Lv.2	Details	To display the Vietnamese language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-FR		Dspl useful func intro French file ver
Lv.1	Details	To display the version of French language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-IT		Dspl useful func intro Italian file ver
Lv.1	Details	To display the version of Italian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-DE		Dspl useful func intro German file ver
Lv.1	Details	To display the version of German language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
INTRO-ES		Dspl useful func intro Spanish file ver
Lv.1	Details	To display the version of Spanish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-ZH		Useful func intro Chinese file ver: smpl
Lv.2	Details	To display the version of simplified Chinese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-TW		Useful func intro Chinese file ver: trad
Lv.2	Details	To display the version of traditional Chinese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-KO		Dspl useful func intro Korean file ver
Lv.2	Details	To display the version of Korean language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-CS		Dspl of useful func intro Czech file ver
Lv.2	Details	To display the version of Czech language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-DA		Dspl useful func intro Danish file ver
Lv.2	Details	To display the version of Danish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-EL		Dspl of useful func intro Greek file ver
Lv.2	Details	To display the version of Greek language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-ET		Dspl useful func intro Estonian file ver
Lv.2	Details	To display the version of Estonian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-FI		Dspl useful func intro Finnish file ver
Lv.2	Details	To display the version of Finnish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
INTRO-HU		Dspl usful func intro Hungarian file ver
Lv.2	Details	To display the version of Hungarian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-NL		Dspl of useful func intro Dutch file ver
Lv.2	Details	To display the version of Dutch language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-NO		Dspl usful func intro Norwegian file ver
Lv.2	Details	To display the version of Norwegian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-PL		Dspl of usful func intro Polish file ver
Lv.2	Details	To display the version of Polish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-PT		Dspl usful func intro Portuguese filever
Lv.2	Details	To display the version of Portuguese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-RU		Dspl useful func intro Russian file ver
Lv.2	Details	To display the version of Russian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-SL		Dspl usful func intro Slovenian file ver
Lv.2	Details	To display the version of Slovenian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-SV		Dspl useful func intro Swedish file ver
Lv.2	Details	To display the version of Swedish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-ID		Dspl of useful func intro Indon file ver
Lv.2	Details	To display the version of Indonesian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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INTRO-BU		Dspl usful func intro Bulgarian file ver
Lv.2	Details	To display the version of Bulgarian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-CR		Dspl useful func intro Croatian file ver
Lv.2	Details	To display the version of Croatian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-RM		Dspl useful func intro Romanian file ver
Lv.2	Details	To display the version of Romanian language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-SK		Dspl of usful func intro Slovak file ver
Lv.2	Details	To display the version of Slovak language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-TK		Dspl useful func intro Turkish file ver
Lv.2	Details	To display the version of Turkish language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-CA		Dspl useful func intro Catalan file ver
Lv.2	Details	To display the version of Catalan language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-TH		Dspl useful func intro Thai file version
Lv.2	Details	To display the version of Thai language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
INTRO-VN		Useful func intro Vietnamese file ver
Lv.2	Details	To display the version of Vietnamese language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-FR		Dspl of custom menu French file version
Lv.1	Details	To display the version of French language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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CSTMN-IT		Dspl of custom menu Italian file version
Lv.1	Details	To display the version of Italian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-DE		Dspl of custom menu German file version
Lv.1	Details	To display the version of German language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ES		Dspl of custom menu Spanish file version
Lv.1	Details	To display the version of Spanish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ZH		Dspl custom menu Chinese file ver: smpl
Lv.2	Details	To display the version of simplified Chinese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TW		Dspl custom menu Chinese file ver: trad
Lv.2	Details	To display the version of traditional Chinese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-KO		Dspl of custom menu Korean file version
Lv.2	Details	To display the version of Korean language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CS		Dspl of custom menu Czech file version
Lv.2	Details	To display the version of Czech language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-DA		Dspl of custom menu Danish file version
Lv.2	Details	To display the version of Danish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-EL		Dspl of custom menu Greek file version
Lv.2	Details	To display the version of Greek language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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CSTMN-ET		Dspl custom menu Estonian file version
Lv.2	Details	To display the version of Estonian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-FI		Dspl of custom menu Finnish file version
Lv.2	Details	To display the version of Finnish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-HU		Dspl of custom menu Hungarian file ver
Lv.2	Details	To display the version of Hungarian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-NL		Dspl of custom menu Dutch file version
Lv.2	Details	To display the version of Dutch language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-NO		Dspl of custom menu Norwegian file ver
Lv.2	Details	To display the version of Norwegian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-PL		Dspl of custom menu Polish file version
Lv.2	Details	To display the version of Polish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-PT		Dspl of custom menu Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-RU		Dspl of custom menu Russian file version
Lv.2	Details	To display the version of Russian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-SL		Dspl of custom menu Slovenian file ver
Lv.2	Details	To display the version of Slovenian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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CSTMN-SV		Dspl of custom menu Swedish file version
Lv.2	Details	To display the version of Swedish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ID		Dspl of custom menu Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-BU		Dspl of custom menu Bulgarian file ver
Lv.2	Details	To display the version of Bulgarian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CR		Dspl custom menu Croatian file version
Lv.2	Details	To display the version of Croatian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-RM		Dspl custom menu Romanian file version
Lv.2	Details	To display the version of Romanian language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-SK		Dspl of custom menu Slovak file version
Lv.2	Details	To display the version of Slovak language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TK		Dspl of custom menu Turkish file version
Lv.2	Details	To display the version of Turkish language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CA		Dspl of custom menu Catalan file version
Lv.2	Details	To display the version of Catalan language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TH		Dspl of custom menu Thai file version
Lv.2	Details	To display the version of Thai language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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CSTMN-VN		Dspl of custom menu Vietnamese file ver
Lv.2	Details	To display the version of Vietnamese language file for custom menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-FR		Dspl accessibility French file version
Lv.1	Details	To display the version of French language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-IT		Dspl of accessibility Italian file ver
Lv.1	Details	To display the version of Italian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-DE		Dspl accessibility German file version
Lv.1	Details	To display the version of German language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-ES		Dspl of accessibility Spanish file ver
Lv.1	Details	To display the version of Spanish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-ZH		Dspl accessibility Chinese file ver:smpl
Lv.2	Details	To display the version of simplified Chinese language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-TW		Dspl accessibility Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-KO		Dspl accessibility Korean file version
Lv.2	Details	To display the version of Korean language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-CS		Dspl of accessibility Czech file version
Lv.2	Details	To display the version of Czech language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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ACSBT-DA		Dspl accessibility Danish file version
Lv.2	Details	To display the version of Danish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-EL		Dspl of accessibility Greek file version
Lv.2	Details	To display the version of Greek language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-ET		Dspl of accessibility Estonian file ver
Lv.2	Details	To display the version of Estonian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-FI		Dspl of accessibility Finnish file ver
Lv.2	Details	To display the version of Finnish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-HU		Dspl of accessibility Hungarian file ver
Lv.2	Details	To display the version of Hungarian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-NL		Dspl of accessibility Dutch file version
Lv.2	Details	To display the version of Dutch language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-NO		Dspl of accessibility Norwegian file ver
Lv.2	Details	To display the version of Norwegian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-PL		Dspl accessibility Polish file version
Lv.2	Details	To display the version of Polish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-PT		Dspl accessibility Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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ACSBT-RU		Dspl of accessibility Russian file ver
Lv.2	Details	To display the version of Russian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-SL		Dspl of accessibility Slovenian file ver
Lv.2	Details	To display the version of Slovenian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-SV		Dspl of accessibility Swedish file ver
Lv.2	Details	To display the version of Swedish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-ID		Dspl accessibility Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-BU		Dspl of accessibility Bulgarian file ver
Lv.2	Details	To display the version of Bulgarian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-CR		Dspl of accessibility Croatian file ver
Lv.2	Details	To display the version of Croatian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-RM		Dspl of accessibility Romanian file ver
Lv.2	Details	To display the version of Romanian language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-SK		Dspl accessibility Slovak file version
Lv.2	Details	To display the version of Slovak language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-TK		Dspl of accessibility Turkish file ver
Lv.2	Details	To display the version of Turkish language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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ACSBT-CA		Dspl of accessibility Catalan file ver
Lv.2	Details	To display the version of Catalan language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-TH		Dspl of accessibility Thai file version
Lv.2	Details	To display the version of Thai language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ACSBT-VN		Dspl accessibility Vietnamese file ver
Lv.2	Details	To display the version of Vietnamese language file for Accessibility application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ERS-FR		Display of ERS French file version
Lv.1	Details	To display the version of French language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-IT		Display of ERS Italian file version
Lv.1	Details	To display the version of Italian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-DE		Display of ERS German file version
Lv.1	Details	To display the version of German language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-ES		Display of ERS Spanish file version
Lv.1	Details	To display the version of Spanish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-ZH		Display of ERS Chinese file ver:smpl
Lv.2	Details	To display the version of simplified Chinese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System

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ERS-TW		Display of ERS Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-KO		Display of ERS Korean file version
Lv.2	Details	To display the version of Korean language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-CS		Display of ERS Czech file version
Lv.2	Details	To display the version of Czech language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-DA		Display of ERS Danish file version
Lv.2	Details	To display the version of Danish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-EL		Display of ERS Greek file version
Lv.2	Details	To display the version of Greek language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-ET		Display of ERS Estonian file version
Lv.2	Details	To display the version of Estonian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-FI		Display of ERS Finnish file version
Lv.2	Details	To display the version of Finnish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-HU		Display of ERS Hungarian file version
Lv.2	Details	To display the version of Hungarian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System

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ERS-NL		Display of ERS Dutch file version
Lv.2	Details	To display the version of Dutch language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-NO		Display of ERS Norwegian file version
Lv.2	Details	To display the version of Norwegian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-PL		Display of ERS Polish file version
Lv.2	Details	To display the version of Polish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-PT		Display of ERS Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-RU		Display of ERS Russian file version
Lv.2	Details	To display the version of Russian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-SL		Display of ERS Slovenian file version
Lv.2	Details	To display the version of Slovenian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-SV		Display of ERS Swedish file version
Lv.2	Details	To display the version of Swedish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-ID		Display of ERS Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System

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ERS-BU		Display of ERS Bulgarian file version
Lv.2	Details	To display the version of Bulgarian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-CR		Display of ERS Croatian file version
Lv.2	Details	To display the version of Croatian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-RM		Display of ERS Romanian file version
Lv.2	Details	To display the version of Romanian language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-SK		Display of ERS Slovak file version
Lv.2	Details	To display the version of Slovak language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-TK		Display of ERS Turkish file version
Lv.2	Details	To display the version of Turkish language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-CA		Display of ERS Catalan file version
Lv.2	Details	To display the version of Catalan language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ERS: Error Recovery System
ERS-TH		Display of ERS Thai file version
Lv.2	Details	To display the version of Thai language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ERS-VN		Display of ERS Vietnamese file version
Lv.2	Details	To display the version of Vietnamese language file for ERS application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-FR		Display of UAC French file version
Lv.1	Details	To display the version of French language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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NLS-IT		Display of UAC Italian file version
Lv.1	Details	To display the version of Italian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-DE		Display of UAC German file version
Lv.1	Details	To display the version of German language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-ES		Display of UAC Spanish file version
Lv.1	Details	To display the version of Spanish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-ZH		Display of UAC Chinese file ver:smpl
Lv.2	Details	To display the version of simplified Chinese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-TW		Display of UAC Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-KO		Display of UAC Korean file version
Lv.2	Details	To display the version of Korean language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-CS		Display of UAC Czech file version
Lv.2	Details	To display the version of Czech language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-DA		Display of UAC Danish file version
Lv.2	Details	To display the version of Danish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-EL		Display of UAC Greek file version
Lv.2	Details	To display the version of Greek language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-ET		Display of UAC Estonian file version
Lv.2	Details	To display the version of Estonian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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NLS-FI		Display of UAC Finnish file version
Lv.2	Details	To display the version of Finnish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-HU		Display of UAC Hungarian file version
Lv.2	Details	To display the version of Hungarian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-NL		Display of UAC Dutch file version
Lv.2	Details	To display the version of Dutch language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-NO		Display of UAC Norwegian file version
Lv.2	Details	To display the version of Norwegian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-PL		Display of UAC Polish file version
Lv.2	Details	To display the version of Polish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-PT		Display of UAC Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-RU		Display of UAC Russian file version
Lv.2	Details	To display the version of Russian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-SL		Display of UAC Slovenian file version
Lv.2	Details	To display the version of Slovenian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-SV		Display of UAC Swedish file version
Lv.2	Details	To display the version of Swedish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-ID		Display of UAC Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
NLS-BU		Display of UAC Bulgarian file version
Lv.2	Details	To display the version of Bulgarian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-CR		Display of UAC Croatian file version
Lv.2	Details	To display the version of Croatian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-RM		Display of UAC Romanian file version
Lv.2	Details	To display the version of Romanian language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-SK		Display of UAC Slovak file version
Lv.2	Details	To display the version of Slovak language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-TK		Display of UAC Turkish file version
Lv.2	Details	To display the version of Turkish language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-CA		Display of UAC Catalan file version
Lv.2	Details	To display the version of Catalan language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ROM-Y		Display of Y-clr Laser Scanner version
Lv.2	Details	To display the lot No., unit version and EEPROM version written in EEPROM of Laser Scanner Unit (Y).
	Use case	When checking the lot No. or EEPROM version of Laser Scanner Unit
	Adj/set/operate method	N/A (display only)
	Display/adj/set range	Lot No.: 4 digits (decimal notation), unit version: 1 digit (hexadecimal notation), EEPROM version: 1 digit (hexadecimal notation)
ROM-M		Display of M-clr Laser Scanner version
Lv.2	Details	To display the lot No., unit version and EEPROM version written in EEPROM of Laser Scanner Unit (M).
	Use case	When checking the lot No. or EEPROM version of Laser Scanner Unit
	Adj/set/operate method	N/A (display only)
	Display/adj/set range	Lot No.: 4 digits (decimal notation), unit version: 1 digit (hexadecimal notation), EEPROM version: 1 digit (hexadecimal notation)

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ROM-C		Display of C-clr Laser Scanner version
Lv.2	Details	To display the lot No., unit version and EEPROM version written in EEPROM of Laser Scanner Unit (C).
	Use case	When checking the lot No. or EEPROM version of Laser Scanner Unit
	Adj/set/operate method	N/A (display only)
	Display/adj/set range	Lot No.: 4 digits (decimal notation), unit version: 1 digit (hexadecimal notation), EEPROM version: 1 digit (hexadecimal notation)
ROM-K		Display of Bk-clr Laser Scanner version
Lv.2	Details	To display the lot No., unit version and EEPROM version written in EEPROM of Laser Scanner Unit (Bk).
	Use case	When checking the lot No. or EEPROM version of Laser Scanner Unit
	Adj/set/operate method	N/A (display only)
	Display/adj/set range	Lot No.: 4 digits (decimal notation), unit version: 1 digit (hexadecimal notation), EEPROM version: 1 digit (hexadecimal notation)
BCT		Display of self diagnosis tool version
Lv.1	Details	To display the version of self diagnosis tool.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
ASR-ES		Dspl of Spanish ASR dictionary version
Lv.1	Details	To display the version of Spanish automatic speech recognition dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ASR: Automatic Speech Recognition
ASR-FR		Dspl of French ASR dictionary version
Lv.1	Details	To display the version of French automatic speech recognition dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ASR: Automatic Speech Recognition
ASR-IT		Dspl of Italian ASR dictionary version
Lv.1	Details	To display the version of Italian automatic speech recognition dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ASR: Automatic Speech Recognition

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ASR-DE		Dspl of German ASR dictionary version
Lv.1	Details	To display the version of German automatic speech recognition dictionary. "--.--" is displayed when no file is found.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
	Supplement/memo	ASR: Automatic Speech Recognition
LANG-TH		Display of Thai language file version
Lv.2	Details	To display the version of Thai language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
LANG-VN		Display of Vietnamese language file ver
Lv.2	Details	To display the version of Vietnamese language file.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-FR		Display of BOX appli French file version
Lv.1	Details	To display the version of French language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-IT		Dspl of BOX appli Italian file version
Lv.1	Details	To display the version of Italian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-DE		Display of BOX appli German file version
Lv.1	Details	To display the version of German language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-ES		Dspl of BOX appli Spanish file version
Lv.1	Details	To display the version of Spanish language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-ZH		Dspl of BOX appli Chinese file ver:smpl
Lv.2	Details	To display the version of simplified Chinese language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-TW		Dspl of BOX appli Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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BOX-KO		Display of BOX appli Korean file version
Lv.2	Details	To display the version of Korean language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-CS		Display of BOX appli Czech file version
Lv.2	Details	To display the version of Czech language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-DA		Display of BOX appli Danish file version
Lv.2	Details	To display the version of Danish language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-EL		Display of BOX appli Greek file version
Lv.2	Details	To display the version of Greek language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-ET		Dspl of BOX appli Estonian file version
Lv.2	Details	To display the version of Estonian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-FI		Dspl of BOX appli Finnish file version
Lv.2	Details	To display the version of Finnish language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-HU		Dspl of BOX appli Hungarian file version
Lv.2	Details	To display the version of Hungarian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-NL		Display of BOX appli Dutch file version
Lv.2	Details	To display the version of Dutch language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-NO		Dspl of BOX appli Norwegian file version
Lv.2	Details	To display the version of Norwegian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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BOX-PL		Display of BOX appli Polish file version
Lv.2	Details	To display the version of Polish language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-PT		Display of BOX appli Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-RU		Dspl of BOX appli Russian file version
Lv.2	Details	To display the version of Russian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-SL		Dspl of BOX appli Slovenian file version
Lv.2	Details	To display the version of Slovenian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-SV		Dspl of BOX appli Swedish file version
Lv.2	Details	To display the version of Swedish language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-ID		Display of BOX appli Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-BU		Dspl of BOX appli Bulgarian file version
Lv.2	Details	To display the version of Bulgarian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-CR		Dspl of BOX appli Croatian file version
Lv.2	Details	To display the version of Croatian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-RM		Dspl of BOX appli Romanian file version
Lv.2	Details	To display the version of Romanian language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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BOX-SK		Display of BOX appli Slovak file version
Lv.2	Details	To display the version of Slovak language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-TK		Dspl of BOX appli Turkish file version
Lv.2	Details	To display the version of Turkish language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-CA		Dspl of BOX appli Catalan file version
Lv.2	Details	To display the version of Catalan language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-TH		Dspl of BOX appli Thai file version
Lv.2	Details	To display the version of Thai language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-VN		Dspl BOX appli Vietnamese file version
Lv.2	Details	To display the version of Vietnamese language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-AP		Display of job hold application version
Lv.1	Details	To display the version of the job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-FR		Dspl of job hold French file version
Lv.1	Details	To display the French language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-IT		Dspl of job hold Italian file version
Lv.1	Details	To display the Italian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-DE		Dspl of job hold German file version
Lv.1	Details	To display the German language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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HOLD-ES		Dspl of job hold Spanish file version
Lv.1	Details	To display the Spanish language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-ZH		Job hold Chinese file version: smpl
Lv.2	Details	To display the simplified Chinese language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-TW		Job hold Chinese file version: trad
Lv.2	Details	To display the traditional Chinese language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-KO		Dspl of job hold Korean file version
Lv.2	Details	To display the Korean language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-CS		Dspl of job hold Czech file version
Lv.2	Details	To display the Czech language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-DA		Dspl of job hold Danish file version
Lv.2	Details	To display the Danish language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-EL		Dspl of job hold Greek file version
Lv.2	Details	To display the Greek language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-ET		Dspl of job hold Estonian file version
Lv.2	Details	To display the Estonian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-FI		Dspl of job hold Finnish file version
Lv.2	Details	To display the Finnish language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
HOLD-HU		Dspl of job hold Hungarian file version
Lv.2	Details	To display the Hungarian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-NL		Dspl of job hold Dutch file version
Lv.2	Details	To display the Dutch language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-NO		Dspl of job hold Norwegian file version
Lv.2	Details	To display the Norwegian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-PL		Dspl of job hold Polish file version
Lv.2	Details	To display the Polish language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-PT		Dspl of job hold Portuguese file version
Lv.2	Details	To display the Portuguese language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-RU		Dspl of job hold Russian file version
Lv.2	Details	To display the Russian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-SL		Dspl of job hold Slovenian file version
Lv.2	Details	To display the Slovenian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-SV		Dspl of job hold Swedish file version
Lv.2	Details	To display the Swedish language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-ID		Dspl of job hold Indonesian file version
Lv.2	Details	To display the Indonesian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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HOLD-BU		Dspl of job hold Bulgarian file version
Lv.2	Details	To display the Bulgarian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-CR		Dspl of job hold Croatian file version
Lv.2	Details	To display the Croatian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-RM		Dspl of job hold Romanian file version
Lv.2	Details	To display the Romanian language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-SK		Dspl of job hold Slovak file version
Lv.2	Details	To display the Slovak language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-TK		Dspl of job hold Turkish file version
Lv.2	Details	To display the Turkish language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-CA		Dspl of job hold Catalan file version
Lv.2	Details	To display the Catalan language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-TH		Dspl of job hold Thai file version
Lv.2	Details	To display the Thai language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
HOLD-VN		Dspl of job hold Vietnamese file version
Lv.2	Details	To display the Vietnamese language file version of job hold application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
WSDS-AP		Display of WSD-SCAN (JAVA UI) version
Lv.1	Details	To display the version of WSD-SCAN application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER > DISPLAY > VERSION		
NLS-TH		Display of UAC Thai file version
Lv.2	Details	To display the version of Thai language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
NLS-VN		Display of UAC Vietnamese file version
Lv.2	Details	To display the version of Vietnamese language file for UAC application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-CS		Display of RUI portal Czech file version
Lv.2	Details	To display the Czech language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-DA		Dspl of RUI portal Danish file version
Lv.2	Details	To display the Danish language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-EL		Display of RUI portal Greek file version
Lv.2	Details	To display the Greek language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-ET		Dspl of RUI portal Estonian file version
Lv.2	Details	To display the Estonian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-FI		Dspl of RUI portal Finnish file version
Lv.2	Details	To display the Finnish language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-HU		Dspl of RUI portal Hungarian file ver
Lv.2	Details	To display the Hungarian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-NL		Display of RUI portal Dutch file version
Lv.2	Details	To display the Dutch language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-NO		Dspl of RUI portal Norwegian file ver
Lv.2	Details	To display the Norwegian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-PL		Dspl of RUI portal Polish file version
Lv.2	Details	To display the Polish language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99

COPIER > DISPLAY > VERSION		
RPTL-PT		Dspl of RUI portal Portuguese file ver
Lv.2	Details	To display the Portuguese language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-RU		Dspl of RUI portal Russian file version
Lv.2	Details	To display the Russian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-SL		Dspl of RUI portal Slovenian file ver
Lv.2	Details	To display the Slovenian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-SV		Dspl of RUI portal Swedish file version
Lv.2	Details	To display the Swedish language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-ID		Dspl of RUI portal Indonesian file ver
Lv.2	Details	To display the Indonesian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-BU		Dspl of RUI portal Bulgarian file ver
Lv.2	Details	To display the Bulgarian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-CR		Dspl of RUI portal Croatian file version
Lv.2	Details	To display the Croatian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-RM		Dspl of RUI portal Romanian file version
Lv.2	Details	To display the Romanian language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-SK		Dspl of RUI portal Slovak file version
Lv.2	Details	To display the Slovak language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-TK		Dspl of RUI portal Turkish file version
Lv.2	Details	To display the Turkish language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-CA		Dspl of RUI portal Catalan file version
Lv.2	Details	To display the Catalan language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99

COPIER > DISPLAY > VERSION		
RPTL-TH		Display of RUI portal Thai file version
Lv.2	Details	To display the Thai language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99
RPTL-VN		Dspl of RUI portal Vietnamese file ver
Lv.2	Details	To display the Vietnamese language file version of the RUI portal.
	Use case	When upgrading the firmware
	Display/adj/set range	00.00 to 99.99

T-8-2

■ USER

COPIER > DISPLAY > USER		
SPDTYPE		Dspl of Ctrollr Board engine speed type
Lv.1	Details	To display the engine speed type (ppm) of Controller Board.
	Use case	When checking the engine speed type of Controller Board
	Display/adj/set range	55 to 75
BRWS-STS		Display of service browser ON/OFF
Lv.1	Details	To display whether the service browser can be used. If the value is 1, [Service Browser] button is displayed on the service mode initial screen. The value of BRWS-STS switches whenever COPIER> FUNCTION> INSTALL> BRWS-ACT is executed, but ON/OFF of service browser is enabled after reboot. If the service browser does not start even though the value of BRWS-STS is 1, turn OFF/ON the main power switch.
	Use case	When checking the usage status of service browser
	Caution	The value of BRWS-STS is linked with COPIER> FUNCTION> INSTALL> BRWS-ACT, but the service browser cannot start even though 1 is displayed unless the main power switch is turned OFF/ON.
	Display/adj/set range	0 to 2 0: OFF (Only at the time of factory shipment, not connected to the UGW server), 1: ON (Available), 2: OFF (Not available)
	Related service mode	COPIER> FUNCTION> INSTALL> BRWS-ACT

T-8-3

■ ACC-STS

COPIER > DISPLAY > ACC-STS		
FEEDER		Display of DADF connection state
Lv.1	Details	To display the connection state of DADF.
	Use case	When checking the connection between the machine and DADF
	Display/adj/set range	0 to 1 0: Not connected, 1: Connected
SORTER		Connect state of Finisher-related option
Lv.1	Details	To display the connecting state of Finisher-related options.
	Use case	When checking the connection of Finisher-related options
	Display/adj/set range	Left column (connecting state of Finisher-related options): 1 to 5 1: Without Saddle 2: With Saddle, without Folding Unit 3: With Saddle and Inserter, without Folding Unit 4: With Saddle and Folding Unit, without Inserter 5: With Saddle, Inserter and Folding Unit Right column (connecting state of Finisher-belonged Inserter): 0 to 4 0: no hole, 1: 2-hole, 2: 2/3-hole, 3: 4-hole, 4: 4-hole (SW)
DECK		Dspl of Paper Deck connection state
Lv.1	Details	To display the connection state of the Paper Deck.
	Use case	When checking the connection between the machine and the Paper Decks
	Display/adj/set range	0 to 8 0: Not connected 1: Connected (small) (Display is hidden on this machine.) 2: Connected (large) 3: POD Deck Lite (with Multi-purpose Tray) 4: POD Deck Lite (without Multi-purpose Tray) 5: Multi-purpose Tray only 6: POD deck 7: 2-POD deck connected 8: 3-POD deck connected (Display is hidden on this machine.)
CARD		Dspl of connection state of Card Reader
Lv.1	Details	To display the connecting state of Card Reader.
	Use case	When checking the connection between the machine and the Card Reader
	Display/adj/set range	0 to 1 0: No card is inserted while the Card Reader is connected. (Copy is not available.) 1: Card Reader is not connected, or card is inserted while the Card Reader is connected. (Copy is available.)
RAM		Display of MNCON PCB memory capacity
Lv.1	Details	To display the memory capacity of the Main Controller PCB.
	Use case	When checking the memory capacity of the machine
	Display/adj/set range	Numeric value

COPIER > DISPLAY > ACC-STS		
COINROBO		Dspl of Coin Manager connection state
Lv.1	Details	To display the connecting state of the Coin Manager.
	Use case	When checking the connection between the machine and the Coin Manager
	Display/adj/set range	0 to 1 0: Not connected, 1: Connected
NIB		Display of Network PCB connection state
Lv.1	Details	To display the connection state of the Network PCB.
	Use case	When checking the connection between the machine and the Network PCB
	Display/adj/set range	0 to 3 0: Not connected, 1: Ethernet PCB connected, 2: Token Ring PCB connected, 3: Ethernet PCB + Token Ring PCB connected
NETWARE		Install state dspl of NetWare firmware
Lv.1	Details	To display the installation state of NetWare firmware.
	Use case	When checking whether NetWare firmware is installed to the machine
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
SEND		Display of SEND support PCB existence
Lv.1	Details	To display whether there is a PCB to support SEND function. SEND function can be used only when the PCB is mounted.
	Use case	When checking the connection between the machine and the PCB that supports SEND function
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
HDD		Display of HDD model name
Lv.1	Details	To display the model name of HDD.
	Use case	When checking the model name of HDD used on the machine
	Display/adj/set range	Character string
PCI1		Display of PCI1-connected PCB name
Lv.1	Details	To display the name of the PCB that is connected to PCI1.
	Use case	When checking the name of the PCB that is connected to PCI1
	Display/adj/set range	-: No PCB connected Voice Board: Voice PCB 3DES Board: Encryption PCB 1Gbit-Board: Giga Ethernet PCB

COPIER > DISPLAY > ACC-STS		
PCI2		Display of PCI2-connected PCB name
Lv.1	Details	To display the name of the PCB that is connected to PCI2.
	Use case	When checking name of the PCB that is connected to PCI2
	Display/adj/set range	-: No PCB connected iSLOT: iSLOT Wireless LAN PCB Voice Board: Voice PCB Voice Board R: Voice Recognition PCB (Display is hidden on this machine.) 3DES Board: Encryption PCB 1Gbit-Board: Giga Ethernet PCB
PCI3		Display of PCI3-connected PCB name
Lv.1	Details	To display the name of the PCB that is connected to PCI3.
	Use case	When checking name of the PCB that is connected to PCI3
	Display/adj/set range	-: No PCB connected iSLOT: iSLOT Wireless LAN PCB Voice Board: Voice PCB Voice Board R: Voice Recognition PCB (Display is hidden on this machine.) 3DES Board: Encryption PCB 1Gbit-Board: Giga Ethernet PCB
IA-RAM		Display of MNCON PCB memory(IA) capacity
Lv.1	Details	To display the memory (IA) capacity of the Main Controller PCB.
	Use case	When checking the memory capacity of the Main Controller PCB

T-8-4

ANALOG

COPIER > DISPLAY > ANALOG		
TEMP		Display of outside temperature
Lv.1	Details	To display the temperature outside the machine. This is measured by the Environment Sensor that measures the outside air.
	Use case	When checking the temperature outside the machine
	Display/adj/set range	0 to 60
	Unit	deg C
	Appropriate target value	20 to 27
HUM		Display of outside humidity
Lv.1	Details	To display the humidity outside the machine. This is measured by the Environment Sensor that measures the outside air.
	Use case	When checking the humidity outside the machine
	Display/adj/set range	0 to 100
	Unit	%
	Appropriate target value	30 to 70
ABS-HUM		Display of outside moisture amount
Lv.1	Details	To display the absolute moisture amount outside the machine. This is measured by the Environment Sensor that measures the outside air.
	Use case	When checking the moisture amount outside the machine
	Display/adj/set range	0 to 100
	Unit	g/m3
	Appropriate target value	0 to 22
DR-TEMP		[For R&D]
FIX-UC		Dspl of Fixing Film center temperature
Lv.1	Details	To display the center temperature of the Fixing Film detected by the Fixing Main Thermistor.
	Use case	When checking the temperature at the center of Fixing Film
	Display/adj/set range	0 to 999
	Unit	deg C
FIX-UE		Dspl Fixing Film rear edge temperature
Lv.1	Details	To display the rear edge temperature of the Fixing Film detected by the Fixing Sub Thermistor 1.
	Use case	When checking the edge temperature of the Fixing Film
	Display/adj/set range	0 to 999
	Unit	deg C
FIX-LC		Dspl of Pressure Roller center temperature
Lv.1	Details	To display the center temperature of the Pressure Roller detected by the Pressure Main Thermistor.
	Use case	When checking the temperature at the center of the Pressure Roller
	Unit	deg C
	Appropriate target value	At standby: 90 to 140 At print: 70 to 150 (differs depending on modes)

COPIER > DISPLAY > ANALOG		
FIX-UE2		Dspl of Fixing Rollerfront edge temp
Lv.1	Details	To display the front edge temperature of the Fixing Film detected by the Fixing Sub Thermistor 2.
	Use case	When checking the edge temperature of the Fixing Film
	Display/adj/set range	0 to 999
	Unit	deg C
DR-TEMPL		[For R&D]
DEVHUM1		Dspl of Y/M color Dev Ass'y humidity
Lv.2	Details	To display the humidity of the Y and M Developing Assembly detected by the Developing Assembly Inner Temperature Detection PCB (Y/M).
	Use case	When a failure occurs on the developing contrast
	Display/adj/set range	0 to 100
	Unit	%
	Appropriate target value	5 to 80
DEVHUM2		Dspl C color Developing Ass'y humidity
Lv.2	Details	To display the humidity of the C Developing Assembly detected by the Developing Assembly Inner Temperature Detection PCB (C/Bk).
	Use case	When a failure occurs on the developing contrast
	Display/adj/set range	0 to 100
	Unit	%
	Appropriate target value	5 to 80
DEVTEMP2		Dspl of C color Developing Ass'y temp
Lv.2	Details	To display the temperature of the C Developing Assembly detected by the Developing Assembly Inner Temperature Detection PCB (C/Bk).
	Use case	When a failure occurs on the developing contrast
	Display/adj/set range	0 to 100
	Unit	deg C
	Appropriate target value	10 to 45
	Related service mode	COPIER> DISPLAY> ANALOG> DEVHUM1, DEVHUM2, DEVTEMP1
PDK-TEMP		Dspl of POD Deck compartment temp
Lv.1	Details	To display the compartment temperature of POD Deck Lite. It may be out of order if the indicated temperature is greatly different from the machine right after power-on.
	Display/adj/set range	0 to 60
	Unit	deg C
	Related service mode	COPIER> DISPLAY> ANALOG> TEMP, PDK-HUM
PDK-HUM		Dspl of POD Deck compartment humidity
Lv.1	Details	To display the compartment humidity of POD Deck Lite. It may be out of order if the indicated humidity is greatly different from the machine right after power-on.
	Display/adj/set range	0 to 100
	Unit	%
	Related service mode	COPIER> DISPLAY> ANALOG> HUM, PDK-TEMP

COPIER > DISPLAY > ANALOG		
MDK-TEMP		Dspl of Multi Deck compartment temp
Lv.1	Details	To display the compartment temperature of the Multi Deck. It may be out of order if the indicated temperature is greatly different from the machine right after power-on.
	Display/adj/set range	0 to 60
	Unit	deg C
	Related service mode	COPIER> DISPLAY> ANALOG> TEMP, MDK-HUM
MDK-HUM		Dspl of POD Deck compartment humidity
Lv.1	Details	To display the compartment humidity of the Multi Deck. It may be out of order if the indicated humidity is greatly different from the machine right after power-on.
	Display/adj/set range	0 to 100
	Unit	%
	Related service mode	COPIER> DISPLAY> ANALOG> HUM, MDK-TEMP
DEVTEMP1		Dspl of Y/M Developing Ass'y temperature
Lv.2	Details	To display the temperature of the Y and M Developing Assembly detected by the Developing Assembly Inner Temperature Detection PCB (Y/M).
	Use case	When a failure occurs on the developing contrast
	Display/adj/set range	0 to 100
	Unit	deg C
	Appropriate target value	10 to 45
	Related service mode	COPIER> DISPLAY> ANALOG> DEVHUM1, DEVHUM2, DEVTEMP2
FX-MTR		Display of Fixing Motor current value
Lv.1	Details	To display the real-time current value of the Fixing Motor.
	Use case	When checking the life of the Pressure Roller
	Unit	mA
FIX-UC2		Fixing Thermistor output temperature
Lv.1	Details	To display the output temperature of the Fixing Thermistor (Fixing Center Thermistor 1).
	Use case	When checking the output temperature of the Fixing Center Thermistor 1
	Display/adj/set range	0 to 999
	Unit	deg C
FIX-UC3		Fixing Thermistor output temperature
Lv.1	Details	To display the output temperature of the Fixing Thermistor (Fixing Center Thermistor 2).
	Use case	When checking the output temperature of the Fixing Center Thermistor 2
	Display/adj/set range	0 to 999
	Unit	deg C

T-8-5

CST-STS

COPIER > DISPLAY > CST-STS		
WIDTH-MF		Dspl Multi-purpose Tray ppr width size
Lv.2	Details	To display the paper width size set on the Multi-purpose Tray.
	Use case	When checking the paper width side set on the Multi-purpose Tray
	Display/adj/set range	Numeric value

T-8-6

HV-STS

COPIER > DISPLAY > HV-STS		
PRI-GRID		Display of primary charging current
Lv.1	Details	To display the current that is Applied to the Primacy Charging Assembly At the latest. The result set in COPIER> ADJUST> HV-PRI> PRIMARY is reflected.
	Use case	When checking ON/OFF of potential control
	Display/adj/set range	-1200 to 0
	Unit	uA
	Related service mode	COPIER> ADJUST> HV-PRI> PRIMARY
PRE-TR		Dspl of pre-transfer charge DC current
Lv.1	Details	To display the DC component of current that is Applied to the Pretransfer Charging Assembly At the latest The result set in COPIER> ADJUST> HV-TR> PRE-TR is reflected.
	Use case	For checking
	Display/adj/set range	-650 to 0
	Unit	uA
	Related service mode	COPIER> ADJUST> HV-TR> PRE-TR
1ATVC-Y		Dspl pry trns paper interval current (Y)
Lv.2	Details	To display the decuple value of the paper interval current lastly flown on the Y Primary Transfer Roller by the primary transfer paper interval ATVC control.
	Use case	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range	0 to 900
	Unit	uA
1ATVC-M		Dspl pry trns paper interval current (M)
Lv.2	Details	To display the decuple value of the paper interval current lastly flown on the M Primary Transfer Roller by the primary transfer paper interval ATVC control.
	Use case	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range	0 to 900
	Unit	uA
1ATVC-C		Dspl pry trns paper interval current (C)
Lv.2	Details	To display the decuple value of the paper interval current lastly flown on the C Primary Transfer Roller by the primary transfer paper interval ATVC control.
	Use case	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range	0 to 900
	Unit	uA

COPIER > DISPLAY > HV-STS		
1ATVC-K4		Dspl pry trns ppr intvl crrnt (Bk):clr
Lv.2	Details	To display the decuple value of the paper interval current lastly flown on the Bk Primary Transfer Roller by the primary transfer paper interval ATVC control At full-color jobs.
	Use case	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range	0 to 900
	Unit	uA
1ATVC-K1		Dspl pry trams ppr intvl crrnt (Bk):B&W
Lv.2	Details	To display the decuple value of the paper interval current lastly flown on the Bk Primary Transfer Roller by the primary transfer paper interval ATVC control At B&W jobs.
	Use case	When estimating the life of Primary Transfer Roller based on the displayed value
	Display/adj/set range	0 to 900
	Unit	uA
2EL		Dspl Sec Transfer Static Eliminator V
Lv.2	Details	To display the voltage which is Applied to the Secondary Transfer Static Eliminator At the latest.
	Use case	For checking
	Display/adj/set range	-4000 to 0
	Unit	V
	Related service mode	COPIER> ADJUST> HV-TR> 2EL
PR-GRI-K		Dspl Prmry Charging Ass'y grid voltage
Lv.2	Details	To display the grid voltage of the Primary Charging Assembly. Check that the value is in the range of Bk Drum surface potential Vd + 0 to 200V. Values out of the tolerable range may indicate failures of the Primary Charging Assembly or the Photosensitive Drum.
	Use case	When checking the grid voltage of the Primary Charging Assembly
	Display/adj/set range	0 to 1200
	Unit	V
	Related service mode	COPIER> DISPLAY> DPOT> DPOT-K
2ATVC-F1		Sec Trns ATVC target current:clr,1/1 SPD
Lv.2	Details	To display the decuple value of the target current At full-color 1/1 speed derived from the latest secondary transfer Full ATVC control.
	Use case	When judging whether the secondary transfer is appropriately set At image failure
	Caution	The correct value is not shown unless paper feed has triggered the secondary transfer ATVC control After power-off/on.
	Display/adj/set range	-70 to 0
	Unit	uA

COPIER > DISPLAY > HV-STS		
PRIACV-Y		Discharge current ctrl setting voltg (Y)
Lv.2	Details	To display the AC voltage setting value to be Applied to the Y Charging Roller At 1/1 speed derived from the latest discharge current control.
	Use case	When checking the voltage value (Y) for discharge current control
	Display/adj/set range	0 to 3000
	Unit	V
	Related service mode	COPIER> DISPLAY> HV-STS> PRIACV-M, PRIACV-C, PRIACI-Y, PRIACI-M, PRIACI-C, PRISMP-Y, PRISMP-M, PRISMP-C COPIER> FUNCTION> MISC-P> DISCHG
PRIACV-M		Discharge current ctrl setting voltg (Y)
Lv.2	Details	To display the AC voltage setting value to be Applied to the M Charging Roller At 1/1 speed derived from the latest discharge current control.
	Use case	When checking the voltage value (M) for discharge current control
	Display/adj/set range	0 to 3000
	Unit	V
	Related service mode	COPIER> DISPLAY> HV-STS> PRIACV-Y, PRIACV-C, PRIACI-Y, PRIACI-M, PRIACI-C, PRISMP-Y, PRISMP-M, PRISMP-C COPIER> FUNCTION> MISC-P> DISCHG
PRIACV-C		Discharge current ctrl setting voltg (C)
Lv.2	Details	To display the AC voltage setting value to be Applied to the C Charging Roller At 1/1 speed derived from the latest discharge current control.
	Use case	When checking the voltage value (C) for discharge current control
	Display/adj/set range	0 to 3000
	Unit	V
	Related service mode	COPIER> DISPLAY> HV-STS> PRIACV-Y, PRIACV-M, PRIACI-Y, PRIACI-M, PRIACI-C, PRISMP-Y, PRISMP-M, PRISMP-C COPIER> FUNCTION> MISC-P> DISCHG
2ATVC-M1		Sec Trns ATVC target current:B&W,1/1 SPD
Lv.2	Details	To display the decuple value of the target current At B&W 1/1 speed derived from the latest secondary transfer Full ATVC control.
	Use case	When judging whether the secondary transfer is appropriately set At image failure
	Caution	The correct value is not shown unless paper feed has triggered the secondary transfer ATVC control After power-off/on.
	Display/adj/set range	Number
	Unit	uA
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-TGT1 to 8, TR-PPR1 to 8

COPIER > DISPLAY > HV-STS		
2ATVC-F2		Sec Trns ATVC target current:clr,1/2 SPD
Lv.2	Details	To display the decuple value of the target current At full-color 1/2 speed derived from the latest secondary transfer Full ATVC control.
	Use case	When judging whether the secondary transfer is appropriately set At image failure
	Caution	The correct value is not shown unless paper feed has triggered the secondary transfer ATVC control After power-off/on.
	Display/adj/set range	Number
	Unit	uA
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-TGT1 to 8, TR-PPR1 to 8
2ATVC-M2		Sec Trns ATVC target current:B&W,1/2 SPD
Lv.2	Details	To display the decuple value of the target current At B&W 1/2 speed derived from the latest secondary transfer Full ATVC control.
	Use case	When judging whether the secondary transfer is appropriately set At image failure
	Caution	The correct value is not shown unless paper feed has triggered the secondary transfer ATVC control After power-off/on.
	Display/adj/set range	Number
	Unit	uA
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-TGT1 to 8, TR-PPR1 to 8
2ATVC-F3		Sec Trns ATVC target current:clr,1/3 SPD
Lv.2	Details	To display the decuple value of the target current At full-color 1/3 speed derived from the latest secondary transfer Full ATVC control.
	Use case	When judging whether the secondary transfer is appropriately set At image failure
	Caution	The correct value is not shown unless paper feed has triggered the secondary transfer ATVC control After power-off/on.
	Display/adj/set range	Number
	Unit	uA
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-TGT1 to 8, TR-PPR1 to 8
2ATVC-M3		Sec Trns ATVC target current:B&W,1/3 SPD
Lv.2	Details	To display the decuple value of the target current At B&W 1/3 speed derived from the latest secondary transfer Full ATVC control.
	Use case	When judging whether the secondary transfer is appropriately set At image failure
	Caution	The correct value is not shown unless paper feed has triggered the secondary transfer ATVC control After power-off/on.
	Display/adj/set range	Number
	Unit	uA
	Related service mode	COPIER> ADJUST> HV-TR> 2TR-TGT1 to 8, TR-PPR1 to 8

COPIER > DISPLAY > HV-STS		
PRIACI-Y		Discharge current ctrl set current (Y)
Lv.2	Details	To display the AC current setting value to be Applied to the Y Charging Roller At 1/1 speed derived from the latest discharge current control.
	Use case	When checking the current value (Y) for discharge current control
	Display/adj/set range	0 to 5000
	Unit	uA
	Related service mode	COPIER> DISPLAY> HV-STS> PRIMACV-Y, PRIMACV-M, PRIMACV-C, PRIACI-M, PRIACI-C, PRISMP-Y, PRISMP-M, PRISMP-C COPIER> FUNCTION> MISC-P> DISCHG
PRIACI-M		Discharge current ctrl set current (M)
Lv.2	Details	To display the AC current setting value to be Applied to the M Charging Roller At 1/1 speed derived from the latest discharge current control.
	Use case	When checking the current value (M) for discharge current control
	Display/adj/set range	0 to 5000
	Unit	uA
	Related service mode	COPIER> DISPLAY> HV-STS> PRIMACV-Y, PRIMACV-M, PRIMACV-C, PRIACI-Y, PRIACI-C, PRISMP-Y, PRISMP-M, PRISMP-C COPIER> FUNCTION> MISC-P> DISCHG
PRIACI-C		Discharge current ctrl set current (C)
Lv.2	Details	To display the AC current setting value to be Applied to the C Charging Roller At 1/1 speed derived from the latest discharge current control.
	Use case	When checking the current value (C) for discharge current control
	Display/adj/set range	0 to 5000
	Unit	uA
	Related service mode	COPIER> DISPLAY> HV-STS> PRIMACV-Y, PRIMACV-M, PRIMACV-C, PRIACI-Y, PRIACI-M, PRISMP-Y, PRISMP-M, PRISMP-C COPIER> FUNCTION> MISC-P> DISCHG
PRISMP-Y		Discharge current ctrl sampling point(Y)
Lv.2	Details	To display the AC current value flown on the Y Charging Roller when the certain voltage is Applied by the latest discharge current control. AC current/current to be Applied At 1/1 speed is derived from 6 sampling results.
	Use case	When checking the sampling results of discharge current control
	Display/adj/set range	0 to 5000
	Unit	uA
	Related service mode	COPIER> DISPLAY> HV-STS> PRISMP-M, PRISMP-C, PRIMACV-Y, PRIMACV-M, PRIMACV-C, PRIACI-Y, PRIACI-M, PRIACI-C COPIER> FUNCTION> MISC-P> DISCHG

COPIER > DISPLAY > HV-STS		
PRISMP-M		Discharge current ctrl sampling point(M)
Lv.2	Details	To display the AC current value flown on the Y Charging Roller when the certain voltage is Applied by the latest discharge current control. AC current/current to be Applied At 1/1 speed is derived from 6 sampling results.
	Use case	When checking the sampling results of discharge current control
	Display/adj/set range	0 to 5000
	Unit	uA
	Related service mode	COPIER> DISPLAY> HV-STS> PRISMP-Y, PRISMP-C, PRIMACV-Y, PRIMACV-M, PRIMACV-C, PRIACI-Y, PRIACI-M, PRIACI-C COPIER> FUNCTION> MISC-P> DISCHG
PRISMP-C		Discharge current ctrl sampling point(C)
Lv.2	Details	To display the AC current value flown on the Y Charging Roller when the certain voltage is Applied by the latest discharge current control. AC current/current to be Applied At 1/1 speed is derived from 6 sampling results.
	Use case	When checking the sampling results of discharge current control
	Display/adj/set range	0 to 5000
	Unit	uA
	Related service mode	COPIER> DISPLAY> HV-STS> PRISMP-Y, PRISMP-M, PRIMACV-Y, PRIMACV-M, PRIMACV-C, PRIACI-Y, PRIACI-M, PRIACI-C COPIER> FUNCTION> MISC-P> DISCHG

T-8-7

■ CCD

COPIER > DISPLAY > CCD		
TARGET-B		Shading target value (B)
Lv.2	Details	To display the shading target value of Blue. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	512 to 2047
TARGET-G		Shading target value (G)
Lv.2	Details	To display the target value of Green. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	512 to 2047
TARGET-R		Shading target value (R)
Lv.2	Details	To display the shading target value of Red. Continuous display of 0 (minimum) or FFFF (maximum) is considered a failure of the Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	512 to 2047
GAIN-OB		Gain level of Img Sensor odd bit(B): frt
Lv.2	Details	To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN-OG		Gain level of Img Sensor odd bit(G): frt
Lv.2	Details	To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143

COPIER > DISPLAY > CCD		
GAIN-OR		Gain level of Img Sensor odd bit(R): frt
Lv.2	Details	To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN-EB		Gain level of Img Sensor even bit(B):frt
Lv.2	Details	To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN-EG		Gain level of Img Sensor even bit(G):frt
Lv.2	Details	To display the Green gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN-ER		Gain level of Img Sensor even bit(R):frt
Lv.2	Details	To display the Red gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper front). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
LAMP-BW		Scan Lamp intensity adj VL(B&W): front
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper front) in B&W scanning mode.
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	100 to 275
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.

COPIER > DISPLAY > CCD		
LAMP-CL		Scan Lamp intensity adj VL(color): frt
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper front) in color scanning mode.
	Use case	When image failure occurs at front side scanning in color mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	100 to 275
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.
LAMP2-BW		Scan Lamp intensity adj VL(B&W): back
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper back) in B&W scanning mode.
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to FFFF
	Appropriate target value	100 to 275
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.
LAMP2-CL		Scan Lamp intensity adj VL(color): back
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit (paper back) in color scanning mode.
	Use case	When image failure occurs at back side scanning in color mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	100 to 275
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.
OFST-BW		Img Sensor offset value (B&W) [Front]
Lv.2	Details	To display the CMOS Sensor offset value at B&W scanning.
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 116
OFST-CL		Img Sensor offset value (color) [Front]
Lv.2	Details	To display the CMOS Sensor offset value at color scanning.
	Use case	When image failure occurs at front side scanning in color mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 116
OFST2-BW		Img Sensor offset value (B&W) [Back]
Lv.2	Details	To display the CMOS Sensor offset value at B&W scanning.
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 116
GAIN-BW1		Img Sensor gain level adj VL1(B&W): frt
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 1 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143

COPIER > DISPLAY > CCD		
GAIN-BW2		Img Sensor gain level adj VL2(B&W): frt
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 2 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN-BW3		Img Sensor gain level adj VL3(B&W): frt
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 3 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN-BW4		Img Sensor gain level adj VL4(B&W): frt
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 4 of Scanner Unit (paper front).
	Use case	When image failure occurs at front side scanning in black mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2BW1		Img Sensor gain level adj VL1(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 1 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2BW2		Img Sensor gain level adj VL2(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 2 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2BW3		Img Sensor gain level adj VL3(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 3 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2BW4		Img Sensor gain level adj VL4(B&W): Back
Lv.2	Details	To display the CMOS Sensor B&W gain level adjustment value 4 of Scanner Unit (paper back).
	Use case	When image failure occurs at back side scanning in black mode.
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143

COPIER > DISPLAY > CCD		
GAIN2-OR		Gain level of Img Sensor odd bit(R): bck
Lv.2	Details	To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2-OG		Gain level of Img Sensor odd bit(G): bck
Lv.2	Details	To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2-OB		Gain level of Img Sensor odd bit(B): bck
Lv.2	Details	To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2-ER		Gain level of Img Sensor even bit(R):bck
Lv.2	Details	To display the Red gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
GAIN2-EG		Gain level of Img Sensor even bit(G):bck
Lv.2	Details	To display the Green gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143

COPIER > DISPLAY > CCD		
GAIN2-EB		Gain level of Img Sensor even bit(B):bck
Lv.2	Details	To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit (paper back). Continuous display of upper limit is considered a failure of the Scanner Unit/Reader Controller PCB.
	Use case	- When replacing the Reader Controller PCB - At scanned image failure
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 143
OFST2-CL		Img Sensor offset value (color) [Back]
Lv.2	Details	To display the CMOS Sensor offset value at color scanning.
	Use case	When image failure occurs at back side scanning in color mode
	Display/adj/set range	0 to FFFF
	Appropriate target value	0 to 116

T-8-8

DPOT

COPIER > DISPLAY > DPOT		
DPOT-K		Display of Bk Drum surface potential
Lv.1	Details	To display the current surface potential Vd on the Bk Photosensitive Drum that is specified as a result of the potential control. The value after the calculation of potential offset is displayed. If the offset value is not adjusted, negative value may be detected during printing.
	Use case	When the density failure or foggy image occurs, check whether the surface potential of the Drum is the factor.
	Caution	- To update the display, be sure to move to a different screen, and then move back to display it again. (The potential at the moment of showing this screen is displayed.) - If the value is out of range (-30 to 30), there is a possibility of Potential Sensor disconnection.
	Display/adj/set range	-1100 to 0
	Unit	V
VCONT-K		Dspl of Bk contrast potential setting VL
Lv.2	Details	To display the current setting value of Bk contrast potential Vcont.
	Use case	When checking contrast potential
	Display/adj/set range	0 to 800
	Unit	V
VBACK-K		Dspl of Bk fogging removal potntl set VL
Lv.2	Details	To display the current setting value of Bk fogging removal potential Vback (difference between the developing DC bias and the charging potential). The fogging correction value is set based on this value and the value set in user mode (Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast).
	Use case	When checking the setting value of fogging removal potential at image failure such as fogging
	Caution	Fogging occurred in the normal use range of 150 to 250V is judged as an error on the high voltage or the Potential Sensor.
	Display/adj/set range	0 to 300
	Unit	V
2TR-PPR		Dspl of sec trns ATVC ppr allotted voltg
Lv.2	Details	To display the paper allotted voltage set by the latest secondary transfer Full ATVC control. The appropriate range may be exceeded due to wrong media setting.
	Use case	When transfer failure occurs on certain media
	Display/adj/set range	0 to 5000
	Unit	V

COPIER > DISPLAY > DPOT		
2TR-BASE		Dspl of sec transfer ATVC base voltage
Lv.2	Details	To display the base voltage set by the latest secondary transfer Full ATVC control. The appropriate range may be exceeded due to wrong media setting.
	Use case	When transfer failure occurs on certain media
	Display/adj/set range	0 to 6000
	Unit	V
1TR-DC-Y		Dspl of primary transfer voltage (Y)
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (Y).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 5000
	Unit	V
1TR-DC-M		Dspl of primary transfer voltage (M)
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (M).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 5000
	Unit	V
1TR-DC-C		Dspl of primary transfer voltage (C)
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (C).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 5000
	Unit	V
1TR-DC-K		Dspl of primary transfer voltage (Bk)
Lv.2	Details	To display the voltage lastly applied to the Primary Transfer Roller (Bk).
	Use case	When transfer failure occurs due to the primary transfer
	Display/adj/set range	0 to 5000
	Unit	V
CHG-AC-Y		Display of primary charging AC bias (Y)
Lv.2	Details	To display the primary charging AC bias lastly applied to the Primary Charging Roller (Y).
	Use case	When an image failure occurs due to charging failure
	Display/adj/set range	0 to 3000
	Unit	V
	Appropriate target value	1400 to 2400
	Related service mode	COPIER > ADJUST > HV-PRI > CHACOUTM
CHG-AC-M		Display of primary charge AC current (M)
Lv.2	Details	To display the primary charging AC current lastly flown with the AC voltage applied on the Charging Roller (M).
	Use case	When an image failure occurs due to charging failure
	Display/adj/set range	0 to 3000
	Unit	V
	Appropriate target value	1400 to 2400
	Related service mode	COPIER > ADJUST > HV-PRI > CHACOUTM

COPIER > DISPLAY > DPOT		
CHG-AC-C		Display of primary charging AC bias (C)
Lv.2	Details	To display the primary charging AC bias lastly applied to the Primary Charging Roller (C).
	Use case	When an image failure occurs due to charging failure
	Display/adj/set range	0 to 3000
	Unit	V
	Appropriate target value	1400 to 2400
	Related service mode	COPIER > ADJUST > HV-PRI > CHACOUTM
LPWR-Y		Display of laser power (Y)
Lv.2	Details	To display Y laser power determined by D-max control. FF display with low image density is considered that the Photosensitive Drum may be near the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
LPWR-M		Display of laser power (M)
Lv.2	Details	To display M laser power determined by D-max control. FF display with low image density is considered that the Photosensitive Drum may be near the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
LPWR-C		Display of laser power (C)
Lv.2	Details	To display C laser power determined by D-max control. FF display with low image density is considered that the Photosensitive Drum may be near the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
LPWR-K		Display of laser power (Bk)
Lv.2	Details	To display Bk laser power determined by potential control. FF display with low image density is considered that the Photosensitive Drum may be nearly the end of life.
	Use case	When the image density is low
	Display/adj/set range	00 to FF (hexadecimal)
PVCONT-Y		Dspl of target patch contrast potntl (Y)
Lv.2	Details	To display the target Y patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 255
	Unit	V

COPIER > DISPLAY > DPOT		
PVCONT-M		Dspl of target patch contrast potntl (M)
Lv.2	Details	To display the target M patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 255
	Unit	V
PVCONT-C		Dspl of target patch contrast potntl (C)
Lv.2	Details	To display the target C patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 255
	Unit	V
PVCONT-K		Dspl target patch contrast potntl (Bk)
Lv.2	Details	To display the target Bk patch contrast potential. Check the target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 255
	Unit	V

COPIER > DISPLAY > DPOT		
P-LPW-K		Display of Bk patch target laser power
Lv.2	Details	To display the laser power to be used as a target Bk patch contrast potential. Check the laser power to be used as a target patch contrast potential to check whether the toner supply control is properly executed at image density failure. Investigate the other possible factors if the value is within the defined range.
	Use case	- When analyzing the cause of the image density failure - When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00 to FF (hexadecimal)
D-CONT-Y		Display of Y Drum total charging time
Lv.1	Details	To display the total charging time (charging counter) for the Drum Unit (Y). The counter can be reset in COPIER> FUNCTION> DPC> DRMRSETY.
	Use case	When checking if the high voltage is properly set
	Display/adj/set range	0 to 1000000
	Unit	msec
	Related service mode	COPIER> DISPLAY> DPOT> D-CONT-M, D-CONT-C, D-CONT-K COPIER> FUNCTION> DPC> DRMRSETY
D-CONT-M		Display of M Drum total charging time
Lv.1	Details	To display the total charging time (charging counter) for the Drum Unit (M). The counter can be reset in COPIER> FUNCTION> DPC> DRMRSETM.
	Use case	When checking if the high voltage is properly set
	Display/adj/set range	0 to 1000000
	Unit	msec
	Related service mode	COPIER> DISPLAY> DPOT> D-CONT-Y, D-CONT-C, D-CONT-K COPIER> FUNCTION> DPC> DRMRSETM
D-CONT-C		Display of C Drum total charging time
Lv.1	Details	To display the total charging time (charging counter) for the Drum Unit (C). The counter can be reset in COPIER> FUNCTION> DPC> DRMRSETC.
	Use case	When checking if the high voltage is properly set
	Display/adj/set range	0 to 1000000
	Unit	msec
	Related service mode	COPIER> DISPLAY> DPOT> D-CONT-Y, D-CONT-M, D-CONT-K COPIER> FUNCTION> DPC> DRMRSETC

COPIER > DISPLAY > DPOT		
D-CONT-K		Display of Bk Drum total charging time
Lv.1	Details	To display the total charging time (charging counter) for the Drum (Bk). The counter can be reset in COPIER> FUNCTION> DPC> DRMRSETK.
	Use case	When checking if the high voltage is properly set
	Display/adj/set range	0 to 1000000
	Unit	msec
	Related service mode	COPIER> DISPLAY> DPOT> D-CONT-Y, D-CONT-M, D-CONT-C COPIER> FUNCTION> DPC> DRMRSETK
LS-PWM-Y		Display of Y-color PWM setting value
Lv.2	Details	To display the PWM value set for Y.
	Use case	When checking the current PWM setting
	Display/adj/set range	0 to 100
	Unit	%
	Related service mode	COPIER> DISPLAY> DPOT> LS-PWM-M, LS-PWM-C, LS-PWM-K
LS-PWM-M		Display of M-color PWM setting value
Lv.2	Details	To display the PWM value set for M.
	Use case	When checking the current PWM setting
	Display/adj/set range	0 to 100
	Unit	%
	Related service mode	COPIER> DISPLAY> DPOT> LS-PWM-Y, LS-PWM-C, LS-PWM-K
LS-PWM-C		Display of C-color PWM setting value
Lv.2	Details	To display the PWM value set for C.
	Use case	When checking the current PWM setting
	Display/adj/set range	0 to 100
	Unit	%
	Related service mode	COPIER> DISPLAY> DPOT> LS-PWM-Y, LS-PWM-M, LS-PWM-K
LS-PWM-K		Display of Nk-color PWM setting value
Lv.2	Details	To display the PWM value set for BkY.
	Use case	When checking the current PWM setting
	Display/adj/set range	0 to 100
	Unit	%
	Related service mode	COPIER> DISPLAY> DPOT> LS-PWM-Y, LS-PWM-M, LS-PWM-C
CHG-DCY2		Dspl pry chg DC voltg (Y):1/2, 1/3 SPD
Lv.1	Details	To display the primary charging DC voltage lastly applied to the Charging Roller (Y) at 1/2 and 1/3 speed.
	Use case	When checking
	Display/adj/set range	0 to 1000
	Unit	V

COPIER > DISPLAY > DPOT		
CHG-DCM2		Dspl pry chg DC voltg (M):1/2, 1/3 SPD
Lv.1	Details	To display the primary charging DC voltage lastly applied to the Charging Roller (M) at 1/2 and 1/3 speed.
	Use case	When checking
	Display/adj/set range	0 to 1000
	Unit	V
CHG-DCC2		Dspl pry chg DC voltg (C):1/2, 1/3 SPD
Lv.1	Details	To display the primary charging DC voltage lastly applied to the Charging Roller (C) at 1/2 and 1/3 speed.
	Use case	When checking
	Display/adj/set range	0 to 1000
	Unit	V
LPGAIN-Y		Dspl of Y-color laser power gain value
Lv.2	Details	To display the gain value of Y laser power by D-max control.
	Use case	When checking D-max control results
	Display/adj/set range	-1000 to 1000
	Unit	%
LPGAIN-M		Dspl of M-color laser power gain value
Lv.2	Details	To display gain value of M laser power by D-max control.
	Use case	When checking D-max control results
	Display/adj/set range	-1000 to 1000
	Unit	%
LPGAIN-C		Dspl of C-color laser power gain value
Lv.2	Details	To display gain value of C laser power by D-max control.
	Use case	When checking D-max control results
	Display/adj/set range	-1000 to 1000
	Unit	%

T-8-9

■ DENS

COPIER > DISPLAY > DENS		
DENS-Y		Dspl of Y developer density change ratio
Lv.1	Details	To display the difference between Y-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the Toner Density Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-8 to 8
	Unit	%
	Related service mode	COPIER> DISPLAY> DENS> SGNL-Y
DENS-M		Dspl of M developer density change ratio
Lv.1	Details	To display difference between M-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the Toner Density Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-8 to 8
	Unit	%
	Related service mode	COPIER> DISPLAY> DENS> SGNL-M
DENS-C		Dspl of C developer density change ratio
Lv.1	Details	To display difference between C-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the Toner Density Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-8 to 8
	Unit	%
	Related service mode	COPIER> DISPLAY> DENS> SGNL-C

COPIER > DISPLAY > DENS		
DENS-K		Dspl Bk developer density change ratio
Lv.1	Details	To display difference between Bk-color developer density and the target value in % (percentage). Intolerable difference will trigger E020. This may be caused by deterioration of the developer, failure/disconnection of the Toner Density Sensor or error in toner supply system. The value is updated upon print operation after power-on.
	Use case	- When the density varies dramatically - When the density is unstable even after gradation correction
	Display/adj/set range	-8 to 8
	Unit	%
	Related service mode	COPIER> DISPLAY> DENS> SGNL-K
DENS-S-Y		Dspl of ATR control patch density (Y)
Lv.2	Details	To display Y patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
DENS-S-M		Dspl of ATR control patch density (M)
Lv.2	Details	To display M patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
DENS-S-C		Dspl of ATR control patch density (C)
Lv.2	Details	To display C patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
DENS-S-K		Dspl of ATR control patch density (Bk)
Lv.2	Details	To display Bk patch image density created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
D-Y-TRGT		Dspl of ATR ctrl Y patch target density
Lv.2	Details	To display the target density for Y patch image created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > DENS		
D-M-TRGT		Dspl of ATR ctrl M patch target density
Lv.2	Details	To display the target density for M patch image created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
D-C-TRGT		Dspl of ATR ctrl C patch target density
Lv.2	Details	To display the target density for C patch image created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
REF-Y		Dspl of Y developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (Y).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	50 to 200
REF-M		Dspl of M developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (M).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	50 to 200
REF-C		Dspl of C developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (C).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	50 to 200
REF-K		Dspl Bk developer density target value
Lv.1	Details	To display the developer density target value for the ATR Sensor (Bk).
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	50 to 200
SGNL-Y		Display of Y-color developer density
Lv.1	Details	To display the measured value of Y-color developer density. The density is measured with the ATR Sensor (Y) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
	Appropriate target value	20 to 230
	Related service mode	COPIER> DISPLAY> DENS> DENS-Y

COPIER > DISPLAY > DENS		
SGNL-M		Display of M-color developer density
Lv.1	Details	To display the measured value of M-color developer density. The density is measured with the Toner Density Sensor (M) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
SGNL-C		Display of C-color developer density
Lv.1	Details	To display the measured value of C-color developer density. The density is measured with the Toner Density Sensor (C) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
SGNL-K		Display of Bk-color developer density
Lv.1	Details	To display the measured value of Bk-color developer density. The density is measured with the Toner Density Sensor (Bk) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of a problem
	Display/adj/set range	0 to 255
P-SENS-P		Dspl base intnsty at ATR ctrl (P-wave)
Lv.2	Details	To display the light intensity (P-wave) reflected from the background (ITB) at ATR control. Intolerable values may be caused by Patch Sensor disconnection, LED failure, soiled Sensor surface, Shutter failure, Registration Patch Shutter Open/Close Solenoid failure, insufficient ITB cleaning, etc.
	Use case	When checking the failure of Patch Sensor/ITB at low density, fogging deterioration or E020 display
	Display/adj/set range	0 to 1023
DEV-DC-Y		Dspl of developing DC voltage (Y)
Lv.2	Details	To display the latest Y developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	0 to 1023
	Unit	V
DEV-DC-M		Dspl of developing DC voltage (M)
Lv.2	Details	To display the latest M developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	0 to 1023
	Unit	V

COPIER > DISPLAY > DENS		
DEV-DC-C		Dspl of developing DC voltage (C)
Lv.2	Details	To display the latest C developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	0 to 1023
	Unit	V
DEV-DC-K		Dspl of developing DC voltage (Bk)
Lv.2	Details	To display the latest Bk developing DC voltage Vdc.
	Use case	- When image failure occurs due to carrier adherence - When fogging occurs - When fogging is deteriorated
	Display/adj/set range	0 to 1023
	Unit	V
D-K-TRGT		Dspl of ATR ctrl Bk patch target density
Lv.2	Details	To display the Bk patch image target density created by ATR control.
	Use case	When analyzing the cause of a problem
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
D-CRNT-P		Dspl of ATR ctrl dark current (P-wave)
Lv.2	Details	To display the dark current value (P-wave) measured at ATR control.
	Use case	When checking the Patch Sensor
	Display/adj/set range	0 to 1023
D-CRNT-S		Dspl of ATR ctrl dark current (S-wave)
Lv.2	Details	To display the dark current value (S-wave) measured at ATR control.
	Use case	When checking the Patch Sensor
	Display/adj/set range	0 to 1023
P-SENS-S		Dspl base intnsty at ATR ctrl (S-wave)
Lv.2	Details	To display the light intensity (S-wave) reflected from the background (ITB) at ATR control. Intolerable values may be caused by insufficient ITB cleaning, etc.
	Use case	When checking ITB failure at low density or fogging deterioration
	Display/adj/set range	0 to 1023
DENS-Y-H		Dspl of ATR ctrl Y-clr TD ratio history
Lv.2	Details	To display the latest 8 Y-toner density log data (T/D ratio) detected by the Toner Density Sensor at ATR control. Sharp change in values may indicate Toner Density Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255

COPIER > DISPLAY > DENS		
DENS-M-H		Dspl of ATR ctrl M-clr TD ratio history
Lv.2	Details	To display the latest 8 M-toner density log data (T/D ratio) detected by the Toner Density Sensor at ATR control. Sharp change in values may indicate Toner Density Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255
DENS-C-H		Dspl of ATR ctrl C-clr TD ratio history
Lv.2	Details	To display the latest 8 C-toner density log data (T/D ratio) detected by the Toner Density Sensor at ATR control. Sharp change in values may indicate Toner Density Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255
DS-S-Y-H		Dspl Y-clr patch image density history
Lv.2	Details	To display the latest 8 Y-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
DS-S-M-H		Dspl M-clr patch image density history
Lv.2	Details	To display the latest 8 M-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > DENS		
DS-S-C-H		Dspl C-clr patch image density history
Lv.2	Details	To display the latest 8 C-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
DS-S-K-H		Dspl Bk-clr patch image density history
Lv.2	Details	To display the latest 8 Bk-patch image density log data. It is the reference for judging the cause at E020 occurrence, etc. Sharp change in values may indicate the failure in Patch Sensor, Shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by Patch Sensor.
	Use case	When analyzing the cause of E020
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
P-LED-DA		Dspl of Patch Sensor LED light intensity
Lv.2	Details	To display the Patch Sensor LED intensity. The stain on Sensor window or soiled ITB (ITB cleaning failure) is suspected if the background light intensity (P-wave) is too low even with sufficient LED intensity and PT-LPADJ execution will not correct the problem.
	Use case	When checking the Patch Sensor
	Display/adj/set range	Number
	Related service mode	COPIER> DISPLAY> DENS> P-SENS-P COPIER> FUNCTION> MISC-P> PT-LPADJ
SPL-LG-Y		Display of Y toner supply history
Lv.2	Details	To display the latest 8 Y-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking toner supply status at E020 occurrence, low density or fogging deterioration
	Display/adj/set range	0 to 5
SPL-LG-M		Display of M toner supply history
Lv.2	Details	To display the latest 8 M-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking toner supply status at E020 occurrence, low density or fogging deterioration
	Display/adj/set range	0 to 5

COPIER > DISPLAY > DENS		
SPL-LG-C		Display of C toner supply history
Lv.2	Details	To display the latest 8 C-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking toner supply status at E020 occurrence, low density or fogging deterioration
	Display/adj/set range	0 to 5
DENS-K-H		Dspl of ATR ctrl Bk-clr TD ratio history
Lv.2	Details	To display the latest 8 Bk-toner density log data (TD ratio) detected by the ATR Sensor at ATR control. Sharp change in values may indicate the ATR Sensor disconnection/ failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking toner density in the Developing Assembly at low density or fogging deterioration
	Display/adj/set range	0 to 255
SPL-LG-K		Display of Bk toner supply history
Lv.2	Details	To display the latest 8 Bk-toner supply log data. Each data represents the number of toner blocks supplied per paper.
	Use case	When checking the toner supply status at low density or fogging deterioration
	Display/adj/set range	0 to 10
CONT-M		Dspl Toner Density Sensor (M) ctrl voltg
Lv.1	Details	To display the density detection control voltage of the Toner Density Sensor (M).
	Use case	When checking before clearing RAM data
	Display/adj/set range	0 to 255
	Unit	V
	Related service mode	COPIER> ADJUST> DENS> CONT-M
CONT-Y		Dspl Toner Density Sensor (Y) ctrl volt
Lv.1	Details	To display the density detection control voltage of the Toner Density Sensor (Y).
	Use case	When checking before clearing RAM data
	Display/adj/set range	0 to 255
	Unit	V
	Related service mode	COPIER> ADJUST> DENS> CONT-Y
CONT-C		Dspl Toner Density Sensor (C) ctrl voltg
Lv.1	Details	To display the density detection control voltage of the Toner Density Sensor (C).
	Use case	When checking before clearing RAM data
	Display/adj/set range	0 to 255
	Unit	V
	Related service mode	COPIER> ADJUST> DENS> CONT-C

COPIER > DISPLAY > DENS		
CONT-K		Dspl Toner Density Sensor (Bk) ctrl V
Lv.1	Details	To display the density detection control voltage of the Toner Density Sensor (Bk).
	Use case	When checking before clearing RAM data
	Display/adj/set range	0 to 255
	Unit	V
	Related service mode	COPIER> ADJUST> DENS> CONT-K

T-8-10

■ FIXING

COPIER > DISPLAY > FIXING		
FX-MTR2		Dspl Fix Motor crrnt VLlog at 321mm/sec
Lv.2	Details	To display the maximum Fixing Motor current values at process speed of 321mm/sec. Display an alarm (06-0004) when the value is 2.30 (2.3A) and higher, and display an error (E008-001) when the value is 2.60 (2.6A) and higher.
	Use case	When investigating the drive torque at the Pressure Roller replacement or error occurrence
	Caution	- Display unit for process speed of 321mm/sec differs from other process speeds. - Press the Clear key at FX-BLT-L when replacing the Pressure Roller Unit. For other than the replacement, execute FX-L-CLR to reset.
	Display/adj/set range	0 to 24
	Unit	A
	Related service mode	COPIER> FUNCTION> CLEAR> FX-L-CLR COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-MTR3		Dspl Fix Motor crrnt VL history: 280mm/s
Lv.2	Details	To display the maximum and latest Fixing Motor current values at process speed of 280mm/sec. Display an alarm (06-0004) when the value is 200 (2.0 A) and higher, and display an error (E008-001) when the value is 220 (2.2 A) and higher.
	Use case	When investigating the drive torque at the Pressure Roller replacement or error occurrence
	Caution	Press the Clear key at FX-BLT-L when replacing the Pressure Roller Unit. For other than the replacement, execute FX-L-CLR to reset.
	Display/adj/set range	0 to 500, 0 to 500
	Unit	mA
	Related service mode	COPIER> FUNCTION> CLEAR> FX-L-CLR COPIER> COUNTER> DRBL-1> FX-BLT-L

COPIER > DISPLAY > FIXING		
FX-MTR4		Dspl Fix Motor crrnt VL history: 160mm/s
Lv.2	Details	To display the maximum and latest Fixing Motor current values at process speed of 160 mm/sec. Display an alarm (06-0004) when the value is 130 (1.3 A) and higher, and display an error (E008-001) when the value is 150 (1.5 A) and higher.
	Use case	When investigating the drive torque at the Pressure Roller replacement or error occurrence
	Caution	Press the Clear key at FX-BLT-L when replacing the Pressure Roller Unit. For other than the replacement, execute FX-L-CLR to reset.
	Display/adj/set range	0 to 500, 0 to 500
	Unit	mA
	Related service mode	COPIER> FUNCTION> CLEAR> FX-L-CLR COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-MTR5		Dspl Fix Motor crrnt VL history: 140mm/s
Lv.2	Details	To display the maximum and latest Fixing Motor current values at process speed of 140 mm/sec. Display an alarm (06-0004) when the value is 120 (1.2 A) and higher, and display an error (E008-001) when the value is 130 (1.3 A) and higher.
	Use case	When investigating the drive torque at the Pressure Roller replacement or error occurrence
	Caution	Press the Clear key at FX-BLT-L when replacing the Pressure Roller Unit. For other than the replacement, execute FX-L-CLR to reset.
	Display/adj/set range	0 to 500, 0 to 500
	Unit	mA
	Related service mode	COPIER> FUNCTION> CLEAR> FX-L-CLR COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-MTR6		Dspl Fix Motor crrnt VL history: 107mm/s
Lv.2	Details	To display the maximum and latest Fixing Motor current values at process speed of 107 mm/sec. Display an alarm (06-0004) when the value is 100 (1.0 A) and higher, and display an error (E008-001) when the value is 120 (1.2 A) and higher.
	Use case	When investigating the drive torque at the Pressure Roller replacement or error occurrence
	Caution	Press the Clear key at FX-BLT-L when replacing the Pressure Roller Unit. For other than the replacement, execute FX-L-CLR to reset.
	Display/adj/set range	0 to 500, 0 to 500
	Unit	mA
	Related service mode	COPIER> FUNCTION> CLEAR> FX-L-CLR COPIER> COUNTER> DRBL-1> FX-BLT-L

COPIER > DISPLAY > FIXING		
FX-MTR7		Dspl Fix Motor crrnt VL history: 93mm/s
Lv.2	Details	To display the maximum and latest Fixing Motor current values at process speed of 93 mm/sec. Display an alarm (06-0004) when the value is 90 (0.9 A) and higher, and display an error (E008-001) when the value is 100 (1.0 A) and higher.
	Use case	When investigating the drive torque at the Pressure Roller replacement or error occurrence
	Caution	Press the Clear key at FX-BLT-L when replacing the Pressure Roller Unit. For other than the replacement, execute FX-L-CLR to reset.
	Display/adj/set range	0 to 500, 0 to 500
	Unit	mA
	Related service mode	COPIER> FUNCTION> CLEAR> FX-L-CLR COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-MTR8		Dspl Fix Motor crrnt VL history: 32mm/s
Lv.2	Details	To display the maximum and latest Fixing Motor current values at process speed of 32 mm/sec. Display an alarm (06-0004) when the value is 70 (0.7 A) and higher, and display an error (E008-001) when the value is 80 (0.8 A) and higher.
	Use case	When investigating the drive torque at the Pressure Roller replacement or error occurrence
	Caution	Press the Clear key at FX-BLT-L when replacing the Pressure Roller Unit. For other than the replacement, execute FX-L-CLR to reset.
	Display/adj/set range	0 to 500, 0 to 500
	Unit	mA
	Related service mode	COPIER> FUNCTION> CLEAR> FX-L-CLR COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-U-TM1		Dspl Fix Film Uni STBY total run time
Lv.2	Details	To display the total value of Fixing Roller's "STBY-equivalent running time" at all process speeds. Display an alarm at 50400000 seconds (14000 hours), and display an error (E008-002) at 54000000 seconds (15000 hours). "STBY-equivalent running time" is proportional to the rotations.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U

COPIER > DISPLAY > FIXING		
FX-U-TM2		Dspl Fix Roller running time: 321mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 321mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
FX-U-TM3		Dspl Fix Roller running time: 280mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 280 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
FX-U-TM4		Dspl Fix Roller running time: 160mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 160 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
FX-U-TM5		Dspl Fix Roller running time: 140mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 140 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U

COPIER > DISPLAY > FIXING		
FX-U-TM6		Dspl Fix Roller running time: 107mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 107 mm/sec
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
FX-U-TM7		Dspl Fix Roller running time: 93mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 93 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
FX-U-TM8		Dspl Fix Roller running time: 32mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 32 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
FX-L-TM1		Dspl PressFilmUni STBY total run time
Lv.2	Details	To display the total value of Pressure Roller's "STBY-equivalent running time" at all process speeds. "STBY-equivalent running time" is proportional to the rotations.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L

COPIER > DISPLAY > FIXING		
FX-L-TM2		Dspl Press Roller running time:321mm/s
Lv.2	Details	To display the running time of the Pressure Roller at process speed of 321mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-L-TM3		Dspl Press Roller running time:280mm/s
Lv.2	Details	To display the running time of the Pressure Roller at process speed of 280 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-L-TM4		Dspl Press Roller running time:160mm/s
Lv.2	Details	To display the running time of the Pressure Roller at process speed of 160 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-L-TM5		Dspl Press Roller running time:140mm/s
Lv.2	Details	To display the running time of the Pressure Roller at process speed of 140 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L

COPIER > DISPLAY > FIXING		
FX-L-TM6		Dspl Press Roller running time:107mm/s
Lv.2	Details	When checking the use history at the Pressure Roller replacement or error occurrence
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-L-TM7		Dspl Press Roller running time:93mm/s
Lv.2	Details	To display the running time of the Pressure Roller at process speed of 93 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L
FX-L-TM8		Dspl Press Roller running time:50mm/s
Lv.2	Details	To display the running time of the Pressure Roller at process speed of 50 mm/sec.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Pressure Roller, press the Clear key at FXBLT-L to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-L
BLT-TM		Dspl Fix Roller STBY total running time
Lv.2	Details	To display the total value of Fixing Roller's "50 mm/s-equivalent running time" at all process speeds. Display an alarm at 13050000 seconds (3625 hours), and display an error (E008-002) at 15000000 seconds (4167 hours). Running time is proportional to the rotations.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U

COPIER > DISPLAY > FIXING		
BLT-TM1		Fix Rol STBY total run time: pressured
Lv.2	Details	To display the total value of Fixing Roller's "50 mm/s-equivalent running time" at all process speeds when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT-TM2		Dspl Fix Rol run time:pressured, 321mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 321mm/sec when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT-TM3		Dspl Fix Rol run time:pressured, 280mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 280 mm/sec when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT-TM4		Dspl Fix Rol run time:pressured, 160mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 160 mm/sec when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U

COPIER > DISPLAY > FIXING		
BLT-TM5		Dspl Fix Rol run time:pressured, 140mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 140 mm/sec when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT-TM6		Dspl Fix Rol run time:pressured, 107mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 107 mm/sec when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT-TM7		Dspl Fix Rol run time:pressured, 93mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 93 mm/sec when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT-TM8		Dspl Fix Rol run time:pressured, 50mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 50 mm/sec when pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U

COPIER > DISPLAY > FIXING		
BLT2-TM1		Fix Rol STBY total run time: press<100%
Lv.2	Details	To display the total value of Fixing Roller's "50 mm/s-equivalent running time" at all process speeds when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT2-TM2		Dspl Fix Rol run time:press<100%,321mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 321mm/sec when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT2-TM3		Dspl Fix Rol run time:press<100%,280mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 280 mm/sec when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT2-TM4		Dspl Fix Rol run time:press<100%,160mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 160 mm/sec when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U

COPIER > DISPLAY > FIXING		
BLT2-TM5		Dspl Fix Rol run time:press<100%,140mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 140 mm/sec when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT2-TM6		Dspl Fix Rol run time:press<100%,107mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 107 mm/sec when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT2-TM7		Dspl Fix Rol run time:press<100%, 93mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 93 mm/sec when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U
BLT2-TM8		Dspl Fix Rol run time:press<100%, 50mm/s
Lv.2	Details	To display the running time of the Fixing Roller at process speed of 50 mm/sec when some pressure is applied to the roller.
	Use case	When checking the use history at the Fixing Roller replacement or error occurrence
	Caution	When replacing the Fixing Roller, press the Clear key at FX-BLT-U to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U

COPIER > DISPLAY > FIXING		
KIN-TM1		Dspl Heat Soaking Roll 321mm/s run time
Lv.2	Details	To display the total value of Heat Soaking Roller's "321mm/s-equivalent running time" at all process speeds. Running time is proportional to the rotations.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL
KIN-TM2		Dspl Heat Soaking Roll run time:321mm/s
Lv.2	Details	To display the running time of the Heat Soaking Roller at process speed of 321mm/sec.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL
KIN-TM3		Dspl Heat Soaking Roll run time:280mm/s
Lv.2	Details	To display the running time of the Heat Soaking Roller at process speed of 280 mm/sec.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL
KIN-TM4		Dspl Heat Soaking Roll run time:160mm/s
Lv.2	Details	To display the running time of the Heat Soaking Roller at process speed of 160 mm/sec.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL

COPIER > DISPLAY > FIXING		
KIN-TM5		Dspl Heat Soaking Roll run time:140mm/s
Lv.2	Details	To display the running time of the Heat Soaking Roller at process speed of 140 mm/sec.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL
KIN-TM6		Dspl Heat Soaking Roll run time:107mm/s
Lv.2	Details	To display the running time of the Heat Soaking Roller at process speed of 107 mm/sec.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL
KIN-TM7		Dspl Heat Soaking Roll run time:93mm/s
Lv.2	Details	To display the running time of the Heat Soaking Roller at process speed of 93 mm/sec.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL
KIN-TM8		Dspl Heat Soaking Roll run time:50mm/s
Lv.2	Details	To display the running time of the Heat Soaking Roller at process speed of 50 mm/sec.
	Use case	When checking the use history at the Heat Soaking Roller replacement or error occurrence
	Caution	When replacing the Heat Soaking Roller, press the Clear key at FX-UH-RL to reset.
	Display/adj/set range	0 to 4294967295
	Unit	sec
	Related service mode	COPIER> COUNTER> DRBL-1> FX-UH-RL

COPIER > DISPLAY > FIXING		
KIN-HP		Dspl Heat Soaking Roll eng/diseng times
Lv.2	Details	To display the number of times the Heat Soaking Roller Engagement/Disengagement HP Sensor turns ON. The counter value is reset by pressing the Clear key. (It is also cleared by clearing FX-CNT.)
	Use case	When checking the use history at the error occurrence
	Caution	The counter value is also cleared by clearing FX-CNT.
	Display/adj/set range	0 to 4294967295
	Unit	time
	Related service mode	COPIER> COUNTER> FIXING> FX-CNT
RCPR-HP		Display of reciprocation HP times
Lv.2	Details	To display the number of times the Reciprocation HP Sensor turns ON. The counter value is reset by pressing the Clear key. (It is also cleared by clearing FX-CNT.)
	Use case	When checking the use history at the error occurrence
	Caution	The counter value is also cleared by clearing FX-CNT.
	Display/adj/set range	0 to 4294967295
	Unit	time
	Related service mode	COPIER> COUNTER> FIXING> FX-CNT
PRS-HP		Dspl Film engagement/disengagement times
Lv.2	Details	To display the number of times the Film Engagement HP Sensor turns ON. The counter value is reset by pressing the Clear key. (It is also cleared by clearing FX-CNT.)
	Use case	When checking the use history at the error occurrence
	Caution	The counter value is also cleared by clearing FX-CNT.
	Display/adj/set range	0 to 4294967295
	Unit	time
	Related service mode	COPIER> COUNTER> FIXING> FX-CNT
CORE-DST		Copper Shield Plate shift amount
Lv.2	Details	To display the total shift amount of the Copper Shield Plate. The counter value is reset by pressing the Clear key. (It is also cleared by clearing FX-CNT.)
	Use case	When checking the use history at the error occurrence
	Caution	The counter value is also cleared by clearing FX-CNT.
	Display/adj/set range	0 to 4294967295
	Unit	mm
	Related service mode	COPIER> COUNTER> FIXING> FX-CNT

T-8-11

SENSOR

COPIER > DISPLAY > SENSOR		
W-TNR-1		Status dspl of Waste Toner Full Sensor
Lv.1	Details	To display the output value and the judgment value of the Waste Toner Full Sensor of the Waste Toner Container. The value in the left shows the current output value. The value in the right shows the threshold value (depending on the adjustment result) to determine full level.
	Use case	- When checking the sensor - When checking clogging of waste toner
	Display/adj/set range	0 to 1023

T-8-12

MISC

COPIER > DISPLAY > MISC		
ENV-TR		Display of Developing Assmbly temperature.
Lv.1	Details	To display the Developing Assmbly temperature.
	Use case	When checking the temperature of Assmbly temperature.
	Display/adj/set range	0 to 100
	Unit	Degree C
LPOWER-Y		Display of laser light intensity (Y)
Lv.2	Details	To display the Y laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00 to FF
	Appropriate target value	50 to FF
LPOWER-M		Display of laser light intensity (M)
Lv.2	Details	To display the M laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00 to FF
	Appropriate target value	50 to FF
LPOWER-C		Display of laser light intensity (C)
Lv.2	Details	To display the C laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00 to FF
	Appropriate target value	50 to FF
LPOWER-K		Display of laser light intensity (Bk)
Lv.2	Details	To display the Bk laser intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00 to FF
	Appropriate target value	50 to FF

T-8-13

HT-C

COPIER > DISPLAY > HT-C		
TGT-A-Y		Dspl ARCDAT screen A Y-color target VL
Lv.2	Details	To display the Y-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-M		Dsp ARCDAT screen A M-color target VL
Lv.2	Details	To display the M-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-C		Dspl ARCDAT screen A C-color target VL
Lv.2	Details	To display the C-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-K		Dspl of ARCDAT screen A Bk-clr target VL
Lv.2	Details	To display the Bk-patch target value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-Y		Dspl ARCDAT screen B Y-color target VL
Lv.2	Details	To display the Y-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-B-M		Dspl ARCDAT screen B M-color target VL
Lv.2	Details	To display the M-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-C		Dspl ARCDAT screen B C-color target VL
Lv.2	Details	To display the C-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-K		Dspl of ARCDAT screen B Bk-clr target VL
Lv.2	Details	To display the Bk-patch target value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-Y		Dspl ARCDAT screen C Y-color target VL
Lv.2	Details	To display the Y-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-M		Dspl ARCDAT screen C M-color target VL
Lv.2	Details	To display the M-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-C-C		Dspl ARCDAT screen C C-color target VL
Lv.2	Details	To display the C-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-K		Dspl of ARCDAT screen C Bk-clr target VL
Lv.2	Details	To display the Bk-patch target value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
SUM-A-Y		Dspl ARCDAT screen A Y-color ctrl differ
Lv.2	Details	To display Y-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-M		Dspl ARCDAT screen A M-color ctrl differ
Lv.2	Details	To display M-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-C		Dspl ARCDAT screen A C-color ctrl differ
Lv.2	Details	To display C-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-A-K		Dspl ARCDAT scrn A Bk-color ctrl differ
Lv.2	Details	To display Bk-patch control difference of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-Y		Dspl ARCDAT screen B Y-color ctrl differ
Lv.2	Details	To display Y-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-M		Dspl ARCDAT screen B M-color ctrl differ
Lv.2	Details	To display M-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-C		Dspl ARCDAT screen B C-color ctrl differ
Lv.2	Details	To display C-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-K		Dspl ARCDAT scrn B Bk-color ctrl differ
Lv.2	Details	To display Bk-patch control difference of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-C-Y		Dspl ARCDAT screen C Y-color ctrl differ
Lv.2	Details	To display Y-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-M		Dspl ARCDAT screen C M-color ctrl differ
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-C		Dspl ARCDAT screen C C-color ctrl differ
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-K		Dspl ARCDAT scrn C Bk-color ctrl differ
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SGNL-A-Y		Dspl ARCDAT screen A Y-patch current VL
Lv.2	Details	To display the current Y-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-A-M		Dspl ARCDAT screen A M-patch current VL
Lv.2	Details	To display the current M-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGNL-A-C		Dspl ARCDAT screen A C-patch current VL
Lv.2	Details	To display the current C-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-A-K		Dspl ARCDAT screen A Bk-patch current VL
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-Y		Dspl ARCDAT screen B Y-patch current VL
Lv.2	Details	To display the current Y-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-M		Dspl ARCDAT screen B M-patch current VL
Lv.2	Details	To display the current M-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-C		Dspl ARCDAT screen B C-patch current VL
Lv.2	Details	To display the current C-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-B-K		Dspl ARCDAT screen B Bk-patch current VL
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-C-Y		Dspl ARCDAT screen C Y-patch current VL
Lv.2	Details	To display the current Y-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGNL-C-M		Dspl ARCDAT screen C M-patch current VL
Lv.2	Details	To display the current M-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-C-K		Dspl ARCDAT screen C Bk-patch current VL
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGNL-C-C		Dspl ARCDAT screen C C-patch current VL
Lv.2	Details	To display the current C-patch value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
DLTA-A-Y		Dspl of ARCDAT screen A Y-density differ
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-A-M		Dspl of ARCDAT screen A M-density differ
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-A-C		Dspl of ARCDAT screen A C-density differ
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLTA-A-K		Dspl of ARCDAT scrn A Bk-density differ
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen A in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-Y		Dspl of ARCDAT screen B Y-density differ
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-M		Dspl of ARCDAT screen B M-density differ
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-C		Dspl of ARCDAT screen B C-density differ
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-B-K		Dspl of ARCDAT scrn B Bk-density differ
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen B in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLTA-C-Y		Dspl of ARCDAT screen C Y-density differ
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-C-M		Dspl of ARCDAT screen C M-density differ
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-C-C		Dspl of ARCDAT screen C C-density differ
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLTA-C-K		Dspl of ARCDAT scrn C Bk-density differ
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen C in ARCDAT control. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
TGT-A-Y2		ARCDAT scrn A Y-color target VL(1/2 SPD)
Lv.2	Details	To display the Y-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-A-M2		ARCDAT scrn A M-color target VL(1/2 SPD)
Lv.2	Details	To display the M-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-C2		ARCDAT scrn A C-color target VL(1/2 SPD)
Lv.2	Details	To display the C-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-K2		ARCDAT scrn A Bk-clr target VL(1/2 SPD)
Lv.2	Details	To display the Bk-patch target value of screen A in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-Y3		ARCDAT scrn A Y-color target VL(1/3 SPD)
Lv.2	Details	To display the Y-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-M3		ARCDAT scrn A M-color target VL(1/3 SPD)
Lv.2	Details	To display the M-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-A-C3		ARCDAT scrn A C-color target VL(1/3 SPD)
Lv.2	Details	To display the C-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-A-K3		ARCDAT scrn A Bk-clr target VL(1/3 SPD)
Lv.2	Details	To display the Bk-patch target value of screen A in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-Y3		ARCDAT scrn B Y-color target VL(1/3 SPD)
Lv.2	Details	To display the Y-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-M3		ARCDAT scrn B M-color target VL(1/3 SPD)
Lv.2	Details	To display the M-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-C3		ARCDAT scrn B C-color target VL(1/3 SPD)
Lv.2	Details	To display the C-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-K3		ARCDAT scrn B Bk-clr target VL(1/3 SPD)
Lv.2	Details	To display the Bk-patch target value of screen B in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-Y2		ARCDAT scrn B Y-color target VL(1/2 SPD)
Lv.2	Details	To display the Y-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-M2		ARCDAT scrn B M-color target VL(1/2 SPD)
Lv.2	Details	To display the M-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

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TGT-B-C2		ARCDAT scrn B C-color target VL(1/2 SPD)
Lv.2	Details	To display the C-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-B-K2		ARCDAT scrn B Bk-clr target VL(1/2 SPD)
Lv.2	Details	To display the Bk-patch target value of screen B in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-Y2		ARCDAT scrn C Y-color target VL(1/2 SPD)
Lv.2	Details	To display the Y-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-M2		ARCDAT scrn C M-color target VL(1/2 SPD)
Lv.2	Details	To display the M-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-C2		ARCDAT scrn C C-color target VL(1/2 SPD)
Lv.2	Details	To display the C-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700

COPIER > DISPLAY > HT-C		
TGT-C-K2		ARCDAT scrn C Bk-clr target VL(1/2 SPD)
Lv.2	Details	To display the Bk-patch target value of screen C in ARCDAT control at 1/2 speed.
	Use case	When checking ARCDAT control operation
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-Y3		ARCDAT scrn C Y-color target VL(1/3 SPD)
Lv.2	Details	To display the Y-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-M3		ARCDAT scrn C M-color target VL(1/3 SPD)
Lv.2	Details	To display the M-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-C3		ARCDAT scrn C C-color target VL(1/3 SPD)
Lv.2	Details	To display the C-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
TGT-C-K3		ARCDAT scrn C Bk-clr target VL(1/3 SPD)
Lv.2	Details	To display the Bk-patch target value of screen C in ARCDAT control at 1/3 speed.
	Use case	When checking ARCDAT control operation
	Display/adj/set range	0 to 1023
	Appropriate target value	0 to 700
SUM-A-Y2		ARCDAT scrn A Y-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-A-M2		ARCDAT scrn A M-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-A-C2		ARCDAT scrn A C-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-A-K2		ARCDAT scrnA Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-B-Y2		ARCDAT scrn B Y-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-B-M2		ARCDAT scrn B M-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-B-C2		ARCDAT scrn B C-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-B-K2		ARCDAT scrnB Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-C-Y2		ARCDAT scrn C Y-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Y-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-C-M2		ARCDAT scrn C M-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-C-C2		ARCDAT scrn C C-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SUM-C-K2		ARCDAT scrnC Bk-clr ctrl differ(1/2 SPD)
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-A-Y2		ARCDAT scrn A Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between Y-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLT-A-M2		ARCDAT scrn A M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between M-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-A-C2		ARCDAT scrn A C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between C-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-A-K2		ARCDAT scrn A Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between Bk-patch target value and the current value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-B-Y2		ARCDAT scrn B Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between Y-patch target value and the current value of screen B in ARCDAT control at 1/2 speed When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLT-B-M2		ARCDAT scrn B M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between M-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-B-C2		ARCDAT scrn B C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between C-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-B-K2		ARCDAT scrn B Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between Bk-patch target value and the current value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-C-Y2		ARCDAT scrn C Y-density differ (1/2 SPD)
Lv.2	Details	To display the difference between Y-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLT-C-M2		ARCDAT scrn C M-density differ (1/2 SPD)
Lv.2	Details	To display the difference between M-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-C-C2		ARCDAT scrn C C-density differ (1/2 SPD)
Lv.2	Details	To display the difference between C-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
DLT-C-K2		ARCDAT scrn C Bk-density differ(1/2 SPD)
Lv.2	Details	To display the difference between Bk-patch target value and the current value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, execute auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not corrected.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	-1023 to 1023
SGL-A-Y2		ARCDAT scrnA Y-patch current VL(1/2 SPD)
Lv.2	Details	To display the current Y-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGL-A-M2		ARCDAT scrnA M-patch current VL(1/2 SPD)
Lv.2	Details	To display the current M-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-A-C2		ARCDAT scrnA C-patch current VL(1/2 SPD)
Lv.2	Details	To display the current C-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-A-K2		ARCDAT scrnA Bk ptch current VL(1/2 SPD)
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-B-Y2		ARCDAT scrnB Y-patch current VL(1/2 SPD)
Lv.2	Details	To display the current Y-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-B-M2		ARCDAT scrnB M-patch current VL(1/2 SPD)
Lv.2	Details	To display the current M-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGL-B-C2		ARCDAT scrnB C-patch current VL(1/2 SPD)
Lv.2	Details	To display the current C-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-B-K2		ARCDAT scrnB Bkpatch current VL(1/2 SPD)
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-C-Y2		ARCDAT scrnC Y-patch current VL(1/2 SPD)
Lv.2	Details	To display the current Y-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-C-M2		ARCDAT scrnC M-patch current VL(1/2 SPD)
Lv.2	Details	To display the current M-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SGL-C-C2		ARCDAT scrnC C-patch current VL(1/2 SPD)
Lv.2	Details	To display the current C-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGL-C-K2		ARCDAT scrnC Bkpatch current VL(1/2 SPD)
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control at 1/2 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Caution	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1023
SUM-A-Y3		ARCDAT scrnA Y-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display Y-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-M3		ARCDAT scrnA M-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display M-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-C3		ARCDAT scrnA C-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display C-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-A-K3		ARCDAT scrnA Bk-clr ctrl differ(1/3 SPD)
Lv.2	Details	To display Bk-patch control difference of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-B-Y3		ARCDAT scrnB Y-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display Y-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-M3		ARCDAT scrnB M-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display M-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-C3		ARCDAT scrnB C-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display C-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-B-K3		ARCDAT scrnB Bk-clr ctrl differ(1/3 SPD)
Lv.2	Details	To display Bk-patch control difference of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-Y3		ARCDAT scrnC Y-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display Y-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SUM-C-M3		ARCDAT scrnC M-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display M-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-C3		ARCDAT scrnC C-clr ctrl differ (1/3 SPD)
Lv.2	Details	To display C-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
SUM-C-K3		ARCDAT scrnC Bk-clr ctrl differ(1/3 SPD)
Lv.2	Details	To display Bk-patch control difference of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-Y3		ARCDAT scrn A Y-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-M3		ARCDAT scrn A M-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLT-A-C3		ARCDAT scrn A C-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-A-K3		ARCDAT scrn A Bk-density differ(1/3 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-Y3		ARCDAT scrn B Y-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-M3		ARCDAT scrn B M-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-B-C3		ARCDAT scrn B C-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
DLT-B-K3		ARCDAT scrn B Bk-density differ(1/3 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-Y3		ARCDAT scrn C Y-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the Y-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-M3		ARCDAT scrn C M-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the M-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-C3		ARCDAT scrn C C-density differ (1/3 SPD)
Lv.2	Details	To display the difference between the C-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023
DLT-C-K3		ARCDAT scrn C Bk-density differ(1/3 SPD)
Lv.2	Details	To display the difference between the Bk-patch target value and the current value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor or replace the developer if not alleviated.
	Use case	When hue variation occurs
	Display/adj/set range	-1023 to 1023

COPIER > DISPLAY > HT-C		
SGL-A-Y3		ARCDAT scrnA Y-patch current VL(1/3 SPD)
Lv.2	Details	To display the current Y-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-M3		ARCDAT scrnA M-patch current VL(1/3 SPD)
Lv.2	Details	When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-C3		ARCDAT scrnA C-patch current VL(1/3 SPD)
Lv.2	Details	To display the current C-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-A-K3		ARCDAT scrnA Bkpatch current VL(1/3 SPD)
Lv.2	Details	To display the current Bk-patch value of screen A in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-Y3		ARCDAT scrnB Y-patch current VL(1/3 SPD)
Lv.2	Details	To display the current Y-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-M3		ARCDAT scrnB M-patch current VL(1/3 SPD)
Lv.2	Details	To display the current M-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

COPIER > DISPLAY > HT-C		
SGL-B-C3		ARCDAT scrnB C-patch current VL(1/3 SPD)
Lv.2	Details	To display the current C-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-B-K3		ARCDAT scrnB Bkpatch current VL(1/3 SPD)
Lv.2	Details	To display the current Bk-patch value of screen B in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-Y3		ARCDAT scrnC Y-patch current VL(1/3 SPD)
Lv.2	Details	To display the current Y-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-M3		ARCDAT scrnC M-patch current VL(1/3 SPD)
Lv.2	Details	To display the current M-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-C3		ARCDAT scrnC C-patch current VL(1/3 SPD)
Lv.2	Details	To display the current C-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
SGL-C-K3		ARCDAT scrnC Bkpatch current VL(1/3 SPD)
Lv.2	Details	To display the current Bk-patch value of screen C in ARCDAT control at 1/3 speed. When hue variation occurs and the value shown is not in the tolerable range, check the Patch Sensor or replace the developer.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023

T-8-14

I/O (I/O display mode)

Host Machine_DC Controller (DC-CON>P001 to P030/P051 to P056)

Address	bit	Name	Symbol	Remarks
P001	15	Not used		
	14	Not used		
	13	For R&D use		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Not used		
	8	Not used		
	7	For R&D use		
	6	Not used		
	5	For R&D use		
	4	Not used		
	3	Not used		
	2	Not used		
	1	Not used		
	0	Not used		
P002	15	Not used		
	14	Not used		
	13	For R&D use		
	12	For R&D use		
	11	Not used		
	10	Not used		
	9	Not used		
	8	Not used		
	7	Not used		
	6	Not used		
	5	Not used		
	4	Not used		
	3	For R&D use		
	2	For R&D use		
	1	For R&D use		
	0	For R&D use		
P003	15	Not used		
	14	Not used		
	13	Not used		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Not used		
	8	For R&D use		
	7	Not used		
	6	Not used		
	5	Not used		
	4	Not used		
	3	Not used		
	2	Not used		
	1	Not used		
	0	Not used		
P004	15	Duplex Left Motor Current Switch I1	M23	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	14	Not used		
	13	Duplex Left Motor Enable	M23	-
	12	Registration Motor Enable	M34	-
	11	Registration Motor_MD	M34	0: 2phase, 1: 1-2phase
	10	Registration Motor Rotation Direction	M34	0:CCW, 1:CW
	9	Registration Motor I1	M34	I1/I0
	8	Registration Motor I0	M34	0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	7	For R&D use		
	6	For R&D use		
	5	For R&D use		
	4	For R&D use		
	3	For R&D use		
	2	Paper Loop Detect Sensor 2	PS91	1: Paper presence
	1	Paper Loop Detect Sensor 1	PS90	1: Paper presence
	0	Secondary Transfer End Sensor	PS23	1: Paper presence

Address	bit	Name	Symbol	Remarks
P005	15	For R&D use		
	14	For R&D use		
	13	For R&D use		
	12	For R&D use		
	11	Duplex Sensor 4	PS27	1: Paper presence
	10	Duplex Sensor 3	PS26	1: Paper presence
	9	Duplex Sensor 2	PS25	1: Paper presence
	8	Duplex Sensor 1	PS24	1: Paper presence
	7	Recipro Motor I1	M53	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.0 A 1/0: Drive current 0.3 A 1/1: Drive current 0 A
	6	Recipro Motor I0	M53	
	5	For R&D use		
	4	Recipro Motor Enable	M53	1:Enable
	3	For R&D use		
	2	Fixing Motor_LOCK	M48	0: Lock, 1: Error
	1	Duplex Left Motor Phase Pattern Switch	M32	0: 2phase, 1: 1-2phase
	0	Duplex Left Motor I0	M32	
P006	15	For R&D use		
	14	For R&D use		
	13	Core Movement Motor Rotation Direction	M56	0:CCW, 1:CW
	12	Core Movement Motor I1	M35	I1/I0 0/0: HOLD_OFF 0/1: Drive current 0.7 A 1/0: Drive current 0.3 A 1/1: Drive current 0 A
	11	Core Movement Motor I0	M35	
	10	For R&D use		
	9	Core Movement Motor Enable	M35	1:Enable
	8	Inner Delivery Sensor	PS75	1: Paper presence
	7	Half Press Sensor	PS102	1:Harf Press
	6	Pre-fixing Feed Motor Phase Pattern Switch	M35	0: 2phase, 1: 1-2phase
	5	Pre-fixing Feed Motor I1	M35	I1/I0 0/0: HOLD_OFF 0/1: Drive current 0.7 A 1/0: Drive current 0.35 A 1/1: Drive current 0 A
	4	Pre-fixing Feed Motor I0	M35	
	3	For R&D use		
	2	Pre-fixing Feed Motor Enable	M35	1:Enable
	1	Pressure Roller Engagement/ Disengagement HP Sensor	PS73	1:HP
	0	Core Movement HP Sensor	PS98	1:HP

Address	bit	Name	Symbol	Remarks
P007	15	Heat Soaking Roller Engagement/Disgag\ement Motor Phase Pattern Switch	M48	0: 2phase, 1: 1-2phase
	14	Heat Soaking Roller Engagement/Disgag\ement Motor Rotation Direction	M48	0: CCW, 1:CW
	13	Heat Soaking Roller Engagement/Disgag\ement Motor I1	M48	I1/I0 0/0: HOLD_OFF 0/1: Drive current 0.5A 1/0: Drive current 0.3 A 1/1: Drive current 0 A
	12	Heat Soaking Roller Engagement/Disgag\ement Motor I0	M48	
	11	For R&D use		
	10	For R&D use		
	9	For R&D use		
	8	For R&D use		
	7	Kona Watch Dock Pulse		
	6	For R&D use		
	5	For R&D use		
	4	For R&D use		
	3	For R&D use		
	2	Fixing Unit Enter Sensor	PS70	1: Paper presence
	1	Heat Soaking Roller HP Sensor	PS99	1:HP
	0	For R&D use		
P008	15	Not used		
	14	Not used		
	13	Not used		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Reverse Vertical Path Sensor 3	PS35	1: Paper presence
	8	Reverse Vertical Path Sensor 2	PS34	1: Paper presence
	7	PV REQ		
	6	Registration Sensor	PS28	1: Paper presence
	5	Vertical Path Merging Sensor	PS30	1: Paper presence
	4	Not used		
	3	Not used		
	2	Not used		
	1	Resipro HP Sensor	PS100	1: HP
	0	Engagement/Disgag\ement Motor Enable	M55	1:Enable

Address	bit	Name	Symbol	Remarks
P009	15	Right Deck Paper Sensor	PS51	1: Paper presence
	14	Right Deck Limit Sensor	PS50	1:Limit
	13	Right Deck Feed Sensor	PS49	1: Paper presence
	12	Right Deck Paper Height Sensor	PS52	0: Paper surface reaches to the upper limit, 1: Up
	11	Left Deck Pullout Sensor	PS58	1: Paper presence
	10	Left Deck Paper Sensor	PS56	1: Paper presence
	9	Left Deck Limit Sensor	PS55	1:Limit
	8	Left Deck Feed Sensor	PS54	0: Paper surface reaches to the upper limit, 1: Up
	7	Left Deck Paper Height Sensor	PS57	0: High voltage remote ON 1: High voltage remote OFF
	6	Color Toner Sensor ON		0:Sensor OFF, 1:Sensor OFF
	5	Waste Toner Bottle Engagement/Disgag\ement Detection Sensor		0:Bottle Non-wearing, 1:Bottle Wearing
	4	Not used		
	3	Outer Delivery Transparency Sensor	PS111	0:Transparency
	2	Secondary Transfer Engagement/Disgag\ement Motor I1	M31	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.5 A
	1	Secondary Transfer Engagement/Disgag\ement Motor I0	M31	1/0: Drive current 0.3 A 1/1: Drive current 0 A
	0	For R&D use		

Address	bit	Name	Symbol	Remarks
P010	15	Upper Cassette Size Detection Sensor 2 SW2	SW15	0: ON, 1: OFF
	14	Upper Cassette Size Detection Sensor 2 SW1	SW15	0: ON, 1: OFF
	13	Upper Cassette Size Detection Sensor 1 SW4	SW14	0: ON, 1: OFF
	12	Upper Cassette Size Detection Sensor 1 SW3	SW14	0: ON, 1: OFF
	11	Upper Cassette Size Detection Sensor 1 SW2	SW14	0: ON, 1: OFF
	10	Upper Cassette Size Detection Sensor 1 SW1	SW14	0: ON, 1: OFF
	9	Left Deck Paper Level Sensor 1	PS43	0: ON, 1: OFF
	8	Left Deck Paper Level Sensor 2	PS44	0: ON, 1: OFF
	7	Right Deck Paper Level Sensor 1	PS41	0: ON, 1: OFF
	6	Right Deck Paper Level Sensor 2	PS42	0: ON, 1: OFF
	5	Cassette 3 Paper Level Sensor 1	PS45	0: ON, 1: OFF
	4	Cassette 3 Paper Level Sensor 2	PS46	0: ON, 1: OFF
	3	Cassette 4 Paper Level Sensor 1	PS47	0: ON, 1: OFF
	2	Cassette 4 Paper Level Sensor 2	PS48	0: ON, 1: OFF
	1	Right Lower Cover Sensor	PS39	0:Open
	0	Left Lower Cover Sensor	PS36	0:Open

Address	bit	Name	Symbol	Remarks
P011	15	Not used		
	14	Waste Toner Screw Lock Sensor	SW10	0:Lock
	13	Reverse Roller Disengagement Motor Enable	M54	1: Enable
	12	Reverse Roller Disengagement Motor I1	M54	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.0 A 1/0: Drive current 0.3 A 1/1: Drive current 0 A
	11	Reverse Roller Disengagement Motor I0	M54	
	10	Not used		
	9	Down Cassette Size Detection Sensor 2 SW4	SW17	0: ON, 1: OFF
	8	Down Cassette Size Detection Sensor 2 SW3	SW17	0: ON, 1: OFF
	7	Down Cassette Size Detection Sensor 2 SW2	SW17	0: ON, 1: OFF
	6	Down Cassette Size Detection Sensor 2 SW1	SW17	0: ON, 1: OFF
	5	Down Cassette Size Detection Sensor 1 SW4	SW16	0: ON, 1: OFF
	4	Down Cassette Size Detection Sensor 1 SW3	SW16	0: ON, 1: OFF
	3	Down Cassette Size Detection Sensor 1 SW2	SW16	0: ON, 1: OFF
	2	Down Cassette Size Detection Sensor 1 SW1	SW16	0: ON, 1: OFF
	1	Upper Cassette Size Detection Sensor 2 SW4	SW15	0: ON, 1: OFF
	0	Upper Cassette Size Detection Sensor 2 SW3	SW15	0: ON, 1: OFF

Address	bit	Name	Symbol	Remarks
P012	15	Delivery Anti-adhesion Fan 2 Lock	FM11	1: Lock, 1:Error
	14	Delivery Anti-adhesion Fan 2 Half Speed	FM11	1: ON
	13	Delivery Anti-adhesion Fan 2 Full Speed	FM11	1: ON
	12	Delivery Anti-adhesion Fan 1 Lock	FM10	1: Lock, 1:Error
	11	Kona Watch Dock Pulse		
	10	Delivery Anti-adhesion Fan 1 Half Speed	FM10	1: ON
	9	Delivery Anti-adhesion Fan 1 Full Speed	FM10	1: ON
	8	Cassette 4 Paper Sensor	PS66	1: Paper presence
	7	Cassette 4 Limit Sensor	PS65	0: Normal, 1: Upper limit
	6	Cassette 4 Feed Sensor	PS64	1: Paper presence
	5	Cassette 4 Paper Height Senso	PS67	0: Paper surface reaches to the upper limit, 1: Up
	4	Cassette 3 Paper Sensor	PS61	1: Paper presence
	3	Cassette 3 Limit Sensor	PS60	0: Normal, 1: Upper limit
	2	Cassette 3 Feed Sensor	PS59	1: Paper presence
	1	Cassette 3 Paper Height Senso	PS62	0: Paper surface reaches to the upper limit, 1: Up
	0	Not used		

Address	bit	Name	Symbol	Remarks
P013	15	Not used		
	14	Not used		
	13	Not used		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Delivery Anti-adhesion Fan 4 Lock	FM13	1: Lock, 1:Error
	8	Delivery Anti-adhesion Fan 4 Half Speed	FM13	1:ON
	7	Delivery Anti-adhesion Fan 4 Full Speed	FM13	1:ON
	6	Reverse Roller Disengagement HP Sensor	PS101	1:HP
	5	Secondary Transfer Roller Engagement/Disengagement Motor Enable	M31	1:Enable
	4	Secondary Transfer Roller Engagement/Disengagement HP Sensor	PS22	1:HP
	3	Not used		
	2	Delivery Anti-adhesion Fan 3 Lock	FM12	1: Lock, 1:Error
	1	Delivery Anti-adhesion Fan 3 Half Speed	FM12	1:ON
	0	Delivery Anti-adhesion Fan 3 Full Speed	FM12	1:ON

Address	bit	Name	Symbol	Remarks
P014	15	Cassette 3 Pickup Motor I0	M44	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.2A 1/0: Drive current 1.07 A 1/1: Drive current 0 A
	14	For R&D use		
	13	For R&D use		
	12	Multi Inside Board Solenoid ON	SL4	1:ON
	11	Left Deck Pickup Motor Enable	M42	1:Enable
	10	Left Deck Pickup Motor Rotation Direction	M42	0:CCW, 1:CW
	9	Left Deck Pickup Motor I1	M42	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.2A 1/0: Drive current 1.07 A 1/1: Drive current 0 A
	8	Left Deck Pickup Motor I0	M42	
	7	Not used		
	6	Vertical Path Sensor 3	PS63	1: Paper presence
	5	Not used		
	4	Right Deck Pickup Motor Enable	M43	1:Enable
	3	Right Deck Pickup Motor Rotation Direction	M43	0:CCW, 1:CW
	2	Right Deck Pickup Motor I1	M43	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.2A 1/0: Drive current 1.07 A 1/1: Drive current 0 A
	1	Right Deck Pickup Motor I0	M43	
	0	Not used		

Address	bit	Name	Symbol	Remarks
P015	15	Delivery Motor Phase Pattern Switch	M37	0: 2phase, 1: 1-2phase
	14	Delivery Motor I1	M37	I1/I0
	13	Delivery Motor I0	M37	0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.95 A 1/1: Drive current 0 A
	12	Not used		
	11	Reverse Sensor	PS32	1: Paper presence
	10	multi Paper Sensor	PS37	1: Paper presence
	9	Cassette 4 Pickup Motor Enable	M45	1:Enable
	8	Cassette 4 Pickup Motor Rotation Direction	M45	0:CCW, 1CW
	7	Cassette 4 Pickup Motor I1	M45	I1/I0
	6	Cassette 4 Pickup Motor I0	M45	0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.95 A 1/1: Drive current 0 A
	5	Not used		
	4	Duplex Sensor 1	PS24	1: Paper presence
	3	Outer Delivery Sensor	PS31	1: Paper presence
	2	Cassette 3 Pickup Motor Enable	M44	1:Enable
	1	Cassette 3 Pickup Motor Rotation Direction	M44	0:CCW, 1CW
	0	Cassette 3 Pickup Motor I1	M44	

Address	bit	Name	Symbol	Remarks
P016	15	For R&D use		
	14	Right Deck Vertical Path Motor Enable	M40	1:Enable
	13	Right Deck Vertical Path Motor Pattern Switch	M40	0: 2phase, 1: 1-2phase
	12	Right Deck Vertical Path Motor I1	M40	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	11	Right Deck Vertical Path Motor I0	M40	
	10	Not used		
	9	PVREQ		
	8	Reverse Motor Enable	M38	1:Enable
	7	Reverse Motor Pattern Switch	M38	0: 2phase, 1: 1-2phase
	6	Reverse Motor Rotation Direction	M38	0:CCW, 1CW
	5	Reverse Motor I1	M38	I1/I0
	4	Reverse Motor I0	M38	0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	3	For R&D use		
	2	Registration Sensor	PS28	1: Paper presence
	1	Vertical Path Merging Sensor	PS30	1: Paper presence
	0	Delivery Motor Enable	M37	1:Enable

Address	bit	Name	Symbol	Remarks
P017	15	Cassette Vertical Path Motor Enable	M39	1:Enable
	14	Cassette Vertical Path Motor Pattern Switch	M39	0: 2phase, 1: 1-2phase
	13	Cassette Vertical Path Motor I1	M39	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	12	Cassette Vertical Path Motor I0	M39	
	11	For R&D use		
	10	Vertical Path Sensor 1	PS53	1: Paper presence
	9	Vertical Path Sensor 2	PS40	1: Paper presence
	8	Left Deck Vertical Path Motor Enable	M41	1:Enable
	7	Left Deck Vertical Path Motor Pattern Switch	M41	0: 2phase, 1: 1-2phase
	6	Left Deck Vertical Path Motor I1	M41	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	5	Left Deck Vertical Path Motor I0	M41	
	4	Not used		
	3	For R&D use		
	2	For R&D use		
	1	Reverse Vertical Path Sensor 3	PS35	1: Paper presence
	0	For R&D use		

Address	bit	Name	Symbol	Remarks
P018	15	Option Cooling Fan2 Lock	FM24	1: Lock, 1:Error
	14	Option Cooling Fan2 Full Speed	FM24	1: ON
	13	Option Cooling Fan2 Half Speed	FM24	1: ON
	12	Option Cooling Fan1 Lock	FM23	1: Lock, 1:Error
	11	Option Cooling Fan1 Full Speed	FM23	1: ON
	10	Option Cooling Fan1 Half Speed	FM23	1: ON
	9	Reverse Vertical Path Sensor 1	PS33	1: Paper presence
	8	Reverse Vertical Path Sensor 2	PS34	1: Paper presence
	7	Pre-registration Multipurpose Tray Drive Motor Enable	M36	1: Enable
	6	Pre-registration Multipurpose Tray Drive Motor Pattern Switch	M36	0: 2phase, 1: 1-2phase
	5	Pre-registration Multipurpose Tray Drive Motor I1	M36	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	4	Pre-registration Multipurpose Tray Drive Motor I0	M36	
	3	For R&D use		
	2	For R&D use		
	1	For R&D use		
	0	Vertical Path Sensor 1	PS68	1: Paper presence
P019	15	Not used		
	14	Not used		
	13	Not used		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Not used		
	8	Not used		
	7	Not used		
	6	Not used		
	5	Not used		
	4	Not used		
	3	Not used		
	2	Not used		
	1	5V Remote		
	0	Option Cooling Fan Connection Detection		0: Fan connection

Address	bit	Name	Symbol	Remarks
P020	15	Not used		
	14	Pre-exposure LED Error(Bk)	UN29	0: Error
	13	Pre-exposure LED Bit0(Bk)	UN29	Change the current amount of BK pre-exposure bit0/bit1 0/0: 125mA (forbid setting) 0/1: 120mA (forbid setting) 1/0: 80mA 1/1: 40mA
	12	Pre-exposure LED Bit1(Bk)	UN29	
	11	Pre-exposure LED ON(Bk)	UN29	
	10	Not used		
	9	Not used		
	8	Not used		
	7	Not used		
	6	Not used		
	5	Not used		
	4	Not used		
	3	Not used		
	2	Not used		
	1	Not used		
	0	Not used		

Address	bit	Name	Symbol	Remarks
P021	15	Post Developing Fan Full Speed (BK)	FM4	1: ON
	14	Hopper Cooling Suction Fan Lock	FM22	1: Lock, 1:Error
	13	Hopper Cooling Suction Fan Half Speed	FM22	1: ON
	12	Hopper Cooling Suction Fan Full Speed	FM22	1: ON
	11	Hopper Cooling Exhaust Fan Lock	FM18	1: Lock, 1:Error
	10	Hopper Cooling Exhaust Fan Half Speed	FM18	1: ON
	9	Hopper Cooling Exhaust Fan Full Speed	FM18	1: ON
	8	Registration Detection Reset	PS19,20	0: Reset
	7	Patch Sensor LED ON	PS21	1: ON
	6	Registration Detection LED ON	PS19,20	1: ON
	5	For R&D use		
	4	For R&D use		
	3	Multi-purpose Tray Door Sensor	PS79	0: OPEN, 1: CLOSE
	2	Primary Charging Suction Fan Lock	FM2	1: Lock, 1:Error
	1	Primary Charging Suction Fan Half Speed	FM2	1: ON
	0	Primary Charging Suction Fan Full Speed	FM2	1: ON

Address	bit	Name	Symbol	Remarks
P022	15	For R&D use		
	14	Developing Sleeve Drive Motor (Y) CW	M20	1: CW
	13	For R&D use		
	12	For R&D use		
	11	For R&D use		
	10	For R&D use		
	9	Registration Sensor	PS28	1: Paper presence
	8	Vertical Path Merging Sensor	PS30	1: Paper presence
	7	Pre-fixing Feed Attraction Fan Lock Detection	FM1	1: Lock, 1:Error
	6	Pre-fixing Feed Attraction Fan Half Speed	FM1	1: ON
	5	Pre-fixing Feed Attraction Fan Full Speed	FM1	1: ON
	4	CI Cleaner Fan Lock Detection	FM5	1: Lock, 1:Error
	3	CI Cleaner Fan Half Speed	FM5	1: ON
	2	CI Cleaner Fan Full Speed	FM5	1: ON
	1	Post Developing Fan Lock Detection	FM4	1: Lock, 1:Error
	0	Post Developing Fan Half Speed	FM4	1: ON
P023	15	12V Power Supply Fan Full Speed		1: ON
	14	24V Power Supply Fan Full Speed		1: ON
	13	24V Pickup SW		1: ON
	12	24V Finisher SW		1: ON
	11	24V Fixing Feed Unit SW		1: ON
	10	24VB Power Supply Remote		1: ON
	9	24VA Power Supply Remote		1: ON
	8	KONA Communication monitor control		1: ON
	7	5V Photo Interrupter Power Supply		
	6	Not used		
	5	Not used		
	4	Not used		
	3	Not used		
	2	Not used		
	1	Not used		
	0	Not used		

Address	bit	Name	Symbol	Remarks
P024	15	Drum Heater connector disconnection		1: connector disconnection
	14	Drum Heater Limit 46 degree C		1: Limit 46 degree C
	13	Drum Heater RL Reset		1: Reset
	12	Drum Heater RL Set		1: Set
	11	Caset Heater Triac ON		1: ON
	10	Not used		
	9	Fixing Feed Knob SW		0: CLOSE, 1: OPEN
	8	Not used		
	7	24VB Power Supply Failure Detection		1: Error
	6	24VA Power Supply Failure Detection		1: Error
	5	AC Driver PCB Location 1		
	4	AC Driver PCB Location 0		
	3	Not used		
	2	IH Fan Lock		1: Lock, 1:Error
	1	IH Power Supply Fan Full Speed		1: ON
	0	IH Power Supply Fan Half Speed		1: ON
P025	15	Not used		
	14	Not used		
	13	Not used		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Not used		
	8	Not used		
	7	Not used		
	6	Not used		
	5	Not used		
	4	Not used		
	3	Not used		
	2	Fixing Web Level Sensor		1: No Web
	1	For R&D use		
	0	For R&D use		

Address	bit	Name	Symbol	Remarks
P030	15	Multi Deck Reset		0: Clear Multi Deck RESET 1: Multi Deck RESET
	14	Multi Deck Connect		0: Open, 1: Connect
	13	Not used		
	12	Not used		
	11	Error Detection		1: Error
	10	Jam Detection		1: Jam
	9	ITOP Signal		
	8	Bideo Board Reset cancellation		
	7	Bideo Board Ready Signal		1: Ready
	6	Not used		
	5	Not used		
	4	Not used		
	3	Not used		
	2	Not used		
	1	Not used		-
	0	Not used		-
P031	15	Not used		
	14	Not used		
	13	Not used		
	12	Not used		
	11	Fixing Feed Drawer Connect		0: Open, 1: Connect
	10	ITB Unit Identification		0: IR-ADV C9200/7200 series 1: IR-ADV C9000/7000 series
	9	For R&D use		
	8	Finisher Download		1: Downloade
	7	Finisher Reset		1: Reset
	6	Finisher Mode Signal		1: Enable (Connecting X4/5)
	5	Finisher Remote		1: ON
	4	Primary Charging Exhaust Fan Lock Detection	FM3	0: Error, 1: Lock
	3	Primary Charging Exhaust Fan Half Speed	FM3	1: ON
	2	Primary Charging Exhaust Fan Full Speed	FM3	1: ON
	1	For R&D use		
	0	Multi Deck Remote		1: ON

Address	bit	Name	Symbol	Remarks
P032	15	For R&D use		
	14	Multi Deck AD chip select		
	13	For R&D use		
	12	For R&D use		
	11	Not used		
	10	Not used		
	9	Not used		
	8	Not used		
	7	12V Power Supply of Driver PCB		0: Normal, 1: Power Down
	6	5V Power Supply of Driver PCB		0: Normal, 1: Power Down
	5	3.3V Power Supply of High Voltage		0: Normal, 1: Power Down
	4	Buffer Driver PCB connection detection		0: Not connect 1: Connect
	3	Not used		
	2	Not used		
	1	Fixing Heat Exhaust Fan Lock Detection		0: Error, 1: Lock
	0	Not used		
P033	15	Not used		0: Open, 1: Close
	14	Not used		
	13	Not used		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Not used		
	8	Not used		
	7	Not used		
	6	Not used		
	5	Front Door Sensor	PS80	
	4	Developing Stirring Motor (Bk) CW	M29	0: CW, 1:CCW (original turn)
	3	Developing Stirring Motor (C) CW	M27	0: CW, 1:CCW (original turn)
	2	Developing Stirring Motor (M) CW	M28	0: CW, 1:CCW (original turn)
	1	Developing Stirring Motor (Y) CW	M26	0: CW, 1:CCW (original turn)
	0	Not used		

Address	bit	Name	Symbol	Remarks
P034	15	Toner Cartridge Drive Motor (Y) CW	M10	0: CCW, 1: CW
	14	Toner Cartridge Drive Motor (M) CW	M13	0: CCW, 1: CW
	13	Toner Cartridge Drive Motor (C) CW	M16	0: CCW, 1: CW
	12	Toner Cartridge Drive Motor (Bk) CW	M7	0: CCW, 1: CW
	11	Pre-exposure LED ON (C)	LED4	1: ON
	10	Pre-exposure LED ON (M)	LED3	1: ON
	9	Pre-exposure LED ON (Y)	LED2	1: ON
	8	Pre-exposure Error Detection (C)	LED4	1: Error
	7	Pre-exposure Error Detection (M)	LED3	1: Error
	6	Pre-exposure Error Detection (Y)	LED2	1: Error
	5	Toner Cartridge inner door Sensor (C)	PS16	0: Open, 1: Close
	4	Post-wire Cleaning Motor ON		0: Motor Stop, 1: Moter Drive
	3	Post-wire Cleaning Motor Rotation Direction		0: CCW (From this side to the depths) 1: CW
	2	Steering Motor Enable		1: Enable
	1	Primary Transfer Engagemant/ Disengagement Motor Enable		1: Enable
	0	Post-Shutter HP		1: Close

Address	bit	Name	Symbol	Remarks
P035	15	Cam Phase Sensor (M)	PS82	
	14	Cam Phase Sensor (C)	PS83	
	13	Cam Phase Sensor (Bk)	PS84	
	12	Hopper Level Detection Sensor (Y)	TS6	0: Absence, 1: Presence
	11	Hopper Level Detection Sensor (M)	TS7	0: Absence, 1: Presence
	10	Hopper Level Detection Sensor (C)	TS8	0: Absence, 1: Presence
	9	Hopper Level Detection Sensor (Bk)	TS5	0: Absence, 1: Presence
	8	Toner Cartridge door Sensor	PS6	0: Close, 1: Open
	7	Toner Cartridge inner door Sensor (Y)	PS10	0: Close, 1: Open
	6	Toner Cartridge inner door Sensor (M)	PS13	0: Close, 1: Open
	5	For R&D use		
	4	Toner Container inner door Sensor (Bk)	PS7	0: Close, 1: Open
	3	For R&D use		
	2	For R&D use		
	1	For R&D use		
	0	For R&D use		
P036	15	For R&D use		
	14	KONA 1 Live		1: ON
	13	5V RMT		1: ON
	12	Toner Cartridge Reciprocation Cam HP Sensor (Y)	PS11	1: HP
	11	Toner Cartridge Reciprocation Cam HP Sensor (M)	PS14	1: HP
	10	Toner Cartridge Reciprocation Cam HP Sensor (C)	PS17	1: HP
	9	Toner Cartridge Reciprocation Cam HP Sensor (Bk)	PS8	1: HP
	8	For R&D use		
	7	For R&D use		
	6	For R&D use		
	5	For R&D use		
	4	For R&D use		
	3	For R&D use		
	2	For R&D use		
	1	For R&D use		
	0	Cam Phase Sensor (Y)		

Address	bit	Name	Symbol	Remarks
P037	15	Steering Motor Phase Pattern Switch		0: 2phase, 1: 1-2phase
	14	Steering Motor Phase Rotation Direction		0: CCW, 1: CW
	13	Steering Motor I1		I1/I0
	12	Steering Motor I0		0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	11	For R&D use		
	10	For R&D use		
	9	For R&D use		
	8	For R&D use		
	7	For R&D use		
	6	For R&D use		
	5	For R&D use		
	4	For R&D use		
	3	Post Charging shutter Rotation Direction		
	2	Primary Charging Shutter Rotation Direction		
	1	Not used		
	0	Not used		

Address	bit	Name	Symbol	Remarks
P038	15	Not used		
	14	ITB Steering HP Sensor		1: HP
	13	ITB HP Sensor	PS5	1: HP
	12	ITB Displacement Sensor		1: ON
	11	Hopper Screw Motor Rotation Detection (Bk)		0: CCW
	10	Hopper Screw Motor Rotation Detection (Y,M,C)		0: CCW
	9	Primary Charging Shutter HP Sensor		1: Close
	8	For R&D use		
	7	Pre-transfer Engagement/ Disengagement Motor Pattern Switch		0: 2phase, 1: 1-2phase
	6	Pre-transfer Engagement/ Disengagement Motor Rotation Direction		0: CCW, 1: CW
	5	Pre-transfer Engagement/ Disengagement Motor I1		I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	4	Pre-transfer Engagement/ Disengagement Motor I0		
	3	For R&D use		
	2	Pre-transfer Engagement/ Disengagement Motor HP Sensor		0: Pre-transfer Engagement 1: Pre-transfer Disengagement
	1	Post Charging Wire Cleaning Motor ON		0: Motor Stop 1: Motor turn
	0	Post Charging Wire Cleaning Motor Rotation Direction		0: CCW (From this side to the depths) 1: CW

Address	bit	Name	Symbol	Remarks
P039	15	Not used		
	14	Fixing Motor Gain	M48	0: High Speed Gain (More than 1700rpm)
	13	Fixing Motor Rotation Direction	M48	0: CW (Fixing drive) 1: CCW (Engagement/ Disengagement)
	12	Fixing Motor ON	M48	0: ON
	11	Not used		
	10	Not used		
	9	Fixing Feed Cooling Fan Full Speed (Center)	FM27	1: ON
	8	Fixing Feed Cooling Fan Half Speed (Center)	FM27	1: ON
	7	Heat Soaking Roller Cooling Fan 1 Full Speed	FM15	1: ON
	6	Heat Soaking Roller Cooling Fan 1 Half Speed	FM15	1: ON
	5	Heat Soaking Roller Cooling Fan 2 Full Speed	FM16	1: ON
	4	Heat Soaking Roller Cooling Fan 2 Half Speed	FM16	1: ON
	3	Transparency Sensor ON	PS29	1: ON
	2	Transparency Sensor Gain 1	PS29	1: ON
	1	Transparency Sensor Gain 2	PS29	1: ON
	0	5V Remote		
P040	15	Not used		
	14	Not used		
	13	Not used		
	12	Not used		
	11	Not used		
	10	Not used		
	9	Not used		
	8	Not used		
	7	Not used		
	6	Not used		
	5	Not used		
	4	High Voltage Remote		0: ON
	3	Secondary Transfer High Voltage CV ON		0: ON
	2	Secondary Transfer High Voltage minus ON		0: ON
	1	Secondary Transfer High Voltage Constant Current ON		0: ON
	0	Secondary Transfer High Voltage Static Elimination High Voltage DC ON		0: ON

Address	bit	Name	Symbol	Remarks
P041	15	Paper Width Size Detection 1	PS94	1: Paper presence
	14	Paper Width Size Detection 2	PS95	1: Paper presence
	13	Paper Width Size Detection 3	PS96	1: Paper presence
	12	Paper Width Size Detection 4	PS97	1: Paper presence
	11	Fixing Feed Cooling Fan Lock (Center)	FM27	0: Lock, 1: Error
	10	Heat Soaking Roller Cooling Fan 1 Lock	FM15	0: Lock, 1: Error
	9	Heat Soaking Roller Cooling Fan 2 Lock	FM16	0: Lock, 1: Error
	8	Not used		
	7	Not used		
	6	Not used		
	5	Not used		
	4	Not used		
	3	Not used		
	2	Not used		
	1	Not used		
	0	Not used		

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Host Machine_Main Controller (DC-CON>P001 to P016)

Address	bit	Name	Symbol	Remarks
P001	8-15	Not used	-	-
	6-7	Reserve	-	-
	4-5	For R&D use	-	-
	3	ZIFO,FIFO PCB Presence/ Absence		bit3,bit2 0,1: ZIFO BOARD 1,0: FIFO BOARD 1,1: NO BOARD
	2	ZIFO,FIFO PCB Presence/ Absence		
	1	Debug SRAM PCB Presence/ Absence	-	0: Absence, 1: Presence
	0	For R&D use	-	-
P002	9-15	Not used	-	-
	0-8	For R&D use	-	-
P003	4-15	Not used	-	-
	0-3	For R&D use	-	-
P004	15	Main Controller PCB 2 Version bit3	-	-
	14	Main Controller PCB 2 Version bit2	-	-
	13	Main Controller PCB 2 Version bit1	-	-
	12	Main Controller PCB 2 Version bit0	-	-
	11	Orfeo-A/ Orfeo-B PCB Detection	-	bit11,bit10 0,0: Short 0,1: Orfeo-B 1,0: Orfeo-A 1,1: OPEN
	10	Orfeo-A/ Orfeo-B PCB Detection	-	
	8-9	For R&D use	-	-
	0-7	Not used	-	-
P005	14-15	For R&D use	-	-
	13	Not used	-	-
	12	Clear reset of image process chip	-	1: Wake
	11	SCPRDY (Controller reception is available)	-	0: Movement is possible
	9-10	For R&D use	-	
	8	Not used	-	
	5-7	For R&D use	-	
	4	Not used	-	
	2-3	For R&D use	-	
	1	Not used	-	
	0	For R&D use	-	
P006	1-15	Not used	-	-
	0	Image Analysis PCB power state	-	0: Abnormal, 1: Normal
P007	8-15	Reserve	-	-
	7	Reader Controller PCB power output state	-	0: Abnormal, 1: Normal
	6	PRTS (Controller reception is available)	-	0: Movement is possible
	5	PCTS (Printer reception is available)	-	0: Movement is possible
	4	PCPRDY (Controller reception is available)	-	0: Movement is possible
	3	PPRDY (Printer power ON)	-	0: Movement is possible
	2	Reserve	-	-
	1	Reserve	-	-
	0	Printer DCON reset state	-	0: Abnormal, 1: Normal
P008	0-15	Not used	-	-
P009	0-1	Not used	-	-
P010	13-15	For R&D use	-	-
	12	Not used	-	-
	11	Riser PCB Version bit3	-	-
	10	Riser PCB Version bit2	-	-
	9	Riser PCB Version bit1	-	-
	8	Riser PCB Version bit0	-	-
	0-7	Not used	-	-
P011	0-15	Not used	-	-
P012	0-15	Not used	-	-
P013	0-15	Not used	-	-
P014	0-15	Not used	-	-
P015	0-15	Not used	-	-
P016	0-15	Not used	-	-

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Reader / ADF (R-CON>P001 to P006)

Address	bit	Name	Symbol	Remarks
P001	8-15	Not used	-	-
	7	For R&D use	-	-
	6	24V Power Supply Monitor	-	0: ON, 1:OFF
	5	Not used	-	-
	4	12V Power Supply Monitor	-	0: ON, 1:OFF
	3	Board Test	-	0: PCB check, 1: Normal start-up
	2	For R&D use	-	-
	1	ADF Glass HP Sensor	SR11	0: ON, 1:OFF
	0	Not used	-	-
P002	8-15	Not used	-	-
	7	For R&D use	-	-
	6	For R&D use	-	-
	5	For R&D use	-	-
	4	For R&D use	-	-
	3	HP Sensor	SR2	0: OFF, 1: ON
	2	For R&D use	-	-
	1	For R&D use	-	-
	0	Original Size Sensor ON	-	0: OFF, 1: ON
P003	8-15	Not used	-	-
	7	For R&D use	-	-
	6	For R&D use	-	-
	5	DF Type	-	0: Reverse duplex 1: 1-path duplex
	4	For R&D use	-	-
	3	Not used	-	-
	2	Watchdog Signal	-	-
	1	For R&D use	-	-
	0	For R&D use	-	-
P004	8-15	Not used	-	-
	7	For R&D use	-	-
	6	For R&D use	-	-
	5	Scanner Motor Reset	M1	0: Reset
	4	Scanner Motor Enable	M1	0: Enable
	3	Original Size Sensor 2	FC2	0: Original presence
	2	Original Size Sensor 1	FC1	0: Original presence
	1	ADF ConnectionDetection	-	0: Unconnected, 1: Connected
	0	For R&D use	-	
P005	8-15	Not used	-	-
	7	For R&D use	-	-
	6	For R&D use	-	-
	5	Not used	-	-
	4	FAN Lock Signal	FM2	1: Failure
	3	FAN ON Signal	FM2	0: OFF, 1: ON
	2	DF Cover Sensor 1	SR1	0: Open, 1: Close
	1	DF Cover Sensor 2	SR3	0: Open, 1: Close
	0	Scanner Motor Direction	-	0: Back scan, 1: Scan
P006	8-15	Not used		
	7	For R&D use		
	6	ADF Glass HP Sensor	SR11	0: ON, 1:OFF
	5	ADF Delay Sensor	SR4	0: Paper presence
	4	ADF Post-separation Sensor 3	SR2 SR3 PCB2	0: Paper presence
	3	ADF Delivery Sensor	PCB5	0: Paper presence
	2	ADF Read Sensor 2	SR5	0: Paper presence
	1	ADF Read Sensor 1	PCB4	0: Paper presence
	0	ADF Registration Sensor	PCB3	0: Paper presence

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■ ADF(FEEDER>P001 to P008)

Address	bit	Name	Symbol	Remarks
P001	8-15	Not used	-	-
	7	24V Power Supply Monitor	-	0: Power supply
	6	Not used	-	-
	5	DADF Fan Alarm	-	0: Failure
	4	LTR-R/LGL Identification Sensor	SR8	1: Paper presence
	3	AB/Inch Identification Sensor	SR7	1: A4R, STMTR, B6R
	2	Tray Sensor	SR9	0: Open, 1: Close
	1	Tray HP Sensor	SR13	1: HP (lower limit)
	0	Paper Surface Sensor	SR6	1: Paper surface detection
P002	8-15	Not used	-	-
	7	Cover Sensor	SR10	0: Open
	6	Original Sensor	SR1	1: Original presence
	5	Not used	-	-
	4	Post-separation 3 Sensor	PCB2	1: Paper presence
	3	Post-separation 2 Sensor	SR3	0: Paper presence
	2	Post-separation 1 Sensor	SR2	0: Paper presence
	1	Pickup Roller Unit Lifting HP Sensor	SR12	1: HP (Escape)
	0	Scanner Unit Cooling Fan Alarm	FM3	0: Failure
P003	8-15	Not used	-	-
	7	Disengagement HP Sensor 2	SR16	1: HP (Disengagement)
	6	For R&D use	-	1: 1-path duplex, 0: Reverse duplex
	5	For R&D use	-	-
	4	Disengagement HP Sensor 1	SR15	1: HP (Disengagement)
	3	Original Size Sensor 4	SR20	1: Paper presence
	2	Original Size Sensor 3	SR19	1: Paper presence
	1	Original Size Sensor 2	SR18	1: Paper presence
	0	Original Size Sensor 1	SR17	1: Paper presence
P004	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Delivery LED 1	-	1: ON
	4	Not used	-	-
	3	Not used	-	-
	2	Tray Lifting Motor Direction	M8	1: Up, 0: Down
	1	Stamp Solenoid	SL2	1: ON
	0	Original LED	-	1: ON
P005	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Tray Lifting Motor Enable	M8	1: Enable
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Disengagement Motor 1 Enable	M6	1: Enable
P006	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Disengagement Motor 2 Enable	M7	1: Enable
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Glass Shift Motor Enable	M9	1: Enable
P007	8-15	Not used	-	-
	7	Not used	-	-
	6	Glass Shift Motor Direction	M9	0: Readin direction 1: Shading direction
	5	Feed Fan ON	FM1	1: ON
	4	Not used	-	-
	3	Pickup Motor Enable	M1	1: Enable
	2	Feed Motor Enable	M2	1: Enable
	1	registration Motor Enable	M3	1: Enable
	0	Read Motor Enable	M4	1: Enable
P008	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Pickup Roller Unit Lifting Motor Enable	FM10	1: Enable
	3	Back Side FAN ON	FM2	1: ON
	2	Not used	-	-
	1	Delivery Motor Enable	M5	1: Enable
	0	Delivery Motor Direction	M5	-

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■ Paper Deck Unit (DC-CON>P048 to P050)

Address	bit	Name	Symbol	Remarks
P048	15	Not used	-	-
	14	Not used	-	-
	13	Not used	-	-
	12	Not used	-	-
	11	Not used	-	-
	10	Deck Main Motor Hold	M1	-
	9	Deck Open Solenoid	SL2	0: Open, 1: Close
	8	Deck Lifter Motor	M2	0: Up, 1:Down
	7	Deck Lifter Motor ON Signal	M2	0: OFF, 1:ON
	6	Deck Main Motor ON Signal	M1	0: OFF, 1:ON
	5	Not used	-	-
	4	Not used	-	-
	3	Deck Pickup Clutch ON Signal	CL2	0: OFF, 1:ON
	2	Not used	-	-
	1	Deck Pickup Roller Releasing Solenoid	SL1	0: OFF, 1:ON
	0	Deck Open Indicator	LED100	-
P049	15	Not used	-	-
	14	Not used	-	-
	13	Not used	-	-
	12	Not used	-	-
	11	Not used	-	-
	10	Not used	-	-
	9	Not used	-	-
	8	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Not used	-	-
P050	15	For R&D	-	-
	14	not used	-	-
	13	For R&D	-	-
	12	For R&D	-	-
	11	Deck Open Sensor	PS9	0: Connected 1: unconnected
	10	Deck Set Sensor	PS5	0: Paper Present, 1: Paper Absent
	9	Deck Lifter Lower Limit Detecting Switch	SW2	0: ON, 1: OFF
	8	Deck Paper Level Sensor	PS8	0: Paper Present, 1: Paper Absent
	7	Deck Paper Supply Position Sensor	PS7	0: Paper Present, 1: Paper Absent
	6	Deck Main Motor Lock Signal	M1	-
	5	Deck Pickup Roller Releasing Solenoid ON Signal	SL1	0: ON, 1: OFF
	4	Deck Pickup Sensor	PS6	0: Paper Present, 1: Paper Absent
	3	Deck Feed Sensor	PS1	0: Paper Present, 1: Paper Absent
	2	Deck Lifter Position Sensor	PS4	0: ON, 1: OFF
	1	Deck Paper Sensor	PS2	0: Paper Present, 1: Paper Absent
	0	Deck Open Detecting Switch	SW1	0: Open, 1: close

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■ POD Deck Lite (DC-CON>P054 to P057)

Address	bit	Name	Symbol	Remarks
P054	15	Large Deck ID	-	Fix to 0
	14	Deck Lifter Motor Error	M2	1: Error, 0: Normal
	13	Deck Lite ID	-	Fix to 0
	12	Deck Lite ID	-	Fix to 1
	11	Deck Receptacle Left Open Sensor	PS9	1: Close, 0: Open
	10	Deck Engagement/Disengagement Sensor	PS5	1: Open, 0: Close
	9	Deck Lifter Lower Limit Detection Switch	SW2	1: Normal, 0: Abnormal
	8	Deck Paper Level Sensor	PS8	1: Paper absence, 0: Paper presence
	7	Deck Supply Position Sensor	PS7	1: Paper absence, 0: Paper presence
	6	Deck Receptacle Right Open Sensor	PS10	1: Close, 0: Open
	5	5V Detection	-	1: 5V OFF, 0: 5V ON
	4	Deck Pullout Sensor	PS6	1: Paper presence, 0: Paper absence
	3	Deck Pickup Sensor	PS1	1: Paper presence, 0: Paper absence
	2	Deck Lifter Position Sensor	PS4	1: Paper absence, 0: Paper presence
	1	Deck Paper Sensor	PS2	1: Paper absence, 0: Paper presence
	0	Receptacle Open Switch	SW3	1: ON, 0: OFF
P055	15	Not used	-	-
	14	Heater Error 1	-	1: Normal, 0: Error
	13	Heater Ready	-	1: Ready, 0: Not ready
	12	POD Deck Detection	-	1: Detect, 0: Not detect
	11	Motor Cooling Fan Error	FAN4	1: Normal, 0: Error
	10	Deck Foreign Matter Sensor	PS13	1: Foreign matter absence, 0: Foreign matter presence
	9	Paper Level Sensor	PS12	1: Paper absence, 0: Paper presence
	8	Hot Air Fan/Cold Air Fan/Expansion Fan/Swing Motor Error, Receptacle Load Error	FAN1, FAN2, FAN3, M3	1: Normal, 0: Error
	7	Temperature DATA [3]	-	1: bit3=1, 0: bit3=0
	6	Temperature DATA [2]	-	1: bit2=1, 0: bit2=0
	5	Temperature DATA [1]	-	1: bit1=1, 0: bit1=0
	4	Temperature DATA [0]	-	1: bit0=1, 0: bit0=0
	3	Humidity DATA [3]	-	1: bit3=1, 0: bit3=0
	2	Humidity DATA [2]	-	1: bit2=1, 0: bit2=0
	1	Humidity DATA [1]	-	1: bit1=1, 0: bit1=0
	0	Humidity DATA [0]	-	1: bit0=1, 0: bit0=0
P056	15	BANK-RX1	-	Auto at bank switching
	14	BANK-RX0	-	Auto at bank switching
	13	BANK-TX	-	Fix to 1
	12	Deck Pickup Clutch ON	CL1	1: ON, 0: OFF
	11	Hot Air Fan OFF	FAN1	1: OFF, 0: ON
	10	Air Heater ON	H1	1: ON, 0: OFF
	9	Open/Close Solenoid ON	SL2, SL3	1: ON, 0: OFF
	8	Lifter DOWN/UP	-	1: Down, 0: Up
	7	Deck Lifter Motor ON	M2	1: ON, 0: OFF
	6	Cold Fan OFF	FAN2	1: ON, 0: OFF
	5	Cassette Heater ON	H2, H3	1: ON, 0: OFF
	4	Motor Cooling Fan	FAN4	1: ON, 0: OFF
	3	Deck Pickup Motor Current 1	M1	-
	2	Deck Pickup Motor Current 0	M1	-
	1	Deck Pickup Solenoid ON	SL1	1: OFF, 0: ON
	0	Indication LED ON	-	1: OFF, 0: ON

Address	bit	Name	Symbol	Remarks
P057	15	Not used	-	-
	14	Not used	-	-
	13	Not used	-	-
	12	Not used	-	-
	11	Not used	-	-
	10	Not used	-	-
	9	Not used	-	-
	8	Not used	-	-
	7	Expansion Fan OFF	FAN3	1: OFF, 0: ON
	6	Not used	-	-
	5	Air Heater Control Signal	H1	0 (0,0): 60 degC, 3 (1,1): 90 degC
	4			
	3	Swing Control Signal	M3	0 (0,0): 250 pps, 3 (1,1): 850 pps
	2			
	1	Fan Control Signal	FAN1, FAN2, FAN3	0 (0,0): 26V, 3 (1,1): 13.5V
	0			

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Multi Deck Unit (DC-CON>P042 to P053)

Address	bit	Name	Symbol	Remarks
P042	15	Not use	-	-
	14	Middle Deck Pull-out Sensor	S202	1: Paper
	13	Vertical Path Lower Sensor	S003	1: Paper
	12	Vertical Path Middle Sensor	S002	1: Paper
	11	Not use	-	-
	10	Not use	-	-
	9	Lower Deck Pull-out Sensor	S302	1: Paper
	8	Lower Deck Feed Sensor	S004	1: Paper
	7	Upper Deck Swing HP Sensor	S116	0: Paper
	6	Not use	-	0: Paper
	5	Not use	-	0: Paper
	4	Upper Deck Lifter Lower Limit sensor	S112	0: Paper
	3	Not use	-	-
	2	Upper Deck Pull-out Sensor	S102	1: Paper
	1	Vertical Path Upper Sensor	S001	1: Paper
	0	Vertical Path Middle Sensor	S002	1: Paper
P043	15	Not use	-	-
	14	Upper Deck Lifter HP Sensor	S111	0: Paper
	13	Upper Deck Paper Presence/ Absence Sensor	S103	0: Paper
	12	Upper Deck Paper Surface Sensor	S104	0: Paper
	11	Upper Deck Foreign Substance Sensor 2	S106	Reserve
	10	Upper Deck Foreign Substance Sensor 1	S106	0: Paper
	9	Upper Deck Lifter Upper Limit Sensor	S105	0: Paper
	8	Upper Deck Pickup Sensor	S101	1: Paper
	7	Not use		-
	6	Not use		-
	5	Deck Pickup Motor ERR	M001	0: Error
	4	Upper Deck Safety Switch	S108	1: Open, 0: Close
	3	Upper Deck Air Heater Unit ERR	HT101	0: High Temperature 1: Normal Temperature
	2	Upper Deck Air Heater Unit READY	HT101	0: Low Temperature 1: Blast temperature
	1	Upper Deck Night Flotation Fan ERR	FAN102	0: Error
	0	Upper Deck Left Flotation Fan ERR	FAN101	0: Error

Address	bit	Name	Symbol	Remarks
P044	15	Not use	-	-
	14	Not use	-	-
	13	Upper Deck Lifter Motor-I1	M101	Reserve
	12	Upper Deck Lifter Motor-I0	M101	
	11	Middle Deck Lifter Motor-I1	M201	Reserve
	10	Middle Deck Lifter Motor-I0	M201	
	9	Lower Deck Lifter Motor-I1	M301	Reserve
	8	Lower Deck Lifter Motor-I0	M301	
	7	Not use	-	-
	6	Not use	-	-
	5	Horizontal Path Feed Motor-I1	M004	Reserve
	4	Horizontal Path Feed Motor-I0	M004	
	3	Vertical Path Lower Feed Motor-I1	M003	Reserve
	2	Vertical Path Lower Feed Motor-I0	M003	
	1	Vertical Path Upper Feed Motor-I1	M002	Reserve
	0	Vertical Path Upper Feed Motor-I0	M002	
P045	15	Lower Deck Pickup Roller Release Solenoid	SL301	1: ON
	14	Middle Deck Pickup Roller Release Solenoid	SL201	1: ON
	13	Upper Deck Pickup Roller Release Solenoid	SL101	1: ON
	12	Deck Pickup Motor CLK	M001	-
	11	Lower Deck Swing Motor -CLK	M302	-
	10	Middle Deck Swing Motor-CLK	M202	-
	9	Upper Deck Swing Motor-CLK	M102	-
	8	Upper Deck Lifter Motor-CLK	M101	-
	7	Middle Deck Lifter Motor-CLK	M201	-
	6	Lower Deck Lifter Motor-CLK	M301	-
	5	Not use	-	-
	4	Horizontal Path Feed Motor-CLK	M004	-
	3	Vertical path Lower Feed Motor-CLK	M003	-
	2	Vertical Path Upper Feed Motor-CLK	M002	-
	1	24V4 ON		1: ON
	0	Lifter EN Rock Clear		0: Clear

Address	bit	Name	Symbol	Remarks
P046	15	Not use	-	-
	14	Lower Deck Lifter HP Sensor	S211	0: Paper
	13	Lower Deck Paper Presence/ Absence Sensor	S303	0: Paper
	12	Lower Deck Paper Surface Sensor	S304	0: Paper
	11	Lower Deck Foreign Substance Sensor2	S306	Reserve
	10	Lower Deck Foreign Substance Sensor1	S306	0: Paper
	9	Lower Deck Lifter Upper Limit Sensor	S305	0: Paperr
	8	Lower Deck Pickup Sensor	S301	1: paper
	7	Middle Deck Swing HP Sensor	S216	0: Paper
	6	Not use	-	0: Paper
	5	Not use	-	0: Paper
	4	Middle Deck Lifter Lower Limit Sensor	S212	0: Paper
	3	Not use	-	-
	2	Not use	-	-
	1	Not use	-	-
	0	Not use	-	-
P047	15	Not use	-	-
	14	Middle Deck Lifter HP Sensor	S311	0: Paper
	13	Middle Deck Paper Presence/ Absence Sensor	S203	0: Paper
	12	Middle Deck Paper Surface Sensor	S204	0: Paper
	11	Middle Deck Foreign Substance Sensor 2	S206	Reserve
	10	Middle Deck Foreign Substance Sensor 1	S206	0: Paper
	9	Middle Deck Lifter Upper Limit Sensor	S205	0: Paper
	8	Middle Deck Pickup Sensor	S201	1: Paper
	7	Lower Deck Swing HP Sensor	S316	0: Paper
	6	Not use	-	0: Paper
	5	Not use	-	0: Paper
	4	Lower Deck Lifter Lower Limit Sensor	S312	0: Paper
	3	Not use	-	-
	2	Vertical Path Lower Sensor	S003	0: Paper
	1	Lower Deck Feed Sensor	S004	0: Paper
	0	Delivery Sensor	S005	0: Paper

Address	bit	Name	Symbol	Remarks
P048	15	Middle Deck Right Flotation Fan EN	FAN202	1: ON
	14	Middle Deck Left Flotation Fan EN	FAN201	1: ON
	13	Middle Deck Air Heater Unit ON SEL	HT201	1: +5V A1T2 ON
	12	Middle Deck Air Heater Unit ON	HT201	1: ON
	11	Middle Deck Air Heater Unit BIT1	HT201	1: BIT1 Select
	10	Middle Deck Air Heater Unit BIT0	HT201	1: BIT0 Select
	9	Middle Deck Swing Motor DIR	M202	1: CW,0:CCW
	8	Middle Deck Swing Motor EN	M202	1: ON
	7	Motor Drivers Reset	-	0: Reset
	6	Horizontal , Lower Deck Vertical Path Lower Feed EN	-	0: ON
	5	Horizontal Path Right Feed MODE	-	1: 1-2 phase both edges 0: W1-2 phase both edges
	4	Not use	-	1: BIT1 Select
	3	Power Supply ON LED	-	1: ON
	2	Not use	-	1: ON
	1	Not use	-	-
	0	Not use	-	-
P049	15	*STANDBY	-	0: STANDBY, Door type +Non 5V ON/OFF
	14	+24V2 ON	-	1: +24V2 ON
	13	Middle Deck LED	-	1: ON
	12	Middle Deck Open/Close Solenoid	SL202	0: deck open
	11	Middle Deck Pull-out Clutch	CL202	1: Connect
	10	Middle Deck Pickup Clutch	CL201	1: Connect
	9	Middle Deck Lifter Motor CWB	M201	0: CCW, 1: CW
	8	Middle Deck Lifter Motor EN	M201	0: ON
	7	Upper Deck Right Flotation Fan EN	FAN102	1: ON
	6	Upper Deck Left Flotation Fan EN	FAN101	1: ON
	5	Upper Deck Air Heater Unit ON/ OFF SEL	HT101	1: +5V A1T1 ON
	4	Upper Deck Air Heater Unit ON	HT101	1: ON
	3	Upper Deck Air Heater Unit BIT1	HT101	1: BIT1 Select
	2	Upper Deck Air Heater Unit BIT0	HT101	1: BIT0 Select
	1	Upper Deck Swing Motor DIR	M102	1: CW,0: CCW
	0	Upper Deck Swing Motor EN	M102	1: ON

Address	bit	Name	Symbol	Remarks
P050	15	Not use	-	-
	14	Not use	-	-
	13	Lower Deck Air Heater Unit Connect Detection	HT301	0: Connect
	12	Middle Deck Air Heater Unit Connect Detection	HT201	0: Connect
	11	Upper Deck Air Heater Unit Connect Detection	HT101	0: Connect
	10	Cassette Heater (Lower Deck) Connect Detection	CHT301	-
	9	Cassette Heater (Middle Deck) Connect Detection	CHT201	-
	8	Not use	-	-
	7	Not use	-	-
	6	Not use	-	-
	5	Not use	-	-
	4	Middle Deck Safety Switch	S208	1: Open, 0: Close
	3	Middle Deck Air Heater Unit ERR	HT201	0: High Temperature 1: Normal Temperature
	2	Middle Deck Air Heater Unit READY	HT201	0: Low Temperature 1: Blast temperature
	1	Middle Deck Right Flotation Fan ERR	FAN202	0: Error
	0	Middle Deck Left Flotation Fan ERR	FAN201	0: Error

Address	bit	Name	Symbol	Remarks
P051	15	Lower Deck Safety Switch	S308	1: ON
	14	Middle Deck Safety Switch	S208	1: ON
	13	Upper Deck Safety Switch	S108	1: ON
	12	Not use	-	-
	11	Not use	-	0: Error
	10	Power Supply Cooling Fan 1 EER	FAN001	0: Error
	9	Deck Left Front Cover Open/Close Sensor	S006	1: Close, 0: Open,
	8	Deck Left Front Cover Safety Switch	S007	1: +24V 4Energization Detection 0: Door close , Energization;0
	7	Double Feed Detection Signal	-	0: Double Feed
	6	Double Feeding Sensor	S009	GND Detection, Connect:0
	5	Double Feeding Sensor	S010	GND Detection, Connect:0
	4	Lower Deck Safety Switch	S308	1: Open, 0: Close
	3	Lower Deck Air Heater Unit ERR	HT301	0: High Temperature 1: Normal Temperature
	2	Lower Deck Air Heater Unit READY	HT301	0: Low Temperature 1: Blast temperature
	1	Lower Deck Right Flotation Fan ERR	FAN302	0: Error
	0	Lower Deck Left Flotation Fan ERR	FAN301	0: Error

Address	bit	Name	Symbol	Remarks
P052	15	Lower Deck Right Flotation Fan EN	FAN302	1: ON
	14	Lower Deck Left Flotation Fan EN	FAN301	1: ON
	13	Lower Deck Air Heater Unit ON/ OFF SEL	HT301	1: +5V A1T3 ON
	12	Lower Deck Air Heater Unit ON	HT301	1: ON
	11	Lower Deck Air Heater Unit BIT1	HT301	1: BIT1 Select
	10	Lower Deck Air Heater Unit BIT0	HT301	1: BIT0 Select
	9	Lower Deck Swing Motor DIR	M302	1: CW,0:CCW
	8	Lower Deck Swing Motor EN	M302	1: ON
	7	Vertical Path Lower Feed MODE	-	0: W1-2 phase both edges 1: 1-2 phase both edges
	6	Vertical Path Lower Feed CWB	-	0: CCW, 1:CW
	5	Right Flotation Fan BIT1	FAN102, FAN202, FAN302	1: Select BIT1
	4	Right Flotation Fan BIT0	FAN102, FAN202, FAN302	1: Select BIT0
	3	Not use		1: BIT2 Select
	2	Left Flotation Fan BIT1	FAN101, FAN201, FAN301	1: Select BIT1
	1	Left Flotation Fan BIT0	FAN101, FAN201, FAN301	1: Select BIT0
	0	Vertical Path Upper Feed EN	-	0: ON
P053	15	AD HUM/TMP Switch	-	1: Humidity, 0: Temperature
	14	+24V3 ON	-	1: +24V3 ON
	13	Lower Deck LED	-	1: ON
	12	Lower Deck Open/Close Solenoid	SL302	0: Deck open
	11	Lower Deck Pull-out Clutch	CL302	1: Connect
	10	Lower Deck Pickup Clutch	CL301	1: Connect
	9	Lower Deck Lifter Motor CWB	M301	1: CW, 0: CCW
	8	Lower Deck Lifter Motor EN	M301	0: ON
	7	Deck Pickup Motor EN	M001	1: ON
	6	+24V1 ON	-	1: 24V1 ON
	5	Upper Deck LED	-	1: ON
	4	Upper Deck Open/Close Solenoid	SL102	0: Deck open
	3	Upper Deck Pull-out Clutch	CL102	1: Connect
	2	Upper Deck Pickup Clutch	CL101	1: Connect
	1	Upper Deck Lifter Motor CWB	M101	1: CW,0:CCW
	0	Upper Deck Lifter Motor EN	M101	0: ON

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Buffer Path Unit (DC-CON>P026 to P029)

Address	bit	Name	Symbol	Remarks
P026	15	Decurler Compression Distance Adjustment Motor 2 I0	M53	I1/I0 0/0: HOLD_OFF 0/1: Drive current 1.2 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	14	For R&D use	-	-
	13	For R&D use	-	-
	12	For R&D use	-	-
	11	Decurler Compression Distance Adjustment Motor 1 Enable	M50	1: Enable
	10	Decurler Compression Distance Adjustment Motor 1 Rotation Direction	M50	0: CW, 1: CCW
	9	Decurler Compression Distance Adjustment Motor 1 I1	M50	I1/I0 0/0: HOLD_OFF
	8	Decurler Compression Distance Adjustment Motor 1 I0	M50	0/1: Drive current 1.2 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Not used	-	-
P027	15	Decurler Feed Motor 2 Pattern Switch	M52	1: 2phase, 0: 1-2phase
	14	Decurler Feed Motor 2 I1	M52	I1/I0
	13	Decurler Feed Motor 2 I0	M52	0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	12	For R&D use	-	-
	11	For R&D use	-	-
	10	For R&D use	-	-
	9	Decurler Feed Motor 1 Enable	M51	1: Enable
	8	Decurler Feed Motor 1 Pattern Switch	M51	1: 2phase, 0: 1-2phase
	7	Decurler Feed Motor 1 I1	M51	I1/I0
	6	Decurler Feed Motor 1 I0	M51	0/0: HOLD_OFF 0/1: Drive current 1.3 A 1/0: Drive current 0.5 A 1/1: Drive current 0 A
	5	For R&D use	-	-
	4	For R&D use	-	-
	3	For R&D use	-	-
	2	Decurler Compression Distance Adjustment Motor 2 Enable	M53	1: Enable
	1	Decurler Compression Distance Adjustment Motor 2 Rotation Direction	M53	0: CCW, 1CW
	0	Decurler Compression Distance Adjustment Motor 2 I1	M53	-
P028	15	For R&D use	-	-
	14	For R&D use	-	-
	13	For R&D use	-	-
	12	For R&D use	-	-
	11	For R&D use	-	-
	10	For R&D use	-	-
	9	Buffer Interlock Loop Detection	-	0: Close
	8	Buffer Door Sensor	PS87	0: Close
	7	Decurler Compression Distance Adjustment Cam HP Sensor 2	PS89	1: HP
	6	Decurler Compression Distance Adjustment Cam HP Sensor 1	PS88	1: HP
	5	Jam Sensor 2	PS86	1: Paper presence
	4	Jam Sensor 1	PS85	1: Paper presence
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Decurler Feed Motor 2 Enable	M52	1: Enable

Address	bit	Name	Symbol	Remarks
P029	15	Not used		
	14	Not used		
	13	Not used		
	12	Decurler Lower Exhaust Fan Lock	FM32	0: Lock, 1: Error
	11	Decurler Lower Exhaust Fan Half Speed	FM32	1: ON
	10	Decurler Lower Exhaust Fan Full Speed	FM32	1: ON
	9	Decurler Side Exhaust Fan Lock	FM31	0: Lock, 1: Error
	8	Decurler Side Exhaust Fan Half Speed	FM31	1: ON
	7	Decurler Side Exhaust Fan Full Speed	FM31	1: ON
	6	Decurler Suction Fan Lock	FM30	0: Lock, 1: Error
	5	Decurler Suction Fan Half Speed	FM30	1: ON
	4	Decurler Suction Fan Full Speed	FM30	1: ON
	3	Not used		
	2	Not used		
	1	Not used		
	0	Not used		

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■ Booklet Finisher K1/Staple Finisher K1 (SORTER>P001 to P024)

Address	bit	Name	Symbol	Remarks
P001	15	Horizontal Registration HP Sensor	S101	1: Home Position
	14	Punch 2-/3-hole Encoder	-	-
	13	-	-	-
	12	-	-	-
	11	Punch 2-/3-hole Sensor	S103	1: Home Position
	10	Punch Position Sensor	S102	1: Home Position
	9	-	-	-
	8	-	-	-
	7	Buffer Feed Motor Rotation Signal	M102	0: CCW, 1: CW
	6	Swing Guide Motor Clock Signal	M110	-
	5	Swing Guide Motor Rotation Signal	M110	0: CW, 1: CCW
	4	Inlet Sensor	S101	0: Paper, 1: No paper
	3	Swing Guide Height Detection Sensor	S118	1: Detected
	2	-	-	-
	1	-	-	-
	0	Feed Path Senor	S102	0: No paper, 1: Paper
P002	15	Inlet Feed Motor	M200	0: CW, 1: CCW
	14	Inlet Feed Motor	M200	-
	13	Stack Delivery Lower/Shutter Motor Rotation	M122	0: CW, 1: CCW
	12	Stack Delivery Lower/Shutter Motor Clock	M122	-
	11	DA Converter 1 Clock Signal	-	-
	10	DA Converter 1 Data Output Signal	-	-
	9	DA Converter 1 Chip Select Signal	-	-
	8	Buffer Feed Motor Clock Signal	-	-
	7	Stacking Tray Paper Retainer Position Sensor	S149	1: Home
	6	Stacking Tray Paper Retainer Rear HP Sensor	S138	1: Home
	5	Tray Auxiliary Guide Rear HP Sensor	S136	0: Home
	4	Rear Alignment HP Sensor	S109	1: Home
	3	Stacking Tray Paper Retainer Front HP Sensor	S139	1: Home
	2	Stacking Tray Paper Retainer Front HP Sensor	S137	0: Home
	1	Front Alignment HP Sensor	S108	1: Home
	0	Staple HP Sensor	S131	1: Home

Address	bit	Name	Symbol	Remarks
P003	15	-	-	-
	14	-	-	-
	13	Tray Auxiliary Guide Motor Lock Signal	M120	-
	12	-	-	-
	11	-	-	-
	10	Stacking Tray Paper Retainer Motor Clock Signal	M114	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	DA Converter 2 Clock Signal	-	-
	5	-	-	-
	4	DA Converter 2 Data Output Signal	-	-
	3	-	-	-
	2	DA Converter 2 Chip Select Signal	-	-
	1	Processing Tray Paper Sensor	S103	1: Detected
	0	Stacking Tray Paper Retainer HP Sensor	S114	1: Home
P004	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	EXIO1 Chip Select	-	-
	10	Tray Paper Surface Sens ON	PBA600	0: Light, 1: Charge
	9	-	-	-
	8	DA converter 2 data input signal	-	-
	7	Staple Alignment Interference Sensor	S128	1: Detedted
	6	Staple Edging Sensor	S132	1: Detedted
	5	Staple Sensor	S133	1: Detedted
	4	Staple Cartridge Sensor	S134	0: 50staples, 1: 100staples
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Symbol	Remarks
P005	15	Tray Paper Surface Sensor 3	PBA700	0: No paper, 1: Paper
	14	Tray Paper Surface Sensor 4	PBA700	0: No paper, 1: Paper
	13	Tray Paper Surface Sensor 1	PBA700	0: No paper, 1: Paper
	12	Tray Paper Surface Sensor 2	PBA700	0: No paper, 1: Paper
	11	Gripper Base Rear Sensor	S117	1: Front
	10	Gripper Base Front Sensor	S116	1: Rear
	9	Gripper Position Sensor	S115	0: Front, 1: Rear
	8	Gripper HP Sensor	S140	1: Home
	7	EXIO2 chip select	-	-
	6	-	-	-
	5	-	-	-
	4	Display LED2	-	0: ON, 1: OFF
	3	Display LED1	-	0: ON, 1: OFF
	2	Saddle Stitcher Motor CCW Signal	M209	(ON,CW,CCW) 1,1,0: CW 1,0,1: CCW 0,1,1: Brake 0,0,0: Free
	1	Saddle Stitcher Motor ON Signal	M209	(ON,CW,CCW) 1,1,0: CW 1,0,1: CCW 0,1,1: Brake 0,0,0: Free
	0	Saddle Stitcher Motor CW Signal	M209	(ON,CW,CCW) 1,1,0: CW 1,0,1: CCW 0,1,1: Brake 0,0,0: Free
P006	15	Punch E2 Data Input Signal	-	-
	14	Punch DA Data Input Signal	-	-
	13	Punch E2 Ship Select	-	-
	12	E2 Chip Select		-
	11	Punch DA Clock Output Signal	-	-
	10	Punch DA Data Output Signal	-	-
	9	E2 Data Input Signal		-
	8	Punch DA Chip Select	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Front Alignment Motor Rotation	-	0: CW, 1: CCW
	3	Front Alignment Motor CLK	-	
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Symbol	Remarks
P007	15	Rear Alignment Motor CLK	M109	-
	14	Rear Alignment Motor Rotation	M109	0: CW, 1: CCW
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Gripper Base Motor CLK	M116	-
	0	Gripper Base Motor DIR	M116	0: CW, 1: CCW
P008	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	Gripper Motor CLK	M117	-
	8	Gripper Motor DIR	M117	0: CW, 1: CCW
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Tray 2 Shift Motor ENBL	M217	0: Enable
	2	Tray 2 Shift Motor CLK	M217	-
	1	Tray 2 Shift Motor CW	M217	0: CW, 1: CCW
	0	Tray 2 Shift Motor CUR	M217	0: OFF, 1: ON

Address	bit	Name	Symbol	Remarks
P009	15	Tray 2 Area Sensor 3	S127	0: No paper, 1: Paper
	14	Tray 2 Area Sensor 2	S126	0: No paper, 1: Paper
	13	Tray 2 Area Sensor 1	S125	0: No paper, 1: Paper
	12	Tray 2 Paper Sensor	S105	0: No paper, 1: Paper
	11	Tray 1 Shift Motor ENBL	M105	0: Enable
	10	Tray 1 Shift Motor CLK	M105	-
	9	Tray 1 Shift Motor CW	M105	0: CW, 1: CCW
	8	Tray 1 Shift Motor CUR	M105	0: OFF, 1: ON
	7	Stapler Shift HP Sensor	S107	1: Home
	6	Escape Tray Paper Sensor	S130	1: Detected
	5	Tray 1 Paper Sensor	S104	0: No paper, 1: Paper
	4	Tray 1 Area Sensor 1	S122	0: No paper, 1: Paper
	3	Tray 1 Area Sensor 2	S123	0: No paper, 1: Paper
	2	Tray 1 Area Sensor 3	S124	0: No paper, 1: Paper
	1	Tray 1 Shift Motor	M105	0: No paper, 1: Paper
	0	Tray 2 Shift Motor Alarm	M217	0: No paper, 1: Paper
P010	15	Buffer Flapper HP Sensor	S142	1: Home
	14	-	-	-
	13	-	-	-
	12	Tray 2 Paper Surface Sensor	S143	1: Detected
	11	Swing Guide HP Sensor	S110	1: Home
	10	Shutter Close Detection Sensor	S148	-
	9	Shutter HP Sensor	S106	0: Home
	8	Paper Trailing Edge Pushing Guide HP Sensor	S113	1: Home
	7	Stack Delivery Lower/Shutter Motor	M122	0: OFF, 1:ON
	6	Shutter Clutch	CL102	0: OFF, 1:ON
	5	Swing Guide Solenoid	SL101	0: OFF, 1:ON
	4	-	-	-
	3	Front Door Sensor	S129	0:open/1:close
	2	Paper Return Guide HP Sensor	S112	1: Home
	1	Paper Retainer HP Sensor	S135	1: Home
	0	Feed Roller Separation HP Sensor	S111	1: Home

Address	bit	Name	Symbol	Remarks
P011	15	-	-	-
	14	-	-	-
	13	Stapler Shift Motor CLK	M107	-
	12	Stapler Shift Motor DIR	M107	0: CCW, 1: CW
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Paper Trailing Edge Pushing Guide Motor CLK	M113	
	6	Paper Trailing Edge Pushing Guide Motor DIR	M113	0: CCW, 1: CW
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P012	15	Paper Return Guide Roller Motor CLK	M121	-
	14	Paper Return Guide Roller Motor DIR	M121	0: CCW, 1: CW
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	Saddle Roller Guide Motor DIR	M204	-
	4	Feed Roller Disengage/Buffer Flapper Motor DIR	M119	0: CCW, 1: CW
	3	Processing Tray Paper Retainer Motor CLK	M118	-
	2	Processing Tray Paper Retainer Motor DIR	M118	0: CCW, 1: CW
	1	Paper Return Guide Motor CLK	M112	-
	0	Paper Return Guide Motor DIR	M112	0: CCW, 1: CW

Address	bit	Name	Symbol	Remarks
P013	15	Punch Slide Motor CW	M101	0: CCW, 1: CW
	14	Punch Slide Motor CLK	M101	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Inserter Connection	-	0: Connected
	6	IF Connection	-	0: Connected
	5	-	-	-
	4	Punch Connection	-	0: Connectecd
	3	Punch Motor CCW	M102	0: CCW, 1: CW
	2	Punch Motor CW	M102	0: CCW, 1: CW
	1	Punch Motor ON	M102	0: OFF, 1: ON
	0	-	-	-
P014	15	Power Supply Fan ON Signal	FAN101	0: OFF, 1: ON
	14	-	-	-
	13	Inserter Eject Start Ack	-	0: OFF, 1: ON
	12	Inserter Entry Start	-	0: OFF, 1: ON
	11	IF Unit Ejection Start Ack	-	0: OFF, 1: ON
	10	IF Unit Entry Start	-	0: OFF, 1: ON
	9	Fold Eject Ack	-	0: OFF, 1: ON
	8	Fold Entry Start	-	0: OFF, 1: ON
	7	-	-	-
	6	Power Supply Fan Alarm	FAN101	0: OFF, 1: ON
	5	Inserter Eject Start	-	0: ON, 1: OFF
	4	Inserter Entry Start Ack	-	0: ON, 1: OFF
	3	IF Unit Ejection Start	-	0: ON, 1: OFF
	2	IF Unit Entry Start Ack	-	0: ON, 1: OFF
	1	Fold Eject Start	-	0: ON, 1: OFF
	0	Fold Entry Ack	-	0: ON, 1: OFF

Address	bit	Name	Symbol	Remarks
P015	15	Saddle Connection	-	0: Connected
	14	-	-	-
	13	Staple Position Switch	SW103	0: Close, 1: Open
	12	Swing Guide Safety Switch	SW102/ SW104	0: Close, 1: Open
	11	Front Door Switch	SW101	0: Close, 1: Open
	10	24V1-DETECT	-	0: ON, 1: OFF
	9	24V-DETECT	-	0: ON, 1: OFF
	8	Relay ON Signal	-	0: OFF, 1: ON
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Feed Motor/Buffer Feed Motor Stepping Change	M101/ M102	0: 2W12phase, 1:1 2phase
	2	Stack Delivery Upper Motor Stepping Change	M101/ M102	0: 2W12phase, 1: 12phase
	1	-	-	-
	0	-	-	-
P016	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	Stacking Tray Paper Retainer Motor Rotation Signal	M114	0: CW, 1: CCW
	8	Tray Auxiliary Guide Motor Rotation Signal	M120	0: CCW, 1: CW
	7	-	-	-
	6	-	-	-
	5	Push Switch (-)	-	0: ON, 1: OFF
	4	Push Switch (+)	-	0: ON, 1: OFF
	3	Dip Switch 4	-	0: ON, 1: OFF
	2	Dip Switch 3	-	0: ON, 1: OFF
	1	Dip Switch 2	-	0: ON, 1: OFF
	0	Dip Switch 1	-	0: ON, 1: OFF

Address	bit	Name	Symbol	Remarks
P017	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	Punch Slide Motor Standby Signal	-	0: Stanfby, 1: Ready
	7	Punch Slide Motor Enable Signal	-	0: Enable, 1: Disenable
	6	-	-	-
	5	DipSW Input 2	-	0: ON, 1: OFF
	4	DipSW Input 1	-	0: ON, 1: OFF
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P018	15	Saddle Delivery Tray Paper Sensor	S228	1: Paper
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	Saddle Trailing Edge Retainer Move HP Sensor	S219	1: Home
	10	Saddle Trailing Edge Retainer HP Sensor	S221	1: Home
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	Saddle Lead Edge Stopper Motor CLK	M203	-
	5	-	-	-
	4	-	-	-
	3	Saddle Lead Edge Stopper Solenoid	SL205	-
	2	Saddle Alignment Roller Disengage Solenoid (Upper)	SL203	1: ON
	1	Saddle Alignment Roller Disengage Solenoid (Lower)	SL204	1: ON
	0	Saddle Inlet Flapper Solenoid	SL206	-

Address	bit	Name	Symbol	Remarks
P019	15	Saddle Trailing Edge Moving Motor Rotation	M211	1: CW, 0: CCW
	14	Saddle Trailing Edge Moving Motor CLK	M211	-
	13	Saddle Trailing Edge Retainer Motor Rotation	M210	1: CW, 0: CCW
	12	Saddle Trailing Edge Retainer Motor CLK	M210	-
	11	-	-	-
	10	-	-	-
	9	Saddle Alignment Guide Motor Rotation	M202	0: CW, 1: CCW
	8	Saddle Alignment Guide Motor CLK	M202	
	7	Saddle Lead-in Roller HP Sensor	S222	1: Home
	6	Saddle Folder HP Sensor	S229	
	5	Staple HP Sensor	S131	1: Home
	4	Saddle Paper Push-on Plate HP Sensor	S218	1: Home
	3	Saddle Vertical Path Sensor	S203	1: Detected
	2	Saddle Delivery Sensor 1	S226	1: Paper
	1	Saddle Paper Push-on Plate Motor Sensor	S213	0: ON, 1: OFF
	0	Saddle Folder/Feeder Motor Sensor	S214	
P020	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	Saddle Alignment Plate HP Sensor	S206	1: Home
	11	Saddle Lead Edge Stopper HP Sensor	S205	1: Home
	10	Saddle Paper Push-on Plate Motor PWM	M205	
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	Trimmer Connection Detection	-	0: Connected
	5	Saddle Stitcher Staple Sensor 2	S225	1: Detedted
	4	Saddle Stitcher Staple Sensor 1	S224	1: Detedted
	3	Saddle Roller Guide HP Sensor	S207	1: Home
	2	Saddle Delivery Sensor 2	S227	1: Paper
	1	Saddle Paper Tapping HP Sensor	S215	1: Home
	0	Saddle Inlet Sensor	S201	1: Paper

Address	bit	Name	Symbol	Remarks
P021	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	Saddle Stitcher Motor CCW Signal	M209	0: CW, 1: CCW
	10	Saddle Stitcher Motor CW Signal	M209	0: CCW, 1: CW
	9	Saddle Stitcher Motor ON Signal	M209	0: OFF, 1: ON
	8	Inserter Lock Power Source Detection	-	0: Detected 24V
	7	Saddle Roller Guide Motor rotation	M204	1: CW, 0: CCW
	6	Saddle Roller Guide Motor CLK	M204	-
	5	Saddle Paper Tapping HP Sensor rRotation	-	1: CW, 0: CCW
	4	Saddle Paper Tapping HP Sensor CLK	-	-
	3	Inlet Feed Motor Standby	-	0: Standby
	2	Inlet Feed Motor Output Enable	-	0: Enable
	1	Saddle Alignment Roller Motor Rotation	M212	1: CW, 0: CCW
	0	Saddle Alignment Roller Motor CLK	M212	-
P022	15	Inlet Feed Motor Rotation	-	1: CW, 0: CCW
	14	Inlet Feed Motor Clock	-	-
	13	Saddle Feed Motor Rotation	-	1: CW, 0: CCW
	12	Saddle Feed Motor Clock	-	-
	11	Inlet Feed Motor Stepping	-	0: Half-step
	10	Saddle Feed Motor Stepping	-	0: Half-step
	9	Saddle Lead-in Roller Disengage Motor Rotation	M214	1: CW, 0: CCW
	8	Saddle Lead-in Roller Disengage Motor CLK	M214	-
	7	Saddle Folder/Feeder Motor CW	M206	1: CW
	6	Saddle Folder/Feeder Motor CCW	M206	1: CCW
	5	Saddle Paper Push-on Plate Motor CW	M205	1: CW
	4	Saddle Paper Push-on Plate Motor CCW	M205	1: CCW
	3	Chip Select For DAC	-	0: ENABLE
	2	Data In For DAC	-	-
	1	Data Out For DAC	-	-
	0	Clock For DAC	-	-

Address	bit	Name	Symbol	Remarks
P023	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	LED PCB	-	1:LED ON
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P024	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-

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Trimmer A1 (SORTER>P024 to P028)

Address	bit	Name	Symbol	Remarks
P024	7	Feed Motor Current Value Setting D/A Output	M101	-
	6	Waste Paper Full Sensor D/A Output	S011	-
	5	Waste Paper Full Sensor A/D Input	S011	-
	4	Push Switch	S011	0: ON, 1: OFF
	3	Press Motor HP Sensor	S106	0: Feed Position 1: Release Position
	2	Inlet Sensor	S101	1: Paper
	1	-	-	-
	0	Waste Paper Box Detection Sensor	S109	1: Waste Paper
P025	15	Rear Estrangement Motor HP Sensor	S104	0: Release Position 1: Feed Position
	14	Front Estrangement Motor HP Sensor	S102	0: Feed Position 1: Release position
	13	Paper Delivery Sensor	-	1: Paper
	12	-	-	-
	11	DIPSW-1	-	0: ON, 1: OFF
	10	DIPSW-2	-	0: ON, 1: OFF
	9	DIPSW-3	-	0: ON, 1: OFF
	8	DIPSW-4	-	0: ON, 1: OFF
	7	Press Motor CW/CCW Switching Signal	M105	0: Release, 1: Touch
	6	Press Motor Standby Signal	M105	0: Standby, 1: Ready
	5	Press Motor Output Permission Signal	M105	0: Permission, 1: Prohibition
	4	Press Motor Drive Clock Output	M105	0: Permission, 1: Prohibition
	3	Feed Motor CW/CCW Switching Signal	M101	0: Entrance, 1: Delivery
	2	Feed Motor Standby Signal	M101	0: Standby, 1: Ready
	1	Feed Motor Output Permission Signal	M101	0: Permission, 1: Prohibition
	0	Feed Motor Drive Clock Signal	M101	0: Permission, 1: Prohibition

Address	bit	Name	Symbol	Remarks
P026	15	Registration Motor Permission Signal	M102	0: Permission, 1: Prohibition
	14	Cutter Motor Encoder Lock	M106	0: Permission, 1: Prohibition
	13	Registration Motor Drive Clock Output	M102	-
	12	Registration Motor Standby Signal	M102	0: Standby, 1: Ready
	11	Registration Motor CW/CCW Switching Signal	M102	1: Registration Completion
	10	Registration HP Sensor	S105	1: Registration Completion
	9	Registration Motor Current Setting PWM Output	M102	-
	8	24V Detection Signal	-	0:24V Detection
	7	-	-	-
	6	-	-	-
	5	Rear Estrangement Motor Drive Clock Output	M104	-
	4	Front Estrangement Motor Standby Motor	M103	0: Standby, 1: Ready
	3	Front Estrangement Motor CW/CCW Switching Signal	M103	0: CW, 1: CCW
	2	-	-	-
	1	-	-	-
	0	-	-	-
P027	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	Front Estrangement Motor Current Setting PWM Output	M103	-
	11	Rear Estrangement Motor Current Setting PWM Output	M104	-
	10	Press Motor Current Setting PWM Output	M105	-
	9	Front Estrangement Motor Output Permission Signal	M103	0: Rermission, 1: prohibition
	8	Front Estrangement Motor Drive Clock Output	M103	-
	7	-	-	-
	6	-	-	-
	5	5V Shutdown Signal	-	1: Shutdown
	4	-	-	-
	3	-	-	-
	2	Paddle Solenoid ON Signal	SL102	0: ON, 1: OFF
	1	Stopper Solenoid ON Signal	SL101	0: ON, 1: OFF
	0	Rear Estrangement Motor Output Permission Signal	M104	0: Permission, 1: Prohibition

Address	bit	Name	Symbol	Remarks
P028	15	-	-	-
	14	LED on PCB	-	0: ON, 1: OFF
	13	Cutter Motor CCW Signal	M106	0: CW, 1: CCW
	12	Cutter Motor CW Signal	M106	0: CCW, 1: CW
	11	Cutter Motor ON/OFF Output	M106	0: OFF, 1: ON
	10	Rear Estrangement Motor CW/CCW Witching Signal	M104	0: Release, 1: Touch
	9	Front Estrangement Motor Standby Signal	M103	0: Standby, 1: Ready
	8	Stopper Solenoid/Paddle Solenoid Drive PWM Output	SL101/SL102	-

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Paper Folding Unit G1 (SORTER>P028 to P037)

Address	bit	Name	Symbol	Remarks
P028	7	Upper Stopper Paper Sensor	S33	1: Paper
	6	Fold Position Accuracy Sensor	S32	1: Paper
	5	Separation Timing Sensor	S31	1: Paper
	4	Speed Down Timing Sensor	S30	1: Paper
	3	Paper Delivery Start Response	-	0: OFF, 1: ON
	2	Paper Delivery Start Request	-	0: ON, 1: OFF
	1	-	-	-
	0	-	-	-
P029	15	Rotation Direction Of Fold Position Adjustment Motor	M15	0: CW, 1: CCW
	14	Rotation Direction Of Fold Position Adjustment Motor CLK	M15	-
	13	-	-	-
	12	Saddle Folder/Feeder Motor CLK	M11	-
	11	C-fold Stopper Solenoid	SOL5	0: PWM, 1: PWM
	10	-	-	-
	9	Separation Solenoid	SOL3	0: PWM, 1: PWM
	8	Fold Tray Branch Flapper Solenoid	SOL2	0: PWM, 1: PWM
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	0: ON, 1: OFF
	2	Exit Motor Phase Switching 2	M13	P31=0,P32=0:2Phase
	1	Exit Motor Phase Switching 1	M14	P31=1,P32=0:1-2Phase
	0	Exit Motor 2CLK	M13	-
P030	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	Upper Stopper Paper Sensor AD	S33	1: Paper
	10	Fold Position Accuracy Sensor AD	S32	1: Paper
	9	Separation Timing Sensor AD	S31	1: Paper
	8	Speed Down Timing Sensor AD	S30	1: Paper
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Fold Tray Branch Flapper Solenoid	SOL4	0: PWM, 1: PWM
	1	Flash Write Communication Received	-	-
	0	Flash Write Communication Send	-	-

Address	bit	Name	Symbol	Remarks
P031	15	EEPROM/IO DO Signal	-	0: Data bit0, 1: Data bit1
	14	C-fold Tray Motor CLK	M7	-
	13	Lead Edge Holding Guide Motor CLK	M10	-
	12	Rotation Direction Of Lead Edge Holding Guide Motor	M10	0: CW, 1: CCW
	11	C-fold Stopper Adjustment Motor CLK	M9	-
	10	Rotation Direction Of C-fold Stopper Adjustment Motor	M9	0: CW, 1: CCW
	9	Upper Stopper Motor	M8	-
	8	Rotation Direction Of Upper Stopper Motor	M8	0: CW, 1: CCW
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	External DAC CS Signal	-	1: OFF, 0: ON
	2	EEPROM CS Signal	-	-
	1	EEPROM/DA/IO/ DI Signal	-	-
	0	EEPROM/DA/IO/ CLK Signal	-	-
P032	15	PM Motor Output Enable	-	0: OFF, 1: ON
	14	-	-	-
	13	-	-	-
	12	External I/O Address Bus3	-	-
	11	External I/O Address Bus2	-	-
	10	External I/O Address Bus1	-	-
	9	-	-	-
	8	-	-	-
	7	Fold Position Adjustment Clutch (Negative)	CL4	0: OFF, 1: ON
	6	Fold Position Adjustment Clutch (Positive)	CL3	0: OFF, 1: ON
	5	PM Motor Chip Enable	-	0: OFF, 1: ON
	4	Exit Motor 1 Enable	M14	0: OFF, 1: ON
	3	Brushless Motor Enable	-	0: OFF, 1: ON
	2	HB Motor Enable	-	0: OFF, 1: ON
	1	Entrance Motor Phase Switching 2	M12	PH0=0,PH1=0:2Phase excitation
	0	Entrance Motor Switching 2	M5	PH0=1,PH1=0:1-2Phase excitation

Address	bit	Name	Symbol	Remarks
P033	15	Paper Delivery Start Response	-	0: ON, 1: OFF
	14	Paper Delivery Start	-	0: OFF, 1: ON
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	C-fold Stopper Adjustment Motor Current	M7	0: PWM, 1: PWM
	2	Upper Stopper Motor Current	M8	0: PWM, 1: PWM
	1	C-fold Stopper Adjustment Motor Current	M9	0: PWM, 1: PWM
	0	Lead Edge Holding Guide Motor Current	M10	0: PWM, 1: PWM
P034	15	External I/O Data Bus 6	-	-
	14	-	-	-
	13	External I/O Data Bus5	-	-
	12	External I/O Data Bus4	-	-
	11	External I/O Data Bus3	-	-
	10	External I/O Data Bus2	-	-
	9	External I/O Data Bus1	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Symbol	Remarks
P035	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Fold Unit Pull-out Sensor	S29	0: Close, 1: Open
	6	Fold Tray Paper Sensor	S27	1: Paper
	5	Fold Tray Full Sensor	S26	1: Paper
	4	Fold Tray HP Sensor	S28	0: HP outside, 1: HP input
	3	Delivery 1 Sensor	S22	1: Paper
	2	2nd Fold Push-on Stopper HP Sensor	S23	0: HP outside, 1: HP input
	1	C-fold Stopper HP Sensor	S24	0: HP outside, 1: HP input
	0	Lead Edge Holding Guide HP Sensor	S25	0: HP outside, 1: HP input
P036	15	-	-	-
	14	Power Supply Fan Lock Detection Signal 3	F1	0: Normal, 1: Lock
	13	-	-	-
	12	-	-	-
	11	Delivery 2 Sensor	S21	1: Paper
	10	Inlet Sensor	S20	1: Paper
	9	Front Upper Cover Sensor	-	0: Close, 1: Open
	8	Brushless Motor Lock Detection Signal	-	0: Close, 1: Open
	7	DSW8	-	0: ON, 1: OFF
	6	DSW7	-	0: ON, 1: OFF
	5	DSW6	-	0: ON, 1: OFF
	4	DSW5	-	0: ON, 1: OFF
	3	DSW4	-	0: ON, 1: OFF
	2	DSW3	-	0: ON, 1: OFF
	1	DSW2	-	0: ON, 1: OFF
	0	DSW1	-	0: ON, 1: OFF

Address	bit	Name	Symbol	Remarks
P037	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	Wire-speed Sorting Identification Signal	-	0: Low speed machine 1: High speed machine
	11	PCB Identification Signal2	-	BIT2=1,BIT3=0:insetion
	10	PCB Identification Signal1	-	-
	9	PSW2	-	0: ON, 1: OFF
	8	PSW1	-	0: ON, 1: OFF
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Fan 2 Enable	-	0: OFF, 1: ON
	2	-	-	-
	1	PCB LED2	-	0: ON, 1: OFF
	0	PCB LED1	-	0: ON, 1: OFF

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Inserter H1 (SORTER>P038 to P047)

Address	bit	Name	Symbol	Remarks
P038	15	Name	-	Remarks
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	Paper Delivery Start Response	-	0: OFF, 1: ON
	10	Paper Delivery Start Request	-	0: ON, 1: OFF
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P039	15	-	-	-
	14	Inlet Motor CLK	M5	-
	13	Lower Tray Document Set LED	-	0: ON, 1: OFF
	12	Exit Motor1CLK	-	-
	11	Upper Tray Document Set LED	-	0: ON, 1: OFF
	10	Exit Motor Phase Switching 2	-	P31=0,P32=0:2Phase
	9	Exit Motor Phase Switching 1	-	P31=1,P32=0:1-2Phase
	8	Exit Motor 2 CLK	-	P31=1,P32=0:1-2 phase
	7	-	-	-
	6	-	-	-
	5	-	S10	-
	4	-	S13	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

Address	bit	Name	Symbol	Remarks
P040	15	-	-	-
	14	-	-	-
	13	Reserve Solenoid	SOL1	0: PWM, 1: PWM
	12	Upper Tray Registration Sensor	S3	0: No paper, 1: Paper
	11	Lower Tray Registration Sensor	S7	0: No paper, 1: Paper
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	EEPROM/IO DO Signal	-	0: Data bit 0, 1: Data bit 1
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P041	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	EEPROM CS Signal	-	-
	9	EEPROM/DA/IO/ DI Signal	-	-
	8	EEPROM/DA/IO/ CLK Signal	-	-
	7	PMmotoroutput Enable	-	0: OFF, 1: ON
	6	Upper Tray Registration Clutch	CL1	0: OFF, 1: ON
	5	Lower Tray Registration Clutch	CL2	0: OFF, 1: ON
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Reserve Unit Motor Rotation Direction	M6	0: CCW, 1: CW
	0	Reserve Unit Motor Phase Switching1	M6	0: 2Phase, 1: 1-2phase

Address	bit	Name	Symbol	Remarks
P042	15	-	-	-
	14	-	-	-
	13	PM Motor Chip Enable	-	0: OFF, 1: ON
	12	Exit Motor 1 Enable	-	0: OFF, 1: ON
	11	Brushless Motor Enable	-	0: OFF, 1: ON
	10	HB Motor Enable	-	0: OFF, 1: ON
	9	Inlet Motor Phase Switching 2	M5	PH0=0,PH1=0: 2Phase
	8	Inlet Motor Phase Switching 1	M5	PH0=1,PH1=0: 1-2Phase
	7	Paper Delivery Start Response	-	0: ON, 1: OFF
	6	Paper Delivery Start	-	0: OFF, 1: ON
	5	Drive Switching Motor Rotation Direction	M4	0: CW, 1: CCW
	4	Drive Switching Motor CLK	M4	-
	3	Lower Tray Lift Motor Rotation Direction	M3	0: CW, 1: CCW
	2	Lower Tray Lift Motor CLK	M3	-
	1	Upper Tray Lift Motor Rotation Direction	M2	0: CW, 1: CCW
	0	Upper Tray Lift Motor CLK	M2	-
P043	15	Pickup Motor Rotation Direction	M1	0: CCW, 1: CW
	14	Upper Tray Lift Motor Current	M2	0: PWM, 1: PWM
	13	Lower Tray Lift Motor Current	M3	0: PWM, 1: PWM
	12	Drive Switching Motor Current	M4	0: PWM, 1: PWM
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	External I/O Data Bus 6	-	-
	6	Reserve Unit Motor CLK	M6	-
	5	External I/O Data Bus 5	-	-
	4	External I/O Data Bus 4	-	-
	3	External I/O Data Bus 3	-	-
	2	External I/O Data Bus 2	-	-
	1	External I/O Data Bus 1	-	-
	0	Pickup Motor CLK	M1	-

Address	bit	Name	Symbol	Remarks
P044	15	Lower Tray Pick Sensor	S6	0: Outside pick position, 1: Pick position
	14	Lower Tray Last Paper Sensor 2	S15	0: No paper, 1: Paper
	13	Lower Tray Last Paper Sensor 1	S14	0: Paper, 1: No paper
	12	Lower Tray Empty Sensor	S12	0: No paper, 1: Paper
	11	Upper Tray Lower Limit Sensor	S4	0:outside lower limit/1:lower limit
	10	Upper Tray Pick Sensor	S2	0: Outside pick position, 1: Pick position
	9	Upper Tray Last Paper Sensor1	S11	0: Paper, 1: No paper
	8	Upper Tray Empty Sensor	S9	0: Paper, 1: No paper
	7	Reserve Timing Sensor	S16	0: No paper, 1: Paper
	6	Reserve Sensor	S17	0: No paper, 1: Paper
	5	Reserve Inlet Sensor	S18	0: No paper, 1: Paper
	4	Intermediate Feed Sensor	S8	0: No paper, 1: Paper
	3	Drive Switching Sensor	S1	0: Outside HP, 1: Inside HP
	2	Unit Open/Close Sensor	S19	0: Close, 1: Open
	1	Upper Cover Open/Close Sensor	SW2	0: Close, 1: Open
	0	Lower Tray Lower Limit Sensor	S5	0: Outside lower limit 1: Lower limit
P045	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	Power Supply Lock Detect Signal 3	F1	0: Normal, 1: Lock
	5	-	-	-
	4	-	-	-
	3	Delivery 2 Sensor	S21	0: No paper, 1: Paper
	2	Inlet Sensor	S20	0: No paper, 1: Paper
	1	Front Upper Cover Sensor	SW1	0: Close, 1: Open
	0	Brushless Motor Lock Detection Signal	-	0: Normal, 1: lock

Address	bit	Name	Symbol	Remarks
P046	15	DSW8	-	0: ON, 1: OFF
	14	DSW7	-	0: ON, 1: OFF
	13	DSW6	-	0: ON, 1: OFF
	12	DSW5	-	0: ON, 1: OFF
	11	DSW4	-	0: ON, 1: OFF
	10	DSW3	-	0: ON, 1: OFF
	9	DSW2	-	0: ON, 1: OFF
	8	DSW1	-	0: ON, 1: OFF
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Wire-speed Sorting Identification Signal	-	0: Low speed machine, 1: High speed machine
	3	PCB Identification Signal 2	-	BIT2=1,BIT3=0: Insetion
	2	PCB Identification Signal 1	-	-
	1	PSW2	-	0: ON, 1: OFF
	0	PSW1	-	0: ON, 1: OFF
P047	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	F an 2 Enable	F1	0: OFF, 1: ON
	10	-	-	-
	9	PCB LED2	-	0: ON, 1: OFF
	8	PCB LED1	-	0: ON, 1: OFF

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■ Puncher Unit BE1/BF1/BG1/BH1 (SORTER>P058 to P059)

Address	bit	Name	Symbol	Remarks
P058	15	-	-	-
	14	-	-	-
	13	Delivery Sensor	PS5	1: Paper
	12	Path Switching Motor HP Sensor	PS7	1: Paper
	11	Integration Unit Reverse Path 3 Sensor	RS4	1: Paper
	10	Integration Unit Reverse Path 2 Sensor	RS3	1: Paper
	9	Integration Unit Reverse Path 1 Sensor	RS2	1: Paper
	8	Integration Unit Bypass 1 Sensor	RS1	1: Paper
	7	P-puncher Bypass 8 Sensor	S8	1: Paper
	6	P-puncher Bypass 7 Sensor	S7	1: Paper
	5	P-puncher Bypass 6 Sensor	S6	1: Paper
	4	P-puncher Bypass 5 Sensor	S5	1: Paper
	3	P-puncher Bypass 4 Sensor	S4	1: Paper
	2	P-puncher Bypass 3 Sensor	S3	1: Paper
	1	P-puncher Bypass 2 Sensor	S2	1: Paper
	0	P-puncher Bypass 1 Sensor	S1	1: Paper
P059	15	Puncher Die Detect HP Sensor	S16	1: ON
	14	Puncher Die Sensor 7	S15	1: ON
	13	Puncher Die Sensor 6	S14	1: ON
	12	Puncher Die Sensor 5	S13	1: ON
	11	Puncher Die Sensor 4	S12	1: ON
	10	Puncher Die Sensor 3	S11	1: ON
	9	Puncher Die Sensor 2	S10	1: ON
	8	Puncher Die Sensor 1	S9	1: ON
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-

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■ Booklet Finisher L1/Staple Finisher L1 (SORTER>P001 to P040)

Addres	bit	Description	Symbol	Remarks
P001	8-15	Not used	-	-
	7	Punch Serial Communication	-	0: OFF, 1: ON
	6	Escape Feed Motor Clock Signal	M112	-
	5	Folding Serial Communication (RxD)	-	-
	4	Folding Serial Communication (TxD)	-	-
	3	Front Cover Sensor	PI102	0: Close, 1: Open
	2	Saddle Unit Connection Detection	-	0: Saddle present, 1: Saddle absent
	1	Punch Serial Communication (RxD)	-	-
	0	Punch Serial Communication (TxD)	-	-
P002	8-15	Not used	-	-
	7	Punch Serial Communication	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Inserter Communication (IN)	-	0: OFF, 1: ON
	2	Tray Motor Clock Signal	-	-
	1	Not used	-	-
	0	Swing Motor Clock Signal	M106	-
P003	8-15	Not used	-	-
	7	Punch Feed Motor Phase B* Signal	M63	-
	6	Punch Feed Motor Phase A* Signal	M63	-
	5	Punch Feed Motor Phase B Signal	M63	-
	4	Punch Feed Motor Phase A Signal	M63	-
	3	Feed Motor Phase B* Signal	M101	-
	2	Feed Motor Phase A* Signal	M101	-
	1	Feed Motor Phase B Signal	M101	-
	0	Feed Motor Phase A Signal	M101	-

Addres	bit	Description	Symbol	Remarks
P004	8-15	Not used	-	-
	7	PSW2 On The Finisher Controller PCB	-	0: ON, 1: OFF
	6	PSW1 On The Finisher Controller PCB	-	0: ON, 1: OFF
	5	Stack Ejection Motor Clock Signal	M102	-
	4	Tray 2 Shift Motor FG Signal	M108	-
	3	Tray 1 Shift Motor FG Signal	M107	-
	2	Feed Motor Clock Signal	M101	-
	1	Punch Feed Motor Clock Signal	M63	-
	0	Punch Paper Trailing Edge Detection	-	0: Not Detected, 1: Detected
P005	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Tray Motor Clock Signal	-	-
	4	Saddle Serial Signal	-	-
	3	Saddle Serial Signal	-	-
	2	PWM Output For Solenoid	-	-
	1	For R&D	-	-
	0	For R&D	-	-
P006	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Expansion I/O Read Signal	-	-
	4	For R&D	-	-
	3	Expansion I/O Write Signal	-	-
	2	For R&D	-	-
	1	For R&D	-	-
	0	PSW3 On The Finisher Controller PCB	-	0: ON, 1: OFF
P007	8-15	Not used	-	-
	7	Not used	-	-
	6	Not useN	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Tray 1 Shift Motor Lock Detection	M107	0: OFF, 1: Lock Detectioon
	2	Chip Select 2	-	-
	1	Chip Select 1	-	-
	0	Front Cover Sensor	PI102	0: Close, 1: Open

Addres	bit	Description	Symbol	Remarks
P008	8-15	Not used	-	-
	7	Tray 2 Shift Area Sensor 1	-	0: ON, 1: OFF
	6	Tray 2 Shift Area Sensor 2	-	0: ON, 1: OFF
	5	Tray 2 Shift Area Sensor 3	-	0: ON, 1: OFF
	4	Inlet Sensor	PI103	0: Paper present, 1: Paper absent
	3	Swing Guide HP Sensor	PI105	0: Besides HP, 1: HP
	2	Download Mode	-	0: OFF, 1: ON
	1	Not used	-	-
	0	Not used	-	-
P009	8-15	Not used	-	-
	7	Tray 1 Paper Sensor	PI111	0: Paper present, 1: Paper absent
	6	Host Machine Software IPC Communication (RxD)	-	-
	5	Host Machine Software IPC Communication (TxD)	-	-
	4	Tray 1 Shift Area Sensor 1	-	0: ON, 1: OFF
	3	Tray 1 Shift Area Sensor 2	-	0: ON, 1: OFF
	2	Tray 1 Shift Area Sensor 3	-	0: ON, 1: OFF
	1	Tray 2 Shift Motor Lock Detection	M108	0: OFF, 1: Lock detectioon
	0	Tray 2 Paper Sensor	PI112	0: Paper present, 1: Paper absent
P010	8-15	Not used	-	-
	7	DIPSW1-8 On The Finisher Controller PCB	-	0: ON, 1: OFF
	6	DIPSW1-7 On The Finisher Controller PCB	-	0: ON, 1: OFF
	5	DIPSW1-6 On The Finisher Controller PCB	-	0: ON, 1: OFF
	4	DIPSW1-5 On The Finisher Controller PCB	-	0: ON, 1: OFF
	3	DIPSW1-4 On The Finisher Controller PCB	-	0: ON, 1: OFF
	2	DIPSW1-3 On The Finisher Controller PCB	-	0: ON, 1: OFF
	1	DIPSW1-2 On The Finisher Controller PCB	-	0: ON, 1: OFF
	0	DIPSW1-1 On The Finisher Controller PCB	-	0: ON, 1: OFF

Addres	bit	Description	Symbol	Remarks
P011	8-15	Not used	-	-
	7	EEPROM Clock Signal	-	-
	6	EEPROM Enable Signal	-	0: OFF, 1: ON
	5	EEPROM Output Signal	-	0: OFF, 1: ON
	4	Not used	-	-
	3	Gear Change Motor Electric Current Change I1	M110	-
	2	Gear Change Motor Electric Current Change I0	M110	-
	1	Gear Change Motor Phase B Signal	M110	-
	0	Gear Change Motor Phase A Signal	M110	-
P012	8-15	Not used	-	-
	7	Swing Height Sensor	PI123	0: Close, 1: Open
	6	Gear Change Home Position Sensor	PI117	0: HP, 1: Besides HP
	5	Not used	-	-
	4	Rear End Assist HP Sensor	PI109	0: HP, 1: Besides HP
	3	Processing Tray Sensor	PI108	0: Paper present, 1: Paper absent
	2	Rear Aligning Plate HP Sensor	PI107	0: HP, 1: Besides HP
	1	Front Aligning Plate HP Sensor	PI106	0: HP/1: Besides HP
	0	EEPROM Input Signal	-	-
P013	8-15	Not used	-	-
	7	Tray 2 Shift Motor ON Signal	M108	0: OFF, 1: ON
	6	Tray 2 Shift Motor CW/CCW Signal	M108	0: CW, 1: CCW
	5	Feed Roller Separation Solenoid	SL101	0: OFF, 1: ON
	4	Punch Feed Motor Standby	M63	0: Standby, 1: Drive
	3	Punch Feed Motor Electric Current Change I0	M63	-
	2	Punch Feed Motor Electric Current Change I1	M63	-
	1	Feed Motor Electric Current Change I0	M101	-
	0	Feed Motor Electric Current Change I1	M101	-

Addres	bit	Description	Symbol	Remarks
P014	8-15	Not used	-	-
	7	Tray 1 Shift Motor Enable Signal	M107	0: Standby, 1: Drive
	6	Tray 1 Shift Motor CW/CCW Signal	M107	0: CW, 1: CCW
	5	Tray 1 Shift Motor ON Signal	M107	0: OFF, 1: ON
	4	Rear End Assist Motor Enable Signal	M109	0: Standby, 1: drive
	3	Rear End Assist Motor eElectric Current Change I1	M109	-
	2	Rear End Assist Motor Electric Current Change I0	M109	-
	1	Rear End Assist Motor Directiojn Change	M109	0: CW, 1: CCW
	0	Inserter Serial Communication (OUT)	-	0: OFF, 1: ON
P015	8-15	Not used	-	-
	7	Staple Motor Direction Change CW Signal	M41	-
	6	Staple Motor Direction Change CCW Signal	M41	-
	5	Stapler Shift Motor Enable Signal	M105	0: Drive, 1: Standby
	4	Stack Ejection Motor Electric Current Change I0	M102	-
	3	Stack Ejection Motor Electric Current Change I1	M102	-
	2	Stack Ejection Motor Torque Terminal	M102	0: 71%, 1: 100%
	1	Swing Motor Electric Current Change	M106	0: High, 1: Low
	0	Swing Motor Direction Change	M106	0: CW, 1: CCW
P016	8-15	Not used	-	-
	7	Not used	-	-
	6	Rear Aligning Plate Motor Direction Change	M104	0: CW, 1: CCW
	5	Rear Aligning Plate Motor Clock Signal	M104	-
	4	Rear Aligning Plate Motor Electric Current Change I0	M104	0: High, 1: Low
	3	Not used	-	-
	2	Front Aligning Plate Motor Electric Current Change I0	M103	0: High, 1: Low
	1	Front Aligning Plate Motor Direction Change	M103	0: CW, 1: CCW
	0	Front Aligning Plate Motor Clock Signal	M103	-

Addres	bit	Description	Symbol	Remarks
P017	8-15	Not used	-	-
	7	Tray 2 Paper Surface Sensor 1	PI115	0: Paper present, 1: Paper absent
	6	Tray 1 Paper Surface Sensor	PI114	0: Paper present, 1: Paper absent
	5	Shutter HP Sensor	PI113	0: HP, 1: Besides HP
	4	Stapler Shift HP Sensor	PI110	0: HP, 1: Besides HP
	3	Stapler Alignment Interference Sensor	PI116	0: Interference, 1: Not interference
	2	Stapler Needle Presence	-	0: Needle present, 1: Needle absent
	1	Stapler READY	-	0: Standby, 1: Drive
	0	Stapler HP Detection	-	0: Besides HP, 1:HP
P018	8-15	Not used	-	-
	7	Stapler Shift Motor	M105	0: CCW, 1: CW
	6	Buffer Roller Separation Solenoid	SL102	0: OFF, 1: ON
	5	Shutter Clutch	CL101	0: OFF, 1: ON
	4	Stack Ejection Lower Roller Clutch	CL102	0: OFF, 1: ON
	3	Buffer Rear End Holding Solenoid	SL104	0: OFF, 1: ON
	2	1st Delivery Roller Separation Solenoid	SL103	0: OFF, 1: ON
	1	Stapler Shift Motor Electric Current Change I1	M105	-
	0	Stapler Shift Motor Electric Current Change I0	M105	-
P019	8-15	Not used	-	-
	7	Inserter Unit Connection Detection	-	0: Connected, 1: Unconnected
	6	fFeed Path Sensor	PI104	0: Paper present, 1: Paper absent
	5	Swing Guide Switch Signal	MS102	0: OFF, 1: ON
	4	Staple Safety Switch Signal	MS104	0: OFF, 1: ON
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Stapler Shift Motor Lock Signal	M105	-
P020	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Escape Feed Motor Phase B* Signal	M112	-
	2	Escape Feed Motor Phase A* Signal	M112	-
	1	Escape Feed Motor Phase B Signal	M112	-
	0	Escape Feed Motor Phase A Signal	M112	-

Addres	bit	Description	Symbol	Remarks
P021	8-15	Not used	-	-
	7	Puncher Unit Connection Detection	-	0: Connected, 1: Unconnected
	6	Tray 2 Paper Surface Sensor 2	PI120	0: Paper present, 1: Paper absent
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Escape Tray Full Sensor	PI119	0: Paper present, 1: Paper absent
	1	Escape Door Sensor	PI121	0: Close, 1: Open
	0	Escape Tray Path Sensor	PI118	0: Paper present, 1: Paper absent
P022	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	For Host Machine Download	-	0: OFF, 1: ON
	2	Not used	-	-
	1	Not used	-	-
	0	Not used	-	-
P023	8-15	Not used	-	-
	7	Not used	-	-
	6	Motor Enable Signal	-	0: Standby, 1: Drive
	5	Punch Serial Communication (OUT)	-	0: OFF, 1: ON
	4	Not used	-	-
	3	Escape Solenoid	SL105	0: OFF, 1: ON
	2	Escape Feed Motor Standby Signal	M112	0: Standby, 1: Drive
	1	Escape Feed Motor Electric Current Change I1	M112	-
	0	Escape Feed Motor Electric Current Change I0	M112	-
P024	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Stack Ejection Motor Phase B* Signal	M102	-
	2	Stack Ejection Motor Phase A* Signal	M102	-
	1	Stack Ejection Motor Phase B Signal	M102	-
	0	Stack Ejection Motor Phase A Signal	M102	-

Addres	bit	Description	Symbol	Remarks
P025	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	For Host Machine Download	-	0: OFF, 1: ON
P026	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Not used	-	-
P027	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Not used	-	-
P028	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Not used	-	-

Addres	bit	Description	Symbol	Remarks
P029	8-15	Not used	-	-
	7	Alignment Plate HP Sensor	PI5	0: Besides HP, 1: HP
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Saddle Staple Unit Connection Detection	-	0: Connected, 1: Unconnected
	2	Vertical Path Paper Sensor	PI17	0: Paper absent, 1: Paper present
	1	Not used	-	-
	0	Not used	-	-
P030	8-15	Not used	-	-
	7	Not used	-	-
	6	Feed Motor Clock Signal	M1	-
	5	Paper Folding Motor PWM Signal	M2	-
	4	Solenoid PWM Signal	-	-
	3	Stitcher HP Sensor (Rear)	SW5	0: bBesides HP, 1: HP
	2	Stitcher HP Sensor (Front)	SW7	0: Besides HP, 1: HP
	1	Paper Pushing Plate Top Position Sensor	PI15	0: Top position, 1: Besides top position
	0	Paper Pushing Plate HP Sensor	PI14	0: Besides HP, 1: HP
P031	8-15	Not used	-	-
	7	Guide Motor Phase B Signal	M3	-
	6	Guide Motor Phase A Signal	M3	-
	5	Alignment Motor B Signal	M5	-
	4	Alignment Motor A Signal	M5	-
	3	Not used	-	-
	2	Paper Positioning Plate Motor Phase B Signal	M4	-
	1	Paper Positioning Plate Motor Phase A Signal	M4	-
	0	Feed Motor CW/CCW Signal	M1	0: CCW, 1: CW
P032	8-15	Not used	-	-
	7	Saddle Rear Staple Electric Current Detection (AD)	-	0: OFF, 1: ON
	6	Saddle Front Staple Electric Current Detection (AD)	-	0: OFF, 1: ON
	5	Not used	-	-
	4	Not used	-	-
	3	Feed Motor Clock Signal	M1	-
	2	Paper Folding Motor Clock Sensor	PI4	-
	1	Paper pushing Plate Motor Clock Sensor	PI1	-
	0	Not used	-	-

Addres	bit	Description	Symbol	Remarks
P033	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	No.2 Paper Deflecting Solenoid	SL2	0: OFF, 1: ON
	4	No.1 Paper Deflecting Solenoid	SL1	0: OFF, 1: ON
	3	Saddle Inlet Solenoid	SL5	0: OFF, 1: ON
	2	Paper Folding HP Sensor	PI21	0: OFF, 1: ON
	1	For R&D	-	-
	0	For R&D	-	-
P034	8-15	Not used	-	-
	7	Not used	-	-
	6	PSW1 On The Saddle Controller PCB	-	0: OFF, 1: ON
	5	Not used	-	0: OFF, 1: ON
	4	Power ON Signal	-	0: OFF, 1: ON
	3	Guide Motor I0	M3	0: OFF, 1: ON
	2	Feed Motor Enable	M1	0: OFF, 1: ON
	1	Feed Motor Electric Current Change I1	M1	-
	0	Feed Motor Electric Current Change I0	M1	-
P035	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Stitcher Motor (Rear) CW Signal	M6	0: OFF, 1: ON
	2	Not used	-	-
	1	Staple Sensor (Rear)	SW4	0: OFF, 1: ON
	0	24V Detection	-	0: ON, 1: OFF
P036	8-15	Not used	-	-
	7	Not used	-	-
	6	Feed plate Contact Solenoid	SL4	0: OFF, 1: ON
	5	Paper Folding Motor RV	M2	0: OFF, 1: ON
	4	Paper Positioning Plate Motor I0	M4	-
	3	Alignment Motor I0	M5	-
	2	Paper Positioning Plate Paper Sensor	PI8	0: Paper present, 1: Paper absent
	1	Paper Positioning Plate HP Sensor	PI7	0: HP, 1: Besides HP
	0	Tray Paper Sensor	PI6	0: Paper present, 1: Paper absent

Addres	bit	Description	Symbol	Remarks
P037	8-15	Not used	-	-
	7	Paper Pushing Plate Motor EN Signal	M8	0: ON, 1: OFF
	6	Paper Pushing Plate Motor FWD Signal	M8	0: OFF, 1: ON
	5	Paper Pushing Plate Motor RV Signal	M8	0: OFF, 1: ON
	4	Paper Folding Motor FWD Signal	M2	0: OFF, 1: ON
	3	Not used	-	-
	2	For R&D	-	-
	1	For R&D	-	-
	0	For R&D	-	-
P038	8-15	Not used	-	-
	7	Stitcher Motor (Rear) CCW Signal	M6	0: ON, 1: OFF
	6	Saddle Software IPC Communication	-	-
	5	Saddle Software IPC Communication	-	-
	4	Stitcher Motor (Front) CW Signal	M7	0: ON, 1: OFF
	3	Stitcher Motor (Front) CCW Signal	M7	0: ON, 1: OFF
	2	Staple Sensor (Front)	SW6	0: Needle absent, 1: Needle present
	1	Not used	-	-
	0	Nnot used	-	-
P039	8-15	Not used	-	-
	7	SW504-8 On The Saddle Controller PCB	-	0: ON, 1: OFF
	6	SW504-7 On The Saddle Controller PCB	-	0: ON, 1: OFF
	5	SW504-6 On The Saddle Controller PCB	-	0: ON, 1: OFF
	4	SW504-5 On The Saddle Controller PCB	-	0: ON, 1: OFF
	3	SW504-4 On The Saddle Controller PCB	-	0: ON, 1: OFF
	2	SW504-3 On The Saddle Controller PCB	-	0: ON, 1: OFF
	1	SW504-2 On The Saddle Controller PCB	-	0: ON, 1: OFF
	0	SW504-1 On The Saddle Controller PCB	-	0: ON, 1: OFF

Addres	bit	Description	Symbol	Remarks
P040	8-15	Not used	-	-
	7	Saddle Inlet Sensor	PI22	0: Paper absent, 1: Paper present
	6	Guide HP Sensor	PI13	0: Besides HP, 1: HP
	5	Crescent Roller Phase Sensor	PI12	0: Besides HP, 1: HP
	4	Delivery Sensor	PI11	0: Paper present, 1: Paper absent
	3	Inlet Cover Sensor	PI9	0: Colse, 1: Open
	2	Saddle Trailing Edge Sensor 3	-	0: OFF, 1: ON
	1	Saddle Trailing Edge Sensor 2	-	0: OFF, 1: ON
	0	Saddle Trailing Edge Sensor 1	-	0: OFF, 1: ON

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External Punch A1 (SORTER>SORTER>P041 to P046)

Address	bit	Name	Symbol	Remarks
P041	8-15	Not used	-	-
	7	Punch Home Position Sensor	PI63	0: ON, 1: OFF
	6	Punch Motor Clock Sensor	PI62	-
	5	Trailing Edge Detection Snsor	LED5, PT5	0: Paper present, 1: Paper absent
	4	Punch OUT Signal	-	-
	3	Not used	-	-
	2	SW601-3 On The Punch Controller PCB	-	0: ON, 1: OFF
	1	SW601-2 On The Punch Controller PCB	-	0: ON, 1: OFF
	0	SW601-1 On The Punch Controller PCB	-	0: ON, 1: OFF
P042	8-15	Not used	-	-
	7	Not used	-	-
	6	Not used	-	-
	5	Not used	-	-
	4	Not used	-	-
	3	Not used	-	-
	2	Punch TxD	-	-
	1	Punch RxD	-	-
	0	Punch In	-	-
P043	8-15	Not used	-	-
	7	Punch Motor CW Signal	M61	0: ON, 1: OFF
	6	Punch Motor CCW Signal	M61	0: ON, 1: OFF
	5	Horizontal Registration Motor	M62	0: Desides standby, 1: Drive
	4	Horizontal Registration Home Position Sensor	PI61	0: Besides HP, 1: HP
	3	EEPROM CS	-	-
	2	EEPROM CLK	-	-
	1	EEPROM DataOut	-	-
	0	EEPROM DataIn	-	-
P044	8-15	Not used	-	-
	7	Not used	-	-
	6	Sensor PWM Signal	-	0: ON, 1: OFF
	5	Horizontal Registration Motor Electric Current Setting	M62	0: Drive electric current 1: Maintenance electric current
	4	Not used	-	-
	3	Not used	-	-
	2	Not used	-	-
	1	Not used	-	-
	0	Not used	-	-

Address	bit	Name	Symbol	Remarks
P045	8-15	Not used	-	-
	7	SW602 On The Punch Controller PCB	-	0: ON, 1: OFF
	6	SW603 On The Punch Controller PCB	-	0: ON, 1: OFF
	5	for R&D	-	-
	4	Not used	-	-
	3	LED602 On The Punch Controller PCB	-	0: OFF, 1: ON
	2	Horizontal Registration Motor Phase B Signal	M62	0: Phase B* ON 1: Phase B ON
	1	Horizontal Registration Motor Phase A Signal	M62	0: Phase A* ON 1: Phase A ON
	0	LED601 On The Punch Controller PCB	-	0: OFF, 1: ON
P046	8-15	Not used	-	-
	7	Horizontal Registration Sensor 1 On The LED PCB	LED1, PT1	0: Paper present 1: Paper absent
	6	Scrap Full Detector PCB	-	0: Paper present 1: Paper absent
	5	Upper Door Switch	-	0: Open, 1: Close
	4	Front Door Switch	-	0: Open, 1: Close
	3	Horizontal Registration Sensor 2 On The LED PCB	LED2, PT2	0: Paper present 1: Paper absent
	2	Horizontal Registration Sensor 3 On The LED PCB	LED3, PT3	0: Paper present 1: Paper absent
	1	Horizontal Registration Sensor 4 On The LED PCB	LED4, PT4	0: Paper present 1: Paper absent
	0	Trailing Edge Sensor On The LED PCB	LED5, PT5	0: Paper present 1: Paper absent

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Inserter J1 / Paper Folding Inserter Unit G1 (SORTER>P047 to P061)

Address	bit	Name	Symbol	Remarks
P047	8-15	Not used	-	-
	7	Reserve Unit Motor *B	M3	1: Active
	6	Reserve Unit Motor *A	M3	1: Active
	5	Reserve Unit Motor	M3	1: Active
	4	Reserve Unit Motor A	M3	1: Active
	3	Straight Path Feed Motor (IN) *B	M9	1: Active
	2	Straight Path Feed Motor (IN) *A	M9	1: Active
	1	Straight Path Feed Motor (IN) B	M9	1: Active
	0	Straight Path Feed Motor (IN) A	M9	1: Active
P048	8-15	Not used	-	-
	7	DA Converter Cssignal	-	-
	6	C Fold Flapper Solenoid	SL5	1: Absorption
	5	-	-	-
	4	Fold Transport Motor Clock Signal	M5	-
	3	Straight Path Feed Motor (IN) *B	M4	1: Active
	2	Straight Path Feed Motor (IN) *A	M4	1: Active
	1	Straight Path Feed Motor (IN) B	M4	1: Active
	0	Straight Path Feed Motor (IN) A	M4	1: Active
P049	8-15	Not used	-	-
	7	Front upper Cover Open/Close Sensor	SW1	1: Active
	6	Top Cover Open/Close Sensor	S2	0: Open
	5	Slowdown Timing Sensor	S24	1: Paper on
	4	PCB Identification Signal 2	-	PF3098 1: H 2: L PF4154 1: L 2: L
	3	PCB Identification Signal 1	-	
	2	Interface Fin Data Enable Signal	-	-
	1	-	-	-
	0	-	-	-
P050	8-15	Not used	-	-
	7	Through Pass /IN_Motor Driver Current	-	Analog input
	6	Paper Feed Motor Driver Current	-	Analog input
	5	C Fold Paper Full Sensor	S20	0: Full
	4	Upper Stopper Path Sensor AD	S22	Analog input
	3	Fold Position Sensor AD	S23	Analog input
	2	Release Timing Sensor AD	S21	Analog input
	1	Slowdown Timing Sensor AD	S24	Analog input
	0	Tray Paper Width Senor AD	S9	Analog input

Address	bit	Name	Symbol	Remarks
P051	8-15	Not used	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P052	8-15	Not used	-	-
	7	Folding Unit Sensor	S14	1: No unit
	6	By Borah Motor Driver_Standby Signal	-	1: Movement is possible L:stop
	5	Reverse Solenoid_PWM	SL1	PWM
	4	Straight Path Flapper Solenoid PWM	SL2	PWM
	3	Skew Sorrection Pressure Solenoid PWM	SL4	PWM
	2	Skew Correction Release Solenoid PWM	SL3	PWM
	1	PCB LED2	-	0: ON
	0	PCB LED1	-	0: ON
P053	8-15	Not used	-	-
	7	-	-	-
	6	DSW5	-	0: ON
	5	DSW6	-	0: ON
	4	DSW7	-	0: ON
	3	Upper Stopper Motor B PHASE	M7	0: OUT*X, 1: OUTX
	2	Upper Stopper Motor A PHASE	M7	0: OUT*X, 1: OUTX
	1	Upper Stopper Motor B ENABLE	M7	0: OFF, 1: Output
	0	Upper Stopper Motor A ENABLE	M7	0: OFF, 1: Output
P054	8-15	Not used	-	-
	7	Tray Lift Motor Driver Current	-	Analog output
	6	Reverse Unit Motor Driver Current	-	Analog output
	5	Inserter Open/Close Sensor	S1	1: Open
	4	Tray Paper Sensor 2	S8	0: Paper on
	3	Tray Paper Sensor 1	S7	0: Paper on
	2	Paper Feed Sensor	S3	0: ON
	1	Tray Lower Limit Sensor	S5	1: Lower limit
	0	Paper Set Sensor	S6	1: Empty

Address	bit	Name	Symbol	Remarks
P055	8-15	Not used	-	-
	7	C Fold Tray Motor B PHASE	M6	
	6	C Fold Tray Motor A PHASE	M6	
	5	C Fold Tray Motor B ENABL	M6	
	4	C Fold Tray Motor A ENABL	M6	
	3	C Fold Stopper Motor B PHASE	M8	0: OUT *X, 1: OUT X
	2	C Fold Stopper Motor A PHASE	M8	0: OUT *X, 1: OUT X
	1	C Fold Stopper Motor B ENABL	M8	0: OFF, 1: Output
	0	C Fold Stopper Motor A ENABL	M8	0: OFF, 1: Output
P056	8-15	Not used	-	-
	7	Fold Position Adjustment Motor *B	M10	1: Active
	6	Fold Position Adjustment Motor *A	M10	1: Active
	5	Fold Position Adjustment Motor B	M10	1: Active
	4	Fold Position Adjustment Motor A	M10	1: Active
	3	Reverse Sensor	S10	1: Paper on
	2	C Fold Stopper Sensor	S17	1: Home
	1	C Fold Tray Motor Sensor	S19	1: Home
	0	C Fold Tray Empty Sensor	S18	0: Paper on
P057	8-15	Not used	-	-
	7	C Fold Stopper Solenoid	SL7	1: Absorption
	6	C Fold Guide Solenoid	SL6	1: Absorption
	5	EEPROM/DA Converter CLK Signal	-	-
	4	EEPROM CS Signal	-	-
	3	Tray Lift Motor B PHASE	M2	0: OUT *X, 1: OUT X
	2	Tray Lift Motor A PHASE	M2	0: OUT *X, 1: OUT X
	1	Tray Lift Motor B ENABLE	M2	0: OFF, 1: Output
	0	Tray Lift Motor A ENABLE	M2	0: OFF, 1: Output
P058	8-15	Not used	-	-
	7	EEPROM/DA Converter Disignal	-	-
	6	Fold Transport Motor ON/OFF Signal	M5	1: Absorption
	5	-	-	1: ON
	4	Fold Adjustment Regi Clutch BACK	-	1: Absorption
	3	Fold Adjustment Regi Clutch FEED	-	1: Absorption
	2	Paper Set LED	-	-
	1	-	-	1: ON
	0	Interface Ins Data Enable Signal	-	-

Address	bit	Name	Symbol	Remarks
P059	8-15	Not used	-	-
	7	Fold Transport Motor Lock Signal	-	1: Lock
	6	Delivery Sensor	S25	1: Paper on
	5	Upper Stopper Sensor	S16	1: Paper on
	4	Upper Stopper Path Sensor	S22	1: Paper on
	3	Paper Feed Motor *B	M1	1: Active
	2	Paper Feed Motor *A	M1	1: Active
	1	Paper Feed Motor B	M1	1: Active
	0	Paper Feed Motor A	M1	1: Active
P060	8-15	Not used	-	-
	7	DSW8	-	0: ON
	6	DSW4	-	0: ON
	5	DSW3	-	0: ON
	4	DSW2	-	0: ON
	3	Reverse Entrance Sensor	S12	0: Paper on
	2	DSW1	-	0: ON
	1	Reverse Timing Sensor	S11	1: Paper on
	0	Paper Registration Sensor	S4	0: Paper on
P061	8-15	Not used	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	PSW 2	-	0: ON
	3	PSW 1	-	0: ON
	2	Delivery Sensor	S25	1: Paper on
	1	Fold Position Sensor	S23	1: Paper on
	0	Release Timing Sensor	S21	1: Paper on

T-8-30

ADJUST

ADJ-XY

COPIER > ADJUST > ADJ-XY		
ADJ-X		Adj of img pstn in book mode: vert scan
Lv.1	Details	To adjust the image reading start position (image lead edge position) in vertical scanning direction. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When the non-image width is larger than the standard value, set the smaller value. When out of original area is copied, set the larger value. As the value is incremented by 1, the image position moves to the trailing edge side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
ADJ-Y		Adj of img pstn in book mode: horz scan
Lv.1	Details	To adjust the image reading start position in horizontal scanning direction. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When the non-image width is larger than the standard value, set the smaller value. When out of original area is copied, set the larger value. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

COPIER > ADJUST > ADJ-XY		
ADJ-Y-DF		Adj img pstn in DADF mode:horz scan[Frt]
Lv.1	Details	To adjust the image reading start position in horizontal scanning direction at DADF reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
STRD-POS		Adj read pstn in DADF mode: front side
Lv.1	Details	To adjust the reading position at DADF reading (front side). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> STRD-POS
ADJ-X-MG		Adj img ratio in book mod:vert scan[frt]
Lv.1	Details	To make a fine adjustment of image magnification in vertical scanning direction at copyboard reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image magnification changes by 0.01%. +: Enlarge -: Reduce
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-50 to 50
	Unit	%
	Default value	0

COPIER > ADJUST > ADJ-XY		
ADJY-DF2		Adj img pstn in DADF mode:horz scan[bck]
Lv.1	Details	To adjust the image position of back side in horizontal scanning direction at simultaneous duplex reading. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the image position moves to the rear side by 0.1mm.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
ADJ-Y-MG		Fine adj img ratio:book, horz scan
Lv.1	Details	To make a fine adjustment of image magnification ratio in horizontal scanning direction at copyboard reading. When replacing the Reader Controller PCB, enter the backup value. As the value is incremented by 1, the image magnification ratio changes by 0.1%. +: Enlarge -: Reduce
	Use case	When replacing the Reader Controller PCB
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 10
	Default value	0

T-8-31

■ CCD

COPIER > ADJUST > CCD		
W-PLT-X		White level data(X) entry of white plate
Lv.1	Details	When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	1 to 9999
	Default value	8271
	Related service mode	COPIER> ADJUST> CCD> W-PLT-Y, W-PLT-Z, BW-TGT
W-PLT-Y		White level data(Y) entry of white plate
Lv.1	Details	When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	1 to 9999
	Default value	8735
	Related service mode	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Z, BW-TGT
W-PLT-Z		White level data(Z) entry of white plate
Lv.1	Details	When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	1 to 9999
	Default value	9418
	Related service mode	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, BW-TGT

COPIER > ADJUST > CCD		
SH-TRGT		Shading target value (B&W)
Lv.1	Details	To set the B&W shading target value in copyboard reading mode.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	1 to 2047
	Default value	1126
100-RG		Img Sensr RG color displace crrct VL:Frt
Lv.1	Details	To correct the color displacement (R and G lines) in vertical scanning direction due to the Scanner Unit (paper front). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0
100-GB		Img Sensr GB color displace crrct VL:Frt
Lv.1	Details	To correct the color displacement (G and B lines) in vertical scanning direction due to the Scanner Unit (paper front). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0

COPIER > ADJUST > CCD		
DFTAR-R		Shading target value (R) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1to 2047
	Default value	1159
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTAR-G		Shading target value (G) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1to 2047
	Default value	1189
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTAR-B		Shading target value (B) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1to 2047
	Default value	1209
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2

COPIER > ADJUST > CCD		
MTF2-M1		MTF value 1 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M2		MTF value 2 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M3		MTF value 3 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M4		MTF value 4 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M5		MTF value 5 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-M6		MTF value 6 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M7		MTF value 7 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M8		MTF value 8 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M9		MTF value 9 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S1		MTF value 1 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-S2		MTF value 2 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S3		MTF value 3 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S4		MTF value 4 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S5		MTF value 5 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S6		MTF value 6 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-S7		MTF value 7 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S8		MTF value 8 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S9		MTF value 9 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
100DF2GB		Img Sns GB clr displc crrct VL:bck,DRead
Lv.2	Details	To correct the color displacement (G and B lines) in vertical scanning direction due to the Scanner Unit (paper back). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0

COPIER > ADJUST > CCD		
100DF2RG		Img Sns RG clr displc crrct VL:bck,DRead
Lv.2	Details	To correct the color displacement (R and G lines) in vertical scanning direction due to the Scanner Unit (paper back). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-256 to 256
	Unit	line
	Default value	0
DFCH2R2		Complex chart No.2 data (R) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2R10		Complex chart No.10 data(R) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH2B2		Complex chart No.2 data (B) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000

COPIER > ADJUST > CCD		
DFCH2B10		Complex chart No.10 data(B) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH2G2		Complex chart No.2 data (G) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2G10		Complex chart No.10 data(G) [Front side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
CCD-CHNG		Scanner Unit(ppr frt) rplce flag setting
Lv.1	Details	To set the calculation mode of MTF filter coefficient that is used at the replacement of Scanner Unit (paper front). When replacing the Scanner Unit (paper front), enter 1. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit (paper front) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Data at factory shipment is used. 1: Data at factory shipment is not used. (Scanner Unit (paper front) is already replaced.)
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> MTFMCL, MTFSCL, MTFMBW, MTFSBW

COPIER > ADJUST > CCD		
MTF-M1		MTF value 1 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M2		MTF value 2 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M3		MTF value 3 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M4		MTF value 4 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M5		MTF value 5 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-M6		MTF value 6 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M7		MTF value 7 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M8		MTF value 8 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M9		MTF value 9 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S1		MTF value 1 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-S2		MTF value 2 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S3		MTF value 3 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S4		MTF value 4 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S5		MTF value 5 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S6		MTF value 6 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-S7		MTF value 7 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S8		MTF value 8 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S9		MTF value 9 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 80
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
DFCH-R2		Complex chart No.2 data (R) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR

COPIER > ADJUST > CCD		
DFCH-R10		Complex chart No.10 data (R) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Red data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-B2		Complex chart No.2 data (B) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-B10		Complex chart No.10 data (B) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Blue data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR

COPIER > ADJUST > CCD		
DFCH-G2		Complex chart No.2 data (G) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-G10		Complex chart No.10 data (G) [Back side]
Lv.1	Details	To derive the front/back side linearity, set the Green data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10 COPIER> FUNCTION> CCD> DF-LNR
MTF2-M10		MTF value 10 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-M11		MTF value 11 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF2-M12		MTF value 12 setting: horz scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S10		MTF value 10 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S11		MTF value 11 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF2-S12		MTF value 12 setting: vert scan [Front]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M10		MTF value 10 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
MTF-M11		MTF value 11 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-M12		MTF value 12 setting: horz scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S10		MTF value 10 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S11		MTF value 11 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC
MTF-S12		MTF value 12 setting: vert scan [Back]
Lv.1	Details	Setting value for MTF filter coefficient calculation. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	20 to 85
	Default value	50
	Related service mode	COPIER> FUNCTION> CCD> MTF-CLC

COPIER > ADJUST > CCD		
DFCH2K2		Complex chart No.2 data (B&W) [Front]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper front) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
DFCH2K10		Complex chart No.10 data (B&W) [Front]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper front) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
DFCH-K2		Complex chart No.2 data (B&W) [Back]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper back) of No.2 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 2550
	Default value	2000
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K10 COPIER> FUNCTION> CCD> DF-LNR
DFCH-K10		Complex chart No.10 data (B&W) [Back]
Lv.1	Details	To derive the front/back side linearity, set the B&W data (for paper back) of No.10 image in DADF complex chart. Enter the value of service label on the Reader.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2550
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-R10, DFCH-B2, DFCH-B10, DFCH-G2, DFCH-G10, DFCH-K2 COPIER> FUNCTION> CCD> DF-LNR

COPIER > ADJUST > CCD		
DFTAR-BW		Shading target value (B&W) [Front side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper front), execute COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper front)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1209
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4
DFTBK-G		Shading target value (G) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1136
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
DFTBK-B		Shading target value (B) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1126
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2

COPIER > ADJUST > CCD		
DFTBK-R		Shading target value (R) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1156
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2
CCD-CHG2		Scanner Unit(paper back) rplce flag set
Lv.1	Details	To set the calculation mode of MTF filter coefficient that is used at the replacement of Scanner Unit (paper back). When replacing the Scanner Unit (paper back), enter 1. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label.
	Use case	- When replacing the Scanner Unit (paper back) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Data at factory shipment is used. 1: Data at factory shipment is not used. (Scanner Unit (paper back) is already replaced.)
	Default value	0
	Related service mode	COPIER> ADJUST> CCD> MTF2MCL, MTF2SCL, MTF2MBW, MTF2SBW
DFTBK-BW		Shading target value (B&W) [Back side]
Lv.1	Details	When replacing the Reader Controller PCB, enter the value of service label. When replacing the Copyboard Glass/Scanner Unit (paper back), execute COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4 and write the value which is automatically set in the service label.
	Use case	- When replacing the Reader Controller PCB/clearing RAM data - When replacing the Copyboard Glass/Scanner Unit (paper back)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	700 to 1400
	Default value	1126
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL3, DF-WLVL4

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IMG-REG

COPIER > ADJUST > IMG-REG		
REG-H-Y		Adj Y color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of Y-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When Y-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0
REG-H-C		Adj C-color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of C-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When C-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0
REG-H-K		Adj Bk-color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of Bk-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When Bk-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0
REG-HS-Y		Adj Y color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of yellow color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When Y-color displacement in the horizontal scanning direction occurs (smaller than 1 pixel)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-5 to 5 (At the processing speed of 280 mm/sec) -4 to 4 (At the processing speed of 321 mm/sec)
	Default value	0

COPIER > ADJUST > IMG-REG		
REG-HS-C		Fine adj C write start pstn: horz scan
Lv.1	Details	To adjust the write start position of cyan color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When C-color displacement in the horizontal scanning direction occurs (smaller than 1 pixel)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-5 to 5 (At the processing speed of 280 mm/sec) -4 to 4 (At the processing speed of 321 mm/sec)
	Default value	0
REG-V-Y		Adj Y color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of Y-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When Y-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0
REG-V-C		Adj C-color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of C-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When C-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0
REG-V-K		Adj Bk-color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of Bk-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When Bk-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0

COPIER > ADJUST > IMG-REG		
REG-H-M		Adj M-color write start pstn: horz scan
Lv.1	Details	To adjust the write start position of M-color image in the horizontal scanning direction in increments of 1 pixel.
	Use case	When M-color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0
REG-V-M		Adj M-color write start pstn: vert scan
Lv.1	Details	To adjust the write start position of M-color image in the vertical scanning direction in increments of 1 pixel.
	Use case	When M-color displacement in the vertical scanning direction occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 127
	Default value	0
REG-VS-Y		Fine adj Y write start pstn: vert scan
Lv.1	Details	To adjust the write start position of yellow color image in the vertical scanning direction in the unit of 1/8 pixel.
	Use case	When magenta color displacement in the vertical scanning direction occurs (smaller than 1 pixel)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-7 to 7
	Unit	pixel
	Default value	0
REG-VS-M		Fine adj M write start pstn: vert scan
Lv.1	Details	To adjust the write start position of magenta color image in the vertical scanning direction in the unit of 1/8 pixel.
	Use case	When magenta color displacement in the vertical scanning direction occurs (smaller than 1 pixel)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-7 to 7
	Unit	pixel
	Default value	0

COPIER > ADJUST > IMG-REG		
REG-VS-C		Fine adj C write start pstn: vert scan
Lv.1	Details	To adjust the write start position of cyan color image in the vertical scanning direction in the unit of 1/8 pixel.
	Use case	When magenta color displacement in the vertical scanning direction occurs (smaller than 1 pixel)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-7 to 7
	Unit	pixel
	Default value	0
MAG-H-K		Adj of Bk color magnification: horz scan
Lv.1	Details	To adjust the standard magnification of Bk color in horizontal scanning direction. Other colors are adjusted by auto registration. All correction values registered in the media list are proportionally changed.
	Use case	When adjusting the standard magnification due to environmental change, etc.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-100 to 100
	Unit	pixel
	Default value	0
REG-HS-M		Fine adj M write start pstn: horz scan
Lv.1	Details	To adjust the write start position of M-color image in the horizontal scanning direction in smaller increments than 1 pixel.
	Use case	When M-color displacement in the horizontal scanning direction occurs (smaller than 1 pixel)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-5 to 5 (At the processing speed of 280 mm/sec) -4 to 4 (At the processing speed of 321 mm/sec)
	Default value	0

COPIER > ADJUST > IMG-REG		
MAG-V		Adj of Bk color magnification: vert scan
Lv.1	Details	To adjust the standard magnification of Bk color in vertical scanning direction by changing the Polygon Mirror speed. Other colors are adjusted by auto registration. All correction values registered in the media list are proportionally changed.
	Use case	When adjusting the standard magnification due to environmental change, etc.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-100 to 100
	Unit	%
	Default value	0
LSR-H-1		Laser emit position horz scan offset 1
Lv.1	Details	To adjust the laser emitting position (the horizontal scanning direction).
	Use case	When replacing the Laser Scanner Unit When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-50 to 60
	Unit	mm
	Default value	0
LSR-H-2		Laser emit position horz scan offset 2
Lv.1	Details	To adjust the laser emitting position (the horizontal scanning direction).
	Use case	When replacing the Laser Scanner Unit When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-50 to 60
	Unit	mm
	Default value	0

COPIER > ADJUST > IMG-REG		
LSR-V-Y		Laser emit pstn vertical scan offset (Y)
Lv.1	Details	To adjust the laser emitting position (the vertical scanning direction).
	Use case	When replacing the Laser Scanner Unit When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-14 to 14
	Unit	mm
	Default value	0
LSR-V-M		Laser emit pstn vertical scan offset (M)
Lv.1	Details	To adjust the laser emitting position (the vertical scanning direction).
	Use case	When replacing the Laser Scanner Unit When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-14 to 14
	Unit	mm
	Default value	0
LSR-V-C		Laser emit pstn vertical scan offset (C)
Lv.1	Details	To adjust the laser emitting position (the vertical scanning direction).
	Use case	When replacing the Laser Scanner Unit When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-14 to 14
	Unit	mm
	Default value	0
LSR-V-K		Laser emit pstn vertical scan offset (K)
Lv.1	Details	To adjust the laser emitting position (the vertical scanning direction).
	Use case	When replacing the Laser Scanner Unit When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-14 to 14
	Unit	mm
	Default value	0

T-8-33

DENS

COPIER > ADJUST > DENS		
REF-Y		Y toner dens target VL entry
Lv.1	Details	To enter the target value of the Toner Density Sensor (Y) of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 255
	Default value	0
REF-M		M toner dens target VL entry
Lv.1	Details	To enter the target value of the Toner Density Sensor (M) of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 255
	Default value	0
REF-C		C toner dens target VL entry
Lv.1	Details	To enter the target value of the Toner Density Sensor (C) of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 255
	Default value	0
SIGG-Y		Adj of Y color ATR patch dens target VL
Lv.1	Details	To enter the Y color ATR patch density target value which is set at Developing Assembly INIT. After the entry, write the value in the service label.
	Use case	When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Display/adj/set range	0 to 1023
	Default value	0
SIGG-M		Adj of M color ATR patch dens target VL
Lv.1	Details	To enter the M color ATR patch density target value which is set at Developing Assembly INIT. After the entry, write the value in the service label.
	Use case	When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Display/adj/set range	0 to 1023
	Default value	0

COPIER > ADJUST > DENS		
SIGG-C		Adj of C color ATR patch dens target VL
Lv.1	Details	To enter the C color ATR patch density target value which is set at Developing Assembly INIT. After the entry, write the value in the service label.
	Use case	When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Display/adj/set range	0 to 1023
	Default value	0
SIGG-K		Adj of Bk color ATR patch dens target VL
Lv.1	Details	To enter the Bk color ATR patch density target value which is set at Developing Assembly INIT. After the entry, write the value in the service label.
	Use case	When re-entering the value at the time of DC Controller PCB replacement/RAM clear
	Display/adj/set range	0 to 1023
	Default value	0
HLMT-PTY		Toner Dens Sensr(Y) dens crrct upr limit
Lv.2	Details	To adjust the upper limit of the target density (T/D ratio) adjustment on the Toner Density Sensor (Y). Density failures and carrier adherence are alleviated when the upper limit is smaller, and fogging and scattering are alleviated when it is larger. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-Y/-4 is executed upon replacement of the developer.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Take necessary action in accordance with the instructions from the Quality Support Division. - Do not use the setting value 11.
	Display/adj/set range	-2 to 2 -2: +2.0%, -1: +1.0%, 0: +/-0%, 1: -1.0%, 2: -2.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-Y/-4
	Supplement/memo	Toner dropping: A symptom that toner drops from the Developing Assembly

COPIER > ADJUST > DENS		
HLMT-PTM		Toner Dens Sensr(M) dens crrct upr limit
Lv.2	Details	To adjust the upper limit of the target density (T/D ratio) adjustment on the Toner Density Sensor (M). Density failures and carrier adherence are alleviated when the upper limit is smaller, and fogging and scattering are alleviated when it is larger. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-M/-4 is executed upon replacement of the developer.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Take necessary action in accordance with the instructions from the Quality Support Division. - Do not use the setting value 11.
	Display/adj/set range	-2 to 2 -2: +2.0%, -1: +1.0%, 0: +/-0%, 1: -1.0%, 2: -2.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-M/-4
	Supplement/memo	Toner dropping: A symptom that toner drops from the Developing Unit
HLMT-PTC		Toner Dens Sensr(C) dens crrct upr limit
Lv.2	Details	To adjust the upper limit of the target density (T/D ratio) adjustment on the Toner Density Sensor (C). Density failures and carrier adherence are alleviated when the upper limit is smaller, and fogging and scattering are alleviated when it is larger. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-C/-4 is executed upon replacement of the developer.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Take necessary action in accordance with the instructions from the Quality Support Division. - Do not use the setting value 11.
	Display/adj/set range	-2 to 2 -2: +2.0%, -1: +1.0%, 0: +/-0%, 1: -1.0%, 2: -2.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-C/-4
	Supplement/memo	Toner dropping: A symptom that toner drops from the Developing Unit

COPIER > ADJUST > DENS		
LLMT-PTY		Toner Dens Sensr(Y)dens crrct lowr limit
Lv.2	Details	To adjust the lower limit of the target density (T/D ratio) adjustment of the Toner Density Sensor (Y). If the lower limit is smaller, the density increase can be prevented in the case of high duty because QM down of developer is restrained, but carrier adherence gets worse. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-Y/-4 is executed upon replacement of the Developing Assembly.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2 -2: +2.0%, -1: +1.0%, 0: +/-0%, 1: -1.0%, 2: -2.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-Y/-4
LLMT-PTM		Toner Dens Sensr(M)dens crrct lowr limit
Lv.2	Details	To adjust the lower limit of the target density (T/D ratio) adjustment of the Toner Density Sensor (M). If the lower limit is smaller, the density increase can be prevented in the case of high duty because QM down of developer is restrained, but carrier adherence gets worse. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-M/-4 is executed upon replacement of the Developing Assembly.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2 -2: +2.0%, -1: +1.0%, 0: +/-0%, 1: -1.0%, 2: -2.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-M/-4

COPIER > ADJUST > DENS		
LLMT-PTC		Toner Dens Sensr(C)dens crrct lowr limit
Lv.2	Details	To adjust the lower limit of the target density (T/D ratio) adjustment of the Toner Density Sensor (C). If the lower limit is smaller, the density increase can be prevented in the case of high duty because QM down of developer is restrained, but carrier adherence gets worse. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-C/-4 is executed upon replacement of the Developing Assembly.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2 -2: +2.0%, -1: +1.0%, 0: +/-0%, 1: -1.0%, 2: -2.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-C/-4
DMAX-Y		Adj D-max ctrl Y color dens target VL
Lv.2	Details	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the yellow density target value of D-max control. The offset is reset when D-max control (Full Adjust) is executed.
	Use case	When an image failure occurs due to environment change
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-30 to 30
	Default value	0
DMAX-M		Adj D-max ctrl M color dens target VL
Lv.2	Details	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the magenta density target value of D-max control. The offset is reset when D-max control (Full Adjust) is executed.
	Use case	When an image failure occurs due to environment change
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-30 to 30
	Default value	0

COPIER > ADJUST > DENS		
DMAX-C		Adj D-max ctrl C color dens target VL
Lv.2	Details	An image failure might occur because the density target value of the D-max control becomes out of the setting table due to environment change. Adjust the offset of the cyan density target value of D-max control. The offset is reset when D-max control (Full Adjust) is executed.
	Use case	When an image failure occurs due to environment change
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-30 to 30
	Default value	0
P-TG-Y		Adj of Y color ATR patch dens target VL
Lv.2	Details	To adjust the offset of the ATR patch target value for Y. When the target value determined upon initialization is changed, the T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range	-2 to 2 -2: -0.5%, -1: -1.0%, 0: +/-0%, 1: +0.5%, 2: +1.0%
	Default value	0

COPIER > ADJUST > DENS		
P-TG-M		Adj of M color ATR patch dens target VL
Lv.2	Details	To adjust the offset of the ATR patch target value for M. When the target value determined upon initialization is changed, the T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range	-2 to 2 -2: -0.5%, -1: -1.0%, 0: +/-0%, 1: +0.5%, 2: +1.0%
	Default value	0
P-TG-C		Adj of C color ATR patch dens target VL
Lv.2	Details	To adjust the offset of the ATR patch target value for C. When the target value determined upon initialization is changed, the T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range	-2 to 2 -2: -0.5%, -1: -1.0%, 0: +/-0%, 1: +0.5%, 2: +1.0%
	Default value	0

COPIER > ADJUST > DENS		
P-TG-K		Adj of Bk color ATR patch dens target VL
Lv.2	Details	To adjust the offset of the ATR patch target value for Bk. When the target value determined upon initialization is changed, the T/D ratio is also changed. Fogging and density increase are alleviated when the value is smaller, and carrier adherence is alleviated when it is larger.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Caution	Execute the auto gradation adjustment first to increase the density. If you adjust the offset of the target value, fogging might get worse.
	Display/adj/set range	-2 to 2 -2: -0.5%, -1: -1.0%, 0: +/-0%, 1: +0.5%, 2: +1.0%
	Default value	0
ALF-C		Adjustment of Patch Sensor alpha value
Lv.1	Details	To adjust the coefficient alpha value of the Patch Sensor. The value multiplied by 1000 is displayed on the screen. When replacing the Patch Sensor/clearing RAM data, enter the value of service label.
	Use case	- When clearing RAM data - When replacing the Patch Sensor
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2047
	Default value	1200
	Supplement/memo	alpha value: Ratio of P wave and S wave
P-K-Y		Adj Y color ptch dens convs coeffct k
Lv.2	Details	To adjust the yellow patch density conversion coefficient k value of the Patch Sensor. The value multiplied by 100 is displayed on the screen.
	Use case	When the Patch Sensor fails to read the density
	Display/adj/set range	0 to 255
	Default value	170
P-K-M		Adj M color ptch dens convs coeffct k
Lv.2	Details	To adjust the magenta patch density conversion coefficient k value of the Patch Sensor. The value multiplied by 100 is displayed on the screen.
	Use case	When the Patch Sensor fails to read the density
	Display/adj/set range	0 to 255
	Default value	170

COPIER > ADJUST > DENS		
P-K-C		Adj C color ptch dens convs coeffct k
Lv.2	Details	To adjust the cyan patch density conversion coefficient k value of the Patch Sensor. The value multiplied by 100 is displayed on the screen.
	Use case	When the Patch Sensor fails to read the density
	Display/adj/set range	0 to 255
	Default value	170
P-K-K		Adj Bk color ptch dens convs coeffct k
Lv.2	Details	To adjust the black patch density conversion coefficient k value of the Patch Sensor. The value multiplied by 100 is displayed on the screen.
	Use case	When the Patch Sensor fails to read the density
	Display/adj/set range	0 to 255
	Default value	170
HLMT-PTK		Toner Dens Sensr(Bk)dens crrct upr limit
Lv.2	Details	To adjust the upper limit of the target density (T/D ratio) adjustment of the Toner Density Sensor (Bk). Density failures and carrier adherence are alleviated when the upper limit is smaller, and fogging and scattering are alleviated when it is larger. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-K/-4 is executed upon replacement of the developer.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Take necessary action in accordance with the instructions from the Quality Support Division. - Do not use the setting value 11.
	Display/adj/set range	-2 to 2 -2: -0.5%, -1: -1.0%, 0: +/-0%, 1: +0.5%, 2: +1.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-K/-4
	Supplement/memo	Toner dropping: A symptom that toner drops from the Developing Unit

COPIER > ADJUST > DENS		
LLMT-PTK		Tonr Dens Sensr(Bk)dens crrct lowr limit
Lv.2	Details	To adjust the lower limit of the target density (T/D ratio) adjustment of the Toner Density Sensor (Bk). If the lower limit is smaller, the density increase can be prevented in the case of high duty because QM down of developer is restrained, but carrier adherence gets worse. The value is returned to 0 if COPIER> FUNCTION> INSTALL> INISET-K/-4 is executed upon replacement of the Developing Assembly.
	Use case	- When adjusting the toner density (T/D ratio) upon occurrence of density failures, fogging, carrier adherence, and scattering, etc. - When analyzing the cause of a problem
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2 -2: -0.5%, -1: -1.0%, 0: +/-0%, 1: +0.5%, 2: +1.0%
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-K/-4
REF-K		Bk toner dens target VL entry
Lv.1	Details	To enter the target value of the Toner Density Sensor (Bk) of ATR control after RAM clear.
	Use case	When checking the value before RAM clear and re-entering it after RAM clear
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 255
	Default value	90(RAM clear)
DMLMT-HY		Y toner charging DC voltage upper limit
Lv.2	Details	To adjust the offset of the charging DC voltage upper limit for Y in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-1500 to 1500
	Unit	V
	Default value	0

COPIER > ADJUST > DENS		
DMLMT-HM		M toner charging DC voltage upper limit
Lv.2	Details	To adjust the offset of the charging DC voltage upper limit for M in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-1500 to 1500
	Unit	V
	Default value	0
DMLMT-HC		C toner charging DC voltage upper limit
Lv.2	Details	To adjust the offset of the charging DC voltage upper limit for C in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-1500 to 1500
	Unit	V
	Default value	0
DMLMT-LY		Y toner charging DC voltage lower limit
Lv.2	Details	To adjust the offset of the charging DC voltage lower limit for Y in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0
DMLMT-LM		M toner charging DC voltage lower limit
Lv.2	Details	To adjust the offset of the charging DC voltage lower limit for M in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0

COPIER > ADJUST > DENS		
DMLMT-LC		C toner charging DC voltage lower limit
Lv.2	Details	To adjust the offset of the charging DC voltage lower limit for C in D-max control.
	Use case	When a failure occurs due to limiter of D-max control
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute quick adjustment of auto gradation adjustment.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-300 to 300
	Unit	V
	Default value	0
CONT-Y		Toner Density Sensor (Y) control voltage
Lv.1	Details	To enter the density detection control voltage of the Toner Density Sensor (Y). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
CONT-M		Toner Density Sensor (M) control voltage
Lv.1	Details	To enter the density detection control voltage of the Toner Density Sensor (M). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0

COPIER > ADJUST > DENS		
CONT-C		Toner Density Sensor (C) control voltage
Lv.1	Details	To enter the density detection control voltage of the Toner Density Sensor (C). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
CONT-K		Toner Density Sensor(Bk) control voltage
Lv.1	Details	To enter the density detection control voltage of the Toner Density Sensor (Bk). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When the backup data is cleared by RAM clear, etc.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0

T-8-34

BLANK

COPIER > ADJUST > BLANK		
BLANK-T		Adjustment of leading edge margin
Lv.1	Details	To adjust the margin on the leading edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 1000
	Default value	29
BLANK-L		Adjustment of left edge margin
Lv.1	Details	To adjust the margin on the left edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1000
	Default value	29
BLANK-R		Adjustment of right edge margin
Lv.1	Details	To adjust the margin on the right edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1000
	Default value	29
BLANK-B		Adjustment of trailing edge margin
Lv.1	Details	To adjust the margin on the trailing edge of paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1000
	Default value	29

COPIER > ADJUST > BLANK		
BLANK-T2		Adj of leading edge margin: Thin paper
Lv.2	Details	To adjust the margin on the leading edge of thin paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1000
	Default value	0
BLANK-B2		Adj of trailing edge margin: Thin paper
Lv.2	Details	To adjust the margin on the trailing edge of thin paper. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm).
	Use case	- When reducing the margin upon user's request - When enlarging the margin for transfer separation/fixing separation
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1000
	Unit	pixel
	Default value	0

T-8-35

■ V-CONT

COPIER > ADJUST > V-CONT		
VCONT-K		Adj of Bk color contrast potential
Lv.2	Details	To adjust the offset of the contrast potential Vcont for Bk. As the value is incremented by 1, the contrast potential changes by 10V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Film or a transfer failure occurs. In principle, the adjustment of the density should be performed in Adjustment/Maintenance> Adjust Image Quality> Density Adjustment Mode.
	Use case	When adjusting the density of D-max control in the case that an image density failure occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute COPIER> FUNCTION> DPC> DPC 4) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VCONT-Y, VCONT-M, VCONT-C COPIER> FUNCTION> DPC> DPC
VBACK-Y		Adj Y color fogging removal potential
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for Y. As the value is incremented by 1, the fogging removal potential changes by 10 V. +: Reduction of fogging, increase of carrier adhesion, and increase of white spots at the edge -: Increase of fogging, reduction of carrier adhesion, and reduction of white spots at the edge
	Use case	At the occurrence of Y fogging
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-M, VBACK-C, VBACK-K

COPIER > ADJUST > V-CONT		
VBACK-M		Adj M color fogging removal potential
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for M. As the value is incremented by 1, the fogging removal potential changes by 10 V. +: Reduction of fogging, increase of carrier adhesion, and increase of white spots at the edge -: Increase of fogging, reduction of carrier adhesion, and reduction of white spots at the edge
	Use case	At the occurrence of M fogging
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-C, VBACK-K
VBACK-C		Adj C color fogging removal potential
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for C. As the value is incremented by 1, the fogging removal potential changes by 10 V. +: Reduction of fogging, increase of carrier adhesion, and increase of white spots at the edge -: Increase of fogging, reduction of carrier adhesion, and reduction of white spots at the edge
	Use case	At the occurrence of C fogging
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-M, VBACK-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

COPIER > ADJUST > V-CONT		
VBACK-K		Adj Bk color fogging removal potential
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for Bk. As the value is incremented by 1, the fogging removal potential changes by 10 V. +: Reduction of fogging, increase of carrier adhesion, and increase of white spots at the edge -: Increase of fogging, reduction of carrier adhesion, and reduction of white spots at the edge
	Use case	At the occurrence of Bk fogging
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute full adjustment of auto gradation adjustment.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-Y, VBACK-M, VBACK-C COPIER> DISPLAY> DPOT> VBACK-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast
EPOTOFST		Manual entry of Potential Sensor offset
Lv.1	Details	To set the offset auto adjustment value of Potential Sensor manually. As the value is incremented by 1, the offset value changes by 1V. +: Identified as the lower potential than the detected one -: Identified as the higher potential than the detected one
	Use case	When an error is displayed by executing OFST (auto offset adjustment) at the replacement of Potential Sensor (When the value out of specified range is set due to Potential Sensor disconnection/ connection failure/installation failure), restore to the factory setting values. 1) To stop the error, set 0 (V) in EPOTOFST. 2) Check around the Potential Sensor. If there is an error, address it and if not, go to the step 3). 3) Enter the value of service label. 4) If image fogging or the like occurs, increase the value by 10V increment.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-100 to 100
	Unit	V
	Default value	0
	Related service mode	COPIER> FUNCTION> DPC> OFST

COPIER > ADJUST > V-CONT		
PT-VCT-Y		Adj Y ATR patch target contrast potntl
Lv.2	Details	To adjust the Y patch target contrast potential for ATR patch. As the value is incremented by 1, the target contrast potential changes by 1 V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-40 to 50
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-M, PT-VCT-C, PT-VCT-K
PT-VCT-M		Adj M ATR patch target contrast potntl
Lv.2	Details	To adjust the M patch target contrast potential for ATR patch. As the value is incremented by 1, the target contrast potential changes by 1 V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-40 to 50
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-C, PT-VCT-K

COPIER > ADJUST > V-CONT		
PT-VCT-C		Adj C ATR patch target contrast potntl
Lv.2	Details	To adjust the C patch target contrast potential for ATR patch. As the value is incremented by 1, the target contrast potential changes by 1 V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-40 to 50
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-M, PT-VCT-K
PT-VCT-K		Adj Bk ATR patch target contrast potntl
Lv.2	Details	To adjust the Bk patch target contrast potential for ATR patch. As the value is incremented by 1, the target contrast potential changes by 1 V. +: Potential is increased. -: Potential is decreased.
	Use case	When density failures, fogging, carrier adherence, etc. occur
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 4) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	-40 to 50
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> PT-VCT-Y, PT-VCT-M, PT-VCT-C

COPIER > ADJUST > V-CONT		
VDGAIN-Y		Adj of Y color charging DC voltage
Lv.2	Details	To adjust the offset of the charging DC voltage Vd for Y. As the value is incremented by 1, the voltage changes by 10 V. Increase the gain when the density is low and decrease the gain when the density is high or an spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VDGAIN-M, VDGAIN-C
VDGAIN-M		Adj of M color charging DC voltage
Lv.2	Details	To adjust the offset of the charging DC voltage Vd for M. As the value is incremented by 1, the voltage changes by 10 V. Increase the gain when the density is low and decrease the gain when the density is high or an spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VDGAIN-Y, VDGAIN-C
VDGAIN-C		Adj of C color charging DC voltage
Lv.2	Details	To adjust the offset of the charging DC voltage Vd for C. As the value is incremented by 1, the voltage changes by 10 V. Increase the gain when the density is low and decrease the gain when the density is high or an spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VDGAIN-Y, VDGAIN-M

COPIER > ADJUST > V-CONT		
LPGAIN-Y		Adjustment of Y color laser power
Lv.2	Details	To adjust the offset of the laser power for Y. As the value is incremented by 1, the laser power changes by 4 Hex. Increase the gain when the density is low and decrease the gain when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-30 to 30
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> LPGAIN-M, LPGAIN-C
LPGAIN-M		Adjustment of M color laser power
Lv.2	Details	To adjust the offset of the laser power for M. As the value is incremented by 1, the laser power changes by 4 Hex. Increase the gain when the density is low and decrease the gain when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-30 to 30
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> LPGAIN-Y, LPGAIN-C
LPGAIN-C		Adjustment of C color laser power
Lv.2	Details	To adjust the offset of the laser power for C. As the value is incremented by 1, the laser power changes by 4 Hex. Increase the gain when the density is low and decrease the gain when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-30 to 30
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> LPGAIN-Y, LPGAIN-M

COPIER > ADJUST > V-CONT		
VBACK2-Y		Adj Y fogging removal potential: 1/2SPD
Lv.2	Details	To adjust the fogging removal potential Vback for Y at 1/2 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/2 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK2-M, VBACK2-C, VBACK2-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast
VBACK2-M		Adj M fogging removal potential: 1/2SPD
Lv.2	Details	To adjust the fogging removal potential Vback for M at 1/2 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/2 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK2-Y, VBACK2-C, VBACK2-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

COPIER > ADJUST > V-CONT		
VBACK2-C		Adj C fogging removal potential: 1/2SPD
Lv.2	Details	To adjust the fogging removal potential Vback for C at 1/2 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/2 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK2-Y, VBACK2-M, VBACK2-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast
VBACK2-K		Adj Bk fogging removal potential: 1/2SPD
Lv.2	Details	To adjust the fogging removal potential Vback for Bk at 1/2 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/2 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK2-Y, VBACK2-M, VBACK2-C
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

COPIER > ADJUST > V-CONT		
VBACK3-Y		Adj Y fogging removal potential: 1/3SPD
Lv.2	Details	To adjust the fogging removal potential Vback for Y at 1/3 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/3 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK3-M, VBACK3-C, VBACK3-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast
VBACK3-M		Adj M fogging removal potential: 1/3SPD
Lv.2	Details	To adjust the fogging removal potential Vback for M at 1/3 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/3 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK3-Y, VBACK3-C, VBACK3-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

COPIER > ADJUST > V-CONT		
VBACK3-C		Adj C fogging removal potential: 1/3SPD
Lv.2	Details	To adjust the fogging removal potential Vback for C at 1/3 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/3 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK3-Y, VBACK3-M, VBACK3-K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast
VBACK3-K		Adj Bk fogging removal potential: 1/3SPD
Lv.2	Details	To adjust the fogging removal potential Vback for Bk at 1/3 speed. +: Fogging is alleviated, but white/black spots are increased due to carrier adherence. -: White/black spots are alleviated, but fogging is increased.
	Use case	When any image failure occurs at 1/3 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute Auto Adjust Gradation > Full Adjust.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK3-Y, VBACK3-M, VBACK3-C
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation > Full Adjust Adjustment/Maintenance> Adjust Image Quality> Correct Color Cast

T-8-36

■ PASCAL

COPIER > ADJUST > PASCAL		
OFST-P-Y		Y density adj at test print reading
Lv.1	Details	To adjust the offset of Y-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-128 to 128
	Default value	According to the adjustment value of the Reader at factory shipment
OFST-P-M		M density adj at test print reading
Lv.1	Details	To adjust the offset of M-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-128 to 128
	Default value	According to the adjustment value of the Reader at factory shipment
OFST-P-C		C density adj at test print reading
Lv.1	Details	To adjust the offset of C-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-128 to 128
	Default value	According to the adjustment value of the Reader at factory shipment

COPIER > ADJUST > PASCAL		
OFST-P-K		Bk density adj at test print reading
Lv.1	Details	To adjust the offset of Bk-color test print reading signal at auto gradation adjustment (full adjustment). When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is larger, the image after adjustment gets darker.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	-128 to 128
	Default value	According to the adjustment value of the Reader at factory shipment

T-8-37

■ COLOR

COPIER > ADJUST > COLOR		
ADJ-Y		Y color balance adjustment
Lv.1	Details	To adjust the default value of the color balance for Y when the density of Y varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-8 to 8
	Default value	0
ADJ-M		M-color balance adjustment
Lv.1	Details	To adjust the default value of the color balance for M when the density of M varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
ADJ-C		C-color balance adjustment
Lv.1	Details	To adjust the default value of the color balance for C when the density of C varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
ADJ-K		Bk-color balance adjustment
Lv.1	Details	To adjust the default value of the color balance for Bk when the density of Bk varies between machines. As the value is larger, the image gets darker. If the value is too large, a transfer failure and/or a fixing failure occurs.
	Use case	Upon user's request (to alleviate the variation of the density between machines)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-8 to 8
	Default value	0
OFST-Y		Adj of Y bright area dens&color balance
Lv.1	Details	To adjust the bright area density and color balance of Y. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	- When the background of a document cannot be read correctly - When removal of the background cannot be performed correctly and a fogging-like image appears
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-32 to 32
	Default value	0

COPIER > ADJUST > COLOR		
OFST-M		Adj of M bright area dens&color balance
Lv.1	Details	To adjust the bright area density and color balance of M. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	- When the background of a document cannot be read correctly - When removal of the background cannot be performed correctly and a fogging-like image appears
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-32 to 32
	Default value	0
OFST-C		Adj of C bright area dens&color balance
Lv.1	Details	To adjust the bright area density and color balance of C. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	- When the background of a document cannot be read correctly - When removal of the background cannot be performed correctly and a fogging-like image appears
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-32 to 32
	Default value	0

COPIER > ADJUST > COLOR		
OFST-K		Adj Bk bright area dens&color balance
Lv.1	Details	To adjust the bright area density and color balance of Bk. As the value is larger, the image gets darker. Lower the value when the background cannot be read correctly because the density of a document is dark and increase the value when the density of a document is light. Lower the value when removal of the background is not performed correctly and a fogging-like image appears. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	- When the background of a document cannot be read correctly - When removal of the background cannot be performed correctly and a fogging-like image appears
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-32 to 32
	Default value	0
LD-OFS-Y		Color balance adj of Y low dens area
Lv.2	Details	To adjust the color balance of the low density area of Y. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
LD-OFS-M		Color balance adj of M low dens area
Lv.2	Details	To adjust the color balance of the low density area of M. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
LD-OFS-C		Color balance adj of C low dens area
Lv.2	Details	To adjust the color balance of the low density area of C. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
LD-OFS-K		Color balance adj of Bk low dens area
Lv.2	Details	To adjust the color balance of the low density area of Bk. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
MD-OFS-Y		Color balance adj of Y mid dens area
Lv.2	Details	To adjust the color balance of the medium density area of Y. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
MD-OFS-M		Color balance adj of M mid dens area
Lv.2	Details	To adjust the color balance of the medium density area of M. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
MD-OFS-C		Color balance adj of C mid dens area
Lv.2	Details	To adjust the color balance of the medium density area of C. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
MD-OFS-K		Color balance adj of Bk mid dens area
Lv.2	Details	To adjust the color balance of the medium density area of Bk. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
HD-OFS-Y		Color balance adj of Y high dens area
Lv.2	Details	To adjust the color balance of the high density area of Y. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
HD-OFS-M		Color balance adj of M high dens area
Lv.2	Details	To adjust the color balance of the high density area of M. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
HD-OFS-C		Color balance adj of C high dens area
Lv.2	Details	To adjust the color balance of the high density area of C. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
HD-OFS-K		Color balance adj of Bk high dens area
Lv.2	Details	To adjust the color balance of the high density area of Bk. As the value is larger, the image gets darker. This setting is linked with Adjustment/Maintenance> Adjust Image Quality> Correct Density, Correct Shading, Auto Correct Color Mismatch in user mode.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PL-OFS-Y		Clr blnce adj of Y low dens area:PDL
Lv.2	Details	To adjust the color balance of the low density area of Y at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PL-OFS-M		Clr blnce adj of M low dens area:PDL
Lv.2	Details	To adjust the color balance of the low density area of M at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PL-OFS-C		Clr blnce adj of C low dens area:PDL
Lv.2	Details	To adjust the color balance of the low density area of C at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
PL-OFS-K		Clr blnce adj of Bk low dens area:PDL
Lv.2	Details	To adjust the color balance of the low density area of Bk at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-Y		Clr blnce adj of Y mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of Y at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-M		Clr blnce adj of M mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of M at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PM-OFS-C		Clr blnce adj of C mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of C at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
PM-OFS-K		Clr blnce adj of Bk mid dens area:PDL
Lv.2	Details	To adjust the color balance of the medium density area of Bk at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-Y		Clr blnce adj of Y high dens area:PDL
Lv.2	Details	To adjust the color balance of the high density area of Y at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-M		Clr blnce adj of M high dens area:PDL
Lv.2	Details	To adjust the color balance of the high density area of M at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0
PH-OFS-C		Clr blnce adj of C high dens area:PDL
Lv.2	Details	To adjust the color balance of the high density area of C at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

COPIER > ADJUST > COLOR		
PH-OFS-K		Clr blnce adj of Bk high dens area:PDL
Lv.2	Details	To adjust the color balance of the high density area of Bk at PDL print. As the value is larger, the image gets darker.
	Use case	Do not use this when the machine is operating correctly.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-8 to 8
	Default value	0

T-8-38

HV-PRI

COPIER > ADJUST > HV-PRI		
PRIMARY		Adjustment of primary charging current
Lv.1	Details	To adjust the offset of primary charging current for the Primary Charging Assembly. As the value is incremented by 1, the current is increased by 50 uA.
	Use case	- When the output difference from the initial value is large due to the Primary Charging Assembly High Voltage Transformer - When changing the primary charging current and then checking the high voltage output
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-10 to 6
	Unit	uA
	Default value	0
DIS-TGY		Discharge current ctrl Y offset adj
Lv.2	Details	To adjust the offset of the target current for Y upon discharge current control for plain paper.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 15
	Unit	uA
	Default value	0
DIS-TGM		Discharge current ctrl M offset adj
Lv.2	Details	To adjust the offset of the target current for M upon discharge current control for plain paper.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 15
	Unit	uA
	Default value	0

COPIER > ADJUST > HV-PRI		
DIS-TGC		Discharge current ctrl C offset adj
Lv.2	Details	To adjust the offset of the target current for C upon discharge current control for plain paper.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-10 to 15
	Unit	uA
	Default value	0
DIS-TGY2		Discharge current ctrl Y offset adj
Lv.2	Details	To adjust the offset of the target current for Y upon discharge current control for plain paper.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	uA
	Default value	0
DIS-TGM2		Discharge current ctrl M offset adj
Lv.2	Details	To adjust the offset of the target current for M upon discharge current control for plain paper.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	uA
	Default value	0
DIS-TGC2		Discharge current ctrl C offset adj
Lv.2	Details	To adjust the offset of the target current for C upon discharge current control for plain paper.
	Use case	When an image failure (sand-like image) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	uA
	Default value	0
PRI-GAIN		[Not used]
PRI-OFST		[Not used]

COPIER > ADJUST > HV-PRI		
OFSTAC-Y		Adj of Y color charging AC voltage
Lv.1	Details	To adjust the offset of the charge AC voltage for Y. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	- Do not use this when the machine is operating correctly. - If the value is too large, the life of the Photosensitive Drum becomes shorter.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTAC-M, OFSTAC-C
OFSTAC-M		Adj of M color charging AC voltage
Lv.1	Details	To adjust the offset of the charge AC voltage for M. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	- Do not use this when the machine is operating correctly. - If the value is too large, the life of the Photosensitive Drum becomes shorter.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTAC-Y, OFSTAC-C

COPIER > ADJUST > HV-PRI		
OFSTAC-C		Adj of C color charging AC voltage
Lv.1	Details	To adjust the offset of the charge AC voltage for C. As the value is incremented by 1, the voltage value is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	- Do not use this when the machine is operating correctly. - If the value is too large, the life of the Photosensitive Drum becomes shorter.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTAC-Y, OFSTAC-M
OFSTACY2		Adjust Y charge AC voltage (1/2 speed)
Lv.1	Details	To adjust the offset of the charge AC voltage for Y at 1/2 speed. As the value is incremented by 1, the offset is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACM2, OFSTACC2
OFSTACM2		Adjust M charge AC voltage (1/2 speed)
Lv.1	Details	To adjust the offset of the charge AC voltage for M at 1/2 speed. As the value is incremented by 1, the offset is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACY2, OFSTACC2

COPIER > ADJUST > HV-PRI		
OFSTACC2		Adjust C charge AC voltage (1/2 speed)
Lv.1	Details	To adjust the offset of the charge AC voltage for C at 1/2 speed. As the value is incremented by 1, the offset is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACY2, OFSTACM2
OFSTACY3		Adjust Y charge AC voltage (1/3 speed)
Lv.1	Details	To adjust the offset of the charge AC voltage for Y at 1/3 speed. As the value is incremented by 1, the offset is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACM3, OFSTACC3
OFSTACM3		Adjust M charge AC voltage (1/3 speed)
Lv.1	Details	To adjust the offset of the charge AC voltage for M at 1/3 speed. As the value is incremented by 1, the offset is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACY3, OFSTACC3

COPIER > ADJUST > HV-PRI		
OFSTACC3		Adjust C charge AC voltage (1/3 speed)
Lv.1	Details	To adjust the offset of the charge AC voltage for C at 1/3 speed. As the value is incremented by 1, the offset is increased by 20 Vpp. Increase the value when the density is low and decrease the value when the density is high or a spotted image occurs.
	Use case	- At the occurrence of an image density failure - At the occurrence of a spotted image
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-20 to 20
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-PRI> OFSTACY3, OFSTACM3
PRI-FREQ		Adjustment of YMC charging AC frequency
Lv.2	Details	To adjust the charge AC frequency for Y, M and C. This mode is effective when horizontal lines or fogging occurs. As the value is smaller, moire is likely to occur.
	Use case	At a charge failure
	Adj/set/operate method	1) Select the items. 2) Enter the setting value, and then press OK key.
	Caution	- Do not use this at the normal service. - Be sure to perform discharge current control (COPIER> FUNCTION> MISC-P> DISCHG) after the execution.
	Display/adj/set range	0 to 2 0: 2.3kHz 1: 2.0kHz 2: 1.8kHz
	Default value	0
DHT-ON		Forcible ON of Drum Heater (Bk)
Lv.2	Details	To forcibly turn ON the Drum Heater (Bk) regardless of the environment when the power is turned ON.
	Use case	When the density of Bk gets lower at the end of the continuous print
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 1
	Default value	0

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HV-TR

COPIER > ADJUST > HV-TR		
PRE-TR		Set Pre-transfer charge current adj VL
Lv.1	Details	To set the output adjustment value of pre-transfer charging current. When the toner scattering occurs at the image end side, decrease the value. As the value is increased by 1, the current is increased by 5 uA.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When an image failure occurs (leopard patterns on Bk solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-30 to 40
	Unit	uA
	Default value	0
2TR-TGT1		Sec trns indiv set target currnt: set 1
Lv.2	Details	To adjust the target current of secondary transfer for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV1, TR-PPR1, TR-CLR1 and TR-DUP1. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV1, TR-PPR1, TR-CLR1, TRDUP1, 2TR-SHR1

COPIER > ADJUST > HV-TR		
2TR-TGT2		Sec trns indiv set target currnt: set 2
Lv.2	Details	To adjust the target current of secondary transfer for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV2, TR-PPR2, TR-CLR2 and TR-DUP2. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV2, TR-PPR2, TR-CLR2, TRDUP2, 2TR-SHR2

COPIER > ADJUST > HV-TR		
2TR-TGT3		Sec trns indiv set target currnt: set 3
Lv.2	Details	To adjust the target current of secondary transfer for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV3, TR-PPR3, TR-CLR3 and TR-DUP3. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV3, TR-PPR3, TR-CLR3, TRDUP3, 2TR-SHR3

COPIER > ADJUST > HV-TR		
2TR-TGT4		Sec trns indiv set target currnt: set 4
Lv.2	Details	To adjust the target current of secondary transfer for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV4, TR-PPR4, TR-CLR4 and TR-DUP4. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV4, TR-PPR4, TR-CLR4, TRDUP4, 2TR-SHR4

COPIER > ADJUST > HV-TR		
2TR-TGT5		Sec trns indiv set target currnt: set 5
Lv.2	Details	To adjust the target current of secondary transfer for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV5, TR-PPR5, TR-CLR5 and TR-DUP5. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV5, TR-PPR5, TR-CLR5, TRDUP5, 2TR-SHR5

COPIER > ADJUST > HV-TR		
2TR-TGT6		Sec trns indiv set target currnt: set 6
Lv.2	Details	To adjust the target current of secondary transfer for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV6, TR-PPR6, TR-CLR6 and TR-DUP6. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV6, TR-PPR6, TR-CLR6, TRDUP6, 2TR-SHR6

COPIER > ADJUST > HV-TR		
2TR-TGT7		Sec trns indiv set target currnt: set 7
Lv.2	Details	To adjust the target current of secondary transfer for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV7, TR-PPR7, TR-CLR7 and TR-DUP7. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV7, TR-PPR7, TR-CLR7, TRDUP7, 2TR-SHR7

COPIER > ADJUST > HV-TR		
2TR-TGT8		Sec trns indiv set target currnt: set 8
Lv.2	Details	To adjust the target current of secondary transfer for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV8, TR-PPR8, TR-CLR8 and TR-DUP8. When this condition is satisfied, the target current that is set here is applied to the Secondary Transfer Outer Roller. When low-voltage mottled image or toner scattering on solid image occurs, increase the current. When high-voltage mottled image or density loss due to excessive transfer occurs, decrease the current. As the value is incremented by 1, the current changes by 2 uA. +: Increase -: Decrease
	Use case	When an image failure occurs on all paper types (mottled image, density loss due to excessive transfer, toner scattering on solid image, etc.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV8, TR-PPR8, TR-CLR8, TRDUP8, 2TR-SHR8

COPIER > ADJUST > HV-TR		
2TR-SHR1		Sec trns indiv set ppr allot voltg:set 1
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV1, TR-PPR1, TR-CLR1 and TR-DUP1. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV1, TR-PPR1, TR-CLR1, TRDUP1, 2TR-TGT1
2TR-SHR2		Sec trns indiv set ppr allot voltg:set 2
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV2, TR-PPR2, TR-CLR2 and TR-DUP2. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV2, TR-PPR2, TR-CLR2, TRDUP2, 2TR-TGT2

COPIER > ADJUST > HV-TR		
2TR-SHR3		Sec trns indiv set ppr allot voltg:set 3
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV3, TR-PPR3, TR-CLR3 and TR-DUP3. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV3, TR-PPR3, TR-CLR3, TRDUP3, 2TR-TGT3
2TR-SHR4		Sec trns indiv set ppr allot voltg:set 4
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV4, TR-PPR4, TR-CLR4 and TR-DUP4. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV4, TR-PPR4, TR-CLR4, TRDUP4, 2TR-TGT4

COPIER > ADJUST > HV-TR		
2TR-SHR5		Sec trns indiv set ppr allot voltg:set 5
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV5, TR-PPR5, TR-CLR5 and TR-DUP5. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV5, TR-PPR5, TR-CLR5, TRDUP5, 2TR-TGT5
2TR-SHR6		Sec trns indiv set ppr allot voltg:set 6
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV6, TR-PPR6, TR-CLR6 and TR-DUP6. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV6, TR-PPR6, TR-CLR6, TRDUP6, 2TR-TGT6

COPIER > ADJUST > HV-TR		
2TR-SHR7		Sec trns indiv set ppr allot voltg:set 7
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV7, TR-PPR7, TR-CLR7 and TR-DUP7. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV7, TR-PPR7, TR-CLR7, TRDUP7, 2TR-TGT7
2TR-SHR8		Sec trns indiv set ppr allot voltg:set 8
Lv.2	Details	To adjust the paper allotted voltage of secondary transfer for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV8, TR-PPR8, TR-CLR8 and TR-DUP8. When this condition is satisfied, the paper allotted voltage that is set here is applied to the Secondary Transfer Outer Roller. As the value is incremented by 1, the voltage changes by 100V. +: Increase -: Decrease
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Increase/decrease the value by 1 while checking the symptom each time.
	Display/adj/set range	-10 to 10
	Unit	V
	Default value	0
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV8, TR-PPR8, TR-CLR8, TRDUP8, 2TR-TGT8

COPIER > ADJUST > HV-TR		
TR-PPR1		Sec trns indiv setting paper type: set 1
Lv.2	Details	To set the paper type (paper weight) for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV1, TR-PPR1, TR-CLR1 and TR-DUP1. When this condition is satisfied, the target current that is set in 2TR-TGT1 and paper allotted voltage that is set in 2TR-SHR1 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV1, TR-CLR1, TR-DUP1, 2TRTGT1, 2TR-SHR1

COPIER > ADJUST > HV-TR		
TR-PPR2		Sec trns indiv setting paper type: set 2
Lv.2	Details	To set the paper type (paper weight) for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV2, TR-PPR2, TR-CLR2 and TR-DUP2. When this condition is satisfied, the target current that is set in 2TR-TGT2 and paper allotted voltage that is set in 2TR-SHR2 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV2, TR-CLR2, TR-DUP2, 2TRTGT2, 2TR-SHR2

COPIER > ADJUST > HV-TR		
TR-PPR3		Sec trns indiv setting paper type: set 3
Lv.2	Details	To set the paper type (paper weight) for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV3, TR-PPR3, TR-CLR3 and TR-DUP3. When this condition is satisfied, the target current that is set in 2TR-TGT3 and paper allotted voltage that is set in 2TR-SHR3 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV3, TR-CLR3, TR-DUP3, 2TRTGT3, 2TR-SHR3

COPIER > ADJUST > HV-TR		
TR-PPR4		Sec trns indiv setting paper type: set 4
Lv.2	Details	To set the paper type (paper weight) for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV4, TR-PPR4, TR-CLR4 and TR-DUP4. When this condition is satisfied, the target current that is set in 2TR-TGT4 and paper allotted voltage that is set in 2TR-SHR4 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV4, TR-CLR4, TR-DUP4, 2TRTGT4, 2TR-SHR4

COPIER > ADJUST > HV-TR		
TR-PPR5		Sec trns indiv setting paper type: set 5
Lv.2	Details	To set the paper type (paper weight) for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV5, TR-PPR5, TR-CLR5 and TR-DUP5. When this condition is satisfied, the target current that is set in 2TR-TGT5 and paper allotted voltage that is set in 2TR-SHR5 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1

COPIER > ADJUST > HV-TR		
TR-PPR6		Sec trns indiv setting paper type: set 6
Lv.2	Details	To set the paper type (paper weight) for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV6, TR-PPR6, TR-CLR6 and TR-DUP6. When this condition is satisfied, the target current that is set in 2TR-TGT6 and paper allotted voltage that is set in 2TR-SHR6 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV6, TR-CLR6, TR-DUP6, 2TRTGT6, 2TR-SHR6

COPIER > ADJUST > HV-TR		
TR-PPR7		Sec trns indiv setting paper type: set 7
Lv.2	Details	To set the paper type (paper weight) for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV7, TR-PPR7, TR-CLR7 and TR-DUP7. When this condition is satisfied, the target current that is set in 2TR-TGT7 and paper allotted voltage that is set in 2TR-SHR7 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV7, TR-CLR7, TR-DUP7, 2TRTGT7, 2TR-SHR7

COPIER > ADJUST > HV-TR		
TR-PPR8		Sec trns indiv setting paper type: set 8
Lv.2	Details	To set the paper type (paper weight) for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV8, TR-PPR8, TR-CLR8 and TR-DUP8. When this condition is satisfied, the target current that is set in 2TR-TGT8 and paper allotted voltage that is set in 2TR-SHR8 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the paper type occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 13 1: Plain paper (64 to 105 g/m2) 2: Recycled paper (64 to 105 g/m2) 3: Thin paper (52 to 63 g/m2) 4: Heavy paper (106 to 220 g/m2) 5: Heavy paper (221 to 300 g/m2) 6: Coated paper (106 to 220 g/m2) 7: Coated paper (221 to 300 g/m2) 8: Transparency 9: Textured paper 10, 11: Not used 12: Postcard 13: Labels
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV8, TR-CLR8, TR-DUP8, 2TRTGT8, 2TR-SHR8

COPIER > ADJUST > HV-TR		
TR-ENV1		Sec trns indiv setting environment:set 1
Lv.2	Details	To set the environment (absolute moisture amount) for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV1, TR-PPR1, TR-CLR1 and TR-DUP1. When this condition is satisfied, the target current that is set in 2TR-TGT1 and paper allotted voltage that is set in 2TR-SHR1 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR1, TR-CLR1, TR-DUP1, 2TRTGT1, 2TR-SHR1
TR-ENV2		Sec trns indiv setting environment:set 2
Lv.2	Details	To set the environment (absolute moisture amount) for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV2, TR-PPR2, TR-CLR2 and TR-DUP2. When this condition is satisfied, the target current that is set in 2TR-TGT2 and paper allotted voltage that is set in 2TR-SHR2 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR2, TR-CLR2, TR-DUP2, 2TRTGT2, 2TR-SHR2

COPIER > ADJUST > HV-TR		
TR-ENV3		Sec trns indiv setting environment:set 3
Lv.2	Details	To set the environment (absolute moisture amount) for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV3, TR-PPR3, TR-CLR3 and TR-DUP3. When this condition is satisfied, the target current that is set in 2TR-TGT3 and paper allotted voltage that is set in 2TR-SHR3 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR3, TR-CLR3, TR-DUP3, 2TRTGT3, 2TR-SHR3
TR-ENV4		Sec trns indiv setting environment:set 4
Lv.2	Details	To set the environment (absolute moisture amount) for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV4, TR-PPR4, TR-CLR4 and TR-DUP4. When this condition is satisfied, the target current that is set in 2TR-TGT4 and paper allotted voltage that is set in 2TR-SHR4 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR4, TR-CLR4, TR-DUP4, 2TRTGT4, 2TR-SHR4

COPIER > ADJUST > HV-TR		
TR-ENV5		Sec trns indiv setting environment:set 5
Lv.2	Details	To set the environment (absolute moisture amount) for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV5, TR-PPR5, TR-CLR5 and TR-DUP5. When this condition is satisfied, the target current that is set in 2TR-TGT5 and paper allotted voltage that is set in 2TR-SHR5 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR5, TR-CLR5, TR-DUP5, 2TRTGT5, 2TR-SHR5
TR-ENV6		Sec trns indiv setting environment:set 6
Lv.2	Details	To set the environment (absolute moisture amount) for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV6, TR-PPR6, TR-CLR6 and TR-DUP6. When this condition is satisfied, the target current that is set in 2TR-TGT6 and paper allotted voltage that is set in 2TR-SHR6 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR6, TR-CLR6, TR-DUP6, 2TRTGT6, 2TR-SHR6

COPIER > ADJUST > HV-TR		
TR-ENV7		Sec trns indiv setting environment:set 7
Lv.2	Details	To set the environment (absolute moisture amount) for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV7, TR-PPR7, TR-CLR7 and TR-DUP7. When this condition is satisfied, the target current that is set in 2TR-TGT7 and paper allotted voltage that is set in 2TR-SHR7 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR7, TR-CLR7, TR-DUP7, 2TRTGT7, 2TR-SHR7
TR-ENV8		Sec trns indiv setting environment:set 8
Lv.2	Details	To set the environment (absolute moisture amount) for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV8, TR-PPR8, TR-CLR8 and TR-DUP8. When this condition is satisfied, the target current that is set in 2TR-TGT8 and paper allotted voltage that is set in 2TR-SHR8 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the environment occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 3 1: Low humidity (Absolute moisture amount: 5.8g/m3 and less) 2: Normal humidity (5.9 to 15g/m3) 3: High humidity (15.1g/m3 and more)
	Default value	2
	Related service mode	COPIER> ADJUST> HV-TR> TR-PPR8, TR-CLR8, TR-DUP8, 2TRTGT8, 2TR-SHR8

COPIER > ADJUST > HV-TR		
TR-CLR1		Sec trns indiv setting color mode: set 1
Lv.2	Details	To set B&W/color for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV1, TR-PPR1, TR-CLR1 and TR-DUP1. When this condition is satisfied, the target current that is set in 2TR-TGT1 and paper allotted voltage that is set in 2TR-SHR1 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV1, TR-PPR1, TR-DUP1, 2TRTGT1, 2TR-SHR1
TR-CLR2		Sec trns indiv setting color mode: set 2
Lv.2	Details	To set B&W/color for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV2, TR-PPR2, TR-CLR2 and TR-DUP2. When this condition is satisfied, the target current that is set in 2TR-TGT2 and paper allotted voltage that is set in 2TR-SHR2 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV2, TR-PPR2, TR-DUP2, 2TRTGT2, 2TR-SHR2

COPIER > ADJUST > HV-TR		
TR-CLR3		Sec trns indiv setting color mode: set 3
Lv.2	Details	To set B&W/color for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV3, TR-PPR3, TR-CLR3 and TR-DUP3. When this condition is satisfied, the target current that is set in 2TR-TGT3 and paper allotted voltage that is set in 2TR-SHR3 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV3, TR-PPR3, TR-DUP3, 2TRTGT3, 2TR-SHR3
TR-CLR4		Sec trns indiv setting color mode: set 4
Lv.2	Details	To set B&W/color for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV4, TR-PPR4, TR-CLR4 and TR-DUP4. When this condition is satisfied, the target current that is set in 2TR-TGT4 and paper allotted voltage that is set in 2TR-SHR4 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV4, TR-PPR4, TR-DUP4, 2TRTGT4, 2TR-SHR4

COPIER > ADJUST > HV-TR		
TR-CLR5		Sec trns indiv setting color mode: set 5
Lv.2	Details	To set B&W/color for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV5, TR-PPR5, TR-CLR5 and TR-DUP5. When this condition is satisfied, the target current that is set in 2TR-TGT5 and paper allotted voltage that is set in 2TR-SHR5 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV6, TR-PPR5, TR-DUP5, 2TRTGT5, 2TR-SHR5
TR-CLR6		Sec trns indiv setting color mode: set 6
Lv.2	Details	To set B&W/color for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV6, TR-PPR6, TR-CLR6 and TR-DUP6. When this condition is satisfied, the target current that is set in 2TR-TGT6 and paper allotted voltage that is set in 2TR-SHR6 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV6, TR-PPR6, TR-DUP6, 2TRTGT6, 2TR-SHR6

COPIER > ADJUST > HV-TR		
TR-CLR7		Sec trns indiv setting color mode: set 7
Lv.2	Details	To set B&W/color for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV7, TR-PPR7, TR-CLR7 and TR-DUP7. When this condition is satisfied, the target current that is set in 2TR-TGT7 and paper allotted voltage that is set in 2TR-SHR7 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV7, TR-PPR7, TR-DUP7, 2TRTGT7, 2TR-SHR7
TR-CLR8		Sec trns indiv setting color mode: set 8
Lv.2	Details	To set B&W/color for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV8, TR-PPR8, TR-CLR8 and TR-DUP8. When this condition is satisfied, the target current that is set in 2TR-TGT8 and paper allotted voltage that is set in 2TR-SHR8 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs due to the color mode occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 2 1: B&W mode, 2: Color mode
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV8, TR-PPR8, TR-DUP8, 2TRTGT8, 2TR-SHR8

COPIER > ADJUST > HV-TR		
TR-DUP1		Sec trns indiv setting feed side: set 1
Lv.2	Details	To set the feed side for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV1, TR-PPR1, TR-CLR1 and TR-DUP1. When this condition is satisfied, the target current that is set in 2TR-TGT1 and paper allotted voltage that is set in 2TR-TGT1 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV1, TR-PPR1, TR-CLR1, 2TRTGT1, 2TR-SHR1
TR-DUP2		Sec trns indiv setting feed side: set 2
Lv.2	Details	To set the feed side for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV2, TR-PPR2, TR-CLR2 and TR-DUP2. When this condition is satisfied, the target current that is set in 2TR-TGT2 and paper allotted voltage that is set in 2TR-TGT2 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV2, TR-PPR2, TR-CLR2, 2TRTGT2, 2TR-SHR2

COPIER > ADJUST > HV-TR		
TR-DUP3		Sec trns indiv setting feed side: set 3
Lv.2	Details	To set the feed side for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV3, TR-PPR3, TR-CLR3 and TR-DUP3. When this condition is satisfied, the target current that is set in 2TR-TGT3 and paper allotted voltage that is set in 2TR-TGT3 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV3, TR-PPR3, TR-CLR3, 2TRTGT3, 2TR-SHR3
TR-DUP4		Sec trns indiv setting feed side: set 4
Lv.2	Details	To set the feed side for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV4, TR-PPR4, TR-CLR4 and TR-DUP4. When this condition is satisfied, the target current that is set in 2TR-TGT4 and paper allotted voltage that is set in 2TR-TGT4 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV4, TR-PPR4, TR-CLR4, 2TRTGT4, 2TR-SHR4

COPIER > ADJUST > HV-TR		
TR-DUP5		Sec trns indiv setting feed side: set 5
Lv.2	Details	To set the feed side for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV5, TR-PPR5, TR-CLR5 and TR-DUP5. When this condition is satisfied, the target current that is set in 2TR-TGT5 and paper allotted voltage that is set in 2TR-TGT5 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV5, TR-PPR5, TR-CLR5, 2TRTGT5, 2TR-SHR5
TR-DUP6		Sec trns indiv setting feed side: set 6
Lv.2	Details	To set the feed side for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV6, TR-PPR6, TR-CLR6 and TR-DUP6. When this condition is satisfied, the target current that is set in 2TR-TGT6 and paper allotted voltage that is set in 2TR-TGT6 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV6, TR-PPR6, TR-CLR6, 2TRTGT6, 2TR-SHR6

COPIER > ADJUST > HV-TR		
TR-DUP7		Sec trns indiv setting feed side: set 7
Lv.2	Details	To set the feed side for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV7, TR-PPR7, TR-CLR7 and TR-DUP7. When this condition is satisfied, the target current that is set in 2TR-TGT7 and paper allotted voltage that is set in 2TR-TGT7 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV7, TR-PPR7, TR-CLR7, 2TRTGT7, 2TR-SHR7
TR-DUP8		Sec trns indiv setting feed side: set 8
Lv.2	Details	To set the feed side for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode and feed side that are set in TR-ENV8, TR-PPR8, TR-CLR8 and TR-DUP8. When this condition is satisfied, the target current that is set in 2TR-TGT8 and paper allotted voltage that is set in 2TR-TGT8 are applied to the Secondary Transfer Outer Roller.
	Use case	When an image failure that differs on the 1st/2nd side occurs (mottled image/density loss due to excessive transfer/toner scattering on solid image)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	1 to 4 1: 1-sided, 2: Auto 2-sided, 3: Multi-purpose Tray 2-sided, 4: POD Deck Lite
	Default value	1
	Related service mode	COPIER> ADJUST> HV-TR> TR-ENV8, TR-PPR8, TR-CLR8, 2TRTGT8, 2TR-SHR8

COPIER > ADJUST > HV-TR		
1TR-TGY		Adj of prmry trns ATVC Y target current
Lv.2	Details	To adjust the offset of the target current for Y upon primary transfer ATVC control. As the value is incremented by 1, the offset is increased by 0.5 uA. Increase the value if spots (white spots), leopard pattern image or mottled image occurs. Decrease the value if white dots occur.
	Use case	When an image failure due to the primary transfer occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
1TR-TGM		Adj of prmry trns ATVC M target current
Lv.2	Details	To adjust the offset of the target current for M upon primary transfer ATVC control. As the value is incremented by 1, the offset is increased by 0.5 uA. Increase the value if spots (white spots), leopard pattern image or mottled image occurs. Decrease the value if white dots occur.
	Use case	When an image failure due to the primary transfer occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
1TR-TGC		Adj of prmry trns ATVC C target current
Lv.2	Details	To adjust the offset of the target current for C upon primary transfer ATVC control. As the value is incremented by 1, the offset is increased by 0.5 uA. Increase the value if spots (white spots), leopard pattern image or mottled image occurs. Decrease the value if white dots occur.
	Use case	When an image failure due to the primary transfer occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0

COPIER > ADJUST > HV-TR		
1TR-TGK1		Prmry trns ATVC Bk target current (B&W)
Lv.2	Details	To adjust the offset of the target current for Bk upon primary transfer ATVC control. As the value is incremented by 1, the offset is increased by 0.5 uA. Increase the value if spots (white spots), leopard pattern image or mottled image occurs. Decrease the value if white dots occur.
	Use case	When an image failure due to the primary transfer occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Unit	uA
	Default value	0
1TR-TGK4		Prmry trns ATVC Bk target current(color)
Lv.2	Details	To adjust the offset of the target current for Bk upon primary transfer ATVC control in color mode. As the value is incremented by 1, the offset is increased by 0.5 uA. Increase the value if spots (white spots), leopard pattern image or mottled image occurs. Decrease the value if white dots occur.
	Use case	When an image failure due to the primary transfer occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-5 to 5
	Unit	uA
	Default value	0

COPIER > ADJUST > HV-TR		
2EL		Set of Sec Trns Static Eliminator bias
Lv.2	Details	To adjust the application voltage of the Secondary Transfer Static Eliminator. As the value is incremented by 1, the voltage is increased by 500V. When the Static Eliminator trace (crow's footprint image) occurs, increase the value. When the Static Eliminator trace (water-drop image) and separation failure occur, decrease the value. If the voltage after the adjustment is out of -4000 to 0V, it is forcibly set to the upper/lower limit value.
	Use case	When an image failure due to the Secondary Transfer Static Eliminator occurs (related with Static Eliminator trace and separation failure)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	If the value is set too high, the Static Eliminator trace occurs again.
	Display/adj/set range	-8 to 6
	Unit	V
	Default value	0
POSTSW-K		Pre-trns charging assembly ON/OFF
Lv.2	Details	To set ON/OFF of the Pre-transfer Charging Assembly.
	Use case	When an image is smeared by the Drum
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When 0 is set, black mottled image and/or leopard patterns (horizontal long lines) might occur.
	Display/adj/set range	0 to 1 0:OFF,1:ON
	Default value	1
2TC-I11		[Not used (for expansion)]
2ELSW		Sec Trns Static Eliminator bias ON/OFF
Lv.2	Details	To set ON/OFF of the Secondary Transfer Static Eliminator bias.
	Use case	When stain on the back of paper occurs at secondary transfer
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0:OFF,1:ON
	Default value	1
	Related service mode	COPIER> DISPLAY> HV-STS> 2EL

COPIER > ADJUST > HV-TR		
1TR-TGY2		Adj Y Pry Trns ATVC tgt crrnt:1/2 speed
Lv.2	Details	To adjust the offset of the target current value for Y upon primary transfer ATVC control at 1/2 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0
1TR-TGM2		Adj M Pry Trns ATVC tgt crrnt:1/2 speed
Lv.2	Details	To adjust the offset of the target current value for M upon primary transfer ATVC control at 1/2 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0
1TR-TGC2		Adj C Pry Trns ATVC tgt crrnt:1/2 speed
Lv.2	Details	To adjust the offset of the target current value for C upon primary transfer ATVC control at 1/2 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0

COPIER > ADJUST > HV-TR		
1TR-TK12		Adj Bk Pry Trns ATVC tgt crrnt:1/2 speed
Lv.2	Details	To adjust the offset of the target current value for pure black upon primary transfer ATVC control at 1/2 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0
1TR-TGY3		Adj Y Pry Trns ATVC tgt crrnt:1/3 speed
Lv.2	Details	To adjust the offset of the target current value for Y upon primary transfer ATVC control at 1/3 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0
1TR-TGM3		Adj M Pry Trns ATVC tgt crrnt:1/3 speed
Lv.2	Details	To adjust the offset of the target current value for M upon primary transfer ATVC control at 1/3 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0

COPIER > ADJUST > HV-TR		
1TR-TGC3		Adj C Pry Trns ATVC tgt crrnt:1/3 speed
Lv.2	Details	To adjust the offset of the target current value for C upon primary transfer ATVC control at 1/3 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0
1TR-TK13		Adj Bk Pry Trns ATVC tgt crrnt:1/3 speed
Lv.2	Details	To adjust the offset of the target current value for pure black upon primary transfer ATVC control at 1/3 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0
1TR-TK42		Adj clr Bk Pry Trn ATVC tgt crrnt:1/2SPD
Lv.2	Details	To adjust the offset of the target current value for Bk (color) upon primary transfer ATVC control at 1/2 speed. As the value is incremented by 1, the offset is increased by 2 micro A. Increase the value if spots (white spots), leopard pattern image occurs. Decrease the value if white dots occur. Decrease the value if mottled image due to paper surface nature occurs when paper type is heavy paper 1/2.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	uA
	Default value	0

COPIER > ADJUST > HV-TR		
1TR-TK43		Adj clr Bk Pry Trn ATVC tgt crrnt:1/3SPD
Lv.2	Details	To adjust the offset of the target current value for Bk (color) upon primary transfer ATVC control at 1/3 speed. Increase the value when spots, mottled image, or image failure due to insufficient transfer current occurs. Decrease the value when image fogging due to transfer memory or drum memory due to strong transfer current occurs.
	Use case	When an image failure due to inappropriate primary transfer current setting occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10
	Default value	0

T-8-40

■ FEED-ADJ

COPIER > ADJUST > FEED-ADJ		
REGIST		Adj of rgst start timing: Plain paper
Lv.1	Details	To adjust the timing to turn ON the Registration Motor in the case of plain paper. As the value is incremented by 1, the margin on the leading edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
ADJ-C1		Right Deck write start pstn in horz scan
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Right Deck (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger (An image moves to the right.) -: Left margin becomes smaller (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width is larger than 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
ADJ-C2		Left deck write start pstn in horz scan
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Left Deck (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
ADJ-C3		Cassette 3 write start pstn in horz scan
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 3 (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
ADJ-C4		Cassette 4 write start pstn in horz scan
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 4 (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
ADJ-MF		Write start pstn in horz scan: MP tray
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Multi-purpose Tray (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
ADJ-DK		Write start pstn in horz scan:Deck/POD D
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Paper Deck/ POD Deck Lite (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
ADJ-REFE		Write start pstn in horz scan: 2nd side
Lv.1	Details	To adjust the image write start position on the second side in the horizontal scanning direction. The image write start position is set in the relative amount against the first side regardless of the paper pickup cassette/tray/deck. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Left margin becomes larger. (An image moves to the right.) -: Left margin becomes smaller. (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
REG-THCK		Rgst start timing adj: Heavy, 1/2 speed
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding heavy paper. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	-20

COPIER > ADJUST > FEED-ADJ		
REG-DUP1		Rgst start timing adj: Plain, 2nd side
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding the second side of plain paper. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	-10
REG-DUP2		Rgst start timing adj: Heavy, 2nd side
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding the second side of heavy paper. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	-10
LP-FEED1		Cassette pre-rgst arch amount: Plain
Lv.1	Details	To adjust the arch amount before registration when feeding plain paper from the cassette. As the value is incremented by 1, the pre-registration arch amount changes by 0.1 mm. +: Increase -: Decrease
	Use case	To adjust the arch amount before registration when feeding plain paper from the cassette.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
LP-FEED2		Casstt pre-rgst arch amount:Heavy/Transp
Lv.1	Details	To adjust the arch amount before registration when feeding heavy paper/transparency from the cassette. As the value is incremented by 1, the pre-registration arch amount changes by 0.1 mm. +: Increase -: Decrease
	Use case	To adjust the arch amount before registration when feeding plain paper from the cassette.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
LP-MULT1		MP Tray pre-rgst arch amount: Plain
Lv.1	Details	To adjust the arch amount before registration when feeding plain paper from the Multi-purpose Tray. As the value is incremented by 1, the pre-registration arch amount changes by 0.1 mm. +: Increase -: Decrease
	Use case	To adjust the arch amount before registration when feeding plain paper from the cassette.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
LP-MULT2		MP Tray pre-rgst arch amount:Heavy/Trans
Lv.1	Details	To adjust the arch amount before registration when feeding heavy paper/transparency from the Multi-purpose Tray. As the value is incremented by 1, the pre-registration arch amount changes 0.1 mm. +: Increase -: Decrease
	Use case	To adjust the arch amount before registration when feeding plain paper from the cassette.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
LP-DUP1		Duplex pre-rgst arch amount: Plain
Lv.1	Details	To adjust the arch amount before registration when feeding plain paper in duplex mode. As the value is incremented by 1, the pre-registration arch amount changes by 0.1 mm. +: Increase -: Decrease
	Use case	To adjust the arch amount before registration when feeding plain paper from the cassette.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
LP-DUP2		Duplex pre-rgst arch amount:Hvy/Transp
Lv.1	Details	To adjust the arch amount before registration when feeding heavy paper/transparency in duplex mode. As the value is incremented by 1, the pre-registration arch amount changes by 0.1 mm. +: Increase -: Decrease
	Use case	To adjust the arch amount before registration when feeding plain paper from the cassette.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
PFIX-FAN		Pre-fix Feed Attraction Fan amount set
Lv.2	Details	To adjust the suction feeding capability of the Pre-fixing Feed Unit by setting the airflow amount of the Pre-fixing Feed Attraction Fan (FM1). Heavy paper of small irregular size can be fed when full speed is set, but noise becomes larger. Noise is alleviated when half speed is set, but a jam might occur unless an upward curl is added to postcards and B5-size heavy papers before they reach the Pre-fixing Feed Unit. When 0 is set, the fan rotates at full speed in case that postcards/ envelopes of 200mm or shorter in feed direction and 106g/m2 or more are fed at 1/2 speed or 1/3 speed. The fan rotates at half speed in other cases. Cases of full speed: postcard/2 on 1 postcard/4 on 1 postcard, Catalog Globe No.8 (envelope) When 1 is set, the fan rotates at full speed if the following conditions are satisfied, and rotates at half speed in other cases. - The paper weight set in user mode (Settings/Registration> Preferences> Paper Settings> Paper Type Management Settings) is 104/149/179/219/255/299g/m2.* - The length in feed direction is 200mm or shorter. When 2 is set, the fan always rotates at half speed.
	Use case	Upon user's request (alleviation of noise/feeding of small-size heavy paper)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	- When full speed is set, noise becomes larger. - When half speed is set, a jam might occur unless an upward curl is added to paper depending on the paper type.
	Display/adj/set range	0 to 2 0: Full speed for postcard/2 on 1 postcard/4 on 1 postcard; Half speed for other papers 1: Full speed for paper of 200mm or shorter in feed direction and a specific paper weight*; Half speed for other papers 2: Half speed
	Default value	0
	Related user mode	Settings/Registration> Preferences> Paper Settings> Paper Type Management Settings
	Supplement/memo	* The paper weight (B) that serves as the condition for the fan to rotate at full speed is set according to the paper weight classification (A) of the paper used. A: 91 to 105g/m2 => B: 104g/m2 A: 106 to 150 g/m2 => B: 149 g/m2 A: 151 to 180 g/m2 => B: 179 g/m2 A: 181 to 220 g/m2 => B: 219 g/m2 A: 221 to 256 g/m2 => B: 255 g/m2 A: 257 to 300 g/m2 => B: 299 g/m2

COPIER > ADJUST > FEED-ADJ		
ADJ-MDK1		Write pstn in horz scan:Multi Deck(Upr)
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Multi Deck (Upper) (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1mm. +: Left margin becomes larger (An image moves to the right.) -: Left margin becomes smaller (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
ADJ-MDK2		Write pstn in horz scan:Multi Deck(Mid)
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Multi Deck (Middle) (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1mm. +: Left margin becomes larger (An image moves to the right.) -: Left margin becomes smaller (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
ADJ-MDK3		Write pstn in horz scan:Multi Deck(Lowr)
Lv.1	Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Multi Deck (Lower) (paper width is within 320 mm.) As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1mm. +: Left margin becomes larger (An image moves to the right.) -: Left margin becomes smaller (An image moves to the left.) When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case	When replacing the DC Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the paper width exceeds 320 mm, execute mechanical adjustment.
	Display/adj/set range	-100 to 100
	Unit	mm
	Default value	0
REG-H2		Rgst start timing adj: Heavy,1/3 speed
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding heavy paper at 1/3 speed. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller (An image moves upward.) -: Left margin becomes larger (An image moves downward.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
REG-S		Rgst start timing adj:Coated, 1/3,1/2SPD
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor in the case of slow feeding of coated paper at 1/3 speed in iR-ADV C9xxx. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller (An image moves upward.) -: Left margin becomes larger (An image moves downward.) When Productivity Priority mode is selected in user mode, timing to turn ON at 1/2 speed is changed and the margin is adjusted.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
	Related user mode	Function Settings > Common > Print Settings > Coated Productivity/ Image Quality Priority

COPIER > ADJUST > FEED-ADJ		
REG-MF		Rgst start timing adj: MP Tray, Plain
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding plain paper from the Multi-purpose Tray. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller (An image moves upward.) -: Left margin becomes larger (An image moves downward.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
REG-MFH1		Rgst start tmg adj: MP Tray,Hvy,1/2 SPD
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding heavy paper at 1/2 speed from the Multi-purpose Tray. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller (An image moves upward.) -: Left margin becomes larger (An image moves downward.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
REG-MFH2		Rgst start tmg adj: MP Tray,Hvy,1/3 SPD
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding heavy paper at 1/3 speed from the Multi-purpose Tray. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller (An image moves upward.) -: Left margin becomes larger (An image moves downward.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

COPIER > ADJUST > FEED-ADJ		
REG-MFS		Rgst start tmg:MP Tray,Coated,1/3,1/2SPD
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding coated paper at 1/3 speed from the Multi-purpose Tray in iR-ADV C9xxx. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller (An image moves upward.) -: Left margin becomes larger (An image moves downward.) When Productivity Priority mode is selected in user mode, timing to turn ON at 1/2 speed is changed and the margin is adjusted.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
	Related user mode	Function Settings > Common > Print Settings > Coated Productivity/ Image Quality Priority
PFIX-SPD		Adj of Pre-fix Feed Motor speed
Lv.2	Details	To adjust the speed of the Pre-fixing Feed Motor. As the value is incremented by 1, the speed is increased by 0.1%. +: The speed is increased. -: The speed is decreased. Increase the value (speed) if a jam occurs as the result that the trailing edge of thin paper or recycled paper winds around the Secondary Transfer Outer Roller. If the value is too large, the arch between the pre-fixing feed and fixing processes becomes too large, and consequently an image failure and/or jam might occur.
	Use case	When the trailing edge of thin paper or recycled paper winds around the Secondary Transfer Outer Roller, and a jam occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	%
	Default value	0

COPIER > ADJUST > FEED-ADJ		
EXT-SPD		Adj of Delivery Motor speed
Lv.2	Details	To adjust the speed of the Delivery Motor. The rotation speed of the Outer Delivery Roller changes in the case of the straight delivery and duplex mode. As the value is incremented by 1, the speed is increased by 0.5%. +: The speed is increased. -: The speed is decreased. If the value is too large, paper is pulled by both the delivery side and fixing side, and consequently noise might occur and/or the motor might become out of sync. If the value is too small, arch is created between the Outer Delivery Roller and Fixing Assembly, and consequently a jam due to paper bending might occur.
	Use case	- When uneven gloss occurs - When noise is generated from the Outer Delivery Drive Assembly
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-5 to 5
	Unit	%
	Default value	0

COPIER > ADJUST > FEED-ADJ		
TBLT-SPD		Fine adjustment of ITB speed
Lv.1	Details	To make a fine adjustment of the ITB speed to alleviate blur image (random uneven pitch). When the speed is changed, image magnification in the vertical scanning direction is changed. As the value is incremented by 1, speed of the ITB Drive Motor is increased by 0.025%. +: The speed is increased. -: The speed is decreased. Increase the speed (1 to 4) when blur image occurs. The adjustment result is reflected to 1/1 speed, 1/2 speed, and 1/3 speed.
	Use case	When blur image (random uneven pitch) occurs
	Adj/set/operate method	1) Enter the setting value (1 to 4; switch negative/positive by -/+ key) and press OK key. 2) Output an halftone image. If blur image is alleviated, execute step 3 and later. If not, change the setting value to 5 to 8, and check again. 3) As needed, change the magnification in the vertical scanning direction in “Fine Adjust Zoom” in user mode. 4) As needed, change the leading edge margin with REGIST in service mode. 5) Adjust the color displacement in the vertical scanning direction in “Auto Correct Color Mismatch” in user mode.
	Caution	- The operation is enabled when the setting value of COPIER > OPTION > IMG-TR > ITB-TYPE is “1”. - If the setting value is out of the range between -4 and 0, banding of other pitch might get worse. - After execution, check magnification in the vertical scanning direction and leading edge margin, and then execute auto registration.
	Display/adj/set range	-30 to 30(-30 to -9,9 to 30:Not used)
	Unit	%
	Default value	0
	Related service mode	COPIER> OPTION> IMG-TR> ITB-TYPE COPIER> ADJUST> FEED-ADJ> REGIST
	Related user mode	Preferences > Paper Settings > Set Paper Type Management > Details/Edit > Adjust Image Position > Fine Adjust Zoom Adjustment/ Maintenance> Adjust Image Quality> Auto Correct Color Mismatch

COPIER > ADJUST > FEED-ADJ		
REG-DUPS		Rgst start tmg: Coated(2nd), 1/3 ,1/2SPD
Lv.1	Details	To adjust the top margin by changing the timing to turn ON the Registration Motor when feeding coated paper at 1/3 speed. As the value is incremented by 1, the margin on the left edge of paper is increased by 0.1 mm. +: Top margin becomes smaller. (An image moves upward.) -: Top margin becomes larger. (An image moves downward.) When Productivity Priority mode is selected in user mode, timing to turn ON at 1/2 speed is changed and the margin is adjusted.
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
	Related user mode	Function Settings > Common > Print Settings > Coated Productivity/ Image Quality Priority

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■ CST-ADJ

COPIER > ADJUST > CST-ADJ		
MF-A4R		Adj of MP Tray A4R paper width
Lv.1	Details	To adjust the width of A4R paper in the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A4R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When registering a new value
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A4R
MF-A6R		Adj of MP Tray A6R paper width
Lv.1	Details	To adjust the width of A6R paper in the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A6R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When registering a new value
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A6R

COPIER > ADJUST > CST-ADJ		
MF-A4		Adj of MP Tray A4 paper width
Lv.1	Details	To adjust the width of A4 paper in the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Multi-purpose Tray Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A4.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When registering a new value
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A4
MDK1-A4		Adj of Multi Deck (Upper) A4 paper width
Lv.1	Details	To adjust the width of A4 size paper in the Multi Deck (Upper). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A4.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A4

COPIER > ADJUST > CST-ADJ		
MDK1-A5R		Adj of Multi Deck(Upper) A5R paper width
Lv.1	Details	To adjust the width of A5R size paper in the Multi Deck (Upper). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A5R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A5R
MDK2-A4		Adj of Multi Deck (Mid) A4 paper width
Lv.1	Details	To adjust the width of A4 size paper in the Multi Deck (Middle). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A4.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A4

COPIER > ADJUST > CST-ADJ		
MDK2-A5R		Adj of Multi Deck (Mid) A5R paper width
Lv.1	Details	To adjust the width of A5R size paper in the Multi Deck (Middle). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A5R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A5R
MDK3-A4		Adj of Multi Deck (Lower) A4 paper width
Lv.1	Details	To adjust the width of A4 size paper in the Multi Deck (Lower). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A4.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A4

COPIER > ADJUST > CST-ADJ		
MDK3-A5R		Adj of Multi Deck(Lower) A5R paper width
Lv.1	Details	To adjust the width of A5R size paper in the Multi Deck (Lower). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When replacing the Paper Width Detection PCB or registering a new value, execute COPIER> FUNCTION> CST> A5R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After the setting value is changed, write the changed value in the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> FUNCTION> CST> A5R

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■ MISC

COPIER > ADJUST > MISC		
SEG-ADJ		Set criteria for text/photo: front side
Lv.1	Details	To set the judgment level of text/photo original in Text/Photo/Map mode. As the value is larger, the original is more likely judged as a photo document, and as the value is smaller, the original is more likely judged as a text document.
	Use case	To set the judgment level of text/photo original in Text/Photo/Map mode. As the value is increased, the original tends to be detected as a photo document, and as the value is decreased, the original tends to be detected as a text document.
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service. Take necessary action in accordance with the instructions from the QA Center.
	Display/adj/set range	-4 to 4
	Default value	0
K-ADJ		Set criteria for black text: front side
Lv.1	Details	To set the judgment level of black characters at text processing. As the value is larger, the text tends to be judged as black.
	Use case	When preferring the text to be judged as black
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
ACS-ADJ		Set criteria for B&W/color in ACS:front
Lv.1	Details	To set the judgment level of B&W/color original in ACS mode. As the value is increased, the original tends to be detected as a B&W document, and as the value is decreased, the original tends to be detected as a color document.
	Use case	When adjusting the color recognition level in ACS mode
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0

COPIER > ADJUST > MISC		
ACS-EN		Set judgment area in ACS mode:front
Lv.2	Details	To set the judgment area in ACS mode. As the value is larger, the judgment area is widened.
	Use case	When adjusting the judgment area in ACS mode
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	1
ACS-CNT		Set jdgmt pixel count area in ACS:front
Lv.2	Details	To set the area where the pixel is counted to judge the color presence in ACS mode. As the value is larger, the judgment area is widened.
	Use case	When adjusting the area where the pixel is counted to judge the color presence in ACS mode
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	0
ACS-EN2		Set ACS mode jdgmt area in DADF mode
Lv.2	Details	To set the judgment area in ACS mode at DADF reading. As the value is larger, the judgment area is widened.
	Use case	When adjusting the judgment area in ACS mode at DADF reading
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	1
ACS-CNT2		Set ACS jdgmt pixel count area in DADF
Lv.2	Details	To set the area where the pixel is counted to judge the color presence in ACS mode at DADF reading. As the value is larger, the judgment area is widened.
	Use case	When adjusting the area where the pixel is counted to judge the color presence in ACS mode at DADF reading
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	0

COPIER > ADJUST > MISC		
WT-ER-LV		Setting of Drum Cleaning Motor speed
Lv.1	Details	To set the speed of Drum Cleaning and Waste Toner Feed Drive Motor (M30). When 10mm uneven pitch occurs, accelerate the speed.
	Use case	When 10mm uneven pitch occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 3 0: 120%, 1: 150%, 2: 160%, 3: 170%
	Default value	0
REOS-PG		Set Reos processing coeffct at 1200dpi
Lv.2	Details	To set an optimal processing coefficient for 1200dpi print. Print PG of the type 55 in COPIER> TEST> PG> TYPE, check the images in the 4 areas of this PG, and specify the number of the area in which the character proportion and line width become optimum in the case of PDL1200 dpi setting. After the setting is done, output the vertical and horizontal patterns with 3 dots and 10 spaces, which are the same as the PG above, in 1200 dpi, and confirm that the result is the same as the specified area.
	Adj/set/operate method	1) Enter the setting value and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 4
	Default value	2
	Related service mode	COPIER> TEST> PG> TYPE
SEG-ADJ3		Set criteria for text/photo: back side
Lv.1	Details	To set the judgment level of text/photo original in Text/Photo/Map mode (back side at duplex reading with 1 path). As the value is larger, the original is more likely judged as a photo document, and as the value is smaller, the original is more likely judged as a text document.
	Use case	When adjusting the classification level of text and photo in Text/Photo/Map mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-4 to 4
	Default value	0

COPIER > ADJUST > MISC		
K-ADJ3		Set Bk text jdgmt stdrd: back side
Lv.1	Details	To set the judgment level of black characters at text processing (back side at duplex reading with 1 path). As the value is increased, the text tends to be detected as black.
	Use case	When preferring the text to be judged as black (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
ACS-ADJ3		Set criteria for B&W/color in ACS:back
Lv.1	Details	To set the judgment level of B&W/color original in ACS mode (back side at duplex reading with 1 path). As the value is increased, the original tends to be detected as a B&W document, and as the value is decreased, the original tends to be detected as a color document.
	Use case	When adjusting the color recognition level in ACS mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
ACS-EN3		Set judgment area in ACS mode:back
Lv.2	Details	To set the judgment area in ACS mode (back side at duplex reading with 1 path). As the value is larger, the judgment area is widened.
	Use case	When adjusting the judgment area in ACS mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	1
ACS-CNT3		Set jdgmt pixel count area in ACS:back
Lv.2	Details	To set the area where the pixel is counted to judge the color presence in ACS mode (back side at duplex reading with 1 path). As the value is larger, the judgment area is widened.
	Use case	When adjusting the area where the pixel is counted to judge the color presence in ACS mode (back side at duplex reading with 1 path)
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-2 to 2
	Default value	0

COPIER > ADJUST > MISC		
SH-ADJ		Adjustment of sharpness: front side
Lv.1	Details	To adjust the sharpness of the images which are set in the user mode. - Image to be read in the copyboard reading mode - Image on the first side of a document to be read in the reverse-path duplex stream reading mode - Image on the first side of a document to be read in the 1-path duplex stream reading mode As the value is larger, the image gets sharper. If the value is too large, moire is likely to occur in an output image of COPY and SEND. To match the image quality with that of the second side in the 1-path duplex stream reading mode, decrease the value when moire on the first side is stronger than the second side and increase the value when it is weaker.
	Use case	When moire frequently occurs on images of COPY and SEND output
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
	Related service mode	COPIER> ADJUST> MISC> SH-ADJ2
SH-ADJ2		Adjustment of sharpness: back side
Lv.1	Details	To adjust the sharpness of images on the second side of a document, which is set in the user mode, in the 1-path duplex stream reading mode. As the value is larger, the image gets sharper. If the value is too large, moire is likely to occur in an output image of COPY and SEND. To match the image quality with that of the second side in the 1-path duplex stream reading mode, decrease the value when moire on the first side is stronger than the second side, and increase the value when it is weaker.
	Use case	When moire frequently occurs on images of COPY and SEND output
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-3 to 3
	Default value	0
	Related service mode	COPIER> ADJUST> MISC> SH-ADJ

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EXP-LED

COPIER > ADJUST > EXP-LED		
PR-EXP-Y		Setting of Y Pre-exposure LED current
Lv.2	Details	To set the current of the Cleaning Pre-exposure LED (Y). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-10 to 10
	Unit	mA
	Default value	0
PR-EXP-M		Setting of M Pre-exposure LED current
Lv.2	Details	To set the current of the Cleaning Pre-exposure LED (M). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-10 to 10
	Unit	mA
	Default value	0
PR-EXP-C		Setting of C Pre-exposure LED current
Lv.2	Details	To set the current of the Cleaning Pre-exposure LED (C). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	-10 to 10
	Unit	mA
	Default value	0

COPIER > ADJUST > EXP-LED		
PR-EXP-K		Setting of Bk Pre-exposure LED current
Lv.2	Details	To set the current of the Cleaning Pre-exposure LED (Bk). Increase the value when taking a measure for drum ghost. Decrease the value when potential is not applied well.
	Use case	- When drum ghost is significant (drum pitch is not correct) - When potential is not applied well
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 2 0: 40 mA, 1: 80 mA, 2: 80 mA
	Unit	mA
	Default value	0

T-8-44

FUNCTION

INSTALL

COPIER > FUNCTION > INSTALL		
STIR-Y		Stirring of Y color developer
Lv.1	Details	To stir developer in the Y Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	60sec
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-M, STIR-C, STIR-K, STIR-4
STIR-M		Stirring of M color developer
Lv.1	Details	To stir developer in the M Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	60sec
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-C, STIR-K, STIR-4
STIR-C		Stirring of C color developer
Lv.1	Details	To stir developer in the C Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	60sec
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-K, STIR-4
STIR-K		Stirring of Bk color developer
Lv.1	Details	To stir developer in the Bk Developing Assembly.
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	60sec
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-C, STIR-4

COPIER > FUNCTION > INSTALL		
STIR-4		Stirring of all color developer
Lv.1	Details	To stir developer in the Developing Assemblies of 4 colors (Y/M/C/Bk).
	Use case	- At installation of the machine - When an image failure occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	60sec
	Related service mode	COPIER> FUNCTION> INSTALL> STIR-Y, STIR-M, STIR-C, STIR-K
SPLY-H-Y		Supply of Y toner to Supply Screw
Lv.1	Details	Supply Y color toner from the Hopper to the Supply Screw.
	Use case	- At installation - When replacing the Hopper
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press OK key to stop operation.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
SPLY-H-M		Supply of M toner to Supply Screw
Lv.1	Details	Supply M color toner from the Hopper to the Supply Screw.
	Use case	- At installation - When replacing the Hopper
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press OK key to stop operation.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
SPLY-H-C		Supply of C toner to Supply Screw
Lv.1	Details	Supply C color toner from the Hopper to the Supply Screw.
	Use case	- At installation - When replacing the Hopper
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press OK key to stop operation.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
SPLY-H-K		Supply of Bk toner to Supply Screw
Lv.1	Details	Supply Bk color toner from the Hopper to the Supply Screw.
	Use case	- At installation - When replacing the Hopper
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press OK key to stop operation.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0

COPIER > FUNCTION > INSTALL		
SPLY-H-4		Supply of 4 colors toner to Supply Screw
Lv.1	Details	Supply 4 colors (Y/M/C/Bk) toner from the Hopper to the Supply Screw.
	Use case	- At installation - When replacing the Hopper
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press OK key to stop operation.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
STRD-POS		Scan position auto adj in DADF mode
Lv.1	Details	To adjust the DADF scanning position automatically.
	Use case	At DADF installation/uninstallation
	Adj/set/operate method	1) Close the DADF. 2) Select the item, and then press OK key. The operation automatically stops after the adjustment. 3) Write the value displayed by COPIER> ADJUST> ADJ-XY> STRD-POS in the service label.
	Caution	Write the adjusted value in the service label.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
	Related service mode	COPIER> ADJUST> ADJ-XY> STRD-POS
CARD		Card number setting
Lv.1	Details	To set the card number to be used for Card Reader. A series of numbers from the entered number to the number of cards specified by CARD-RNG can be used.
	Use case	- At installation of the Card Reader - After replacing the HDD
	Adj/set/operate method	1) Enter the number, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The card management information (department ID and password) is initialized.
	Display/adj/set range	0 to 2001
	Default value	0
	Related service mode	COPIER> OPTION> FNC-SW> CARD-RNG (LEVEL2)
KEY		ON/OFF of management key function
Lv.1	Details	To set whether to enable or disable the management key function.
	Use case	At installation
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

COPIER > FUNCTION > INSTALL		
INISET-Y		Exe of Y Dev Ass'y initial install mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the Y Developing Assembly. 1. Patch light intensity correction 2. Background correction 3. Potential control 4. Idle rotation of the Developing Assembly 5. Initialization of the Toner Density Sensor 6. Initialization of the Patch Sensor 7. Counter reset of the Developing Assembly After execution, the AINR-OFF setting automatically returns to "0: OFF".
	Use case	When replacing the Y Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- When installing the machine or replacing the Developing Assembly of other color, do not use this item. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Default value	0
	Required time	155sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-M, INISET-C, INISET-K, INISET-4, AINR-OFF
INISET-M		Exe of M Dev Ass'y initial install mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the M Developing Assembly. 1. Patch light intensity correction 2. Background correction 3. Potential control 4. Idle rotation of the Developing Assembly 5. Initialization of the Toner Density Sensor 6. Initialization of the Patch Sensor 7. Counter reset of the Developing Assembly After execution, the AINR-OFF setting automatically returns to "0: OFF".
	Use case	When replacing the M Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- When installing the machine or replacing the Developing Assembly of other color, do not use this item. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Default value	0
	Required time	155sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-Y, INISET-C, INISET-K, INISET-4, AINR-OFF

COPIER > FUNCTION > INSTALL		
INISET-C		Exe of C Dev Ass'y initial install mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the C Developing Assembly. 1. Patch light intensity correction 2. Background correction 3. Potential control 4. Idle rotation of the Developing Assembly 5. Initialization of the Toner Density Sensor 6. Initialization of the Patch Sensor 7. Counter reset of the Developing Assembly After execution, the AINR-OFF setting automatically returns to "0: OFF".
	Use case	When replacing the C Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- When installing the machine or replacing the Developing Assembly of other color, do not use this item. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Default value	0
	Required time	155sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-Y, INISET-M, INISET-K, INISET-4, AINR-OFF
AINR-OFF		ON/OFF of warm-up rotation deactivation
Lv.1	Details	To set ON/OFF to disable execution of warm-up rotation. Warm-up rotation can be omitted when turning OFF/ON the power to check the image, etc. after the adjustment of warm-up rotation, etc. This mode is executed when warm-up rotation is not needed.
	Use case	- At installation - When replacing the Developing Assembly
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to enable the operation (cancel disabling) before the machine is used by the user. The operation is automatically enabled by executing INISET-Y/M/C/K/4.
	Display/adj/set range	0: OFF (warm-up rotation enabled), 1: ON (warm-up rotation disabled)
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-Y, INISET-M, INISET-C, INISET-K, INISET-4

COPIER > FUNCTION > INSTALL		
E-RDS		Set use/no use of Embedded-RDS function
Lv.1	Details	To set whether to use the Embedded-RDS function.
	Use case	When using Embedded-RDS
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	0 to 1 0: Not used, 1: Used (All the counter information is sent.)
	Default value	0
	Related service mode	COPIER> FUNCTION> INSTALL> RGW-PORT, COM-TEST, COM-LOG, RGW-ADR
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol
RGW-PORT		Set port number of Sales Co's server
Lv.1	Details	To set the port number of the sales company's server to be used for Embedded-RDS.
	Use case	When using Embedded-RDS
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	1 to 65535
	Default value	443
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, COM-TEST, COM-LOG, RGW-ADR
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol
COM-TEST		Dspl connect result w/ Sales Co's server
Lv.1	Details	To display the result of the connection test with the sales company's server.
	Use case	When using Embedded-RDS
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	During operation: ACTIVE, When connection is completed: OK, When connection is failed: NG
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-LOG, RGW-ADR
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol

COPIER > FUNCTION > INSTALL		
COM-LOG		Dspl connect error w/ Sales Co's server
Lv.1	Details	To display error information when the connection with the sales company's server failed.
	Use case	When using Embedded-RDS
	Adj/set/operate method	Display only
	Caution	Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	Year, date, time, error code, error detail information (maximum 128 characters)
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-TEST, RGW-ADR
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol
RGW-ADR		URL setting of Sales Company's server
Lv.1	Details	To set the URL of the sales company's server to be used for Embedded-RDS.
	Use case	When using Embedded-RDS
	Adj/set/operate method	1) Select the URL. 2) Enter the URL, and then press OK key.
	Caution	- Do not use Shift-JIS character strings. - Be sure to use E-RDS, RGW-PORT, COM-TEST, COM-LOG and RGW-ADR as a set.
	Display/adj/set range	URL
	Default value	https://a01.ugwdevice.net/ugw/agentif010
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, COM-TEST, COM-LOG
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol
CNT-DATE		Set counter send start date to SC server
Lv.1	Details	To set the year, month, date, hour and minute to send counter information to the sales company's server. This is displayed only when the Embedded-RDS third-party extended function is available.
	Use case	When the Embedded-RDS third-party expanded function is available
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	YYYYMMDDHHMM (12 digits) YYYY: Year, MM: Month, DD: Date, HH: Hour, MM: Minute
	Default value	0
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol

COPIER > FUNCTION > INSTALL		
CNT-INTV		Set counter send interval to SC server
Lv.1	Details	To set the interval of sending counter information to the sales company's server in a unit of one hour. This is displayed only when the Embedded-RDS third-party extended function is available.
	Use case	- When restarting potential control after execution of COPIER> OPTION> IMG-FIX> PO-CNT - When the D-max control condition is changed
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 168 (=1 week)
	Default value	24
	Supplement/memo	Embedded-RDS: Function to send device information such as the device counter, failure, and consumables to the sales company's server via SOAP protocol
INISET-4		All color Dev Ass'y initial instal mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the Developing Assemblies of 4 colors (Y, M, C, Bk). 1. Patch light intensity correction 2. Background correction 3. Potential control 4. Idle rotation of the Developing Assembly 5. Initialization of the Toner Density Sensor 6. Initialization of the Patch Sensor 7. Counter reset of the Developing Assembly After execution, the AINR-OFF setting automatically returns to "0: OFF".
	Use case	- At installation - When replacing the Developing Assemblies of all colors
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- Use this item only when replacing Developing Assemblies of 4 colors simultaneously. - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	155sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-Y, INISET-M, INISET-C, INISET-K, AINR-OFF

COPIER > FUNCTION > INSTALL		
INISET-K		Exe of Bk Dev Ass'y initial instal mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the Bk Developing Assembly. 1. Patch light intensity correction 2. Background correction 3. Potential control 4. Idle rotation of the Developing Assembly 5. Initialization of the Toner Density Sensor 6. Initialization of the Patch Sensor 7. Counter reset of the Developing Assembly After execution, the AINR-OFF setting automatically returns to "0: OFF".
	Use case	When replacing the Bk Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- When installing the machine or replacing the Developing Assembly of other color, do not use this item. . - Execute this item after setting "AINR-OFF" to "1: ON".
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	155sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISET-Y, INISET-M, INISET-C, INISET-4, AINR-OFF
INIT-ITB		Creation of ITB edge profile
Lv.1	Details	To create the initial ITB edge profile to be used for the ITB displacement correction control. The initial ITB edge profile is created after neutral position of the Steering Roller is determined by the ITB displacement correction control.
	Use case	When replacing the ITB
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK
	Default value	0
	Required time	3min

COPIER > FUNCTION > INSTALL		
BRWS-ACT		ON/OFF of service browser
Lv.1	Details	To set ON/OFF of service browser. ON/OFF of service browser switches whenever the main power switch is turned OFF/ON after execution. If connection with the UGW server is successful, "OK!" is displayed. If "NG!" is displayed, execute a communication test using COM-TEST. The setting is enabled after reboot. Whether the service browser is ON or OFF can be checked in COPIER> DISPLAY> USER> BRWS-STS (1: ON, 2: OFF).
	Use case	- When using the service browser - At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	After execution, turn OFF/ON the main power switch. After reboot, be sure to check the usage status in COPIER> DISPLAY> USER> BRWS-STS.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
	Related service mode	COPIER> FUNCTION> INSTALL> COM-TEST COPIER> DISPLAY> USER> BRWS-STS
CDS-CTL		Set country/area when using CDS
Lv.1	Details	To set country/area to enable CDS.
	Use case	When enabling CDS
	Display/adj/set range	Country/area set in COPIER> OPTION> FNC-SW> CONFIG, CA (Canada), LA (Latin America) and HK (Hong Kong)
	Default value	The value differs according to the location.
	Related service mode	COPIER> OPTION> FNC-SW> CONFIG
	Supplement/memo	CDS: Contents Delivery System
TD-AD-Y		Setting of Y-toner density
Lv.1	Details	To set toner density of the Y Developing Assembly to optimal value at that time.
	Use case	When replacing to a new Y Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Use this item only when replacing the Developing Assembly.
	Default value	0
	Related service mode	COPIER> FUNCTION> TD-AD-M, TD-AD-C, TD-AD-K, TD-AD-4C
TD-AD-M		Setting of M-toner density
Lv.1	Details	To set toner density of the M Developing Assembly to optimal value at that time.
	Use case	When replacing to a new M Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Use this item only when replacing the Developing Assembly.
	Default value	0
	Related service mode	COPIER> FUNCTION> TD-AD-Y, TD-AD-C, TD-AD-K, TD-AD-4C

COPIER > FUNCTION > INSTALL		
TD-AD-C		Setting of C-toner density
Lv.1	Details	To set toner density of the C Developing Assembly to optimal value at that time.
	Use case	When replacing to a new C Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Use this item only when replacing the Developing Assembly.
	Default value	0
	Related service mode	COPIER> FUNCTION> TD-AD-Y, TD-AD-M, TD-AD-K, TD-AD-4C
TD-AD-K		Setting of Bk-toner density
Lv.1	Details	To set toner density of the Bk Developing Assembly to optimal value at that time.
	Use case	When replacing to a new Bk Developing Assembly
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Use this item only when replacing the Developing Assembly.
	Default value	0
	Related service mode	COPIER> FUNCTION> TD-AD-Y, TD-AD-M, TD-AD-C, TD-AD-4C
TD-AD-4C		Setting of all color toner density
Lv.1	Details	To set toner density of the Developing Assemblies of all colors to 10%.
	Use case	When replacing to a new Developing Assemblies for all colors
	Adj/set/operate method	Select the item, and then press OK key.
	Default value	0
	Related service mode	COPIER> FUNCTION> TD-AD-Y, TD-AD-M, TD-AD-C, TD-AD-K
HD-CRYP		Exe HDD Encrypt Board ini install mod
Lv.1	Details	To automatically execute operation necessary for initial installation of the HDD Encryption Board. By turning OFF the main power switch after execution, the HDD Encryption Board can be installed.
	Use case	At installation of the HDD Encryption Board
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
BIT-SVC		OFF/ON of Web Service of eRDS
Lv.1	Details	To switch ON/OFF of the Web Service function of eRDS. When OFF is selected, authentication information cannot be obtained from eRDS.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0:OFF, 1:ON
	Default value	1

T-8-45

■ CCD

COPIER > FUNCTION > CCD		
DF-WLVL1		White level adj in book mode: color
Lv.1	Details	To adjust the white level for copyboard scanning automatically by setting the paper which is usually used by the user on the Copyboard Glass.
	Use case	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Set paper on the Copyboard Glass. 2) Select the item, and then press OK key.
	Caution	Be sure to execute DF-WLVL2 in a row.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL2 COPIER> ADJUST> CCD> DFTBK-R, DFTBK-G, DFTBK-B
DF-WLVL2		White level adj in DADF mode: color
Lv.1	Details	To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF.
	Use case	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution	Be sure to execute this item after DF-WLVL1.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> CCD> DF-WLVL1 COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B, DFTAR2-R, DFTAR2-G, DFTAR2-B, DFTAR-BW, DFTAR2BW, DFTBK-R, DFTBK-G, DFTBK-B

COPIER > FUNCTION > CCD		
DF-LNR		Deriving of DADF front/back linearity
Lv.1	Details	To derive the front/back side linearity characteristics in the use of DADF based on the scanning data of the DADF complex chart (No. 2, No. 10).
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the value of the reader's service label. (under COPIER> ADJUST> CCD) DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10 2) Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> DFCH-R2, DFCH-G2, DFCH-B2, DFCH-K2, DFCH-R10, DFCH-G10, DFCH-B10, DFCH-K10, DFCH2R2, DFCH2G2, DFCH2B2, DFCH2K2, DFCH2R10, DFCH2G10, DFCH2B10, DFCH2K10
MTF-CLC		Deriving of MTF filter coefficient
Lv.1	Details	To derive the MTF filter coefficient to be set for ASIC based on the MTF value of the DADF complex chart.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the value of the reader's service label. (under COPIER> ADJUST> CCD) MTF-MXX, SXX, MTR2-MXX, SXX 2) Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> MTF-M1 to M12, MTF-S1 to S12, MTF2-M1 to M12, MTF2-S1 to S12
DF-WLVL3		White level adj in book mode (B&W)
Lv.1	Details	To adjust the white level for copyboard scanning automatically by setting the paper which is usually used by the user on the Copyboard Glass.
	Use case	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Set paper on the Copyboard Glass. 2) Select the item, and then press OK key.
	Caution	Be sure to execute DF-WLVL4 in a row.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> DFTBK-BW

COPIER > FUNCTION > CCD		
DF-WLVL4		White level adj in DADF mode (B&W)
Lv.1	Details	To adjust the white level for DADF scanning automatically by setting the paper which is usually used by the user on the DADF.
	Use case	- When replacing the Copyboard Glass - When replacing the Scanner Unit - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution	Be sure to execute this item after DF-WLVL3.
	Display/adj/set range	During operation: ACTIVE, When the operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z
BW-TGT		Set of B&W shading target value
Lv.1	Details	After the white level data (X/Y/Z) for the Standard White Plate is set, read the Standard White Plate and set the black and white shading target value.
	Use case	When replacing the Copyboard Glass/Scanner Unit
	Adj/set/operate method	1) Select the item, and then press OK key.
	Caution	Be sure to execute this item after execution of COPIER> ADJUST> CCD>W-PLT-X, W-PLT-Y, W-PLT-Z.
	Display/adj/set range	1 to 2047
	Related service mode	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Y, W-PLT-Z

T-8-46

LASER

COPIER > FUNCTION > LASER		
LD-ADJ-Y		Restore Y Skew Crrct Motor initial pstn
Lv.2	Details	When Y-color skew volume in vertical scanning direction is larger than estimation, the Skew Correction Motor (Y) is locked, and color displacement cannot be corrected even when color displacement correction control is executed. This item places the Skew Correction Motor (Y) to the center position in such cases.
	Use case	When replacing the Laser Scanner Unit to identify the failure position
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	10sec
LD-ADJ-M		Restore M Skew Crrct Motor initial pstn
Lv.2	Details	When M-color skew volume in vertical scanning direction is larger than estimation, the Skew Correction Motor (M) is locked, and color displacement cannot be corrected even when color displacement correction control is executed. This item places the Skew Correction Motor (M) to the center position in such cases.
	Use case	When replacing the Laser Scanner Unit to identify the failure position
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	10sec
LD-ADJ-C		Restore C Skew Crrct Motor initial pstn
Lv.2	Details	When C-color skew volume in vertical scanning direction is larger than estimation, the Skew Correction Motor (C) is locked, and color displacement cannot be corrected even when color displacement correction control is executed. This item places the Skew Correction Motor (C) to the center position in such cases.
	Use case	When replacing the Laser Scanner Unit to identify the failure position
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Required time	10sec

T-8-47

DPC

COPIER > FUNCTION > DPC		
DPC		Execution of potential control
Lv.1	Details	To execute potential control for the Photosensitive Drum manually. (It is usually executed automatically.) When this item is executed, the same condition is set for development of plain paper and coated paper.
	Use case	When checking potential control operation
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Since the same condition is set for development of plain paper and coated paper groups, be sure to execute D-max control for both groups after execution of this item.
	Default value	0
	Required time	30sec
OFST		Potential adjustment of Potential Sensor
Lv.1	Details	To adjust the detection potential offset value of the Potential Sensor automatically.
	Use case	- When replacing the Photosensitive Sensor - At diagnosis for a failure of the Photosensitive Sensor
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	An error is displayed when disconnection/connection failure/ installation failure occurs to the Potential Sensor at the time of replacement. In this case, manually set the value to 0 by EPOTOFST and then make an adjustment.
	Default value	0
	Required time	4sec
	Related service mode	COPIER> ADJUST> V-CONT> EPOTOFST

COPIER > FUNCTION > DPC		
DRM-RSET		Exe of all color Drums replacement mode
Lv.1	Details	When replacement of Drum Unit is completed within 30 minutes, warm-up rotation may not be executed at power-off/on because of high fixing temperature. In such cases, drum potential becomes unstable, causing an image failure to occur. To prevent this symptom, this item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to drum counter for all colors, total charging time, target Vd values for potential control and drum durability are reset.
	Use case	When replacing the Drum Units for all colors
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution	Be sure to execute this item after replacement of the Drum Units for all colors.
	Display/adj/set range	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value	0
	Required time	2min
	Related service mode	COPIER> FUNCTION> DPC> DRMRSETY, DRMRSETM, DRMRSETC, DRMRSETK
DRMRSETY		Forcible exe of Y Drum replacement mode
Lv.1	Details	When replacement of Drum Unit is completed within 30 minutes, warm-up rotation may not be executed at power-off/on because of high fixing temperature. In such cases, drum potential becomes unstable, causing an image failure to occur. To prevent this symptom, this item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to Y drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case	- When detection of the Drum Unit replacement has failed - When the Drum Unit used in other machine for a while is used as a dummy unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution	Use a Drum Unit that is not close to the end of life as a dummy unit. When using a Drum Unit that is close to the end of life, it affects the life of developer, etc.
	Display/adj/set range	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value	0
	Required time	2min
	Related service mode	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETM, DRMRSETC, DRMRSETK

COPIER > FUNCTION > DPC		
DRMRSETM		Forcible exe of M Drum replacement mode
Lv.1	Details	When replacement of Drum Unit is completed within 30 minutes, warm-up rotation may not be executed at power-off/on because of high fixing temperature. In such cases, drum potential becomes unstable, causing an image failure to occur. To prevent this symptom, this item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to M drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case	- When detection of the Drum Unit replacement has failed - When the Drum Unit used in other machine for a while is used as a dummy unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution	Use a Drum Unit that is not close to the end of life as a dummy unit. When using a Drum Unit that is close to the end of life, it affects the life of developer, etc.
	Display/adj/set range	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value	0
	Required time	2min
	Related service mode	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETC, DRMRSETK

COPIER > FUNCTION > DPC		
DRMRSETC		Forcible exe of C Drum replacement mode
Lv.1	Details	When replacement of Drum Unit is completed within 30 minutes, warm-up rotation may not be executed at power-off/on because of high fixing temperature. In such cases, drum potential becomes unstable, causing an image failure to occur. To prevent this symptom, this item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to C drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case	- When detection of the Drum Unit replacement has failed - When the Drum Unit used in other machine for a while is used as a dummy unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution	Use a Drum Unit that is not close to the end of life as a dummy unit. When using a Drum Unit that is close to the end of life, it affects the life of developer, etc.
	Display/adj/set range	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value	0
	Required time	2min
	Related service mode	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETM, DRMRSETK

COPIER > FUNCTION > DPC		
DRMRSETK		Forcible exe of Bk Drum replacement mode
Lv.1	Details	When replacement of Drum is completed within 30 minutes, warm-up rotation may not be executed at power-off/on because of high fixing temperature. In such cases, drum potential becomes unstable, causing an image failure to occur. To prevent this symptom, this item forcibly executes the same operation as warm-up rotation. At this time, laser power values, etc., that were corrected according to Bk drum counter, total charging time, target Vd values for potential control and drum durability are reset.
	Use case	- When detection of the Drum Unit replacement has failed - When the Drum Unit used in other machine for a while is used as a dummy unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. When the drum replacement mode is enabled, it becomes disabled automatically after execution.
	Caution	Use a Drum that is not close to the end of life as a dummy unit. When using a Drum that is close to the end of life, it affects the life of developer, etc.
	Display/adj/set range	0 to 1 0: Disabled (Not executed), 1: Enabled (Executed)
	Default value	0
	Required time	2min
	Related service mode	COPIER> FUNCTION> DPC> DRM-RSET, DRMRSETY, DRMRSETM, DRMRSETC

T-8-48

■ CST

COPIER > FUNCTION > CST		
MF-A4R		Reg Multi-purpose Tray A4R stdrd width
Lv.1	Details	To register the standard value of A4R paper width (210mm) on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A4R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Multi-purpose Tray Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Set A4R paper on the Multi-purpose Tray, and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MF-A4R, and write it down on the service label.
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A4R
MF-A6R		Reg Multi-purpose Tray A6R stdrd width
Lv.1	Details	To register the standard value of A6R paper width (105 mm) on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A6R.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Multi-purpose Tray Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Set A6R paper on the Multi-purpose Tray, and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MF-A6R, and write it down on the service label.
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A6R
MF-A4		Reg Multi-purpose Tray A4 standard width
Lv.1	Details	To register the standard value of A4 paper width (297 mm) on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-A4.
	Use case	- When replacing the DC Controller PCB/clearing RAM data - When the Multi-purpose Tray Paper Width Detection PCB is replaced or a new value is registered
	Adj/set/operate method	1) Set A4 paper on the Multi-purpose Tray, and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MF-A4, and write it down on the service label.
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MF-A4

COPIER > FUNCTION > CST		
MDK1-A4		Reg Multi Deck (Upper) A4 standard width
Lv.1	Details	To register the standard value of A4 paper width (297 mm) on the Multi Deck (Upper). Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MDK1-A4.
	Adj/set/operate method	1) Set A4 paper on the Multi Deck (Upper), and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MDK1-A4, and write it down on the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MDK1-A4
MDK1-A5R		Reg Multi Deck (Upper) A5R stdrd width
Lv.1	Details	To register the standard value of A5R paper width (148.5 mm) on the Multi Deck (Upper). Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MDK1-A5R.
	Adj/set/operate method	1) Set A5R paper on the Multi Deck (Upper), and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MDK1-A5R, and write it down on the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MDK1-A5R
MDK2-A4		Reg Multi Deck (Middle) A4 stdrd width
Lv.1	Details	To register the standard value of A4 paper width (297 mm) on the Multi Deck (Middle). Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MDK2-A4.
	Adj/set/operate method	1) Set A4 paper on the Multi Deck (Middle), and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MDK2-A4, and write it down on the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MDK2-A4

COPIER > FUNCTION > CST		
MDK2-A5R		Reg Multi Deck (Middle) A5R stdrd width
Lv.1	Details	To register the standard value of A5R paper width (148.5 mm) on the Multi Deck (Middle). Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MDK2-A5R.
	Adj/set/operate method	1) Set A5R paper on the Multi Deck (Middle), and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MDK2-A5R, and write it down on the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MDK2-A5R
MDK3-A4		Reg Multi Deck (Lower) A4 standard width
Lv.1	Details	To register the standard value of A4 paper width (297 mm) on the Multi Deck (Lower). Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MDK3-A4.
	Adj/set/operate method	1) Set A4 paper on the Multi Deck (Lower), and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MDK3-A4, and write it down on the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MDK3-A4
MDK3-A5R		Reg Multi Deck (Lower) A5R stdrd width
Lv.1	Details	To register the standard value of A5R paper width (148.5 mm) on the Multi Deck (Lower). Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MDK3-A5R.
	Adj/set/operate method	1) Set A5R paper on the Multi Deck (Lower), and set the guide so that it fits the paper width. 2) Select the item, and then press OK key. The value is registered after automatic adjustment.
	Caution	After execution, check the registered value by COPIER> ADJUST> CST-ADJ> MDK3-A5R, and write it down on the service label.
	Display/adj/set range	0 to 255
	Default value	0
	Related service mode	COPIER> ADJUST> CST-ADJ> MDK3-A5R

T-8-49

■ CLEANING

COPIER > FUNCTION > CLEANING		
TBLT-CLN		ITB cleaning
Lv.1	Details	To execute three idle rotations of the ITB and clean the ITB. The Process Unit forms toner patch on the ITB with 100mm interval (for 2 rotations) by doing the operation that is the same at image formation. The Primary Transfer Roller comes into contact with the ITB, but the Secondary Transfer Outer Roller is disengaged. This mode is stopped when the last toner patch passes through the ITB Cleaning Unit.
	Use case	- When image failure occurs periodically due to the assumption of soiled ITB - When contacting with the ITB at the time of periodical replacement, etc.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	0 to 1 0: Stop cleaning, 1: Execute cleaning
WIRE-CLN		Cleaning of Charge Wire(1-reciprocation)
Lv.1	Details	To clean the Charging Wire of the Primary Charging Wire/Pre-transfer Charging Wire simultaneously (1 reciprocation).
	Use case	- When replacing the Primary Charging Assembly/Pre-transfer charging assembly - When replacing the Charging Wire - When vertical lines occur on an image
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
TB-INSD		Cleaning inside ITB
Lv.1	Details	To execute two idle rotations of the ITB and clean inside of the ITB and Primary Transfer Roller. Both the Primary Transfer Roller and the Secondary Transfer Outer Roller are engaged with ITB. Positive/reverse bias secondary transfer high voltage is alternately applied to the Secondary Transfer Outer Roller. After the two idle rotations of the ITB, operation stops.
	Use case	- When image failure occurs periodically due to the assumption of inside ITB or Primary Transfer Roller soiling - When contacting with the inside of ITB at the time of periodical replacement
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

COPIER > FUNCTION > CLEANING		
BK-BNDEX		Toner supply to Photosensitive Drum
Lv.1	Details	To form the toner band on the Photosensitive Drum, and collect it with the Drum Cleaning Blade to decrease friction between the two. All Photosensitive Drums and the ITB perform idle rotation, and stop after toner cleaning.
	Use case	When image smear occurs due to the Drum Cleaning Blade
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
WIRE-EX		Cleaning of Charge Wire(5-reciprocation)
Lv.1	Details	To clean the Primary Charging Wire and the Pre-transfer Charging Wire simultaneously (5 reciprocations). Polish new Charging Wires to remove foreign matters or protrusions.
	Use case	- When replacing the Primary Charging Assembly/Pre-transfer Charging Assembly - When replacing the Charging Wire - When vertical lines occur on an image
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
2TR-CLN		Clean of Secondary Transfer Outer Roller
Lv.1	Details	To clean paper dust adhered on the Secondary Transfer Outer Roller. Both the Primary Transfer Roller and the Secondary Transfer Outer Roller are engaged to the ITB. The Process Unit does operation that is the same at image formation. It forms 4 toner bands which the 4 colors are laid on top of another on the ITB. The base voltage (Vb) calculated with the Secondary Transfer ATVC control is applied to the Secondary Transfer Outer Roller until the toner bands pass through, so that toner is adhered on the Secondary Transfer Outer Roller. After the toner bands passed, Secondary Transfer Outer Roller cleaning control is executed (positive/reverse bias is applied every 2 rotations of the roller). Toner is adhered on the ITB. When the toner adhered on the ITB passed through the ITB Cleaning Unit, the operation is stopped.
	Use case	- When the backside of the paper is soiled by the Secondary Transfer Outer Roller - When contacting with the Secondary Transfer Outer Roller at the time of jam processing, etc.
	Display/adj/set range	0 to 1 0: Stop cleaning, 1: Execute cleaning

T-8-50

■ FIXING

COPIER > FUNCTION > FIXING		
NIP-CHK		Check of fixing nip width
Lv.1	Details	To check whether the fixing nip width is appropriate by printing. If it is not appropriate, a fixing failure may occur.
	Use case	- When replacing the fixing-related parts (fixing Roller, Pressure Roller) - When a fixing failure occurs
	Adj/set/operate method	1) Set A4/LTR plain paper (75 to 90g/m2) on the main unit deck. 2) Select the cassette, and then press OK key. Printing is started, and a sheet is automatically stopped at the fixing nip (10 seconds) and then is automatically delivered. 3) Measure the nip width.
	Default value	0
CORE-CHK		Oprtn chck:Copper Shield Plt, Core shift
Lv.1	Details	To execute cleaning of the Copper Shield Plate, and check the operation of it.
	Use case	When checking the Copper Shield Plate control
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0

T-8-51

PANEL

COPIER > FUNCTION > PANEL		
LCD-CHK		Check of LCD Panel dot missing
Lv.1	Details	To check whether there is a missing dot on the LCD Panel of the Control Panel.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that the LCD Panel lights up in the order of white, black, red, green and blue. 3) Press STOP key to terminate checking.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
LED-CHK		Check of Control Panel LED
Lv.1	Details	To check whether the LED on the Control Panel lights up.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that the LED lights up in the order. 3) Use LED-OFF to terminate checking.
LED-OFF		Termination of Control Panel LED check
Lv.1	Details	To terminate the check of LED on the Control Panel.
	Use case	During execution of LED-CHK
	Adj/set/operate method	Select the item, and then press OK key.
KEY-CHK		Check of key input
Lv.1	Details	To check the key input on the Control Panel.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item and press the key on the Control Panel. 2) Check that the input value is displayed. 3) Cancel the selection to terminate checking.
TOUCHCHK		Adj of coordinate pstn of Touch Panel
Lv.1	Details	To adjust the coordinate position on the Touch Panel of the Control Panel.
	Use case	When replacing the LCD Panel
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Press the nine “+” keys in sequence.

T-8-52

PART-CHK

COPIER > FUNCTION > PART-CHK		
CL		Specification of operation Clutch
Lv.1	Details	To specify the Transfer Cleaning Clutch (CL1) to operate.
	Use case	When replacing the Clutch/checking the operation
	Adj/set/operate method	“1”, and then press OK key.
	Display/adj/set range	1 to 7 1: Deck Pickup Clutch (CL1) 2: Multi Deck (Upper) Pickup Clutch (CL2) 3: Multi Deck (Upper) Pullout Clutch (CL5) 4: Multi Deck (Middle) Pickup Clutch (CL3) 5: Multi Deck (Middle) Pullout Clutch (CL6) 6: Multi Deck (Lower) Pickup Clutch (CL4) 7: Multi Deck (Lower) Pullout Clutch (CL7) During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Related service mode	COPIER> FUNCTION> PART-CHK> CL-ON
CL-ON		Operation check of Clutch
Lv.1	Details	To start operation check of the Transfer Cleaning Clutch (CL1). During operation, ON/OFF is repeated with an interval of 3 seconds.
	Use case	When replacing the Clutch/checking the operation
	Adj/set/operate method	1) Drive the ITB and Drum (COPIER> FUNCTION> PART-CHK> MTR > 13) 2) Select the item, and then press OK key. 3) Check the gear of the Transfer Cleaning Assembly.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Related service mode	COPIER> FUNCTION> MISC-P> MAIN-DRV COPIER> FUNCTION> PART-CHK> CL
	Supplement/memo	Remove the Inner Cover so that the Clutch can be checked visually.

COPIER > FUNCTION > PART-CHK		
FAN		Specification of operation Fan
Lv.1	Details	To specify the Fan to operate.
	Use case	When replacing the Fan/checking the operation
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	1 to 23 1: Pre-fixing Feed Suction Fan (FM1) 2: Primary Charging Suction Fan (FM2) 3: Primary Charging Exhaust Fan (FM3) 4: Developing/Pre-transfer Charging Fan (FM4) 5: Color Cleaning Fan (FM5) 6: Fixing Heat Fan (FM6) 7: IH Power Supply Fan (FM7) 8: Power Supply Fan 1 (FM8) 9: Power Supply Fan (FM9) 10: Delivery Heat Fan 1 (FM10) 11: Delivery Heat Fan 2 (FM11) 12: Delivery Heat Fan 3 (FM12) 13: Delivery Heat Fan 4 (FM13) 14: Pressure Roller Cooling Fan (Front) (FM15) 15: Pressure Roller Cooling Fan (Rear) (FM16) 16: Hopper Cooling Fan (FM18) 17: Hopper Cooling Suction Fan (FM22) 18: Anti-adhesion Fan 1 (FM23) 19: Anti-adhesion Fan 2 (FM24) 20: Decurler Suction Fan (FM30) 21: Decurler Side Exhaust Fan (FM31) 22: Decurler Lower Exhaust Fan (FM32) 23:Pre-Fixing Feed cooling Fan (FM27) During operation: ACTIVE, When operation finished normally: OK!
	Default value	1
	Related service mode	COPIER> FUNCTION> PART-CHK> FAN-ON
FAN-ON		Operation check of Fan
Lv.1	Details	To start operation check of the Fan specified by FAN.
	Use case	When replacing the Fan/checking the operation
	Adj/set/operate method	Select the item, and then press OK key.
	Default value	0
	Related service mode	COPIER> FUNCTION> PART-CHK> FAN

COPIER > FUNCTION > PART-CHK		
MTR		Specification of operation Motor
Lv.1	Details	To specify the Motor to operate.
	Use case	When replacing the Motor/checking the operation
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	1 to 21 1: Duplex Left Motor (M32) 2: Left Deck Vertical Path Motor (M41) 3: Pre-registration Multi-purpose Tray Drive Motor (M36) 4: Registration Motor (M34) 5: Pre-fixing Feed Motor (M35) 6: Delivery Motor (M37) 7: Reverse Motor (M38) 8: Left Deck Pickup Motor (M42) 9: Right Deck Pickup Motor (M43) 10: Cassette 3 Pickup Motor (M44) 11: Cassette 4 Pickup Motor (M45) 12: Deck Pickup Motor (M1) 13: Decurler Feeding Motor 1 (M51) 14: Decurler Feeding Motor 2 (M52) 15: Cassette Vertical Path Motor (M39) 16: Right Deck Vertical Path Motor (M40) 17: Left Deck Vertical Path Motor (M41) 18: Vertical Path Upper Feed Motor (M002) 19: Vertical Path Lower Feed Motor (M003) 20: Horizontal Path Feed Motor (M004) 21: Deck Pickup Motor (M001) During operation: ACTIVE, When operation finished normally: OK!
	Default value	1
	Related service mode	COPIER> FUNCTION> PART-CHK> MTR-ON
MTR-ON		Operation check of Motor
Lv.1	Details	To start operation check of the motor specified by MTR. The operation automatically stops after operation of 5 seconds.
	Use case	When replacing the Motor/checking the operation
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	While the Toner Container Drive Motor is active, be sure to remove the Toner Container. Otherwise, toner leakage may occur in the machine.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Related service mode	COPIER> FUNCTION> PART-CHK> MTR

COPIER > FUNCTION > PART-CHK		
SL		Specification of operation solenoid
Lv.1	Details	To specify the Solenoid to operate.
	Use case	When replacing the Solenoid/checking the operation
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	1 to 10 1: Delivery Flapper Solenoid (SL2) 2: Not Used 3: Multi-purpose Tray Pickup Solenoid (SL4) 4: Right Deck Pickup Solenoid (SL5) 5: Left Deck Pickup Solenoid (SL6) 6: Cassette 3 Pickup Solenoid (SL7) 7: Cassette 4 Pickup Solenoid (SL8) 8: Multi Deck (Upper) Pickup Solenoid (SL9) 9: Multi Deck (Middle) Pickup Solenoid (SL10) 10: Multi Deck (Lower) Pickup Solenoid (SL11) During operation: ACTIVE, When operation finished normally: OK!
	Default value	1
	Related service mode	COPIER> FUNCTION> PART-CHK> SL-ON
SL-ON		Operation check of solenoid
Lv.1	Details	To start operation check of the solenoid specified by SL. The operation stops after “ON for 0.5 sec” => “OFF for 10 sec” => “ON for 0.5 sec” => “OFF for 10 sec” => “ON for 0.5 sec”.
	Use case	When replacing the Solenoid/checking the operation
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Default value	0
	Related service mode	COPIER> FUNCTION> PART-CHK> SL

T-8-53

■ CLEAR

COPIER > FUNCTION > CLEAR		
ERR		Clear of error code
Lv.1	Details	To clear error codes (E000, E001, E002, E003, E717, E719).
	Use case	At error occurrence
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Default value	0
DC-CON		RAM clear of DC Controller PCB
Lv.1	Details	To clear the RAM data of the DC Controller PCB.
	Use case	When clearing RAM data of the DC Controller PCB
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - The RAM data is cleared after the main power switch is turned OFF/ON.
	Default value	0
R-CON		RAM clear of Reader Controller PCB
Lv.1	Details	To clear the RAM data of the Reader Controller PCB.
	Use case	When clearing RAM data of the Reader Controller PCB
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Before execution of this item, be sure to output the service mode setting values by P-PRINT. After execution, enter necessary setting values. - The RAM data is cleared after the main power switch is turned OFF/ON.
	Display/adj/set range	None
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT
JAM-HIST		Clear of jam log
Lv.1	Details	To clear the jam log.
	Use case	When clearing the jam log
	Adj/set/operate method	Select the item, and then press OK key.
	Default value	0
ERR-HIST		Clear of error code log
Lv.1	Details	To clear the error code log.
	Use case	When clearing the error code log
	Adj/set/operate method	Select the item, and then press OK key.
	Default value	0
PWD-CLR		Clear of system administrator password
Lv.1	Details	To clear the password of the system administrator set in the user mode.
	Use case	When clearing the password of the system administrator
	Adj/set/operate method	Select the item, and then press OK key.
	Default value	0

COPIER > FUNCTION > CLEAR		
ADRS-BK		Clear of address book
Lv.1	Details	To clear the address book data.
	Use case	When clearing the address book data
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The address book data is cleared after the main power switch is turned OFF/ON.
CNT-MCON		Clear of Main Controller service counter
Lv.1	Details	To clear the service counter counted by the Main Controller PCB.
	Use case	When clearing the service counter counted by the Main Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
	Related service mode	COPIER> COUNTER
CNT-DCON		Clear of DC Controller service counter
Lv.1	Details	To clear the service counter (FIN-STPR, FIN-PDDL, SADDLE, STPL) counted by the DC Controller PCB.
	Use case	When clearing the service counter counted by the DC Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
	Default value	0
	Related service mode	COPIER> COUNTER> DRBL-2> FIN-STPR, FIN-PDDL, SADDLE, STPL
OPTION		Clear of service mode setting VL(OPTION)
Lv.1	Details	To return the value specified in service mode (OPTION) to the default value (value at the time of RAM clear).
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	- Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - This item is executed for the data on the Main Controller PCB, DC Controller PCB and Reader Controller PCB.
	Default value	0

COPIER > FUNCTION > CLEAR		
MMI		Clear of user mode setting value
Lv.1	Details	To clear the Settings/Registration setting values. • Preferences (Excluding values for Paper Type Management Settings) • Adjustment/Maintenance • Function Settings • Destination Settings (Excluding values for Address Lists) • Management Settings (Excluding values for Department ID Management)
	Use case	When clearing various setting values of user mode
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The setting value is cleared after the main power switch is turned OFF/ON.
	Default value	0
MN-CON		RAM clear of MNCON PCB SRAM Board
Lv.1	Details	To clear the RAM data of the Main Controller PCB SRAM Board. All data on the SRAM Board is initialized.
	Use case	When clearing RAM data of the Main Controller PCB SRAM Board
	Adj/set/operate method	1) Select the item, and then press OK key. The machine is automatically rebooted. 2) Turn OFF/ON the main power switch.
	Caution	- Forwarding Settings, Settings/Registration (Preferences), Adjustment/Maintenance, Function Settings, Set Destination, Management Settings, TPM Settings, etc. are deleted. - Inform the user that all images in Inbox will be deleted and get approval for it. - Since the file management information is initialized, images on the HDD cannot be read. - Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - The RAM data is cleared after the main power switch is turned OFF/ON. - If MN-CON is executed while a login application other than Default Authentication is activated, any symptom occurs. (e.g. The login screen is not displayed.) In this case, switch the login application to Default Authentication once so that it returns to normal state.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT
CARD		Clear of card ID-related data
Lv.1	Details	To clear the data related to the card ID (department).
	Use case	When clearing the data related to the card ID
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The data is cleared after the main power switch is turned OFF/ON.

COPIER > FUNCTION > CLEAR		
W-TN-CLR		Clear of waste toner full alarm & error
Lv.1	Details	To clear the Waste Toner Container full alarm/error.
	Use case	Do not use this at the normal service. The counter value is automatically cleared by replacing the Waste Toner Container with a new one when the Waste Toner Container full alarm/error occurs.
	Default value	0
CA-KEY		Deletion of CA certificate and key pair
Lv.2	Details	To simultaneously delete the CA certificate and key pair which are additionally registered by the user.
	Use case	When a service person replaces/discards the device
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that OK is displayed. 3) Turn OFF/ON the main power switch.
	Caution	- Unless this item is executed at the time of replacement/discard of the device, the CA certificate and key pair which are additionally registered by the user remain in the HDD, which is a problem in terms of security. - Do not execute this item carelessly because the CA certificate and key pair which are additionally registered are deleted. If they are deleted mistakenly, they need to be again registered by the user. If no CA certificate and key pair are additionally registered, the machine condition becomes the same as the one at the time of factory shipment. - When NG is displayed in 2), there is a possibility that deletion was not executed. In this case, surely execute the deletion by initializing the HDD, etc.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
ERDS-DAT		Initialization of E-RDS SRAM data
Lv.1	Details	To initialize the SCM value of the Embedded-RDS stored in the SRAM. SCM values are ON/OFF of E-RDS, server's port number, server's SOAP URL, and communication schedule with the server (how often the data is acquired), etc. The value set by COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, RGW-ADR, COM-LOG is cleared.
	Use case	When clearing the setting values of RGW-PORT, RGW-ADR, and COM-LOG
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	The method of using the SRAM in E-RDS differs depending on the Bootable version. Therefore, unless the SRAM data is cleared at the time of version upgrade, data inconsistency occurs.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, RGW-ADR, COM-LOG

COPIER > FUNCTION > CLEAR		
KEY-CLR		Encrypt key clear of HDD Encrypt Board
Lv.2	Details	To clear the encryption key of the HDD Encryption Board (Security Kit) for replacement. Processing is executed at the time of installation of the Encryption Board, and a new encryption key is generated.
	Use case	When replacing the encryption key for the HDD Encryption Board
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Check that OK is displayed. 3) Turn OFF/ON the main power switch.
	Caution	Since all data in the HDD becomes unavailable when executing this item, be sure to initialize the HDD after turning OFF/ON the main power switch.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
USBM-CLR		Initialize USB MEAP priority rgst info
Lv.1	Details	To initialize the registered ID data retained in the OS field by calling the API provided by the OS.
	Use case	When a failure occurs in USB MEAP priority registration
JV-CACHE		Cache clear of JAVA application
Lv.1	Details	To clear the cache information used by JAVA application.
	Use case	When initializing the JAVA application
	Adj/set/operate method	Select the item, and then press OK key.
FXTX-CLR		Clearing fax job information
Lv.1	Details	To clear fax job information stored on SRAM. Use this mode to restore from E611-0001.
	Use case	When E611-0001 occurs
	Adj/set/operate method	Select the item, and then press OK key.
LANG-CLR		Uninstallation of language files
Lv.2	Details	To uninstall the language files other than Japanese and English files. After execution, the machine automatically reboots.
	Use case	When installing a new language file while there are 7 installed language files
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Select the firmware in which the necessary language is included by SST, and perform downloading.
	Supplement/memo	Screen is displayed in English after the execution, so switch the language.
FIN-MCON		Clearing Finisher info in controller
Lv.1	Details	To clear the Finisher information which the Main Controller retains. After execution, set the Delivery Tray again in user mode (Settings/ Registration> Function Settings> Common> Paper Output Settings> Output Tray Settings).
	Use case	When switching to another type of Finisher in the field
	Adj/set/operate method	Select the item, and then press OK key.

T-8-54

MISC-R

COPIER > FUNCTION > MISC-R		
SCANLAMP		Light-up check of LED
Lv.1	Details	Maintenance> Adjust Image Quality> Auto Correct Color Mismatch.
	Use case	When replacing the LED
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
1PSCLB-A		DADF 2 faces color differ crrct (front)
Lv.1	Details	To acquire scanning data on the front side in order to correct the color difference between the front and back side at the time of duplex stream reading. A significant color difference may occur between the front and back side of the image scanned on DADF caused by variations in the light source of the lamp and changes in durability. Such a color difference is corrected by executing 1PSCLB-B following 1PSCLB-A.
	Use case	When a significant color difference occurs between the front and back side caused by variations in the light source of the lamp and changes in durability
	Adj/set/operate method	1) Set paper on the DADF. 2) Select the item, and then press OK key.
	Caution	Be sure not to turn OFF/ON the power after OK is displayed by 1PSCLB-A.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> MISC-R> 1PSCLB-B
1PSCLB-B		DADF 2 faces color differ crrct (back)
Lv.1	Details	To acquire scanning data on the back side in order to correct the color difference between the front and back side at the time of duplex stream reading. A significant color difference may occur between the front and back side of the image scanned on DADF caused by variations in the light source of the lamp and changes in durability. Such a color difference is corrected by executing 1PSCLB-B following 1PSCLB-A.
	Use case	When a significant color difference occurs between the front and back side caused by variations in the light source of the lamp and changes in durability
	Adj/set/operate method	1) Set the document used by 1PSCLB-A on DADF, so that the front side is faced down and the cyan image is placed at the left rear side. 2) Select the item, and then press OK key.
	Caution	Be sure not to turn OFF/ON the power after OK is displayed by 1PSCLB-A.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> MISC-R> 1PSCLB-A

COPIER > FUNCTION > MISC-R		
1PCLBSET		DADF 2 faces color differ crrct ref side
Lv.1	Details	To set which side of the front or back side should be the reference side when correcting a color difference at the time of duplex stream reading. The correction result is reflected after executing the following operation: specify the reference side, execute a series of color difference correction processing, and then turn OFF/ON the power.
	Use case	Before starting correction of color difference in DADF duplex printing
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: N/A, 1: Front side, 2: Back side
	Default value	0
1PCLBUDR		DADF 2 faces clr differ crrct lowr limit
Lv.1	Details	Colors which do not need to be corrected are sometimes corrected as a result of correction of color difference in duplex stream reading. To keep colors which do not need to be corrected, the correction amount is adjusted so that the effect of correction is weakened. The result is reflected when correction of color difference is executed again after the setting is made. When “1: ON” is specified, unnecessary correction is not executed, but an expected effect may not be obtained for other colors.
	Use case	If the color difference occurs on the colors which didn’t have any difference before correction, adjust the correction amount before executing the color difference correction again.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Expected correction result may not be obtained.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
1PCLBOVR		DADF 2 faces clr differ crrct upr limit
Lv.1	Details	Excessive correction is sometimes made when correcting color difference in duplex stream reading. To control excessive correction, adjust the correction amount to weaken the effect of correction. The result is reflected when correction of color difference is executed again after the setting is made. When “1: Weak control” or “2: Strong control” is specified, excessive correction is not made, but an expected effect may not be obtained for other colors.
	Use case	If the color difference occurs on the colors which didn’t have any difference before correction, adjust the correction amount before executing the color difference correction again.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Expected correction result may not be obtained.
	Display/adj/set range	0 to 2 0: No control, 1: Weak control, 2: Strong control
	Default value	0

COPIER > FUNCTION > MISC-R		
CLM-PLTN		Sampling of color copyboard read MTF VL
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When color copyboard reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx.
	Use case	At installation
	Adj/set/operate method	1) Set the MTF chart on the Copyboard Glass. 2) Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
BWM-PLTN		Sampling of B&W copyboard read MTF value
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When B&W copyboard reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx.
	Use case	At installation
	Adj/set/operate method	1) Set the MTF chart on the Copyboard Glass. 2) Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
CLM-DF1		Sampling of clr front stream read MTF VL
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When color front side stream reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx.
	Use case	At installation
	Adj/set/operate method	1) Set the MTF chart on the ADF. 2) Select the item, and then press OK key. 3) Perform color front side stream reading with the MTF chart set on the ADF. (CLM-DF1)
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12

COPIER > FUNCTION > MISC-R		
BWM-DF1		Sampling of B&W front stream read MTF VL
Lv.1	Details	The MTF value for the Reader Unit is sometimes displaced from the factory setting value depending on the condition at transportation/ storage. If the machine is installed without correcting the value, it may cause an image failure such as moire. Therefore, it is necessary to readjust the MTF value by reading the MTF adjustment chart at installation. When B&W front side stream reading is performed, the controller performs sampling of the MTF value. This value is set in COPIER> ADJUST> CCD> MTF2-Mx, MTF2-Sx.
	Use case	At installation
	Adj/set/operate method	1) Set the MTF chart on the ADF. 2) Select the item, and then press OK key. 3) Perform B&W front side stream reading with the MTF chart set on the ADF. (BWM-DF1)
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
CLPLT-EN		Color copyboard read MTF VL initial set
Lv.1	Details	To return the MTF value for color copyboard reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When CLM-PLTN is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with CLM-PLTN becomes disabled and returned to the factory setting value.
	Use case	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-PLTN.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Default value	0
	Related service mode	COPIER> FUNCTION> MISC-R> CLM-PLTN, CLM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12

COPIER > FUNCTION > MISC-R		
BWPLT-EN		B&W copyboard read MTF value initial set
Lv.1	Details	To return the MTF value for B&W copyboard reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When BWM-PLTN is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with BWM-PLTN becomes disabled and returned to the factory setting value.
	Use case	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-PLTN.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Default value	0
	Related service mode	COPIER> FUNCTION> MISC-R> BWM-PLTN, BWM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
CLDF1-EN		Clr front stream read MTF VL initial set
Lv.1	Details	To return the MTF value for color front side stream reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When CLM-DF1 is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with CLM-DF1 becomes disabled and returned to the factory setting value.
	Use case	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a color image even performing a fine adjustment with CLM-TGT after adjusting the MTF value with CLM-DF1.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Default value	0
	Related service mode	COPIER> FUNCTION> MISC-R> CLM-DF1, CLM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12

COPIER > FUNCTION > MISC-R		
BWDF1-EN		B&W front stream read MTF VL initial set
Lv.1	Details	To return the MTF value for B&W front side stream reading to the factory setting value. Since overwriting is performed with the backup data retained in the Reader Controller PCB, the MTF value obtained by sampling of the MTF chart becomes disabled. When BWM-DF1 is executed, the value is automatically set to 1. When the value is set to 0, the value adjusted with BWM-DF1 becomes disabled and returned to the factory setting value.
	Use case	When returning the MTF value to the initial setting value upon user's request in case that a sufficient quality level cannot be obtained on the front side of a B&W image even performing a fine adjustment with BWM-TGT after adjusting the MTF value with BWM-DF1.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	0 to 1 0: Factory setting value, 1: Adjustment value at installation
	Default value	0
	Related service mode	COPIER> FUNCTION> MISC-R> BWM-DF1, BWM-TGT COPIER> ADJUST> CCD> MTF2-M1 to 12, MTF2-S1 to 12
CLM-TGT		Fine adjustment of color MTF value
Lv.1	Details	To perform the filter processing inside of the Reader Controller so that the MTF value measured by CLM-PLTN/CLM-DF1/CLM-DF2 becomes 55% or lower of the value. When 1 is specified, the MTF correction filter is calculated again, and the MTF value becomes 50% or lower of the value (the image becomes foggy). The backup MTF filter correction coefficient is updated.
	Use case	When decreasing the MTF value (to make the image foggy) upon user's request (moire, incorrect judgment)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: 55% 1: 50% (The image becomes foggy.)
	Default value	0

COPIER > FUNCTION > MISC-R		
BWM-TGT		Fine adjustment of B&W MTF value
Lv.1	Details	To perform the filter processing inside of the Reader Controller so that the MTF value measured by BWM-PLTN/BWM-DF1/BWM-DF2 becomes 55% or lower of the value. When 1 is specified, the MTF correction filter is calculated again, and the MTF value becomes 50% or lower of the value (the image becomes foggy). The backup MTF filter correction coefficient is updated.
	Use case	When decreasing the MTF value (to make the image foggy) upon user's request (moire, incorrect judgment)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: 55% 1: 50% (The image becomes foggy.)
	Default value	0
SCANLMP2		Light-up check of LED Lamp Unit: back
Lv.1	Details	To light up the LED Lamp Unit for back side, which is placed in the ADF, and check whether there is a missing block or no lighting in LED.
	Use case	When replacing the LED Lamp Unit for back side
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
RD-SHPOS		Shift to fixed pstn of Reader Scan Unit
Lv.2	Details	To move the Reader Scanner Unit to the position where it is fixed when moving. When moving the Reader after installation, the Reader Scanner Unit may move and get damage. By moving the Scanner Unit to the specified position and securing it in place with a screw before moving, damage can be prevented.
	Use case	When moving the Reader after installation
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	When the machine is moved after Reader is installed, be sure to shift the Scanner Unit to the specific position to be fixed and then tighten the screws. If the Scanner Unit is not fixed, it might cause damage when the machine is moved.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

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■ MISC-P

COPIER > FUNCTION > MISC-P		
P-PRINT		Output of service mode setting value
Lv.1	Details	To print the service mode setting value.
	Use case	Before executing the CLEAR service mode, etc.
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
MAIN-DRV		Adj of user mode Drum cleaning time
Lv.2	Details	To adjust the duration to execute cleaning of the Photosensitive Drum to be performed by the user mode. The Photosensitive Drum and ITB perform idle rotation for the specified period of time without high voltage applied.
	Use case	- Upon user's request - When image smear occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	When the period is too long, flip occurs on the Drum Cleaning Blade or the blade is getting close to the end of life.
	Unit	sec
HIST-PRT		Output of jam and error log
Lv.1	Details	To print the jam log and error log.
	Use case	When printing the jam/error log
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
TRS-DATA		Moving memory reception data to Inbox
Lv.2	Details	To move the data received in memory to Inbox.
	Use case	When moving the data received in memory to Inbox
	Adj/set/operate method	Select the item, and then press OK key.
USER-PRT		Output of user mode list
Lv.1	Details	To print the user mode list.
	Use case	When printing the user mode list
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
LBL-PRNT		Output of service label
Lv.1	Details	To print the service label.
	Use case	When printing the service label
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.

COPIER > FUNCTION > MISC-P		
PRE-EXP		Light-up of Pre-exposure LED
Lv.1	Details	To light up the Cleaning Pre-exposure LED (Y/M/C/Bk). Open the Front Cover, and check that the LEDs light up visually. It automatically stops after all light up.
	Use case	When checking that the Pre-exposure LEDs light up
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Drum memory may occur, so be sure not to execute this item frequently.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
D-PRINT		Output of service mode (DISPLAY)
Lv.1	Details	To output items displayed by DISPLAY in the service mode . Items output by P-PRINT, LBL-PRNT and HIST-PRT, and ALARM are excluded.
	Use case	When printing the print job log with detailed information
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
1ATVC-EX		Execute of primary transfer ATVC control
Lv.1	Details	To execute the primary transfer ATVC control to optimize the primary transfer voltage.
	Use case	- At occurrence of the primary transfer failure - When replacing the Primary Transfer Roller and ITB
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
ENV-PRT		Temp&hmdy/surface temp of Fix Roll
Lv.1	Details	To output data of the temperature and humidity inside the machine/surface temperature of the Fixing Roller as a log.
	Use case	When figuring out the past temperature inside the machine/fixing temperature information at problem analysis
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
ITB-ROT		[Not used (for expansion)]
1TR-ROT		[Not used (for expansion)]
ATR-EX		Execution of ATR contro
Lv.2	Details	To execute the ATR control for all colors.
	Use case	- At occurrence of E020 - At operation check
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

COPIER > FUNCTION > MISC-P		
INTR-EX		Execution of warm-up rotation
Lv.2	Details	To execute the regular warm-up rotation performed first time for the day excluding the Photosensitive Drum idle rotation and Charging Wire cleaning.
	Use case	- When restarting potential control after execution of COPIER> OPTION> IMG-FIX> PO-CNT - When the D-max control condition is changed
	Adj/set/operate method	Select the item, and then press OK key.
PJH-P-1		Detail info of print job log: 100 jobs
Lv.1	Details	To print the print job history for the latest 100 jobs with detailed information. In the case of less than 100 jobs, the history of all print jobs is printed.
	Use case	When printing the print job log with detailed information
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
PJH-P-2		Detail info of print job log: all jobs
Lv.1	Details	To print the history of all print jobs stored in the machine with detailed information (for maximum 5000 jobs). The difference between PJH-P-1 and this item is only the number of jobs printed.
	Use case	When printing the print job log with detailed information
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
PT-LPADJ		Adj of Patch Sensor light intensity
Lv.1	Details	To execute correction of patch intensity and correction of background
	Use case	When replacing the Patch Sensor
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> DISPLAY> DENS> P-SENS-P, P-SENS-S, P-LED-DA COPIER> ADJUST> DENS> ALF-C
AT-IMG-X		Exe image position correction control
Lv.1	Details	To execute a series of operation of image position correction control at parts replacement. Image position correction control is usually executed by the printer engine at the specified timing according to operating condition and environmental variation. This service mode is linked with following user mode: Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch.
	Use case	- When removing the Drum Unit - When releasing the ITB pressure
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

COPIER > FUNCTION > MISC-P		
WTN-OFST		Adj of Waste Toner Full Sensor
Lv.1	Details	To adjust offset of Waste Toner Full Sensor.
	Use case	- When replacing the Waste Toner Full Sensor - When replacing the DC Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
USBH-PRT		Output of USB device information report
Lv.1	Details	To output information of the connected USB device in the form of a report.
	Use case	When printing the print job log with detailed information
	Adj/set/operate method	1) Place paper in Cassette 1. 2) Select the item, and then press OK key.
	Caution	Be sure to use A4/LTR size plain paper/recycled paper.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
DISCHG		Execution of discharge current control
Lv.2	Details	To execute the discharging current control.
	Use case	When image failure occurs due to uneven YMC discharge.
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	COPIER> DISPLAY> HV-STS> PRISMP-Y, PRISMP-M, PRISMP-C, PRIMACV-Y, PRIMACV-M, PRIMACV-C, PRIACI-Y, PRIACI-M, PRIACI-C
SPIT-EX		Execution of toner ejection
Lv.1	Details	To supply new toner by ejecting the toner in the Developing Assembly. Use this mode when the image density is low or coarseness occurs on halftone image after the machine is left for a long time.
	Use case	When the image density is low or coarseness occurs on halftone image after the machine is not used for a long time (e.g. summer vacation)
	Adj/set/operate method	Select the item, and then press OK key.
DRUM-TH		Drum Thermopile operation check
Lv.1	Details	To check if the Drum Thermopile detects the surface temperature of the Drum correctly. The operation status and the surface temperature are displayed.
	Use case	When replacing the Drum Thermopile
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
FX-HPRS		Set Fixing Roll position: transportation
Lv.2	Details	To secure the Fixing Roller in the position to prevent it from being damaged at transportation.
	Use case	At transportation
	Adj/set/operate method	Select the item, and then press OK key.

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■ SYSTEM

COPIER > FUNCTION > SYSTEM		
DOWNLOAD		Shift to download mode
Lv.1	Details	To make the machine enter the download mode and wait for a command. Perform downloading by SST or USB.
	Use case	At upgrade
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Perform downloading by SST or USB.
	Caution	Do not turn OFF/ON the power of the device during downloading.
CHK-TYPE		HD-CLEAR/HD-CHECK exe partition No.
Lv.1	Details	To specify the partition number of the HDD to execute HD-CLEAR/HD-CHECK.
	Use case	When executing HD-CLEAR/HD-CHECK
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 65535 0: Entire HDD 1,2,3,4: Image data storage area 5: Universal file storage area 6,7,8: Universal file storage area (temporary file) 9: PDL file storage area 10: Program file storage area 11: MEAP application 12: Address book/transfer setting 13: MEAP stored data 14: System log storage area 15: Advanced Box area 16: Delivery server area
	Related service mode	COPIER> FUNCTION> SYSTEM> HD-CLEAR, HD-CHECK
	Supplement/memo	Universal file: Management information of user setting data, various log data, PDL spool data, and image data, etc.
HD-CHECK		Entire HDD check and recovery
Lv.1	Details	To check the entire HDD and execute recovery processing.
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to execute this item after CHK-TYPE.
	Display/adj/set range	During operation: %, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> CHK-TYPE
HD-CLEAR		Initialization of specified partition
Lv.1	Details	To initialize the HDD partition specified by CHK-TYPE.
	Use case	When initializing the HDD partition
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to execute this item after CHK-TYPE.
	Display/adj/set range	First 2 digits: Progress ratio (%, Returns to “00” at termination) Last 2 digits: Result at termination (00: Normally finished, Others: Abnormally finished)
	Related service mode	COPIER> FUNCTION> SYSTEM> CHK-TYPE

COPIER > FUNCTION > SYSTEM		
DEBUG-1		Setting of log type and save timing
Lv.2	Details	To set the types of logs to be stored and the timing to store logs in the HDD. Logs are used to analyze the cause of a problem.
	Use case	When analyzing the cause of a problem
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Do not use this at the normal service. Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 3 0: Save PLOG at detection of Reboot/Exception 1: Save PLOG at detection of Reboot/Exception/Encode 2: Save SUBLOG at detection of Reboot/Exception/Encode 3: Save SUBLOG in overwrite mode at detection of Reboot/Exception/Encode
	Default value	3
	Related service mode	COPIER> FUNCTION> SYSTEM> DEBUG-2(LEVEL2)
	Supplement/memo	PLOG can be printed by COPIER> FUNCTION> SYSTEM> DEBUG-2. SUBLOG cannot be printed. (It should be uploaded from SST.)
DEBUG-2		Output of log saved on HDD
Lv.2	Details	To print the PLOG saved in HDD by COPIER> FUNCTION> SYSTEM> DEBUG-1. (A4: Approx. 20 sheets) SUBLOG is not printed. It should be uploaded from SST or USB.
	Use case	When printing PLOG
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Do not use this at the normal service.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> DEBUG-1(LEVEL2)
CDS-UPDT		[Not used]
DSRAMBUP		Backup of DC Controller PCB SRAM
Lv.2	Details	To back up the setting data in SRAM of the DC Controller PCB.
	Use case	When replacing the DC Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> DSRAMRES

COPIER > FUNCTION > SYSTEM		
DSRAMRES		Restore of DC Controller PCB SRAM
Lv.2	Details	To restore the setting data which has been backed up in SRAM of the DC Controller PCB.
	Use case	When replacing the DC Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> DSRAMBUP
RSRAMBUP		Backup of Reader Controller PCB SRAM
Lv.2	Details	To back up the setting data in SRAM of the Reader Controller PCB.
	Use case	When replacing the Reader Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> RSRAMRES
RSRAMRES		Restore of Reader Controller PCB SRAM
Lv.2	Details	To restore the setting data which has been backed up in SRAM of the Reader Controller PCB.
	Use case	When replacing the Reader Controller PCB for troubleshooting at the time of problem occurrence
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	During operation, the setting data changes by manual or automatic adjustment. When backup data which has been left for a long period of time is restored, it is overwritten with new setting data and the old data is deleted.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> SYSTEM> RSRAMBUP
REBOOT		Reboot of host machine
Lv.2	Details	To reboot the host machine.
	Use case	For customization
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
DELLNGFL		[Not used]
R-REBOOT		Reboot of host machine: remote
Lv.1	Details	To reboot the host machine by remote control via RUI.
	Use case	When rebooting the host machine by remote control
	Adj/set/operate method	Select the item, and then press OK key.

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OPTION

FNC-SW

COPIER > OPTION > FNC-SW		
PO-CNT		ON/OFF of potential control function
Lv.1	Details	To set ON/OFF of potential control function.
	Use case	When replacing the Potential Sensor
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set the value back to 1 (ON) after servicing.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
MODEL-SZ		Fixed magnifictn & DADF orgnl dtct size
Lv.1	Details	To set the fixed magnification ratio display and the original detection size with DADF. It is set automatically at the time of installation of the Reader according to the location.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: AB configuration (6R5E) for Japan, 1: Inch configuration (5R4E) for North/Middle/South America, 2: A configuration (3R3E) for Europe, 3: AB/Inch configuration (6R5E) for Asia, Oceania, South America
	Default value	The value differs according to the location.
SCANSLCT		ON/OFF of scan area calculate function
Lv.2	Details	To set ON/OFF of the function to calculate scanning area from the specified paper size. When the paper size is larger than the original size, selecting ON reduces productivity because the scanning area gets larger.
	Use case	When matching the scanning area with the paper size
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF (calculated from the detected original size) 1: ON (calculated from the specified paper size)
	Default value	0

COPIER > OPTION > FNC-SW		
DH-SW		ON/OFF of auto D-half control
Lv.2	Details	To set ON/OFF of auto D-half control. Execution interval can be set by COPIER> OPTION> IMG-FIX> INTROT-2.
	Use case	- When D-half-related failure occurs/when identifying the cause of D-half-related failure - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set the value back to 1 (ON) after servicing.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Related service mode	COPIER> OPTION> IMG-FIX> DH-TMG
SENS-CNF		Setting of original detection size
Lv.2	Details	To set original detection size according to AB configuration/Inch configuration/A configuration. Select 1 (Inch configuration) for Inch configuration machine or 2 (A configuration) for A configuration machine.
	Use case	When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: AB configuration, 1: Inch configuration
	Default value	0
CONFIG		Set country/regn/lang/location/ppr size
Lv.1	Details	To set the country/region, language, location, paper size configuration for multiple system software in HDD.
	Use case	Upon user's request
	Adj/set/operate method	1) Select the setting item. 2) Switch with +/- key, and then press OK key. 3) Turn OFF/ON the main power switch.
	Display/adj/set range	XX YY.ZZ.AA XX: Country/region JP: Japan, US: USA, GB: Great Britain, FR: France, DE: Germany, IT: Italy, AU: Australia, SG: Singapore, NL: Netherlands, KR: Korea, CN: China, TW: Taiwan, ES: Spain, SE: Sweden, PT: Portugal, NO: Norway, DK: Denmark, FI: Finland, PL: Poland, HU: Hungary, CZ: Czech Republic, SI: Slovenia, GR: Greece, EE: Estonia, RU: Russia, SK: Slovakia, RO: Romania, HR: Croatia, BG: Bulgaria, TR: Turkey, TH: Thailand, VN: Vietnam YY: Language (Fixed; e.g. ja: Japanese) ZZ: Location (Fixed; e.g. 00: CANON) AA: Paper size configuration (00: AB configuration, 01: Inch configuration, 02: A configuration, 03: Inch/AB configuration)
	Related service mode	COPIER> OPTION> FNC-SW> MODEL-SZ

COPIER > OPTION > FNC-SW		
W/SCNR		Setting of Reader Unit installation
Lv.1	Details	To set installation of the Reader Unit. 1 (Installed) is automatically selected once the Reader Unit is detected at the start of the machine.
	Use case	When installing/removing the Reader Unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
	Default value	According to the setting at shipment
ORG-LGL		Special paper size set in DADF mode: LGL
Lv.2	Details	To set the size of special paper (LGL configuration) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 10 0: LEGAL-R, 1: FOOLSCAP-R, 2: OFICIO-R, 3: FOLIO-R, 4: Australian FOOLSCAP-R, 5: Ecuador OFICIO-R, 6: Bolivia OFICIO-R, 7: Argentine OFICIO-R, 8: Argentine LEGAL-R, 9: Government LEGAL-R, 10: Mexico OFICIO-R
	Default value	0
ORG-LTR		Special paper size set in DADF mode: LTR
Lv.2	Details	To set the size of special paper (LTR configuration) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: LETTER, 1: EXECUTIVE, 2: Argentine LETTER, 3: Government LETTER
	Default value	0
ORG-B5		Special paper size set in DADF mode: B5
Lv.2	Details	To set the size of special paper (B5) that cannot be recognized in DADF stream reading mode.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: B5, 1: Korean government office paper
	Default value	0

COPIER > OPTION > FNC-SW		
INTROT-1		Set ini/last rotation auto adj exe intvl
Lv.1	Details	To set the paper interval to execute process auto adjustment (ACR toner ejection control) at initial/last rotation. As the value is incremented by 1, the interval is increased by 1 sheet.
	Use case	When matching the use environment of the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Increasing the number of sheets (widening the interval) causes higher frequency of image failure.
	Display/adj/set range	50 to 1000
	Unit	sheet
	Default value	100
INTROT-2		Set of last rotation auto adj exe intvl
Lv.1	Details	To set the paper interval to execute auto adjustment (D-max control, D-half control) at last rotation. As the value is incremented by 1, the paper interval is increased by 1 sheet. When 0 is specified, the control is not executed.
	Use case	When matching the use environment of the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Increasing the number of sheets (widening the interval) causes higher frequency of image failure.
	Display/adj/set range	0 to 20000 0: No control
	Unit	sheet
	Default value	15000
	Related service mode	COPIER> OPTION> CLEANING> W-CLN-P
INTROT-T		Clr displace crrct:horz scan after start
Lv.1	Details	Color displacement may occur right after starting a job (1 to 5 sheets) due to the ITB Unit specific variation. When the setting value is changed, write start position of each color is adjusted according to the color displacement correction level only right after starting a job (1 to 5 sheets), so color displacement can be corrected.
	Use case	When color displacement in the horizontal scanning direction occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use the setting value 4 to 10. Use 0 to 3 in the normal operation.
	Display/adj/set range	0 to 10 0: Color displacement correction level 0 1: Color displacement correction level 1 2: Color displacement correction level 2 3: Color displacement correction level 3 4 to 10: Not used
	Default value	2

COPIER > OPTION > FNC-SW		
MODELSZ2		Ppr size dtct global support in bookmode
Lv.2	Details	To set ON/OFF for global support of document size detection in copyboard reading mode.
	Use case	Upon user's request (mixed media original with AB/Inch configuration)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - The Document Size Sensor (Photo Sensor) is additionally required to correctly detect the document size when the original consists of mixed media (AB/Inch configuration).
	Display/adj/set range	0 to 1 0: Detected with detection size according to location, 1: Detected with AB/Inch mixed media.
	Default value	0
SVMD-ENT		Setting of entry method to service mode
Lv.2	Details	To set the way to get in service mode to prevent information leak.
	Use case	As needed
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: [Settings/Registration] - Pressing [2] and [8] at the same time - [Settings/Registration] 1: [Settings/Registration] - Pressing [4] and [9] at the same time - [Settings/Registration]
	Default value	0
FXWRNLVL		Set No.of fed sht FxBltUnt warn dspl lvl
Lv.2	Details	To set the threshold value for the number of fed sheets to display the life alarm message of Fixing Belt Unit.
	Use case	When switching the warning level of the Fixing Belt Unit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Error display threshold value 1: The value 20,000 smaller than the error display threshold value 2: The value 40,000 smaller than the error display threshold value 3: The value 60,000 smaller than the error display threshold value
	Default value	2
	Related service mode	COPIER> OPTION> IMG-FIX> FX-U-ERR COPIER> OPTION> DSPLY-SW> FXMSGSW2
CKT-LANG		[Not used]

COPIER > OPTION > FNC-SW		
KSIZE-SW		Set of Chinese paper (K-size) support
Lv.2	Details	To set to detect/display the Chinese paper (K size paper: 8K, 16K).
	Use case	When using K-size paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Go through the following: COPIER > OPTION > FNC-SW > MODEL-SZ; and if MODEL-SZ is "0: AB configuration", this mode is enabled.
	Display/adj/set range	0 to 1 0: Not supported, 1: Supported
	Default value	JP:0, USA:0, EUR:0, AU:0, CN:1, KR:0, TW:0, ASIA:0
	Related service mode	COPIER> OPTION> FNC-SW> MODEL-SZ
	Supplement/memo	8K paper: 270 x 390 mm, 16K paper: 270 x 195 mm
ORG-A4R		Special paper size set in DADF mode: A4R
Lv.2	Details	To set the size of special paper (A4R) that cannot be recognized in DADF stream reading mode. When picking up A4R size original from the DADF of the Inch/AB configuration models, the size is converted into the specified size so that an image can be formed properly.
	Use case	- Upon user's request - When picking up special paper size original from DADF
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: A4R, 1: FOLIO-R
	Default value	0
PDF-RDCT		PDF reduction set at forwarding
Lv.2	Details	To set whether to reduce the image for transmission when converting the image received by IFAX into PDF for e-mail/file transmission.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: With the current setting, 1: Image reduction
	Default value	0

COPIER > OPTION > FNC-SW		
REBOOTSW		Restart setting at E240 error occurrence
Lv.2	Details	To set whether to reboot in the case of E240 error. In the case of E240 error, the machine is automatically rebooted due to the possibility of continuous operation of the drive system while the spooled print job is cleared. Print job can be obtained if selecting the setting not to reboot.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - Be sure to get approval from the user by telling the possibility of continuous operation of the drive system in the case of E240 error.
	Display/adj/set range	0 to 1 0: Rebooted, 1: Not rebooted
	Default value	0
	Supplement/memo	E240 error: Communication error between the Main Controller and the DC Controller.
SJB-UNW		Reserve upper limit of secure print job
Lv.2	Details	To set the upper limit for the number of reserved jobs in secure print job.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: 50 jobs, 1: 90 jobs
	Default value	0
WEBV-SW		ON/OFF of WebDAV function
Lv.2	Details	To set ON/OFF of WebDAV function. OFF setting can reduce memory use of the machine. In addition, the following WebDAV-related items are hidden in user mode. - Settings/Registration> Set Destination> Register Destinations> Register New Dest.> File> Protocol> WebDAV - Settings/Registration> Function Settings> Send> Common Settings> Use Divided Chunk Send for WebDAV TX
	Use case	When reducing memory use of the machine
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0
	Related user mode	Settings/Registration> Set Destination> Register Destinations> Register New Dest.> File> Protocol> WebDAV Settings/Registration> Function Settings> Send> Common Settings> Use Divided Chunk Send for WebDAV TX
	Supplement/memo	WebDAV function is equipped as standard with the machine.

COPIER > OPTION > FNC-SW		
CARD-RNG		Card number setting (department number)
Lv.2	Details	To set the number of cards (departments) that can be used with the Card Reader.
	Use case	When setting the number of cards (departments)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 1000
	Default value	1000
COMP-PRT		Img proc memory allocate at job conflict
Lv.2	Details	When making 2 or more composition prints (page number, number of copies, stamp, date, booklet, watermark), memory for image processing is allotted preferentially to print jobs. Meanwhile, memory for image processing of scan/send and PDL input becomes insufficient depending on the options and document size, and these jobs might be unprocessed until composition prints are finished. If these jobs are interfered each other, image processing can be put forward little by little by allotting memory equally to each job.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Print priority, 1: Equal allocation
	Default value	0
ARCDT-SW		ON/OFF of ARCDAT control
Lv.1	Details	To set ON/OFF of ARCDAT control. When "1: OFF" is set, the result of ARCDAT control is not reflected to LUT. When the hue variation occurs in the case of failure value displayed in COPIER> DISPLAY> HT-C, turn OFF the ARCDAT control once and check the hue. If hue variation is alleviated, analyze the cause of ARCDAT control error (developer, Patch Sensor, etc.).
	Use case	When hue variation occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set "0: ON" again when ARCDAT control recovers.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0
	Related service mode	COPIER> DISPLAY> HT-C

COPIER > OPTION > FNC-SW		
SJOB-CL		Set of scan job canceling by logout
Lv.1	Details	To set whether to cancel the scan job in operation by logout of the user.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The job with scanning completed cannot be canceled.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
	Supplement/memo	Scan job: A job after the scanning operation is completed.
USB-RCNT		Auto connect set at USB device disconnct
Lv.2	Details	To set to enable/disable automatic connection when the USB device is disconnected. With the setting to disable automatic connection, USB device cannot be used if disconnecting and then connecting the USB device. To enable connection again, the power needs to be turned OFF/ON. With the setting to enable automatic connection, reconnection is made after disconnecting, and then connecting the USB device.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	With the setting to enable automatic connection, disconnecting of 1 area makes automatic connection of all USB devices if there is USB hub.
	Display/adj/set range	0 to 1 0: No automatic connection, 1: Automatic connection
	Default value	0
UNLMTBND		Over 400 binders print job support set
Lv.1	Details	To set whether to support print job that exceeds 400 binders. With the setting to support, the machine makes prints by sharing binders according to job attribution. Select "1: Not supported" if the user does not print job* with large quantity of binders.
	Use case	When supporting print job that exceeds 400 binders
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Automatic setting (When the print server is not connected: not supported; When the print server is connected: supported) 1: Not supported
	Default value	0
	Supplement/memo	* : A job that requires finishing (such as stapling) in one job. Does not apply in the case of executing finishing with multiple sets of output.

COPIER > OPTION > FNC-SW		
MIBCOUNT		Scope range set of Charge Counter MIB
Lv.2	Details	To set the range of counter information that can be obtained as MIB (Management Information Base).
	Use case	For customization
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: All charge counters are obtained, 1: Only the displayed counter* is obtained, 2: All charge counters are not obtained *: Counter specified by the following: COPIER> OPTION> USER> COUNTER 1 to 6
	Default value	0
	Related service mode	COPIER> OPTION> USER> COUNTER1 to 6
MEAP-PRI		Setting of MEAP task priority
Lv.2	Details	Selecting "1: ON" increases MEAP task priority.
	Use case	When improving processing performance of MEAP
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
CNTR-SW		Init of parts counter replacement timing
Lv.1	Details	To return the estimated life of parts counter to the initial value.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter 0, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0: Returned to the initial value
	Default value	0
W/RAID		Set of HDD Mirroring Kit installation
Lv.1	Details	To set installation condition of HDD Mirroring Kit. Select "1: Installed" when installing the HDD Mirroring Kit. Select "0: Not installed" when removing the HDD Mirroring Kit.
	Use case	When installing/removing HDD Mirroring Kit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
	Default value	0

COPIER > OPTION > FNC-SW		
PSWD-SW		Password type set to enter service mode
Lv.1	Details	To set the type of password that is required to enter when getting into service mode. 2 types are available: one for “service technician” and the other for “system administrator + service technician”. When selecting the type for “system administrator + service technician”, enter the password for service technician after the password entry by the user’s system administrator.
	Use case	Upon request from the user who concerns security
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: No password, 1: Service technician, 2: System administrator + service technician
	Default value	0
SM-PSWD		Password setting for service technician
Lv.2	Details	To set password for service technician that is used when getting into service mode.
	Use case	When password is required to get into service mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to select 1 or 2 for PSWD-SW in advance.
	Display/adj/set range	1 to 99999999
	Default value	11111111
	Related service mode	COPIER> OPTION> FNC-SW> PSWD-SW
RPT2SIDE		Set of report 1-sided/2-sided output
Lv.1	Details	To set whether to use 1-sided or 2-sided for report output of service mode.
	Use case	When making 2-sided report output to reduce the number of output pages
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: 1-sided, 1: 2-sided
	Default value	1
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT

COPIER > OPTION > FNC-SW		
BRWS-FAV		Set of service browser favorite register
Lv.2	Details	To set whether to allow registration of favorites in the browser for service. When 1 is set, favorites in the browser for service can be edited, and any URLs can be accessed.
	Use case	When service engineers edit favorites in the browser for service
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
PSCL-MS		Set of auto gradation adjustment: Heavy
Lv.1	Details	To set at which speed (1/1 speed, 1/2 speed, or 1/3 speed) PASCAL control and D-half control are executed at auto gradation adjustment. When 2 is set, it is executed only for the lastly used speed only. The time required for auto gradation adjustment is short, but switching to another speed takes time. This is suitable for the users who frequently use a specific paper type. When 3 is set, it is executed for all speeds. The time required for auto gradation adjustment is long (approx. 3 minutes), but switching to another speed is quick. This is suitable for the users who use various paper types.
	Use case	When setting the speed according to the materials used by the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	2 to 3 2: Lastly used speed, 3: All speeds
	Default value	2
DMX-DISP		ON/OFF auto grdtn adj D-max PASCAL ctrl
Lv.1	Details	To set whether to execute D-max PASCAL control at full adjustment of auto gradation adjustment. When 0 is set, D-max PASCAL control and PASCAL control are executed. Four A4-size sheets are used for test prints (one for D-max PASCAL control and three for PASCAL control). When 1 is set, PASCAL control (gradation adjustment) only is executed. Three A4-size sheets are used for test prints (for PASCAL control).
	Use case	When making the setting according to the usage of the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0

COPIER > OPTION > FNC-SW		
STND-PNL		Set of 3-D Control Panel installation
Lv.2	Details	To set whether the 3-D Control Panel is installed. When the 3-D Control Panel is installed, set “1: Installed”.
	Use case	At installation of the 3-D Control Panel
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed
	Default value	0
INVALPDL		Disabling PDL license
Lv.1	Details	To disable the registered PDL license. When “1: Disabled” is set, PDL is disabled even if a PDL license is registered. This is set to the machines installed at convenience stores, which do not allow PDL to be used.
	Use case	When prohibiting the use of PDL
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Registered PDL license is enabled, 1: Disabled
	Default value	0
IMGCNTPR		Setting of image quality mode
Lv.1	Details	To set the image quality mode. The counter priority mode is applied when 1 is set, and the image quality priority mode is applied when 0 is set.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Image quality priority mode, 1: Counter priority mode
	Default value	JP:1, USA: 0, EUR: 1, AU: 1, CN: 1, KR 1, TW: 1, ASIA: 1
CDS-FIRM		Set to allow firmware update by admin
Lv.1	Details	To set whether to allow the user (administrator) to perform firmware update linked with CDS and collection of log files. When 1 is set, “Deliver Update” is added to remote UI, and “Firmware Update” is added to the Register/Update Software menu of local UI. Log files can be collected from remote UI.
	Use case	When allowing the administrator to update the firmware and collect log files
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use it for purposes other than collecting log files. In Japan, the firmware cannot be updated by user. Be sure to return the value to 0 after use.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	EUR: 1, Other: 0
	Supplement/memo	CDS: Content Delivery System

COPIER > OPTION > FNC-SW		
CDS-MEAP		Set to allow MEAP installation by admin
Lv.1	Details	To set whether to permit the user (administrator) to install MEAP applications and enable iR options from CDS. When “1: Enabled” is set, Updater can be activated from the user mode.
	Use case	When allowing the administrator to install MEAP applications and enable iR options from CDS
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	1
	Supplement/memo	CDS: Content Delivery System
CDS-UGW		Set to allow firmware update from UGW
Lv.1	Details	To set whether to permit update of the firmware from the UGW server. When “1: Enabled” is set, Updater accepts the operation from the UGW server in cooperation with CDS.
	Use case	When allowing update of the firmware from the UGW server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
	Supplement/memo	CDS: Content Delivery System
LOCLFIRM		Set to allow firmware update by file
Lv.1	Details	To set whether to permit the user (administrator) to update the firmware from the remote UI using a local file. This update is executed as a measure for vulnerability in emergency situations.
	Use case	When prohibiting the administrator to update the firmware using a file
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	1
RSHDW-SW		ON/OFF of remote shutdown
Lv.1	Details	A shared multi-function machine is not likely to be shut down at power failure. Set ON/OFF of the remote shutdown function to prevent accident. When “1: ON” is set, the machine can be shut down from the remote shutdown menu displayed in the remote UI.
	Use case	When preventing an accident at specified power-off time.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

COPIER > OPTION > FNC-SW		
T1HP-POS		Set pry-trns diseng/eng pstn:initial VL
Lv.1	Details	To set the engagement or disengagement position as the home position of the Primary Transfer Rollers (Y, M, C). When “0: Engagement position” is set, the Primary Transfer Rollers of 4 colors engage the ITB in the initial state. When “1: Disengagement position” is set, the Primary Transfer Roller of Bk only engages the ITB in the initial state. Set “0: Engagement position” if you give priority to the first copy time in the color mode. Set “1: Disengagement position” if you give priority to the first copy time in the B&W mode.
	Use case	Upon user’s request (Frequency to use color/B&W)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Engagement position, 1: Disengagement position
	Default value	0
MC-FANSW		Set of Controller Cooling Fan control
Lv.1	Details	To set full speed/half speed to fan control of the Controller Cooling Fan 1 and 2. When “1: Full speed” is set, the heat exhaust efficiency is enhanced.
	Use case	- When HDD damage occurs multiple times - When the machine is installed in a high temperature environment in which HDD damage is likely to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Half speed, 1: Full speed
	Default value	0

COPIER > OPTION > FNC-SW		
OP-FAN		Setting of Anti-adhesion Fan airflow
Lv.2	Details	In the normal sequence, the Anti-adhesion Fan is set to OFF for the reverse delivery, and 1/1 speed for the straight delivery or 2-sided delivery. Set the airflow of the Anti-adhesion Fan when the delivery adhesion occurs or the delivery stackability decreases. Set to 1 (1/2 speed) or 2 (1/1 speed) when the delivery adhesion occurs at the time of the reverse delivery. Set to 1 (1/2 speed) or 3 (OFF) when the delivery stackability decreases at the time of the straight delivery or the 2-sided delivery.
	Use case	- When the delivery adhesion occurs at the time of the reverse delivery - When the delivery stackability is low at the time of the straight delivery or the 2-sided delivery
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	- When changing the value from 3 to 1 or 2, the delivery stackability decreases. - When changing the value from 2 to 1 or 3, the delivery adhesion may deteriorate.
	Display/adj/set range	0 to 3 0: Normal sequence, 1: 1/2 speed, 2: 1/1 speed, 3: OFF
	Default value	0
BXNUPLOG		ON/OFF of Nup log at Inbox print
Lv.2	Details	To set whether to keep Nup log at Inbox print.
	Use case	When keeping Nup log at Inbox print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
BUSI-SW		Setting of customized function
Lv.1	Details	To set the function in accordance with the customized specification.
	Use case	When installing the customized machine
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Standard, 1: Customization
	Default value	0

COPIER > OPTION > FNC-SW		
SDLMTWRN		ON/OFF cpcty warn dspl: E-mail/I-Fax TX
Lv.1	Details	To set whether to display the warning message when sending data that exceeds the upper limit value for the transmission data size via E-mail/I-Fax.
	Use case	For customization
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related user mode	Function Settings> Send> E-Mail/I-Fax Settings> Maximum Data Size for Sending
JLK-PWSC		ON/OFF of PCAM password auth doc scan
Lv.2	Details	To set whether to scan the PCAM password authentication document with the MEAP application.
	Use case	When scanning the PCAM password authentication document
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
FAX-INT		Set FAX RX print interruption oprtn mode
Lv.2	Details	To set the mode performing interruption operation of FAX reception print automatically.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal, 1: Interruption operation mode
	Default value	0

COPIER > OPTION > FNC-SW		
PDL-Z-LG		Setting of drawing algorithm
Lv.1	Details	To switch the drawing algorithm of the iR C series and the iR-ADV C series to obtain output the user expects. When 0 is set, image is output as displayed on the screen by the new algorithm adopted from the iR-ADV C Series. Pseudo outline (boundary for processing divided graphics separately) occurred with the iR C series does not occur. However, when PDL job with special data structure is sent, output the user expects may not be obtained. When 1 is set, the drawing algorithm adopted by the conventional iR C series is used. Output equivalent to that of the iR C Series can be obtained; however, drawing-related phenomenon occurred with the series occurs.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use setting value 2 and 3.
	Display/adj/set range	0 to 3 0: Drawing algorithm of iR-ADV C series, 1: Drawing algorithm of the conventional iR C series, 2, 3: For R&D use
	Default value	0
CDS-LVUP		Set to allow CDS periodical update
Lv.1	Details	To set whether to allow the user (administrator) to use the periodical update function linked with CDS. When 1 is set, the periodical update function can be used from user mode.
	Use case	When allowing the user to use the periodical update function
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not set 1 in Japan. The firmware cannot be updated by user.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	The value differs according to the location.
	Supplement/memo	CDS: Content Delivery System

COPIER > OPTION > FNC-SW		
AMSOFFSW		Disabling AMS mode
Lv.1	Details	Normally, AMS mode is automatically enabled when the following 2 conditions are satisfied. - AMS license which is an iR option is installed. - AMS-supported Login application is activated. When disabling AMS mode, set 1. For North/Middle/South America and for Europe, the default is 1. When enabling AMS mode, set 0.
	Use case	- When disabling AMS mode - When enabling AMS mode (for North/Middle/South America and for Europe)
	Adj/set/operate method	1) Check that “ACCESS MANAGEMENT SYSTEM” is displayed in Check Counter > Check Device Configuration. (If it is displayed, it means that AMS mode is enabled.) 2) Enter 1, and then press OK key. 3) Turn OFF/ON the main power switch. 4) Check that “ACCESS MANAGEMENT SYSTEM” is not displayed in Check Counter > Check Device Configuration. (If it is not displayed, it means that AMS mode is disabled.)
	Display/adj/set range	0 to 1 0: AMS mode enabled, 1: AMS mode disabled
	Default value	JP: 0, USA: 1, EUR: 1, AU: 0, CN: 0, KR: 0, TW: 0, ASIA: 0
	Related service mode	COPIER> OPTION> LCNS-TR> ST-AMS
	Related user mode	Settings/Registration > Management Settings > License/Other > Use ACCESS MANAGEMENT SYSTEM
	Supplement/memo	AMS: Access Management System When the device is in AMS mode, “ACCESS MANAGEMENT SYSTEM” is displayed in Check Counter > Check Device Configuration.
UA-OFFSW		ON/OFF of unified auth function
Lv.1	Details	To set ON/OFF of the Unified Authentication function. Set the value to 0 when not preferring to use the Unified Authentication function because of security concern.
	Use case	Upon user’s request (not to use the Unified Authentication function)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0

COPIER > OPTION > FNC-SW		
MIB-NVTA		RFC-compatible character stringMIB write
Lv.1	Details	As default, MIB object which NVT-ASCII can be written exists in order to link with LUI entry value. This violates RFC order, so a problem like garbled 2-byte characters may occur in the SNMP monitoring system, such as the 3rd vendor’s MPS. Whether non-RFC-compatible character strings are written in MIB can be set using this mode. When 1 is set, only the character strings which are strictly compatible with RFC are written. (Writing operation is executed from the SNMP manager.) LUI is not linked.
	Use case	Upon user’s request (operation with RFC-compatible system)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Compatible in a conventional manner, 1: RFC-compatible, 2 to 3: Not used
	Default value	0
	Supplement/memo	RFC: Document of internet-related technical standards NVT-ASCII: Network Virtual Terminal-ASCII
MIB-EXT		ON/OFF of link with Ex-Cont on network
Lv.1	Details	To set whether to link with External Controller on network (Hewlett-Packard Co.).
	Use case	When linking with External Controller of Hewlett-Packard Co.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: OFF, 1: ON, 2: Not used
	Default value	0
SVC-RUI		Enabling of RUI function for servicing
Lv.1	Details	To set whether to enable the RUI function for servicing (not provided to end users). When 0 is set, the RUI function is disabled. When setting the value other than 0, RUI function is enabled. The value entered becomes password to use the RUI function. The data is cleared after the main power switch is turned OFF/ON.
	Use case	When preferring to use the import function of background image file of main menu
	Adj/set/operate method	Enter the setting value, and then press OK key. The data is cleared after the main power switch is turned OFF/ON.
	Display/adj/set range	0 to 65535
	Default value	0

COPIER > OPTION > FNC-SW		
LCDSFLG		Enabling of local CDS server
Lv.1	Details	To set whether to use the local CDS server. When CDSFIRM is 1, this setting is enabled.
	Use case	When using the local CDS server
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When CDSFIRM is 1, this setting is enabled.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
	Related service mode	COPIER > OPTION > FNC-SW > CDS-FIRM
	Related user mode	Management Settings> License/Other> Register/Update Software> Software Management Setting> Setting
	Supplement/memo	When local CDS is used, iW EMC/MC device firmware update plug-in is required.
STNDBY-B		Setting of standby mode
Lv.1	Details	To set the continu of standby mode In standby mode, the Fixing Roller is heated and rotated while it is in the contact state at waiting time so it is possible to output with the minimum FCOT.
	Use case	Upon user's request (FCOT)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	By setting a value other than 0 when the machine is not frequently used, the life may become shorter than the estimated life.
	Display/adj/set range	0 to 1 0: OFF, 1: Continu the standby mode
	Default value	0
STNDBY-A		Setting of operation at sleep
Lv.1	Details	To set the sleep operation when pressing the Control Panel Power Switch. Normally, the entire machine shifts to sleep mode. When 1 is set, only the LCD backlight is turned off.
	Use case	Upon user's request (FCOT)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	By setting 1 when the machine is not frequently used, the life may become shorter than the estimated life.
	Display/adj/set range	0 to 1 0: The entire machine is in sleep mode, 1: Only the LDC backligh is turned off
	Default value	0
	Related service mode	COPIER > OPTION > FNC-SW > STNDBY-B

COPIER > OPTION > FNC-SW		
BXSHIFT		Setting of binding at 0mm binding margin
Lv.1	Details	To set whether to judge the job as a job "without binding" when storing a PDL job in Inbox while the binding margin is set to "0". By setting the binding margin to 0 mm while "0" is set, the job is processed as "without binding". "Booklet" in "Options" on the Inbox screen can be also used.When "1" is set, it is judged as "with binding" even the binding margin is 0 mm so "Booklet", which has an exclusive relationship with "binding", cannot be used.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Without binding, 1: With binding
	Default value	0
STRT-SEQ		Set of image quality control at startup
Lv.1	Details	To set the threshold value for image quality control to be executed at startup when there is any changes in an environment. +: Likely to execute image quality control -: Less likely to execute image quality control
	Use case	When prioritizing productivity over image quality stability, or when prioritizing image quality stability over productivity
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Do not set -3 without permission from the QA Center. Otherwise, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: Not used, -3: 30-second startup (not execute image quality control), -2: Lowest threshold value, -1: Low threshold value, 0: Default, 1: Moderate threshold value, 2: High threshold value, 3: Highest threshold value, 4: Execute image quality control every time
	Default value	0

COPIER > OPTION > FNC-SW		
ENV-SEQ		Set image auto adj at environment change
Lv.1	Details	To set auto adjustment of image which is executed according to the environment changes.
	Use case	When prioritizing productivity over image quality stability, or when prioritizing image quality stability over FCOT
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When 5 is set, a fixing failure may occur.
	Display/adj/set range	0 to 5 0: Execute control due to environment change 1: Execute control even environment change is small 2: Execute control only when environment change is very large 3: Execute control other than image adjustment due to environment change (execute color displacement correction) 4: Execute control other than image adjustment and color displacement correction due to environment change (without using toner) 5: Not execute control
	Default value	0
HOME-SW		Set screen displayed with Main Menu key
Lv.1	Details	To set whether to display the main menu screen or the screen registered as the startup screen when pressing Main Menu key.
	Use case	Upon user's request (to change the startup screen)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Main Menu screen, 1: Screen registered as the startup screen
	Default value	0
NO-LGOUT		Display/hide of logout button
Lv.1	Details	To set whether to display or hide [Logout] button. When 0 is set, [Logout] button is displayed on the screen, and logout with the ID key is enabled. (Normal) When 1 is set, [Logout] button is not displayed, and logout with the ID key is disabled.
	Use case	Upon user's request (for customization, etc.)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Display, 1: Hide
	Default value	0

COPIER > OPTION > FNC-SW		
T-DLV-BK		Set of Bk-toner level displaying alarm
Lv.2	Details	To set the Bk-toner level to display "absence of toner" message.
	Use case	When changing the timing to notify the end of life according to the usage status
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Since toner level is calculated based on the developing supply count, some errors may occur.
	Display/adj/set range	0 to 40
	Unit	%
	Default value	JP:10, USA:10, EUR:5, AU:10, CN:10, KR:10, TW:10, ASIA:10
	Related service mode	COPIER > OPTION > FNC-SW > T-DLV-CL
T-DLV-CL		Set Y/M/C-toner level displaying alarm
Lv.2	Details	To set the Y/M/C-toner level to display "absence of toner" message.
	Use case	When changing the timing to notify the end of life according to the usage status
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Since toner level is calculated based on the developing supply count, some errors may occur.
	Display/adj/set range	0 to 40
	Unit	%
	Default value	5
	Related service mode	COPIER > OPTION > FNC-SW > T-DLV-BK
JM-ERR-D		Handling 0CAx jam as an error: DCON
Lv.2	Details	To display 0CAF jam as the error E996-0CAF. By handling the jam as an error, the machine stops, so that loss of the log can be prevented. Be sure to enable the service mode at the user's site where 0CAF jam occurs. After that, if the error E996-0CAF occurs, the log which has been backed up can be obtained.
	Use case	When obtaining a log at the occurrence of 0CAF jam
	Adj/set/operate method	1) Enter the setting value, and then press OK key.
	Display/adj/set range	0: Display as a jam, 1: Display as an error
	Default value	0
	Related service mode	COPIER > OPTION > FNC-SW > JM-ERR-R

COPIER > OPTION > FNC-SW		
JM-ERR-R		Handling 0071 jam as an error: RCON
Lv.2	Details	To display 0071 jam as the error E996-0071. By handling the jam as an error, the machine stops, so that loss of the log can be prevented. Be sure to enable the service mode at the user's site where 0CAx jam occurs. After that, if the error E996-0CAx occurs, the log which has been backed up can be obtained.
	Use case	When obtaining a log at the occurrence of 0071 jam
	Adj/set/operate method	1) Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Display as a jam, 1: Display as an error
	Default value	0
	Related service mode	COPIER > OPTION > FNC-SW > JM-ERR-D
LOW-SEQ		Setting of low speed control
Lv.1	Details	To set the low speed control.
	Use case	When prioritizing productivity over image quality stability, or when prioritizing image quality stability over productivity and FCOT
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5 0: Not execute low speed control, 1: Image quality top priority, 2 to 5: Not used
	Default value	0
TMP-C4-1		Adj of initial rotation temp: coat ppr4
Lv.2	Details	To adjust the initial rotation temperature (Print 0) when using coated paper 4. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > FNC-SW		
DSC-RPT		Prevention of low temperature fogging
Lv.2	Details	To shift to low temperature (10 deg C or lower) fogging prevention mode. Setting the setting value to 1 is effective for preventing fogging, but moire may occur.
	Use case	When fogging occurred at a low temperature (10 deg C or lower)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When the setting value is set to 1, moire may occur at a low temperature (10 deg C or lower).
	Display/adj/set range	0 to 1 0: Normal, 1: Low temperature fogging prevention mode
	Default value	0
ASLPMAX		Set auto sleep shift time maximum value
Lv.1	Details	Set auto sleep shift time maximum value
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: 4 hours 1: 60 minutes
	Default value	JP:0 USA:0 EUR:1 AU:0 CN:0 KR:0 TW:0 ASIA:0

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■ DSPLY-SW

COPIER > OPTION > DSPLY-SW		
UI-COPY		Display/hide of copy screen
Lv.2	Details	To set whether to display or hide the copy function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
UI-BOX		Display/hide of Inbox screen
Lv.2	Details	To set whether to display or hide the Inbox function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: No Inbox function (Storing is not available even with PDL to Inbox.) 1: Inbox function is active 2: Inbox function is active (with limitation; Storing is available with PDL to Inbox despite no display on the Control Panel/remote UI)
	Default value	1
	Related user mode	Preferences> Display Settings> Store Location Display Settings> Mail Box The setting value is changed to 2 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on. As the setting value of this service mode is changed, the setting value of the foregoing user mode is also changed.
UI-SEND		Display/hide of send screen
Lv.2	Details	To set whether to display or hide the SEND function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
UI-FAX		Display/hide of FAX screen
Lv.2	Details	To set whether to display or hide the FAX function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1

COPIER > OPTION > DSPLY-SW		
NWERR-SW		OFF/ON of network-related error display
Lv.2	Details	To set OFF/ON of network-related error message display. When setting "0: OFF" while the machine is not connected to network, the error message "Check the network connection." is not displayed.
	Use case	When using the machine as a copy machine
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1: Normal model, 0: Self-copy model
UISW-DSP		ON/OFF of user screen switch display
Lv.2	Details	To set ON/OFF of the switch to change the standard screen and simple screen for the users.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
T-CRG-SW		ON/OFF of Toner Cntner rplce user mode
Lv.2	Details	To set whether to display or hide the Toner Container replacement screen in user mode.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related user mode	Adjustment/Maintenance> Maintenance> Replace Specified Toner

COPIER > OPTION > DSPLY-SW		
FXMSG-SW		ON/OFF of Fixing Ass'y rplce warning dis
Lv.2	Details	To set whether to display the warning prompting to replace the Fixing Assembly on the Control Panel when the Fixing Assembly reaches its life. Criteria for judging the life differ, depending on the setting value of FXMSGSW2. FXMSGSW2 = 0: Fixing Assembly Motor current value + Fixing Roller rotation time FXMSGSW2 = 1: Items above + Total number of sheets fed on Fixing Roller
	Use case	When displaying the Fixing Assembly replacement message
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Related service mode	COPIER> OPTION> DSPLY-SW> FXMSGSW2 COPIER> DISPLAY> ALARM-2 COPIER> DISPLAY> FIXING>FX-MTR2 to 8, FX-U-TM1 COPIER> COUNTER> DRBL-1> FX-BLT
ANIM-SW		Not Used
UI-PRINT		Display/hide of print job screen
Lv.2	Details	To set whether to display or hide the print job screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
IMGC-ADJ		Dis/hide of img adj item in user mode
Lv.1	Details	To set whether to display or hide the item relating to image adjustment in user mode. When selecting "1: Display", detailed image adjustment procedure will be displayed only for the duplicated paper specified with the following settings: Preferences> Paper Settings> Paper Type Management Settings.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related user mode	Preferences> Paper Settings> Set Paper Type Management

COPIER > OPTION > DSPLY-SW		
UI-RSCAN		Display/hide of remote scan screen
Lv.2	Details	To set whether to display or hide the remote scan screen on the Control Panel.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
UI-EPRNT		Display/hide of extended print screen
Lv.2	Details	To set whether to display or hide the extended print screen (print screen for print server).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
UI-WEB		Display/hide of Web browser screen
Lv.2	Details	To set whether to display or hide the Web browser screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
UI-HOLD		Display/hide of hold job screen
Lv.2	Details	To set whether to display the hold job screen on the Control Panel.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Hide (when POD function is OFF and JAL is OFF) 1: Display (when POD function is ON and JAL is OFF) 2: Hide (when POD function is OFF and JAL is ON) 3: Hide (when POD function is ON and JAL is ON)
	Default value	1
	Supplement/memo	POD function: JDF + HOLD functions JAL function: A function to save the print result as a thumbnail.

COPIER > OPTION > DSPLY-SW		
TNR-WARN		ON/OFF of toner warning display
Lv.1	Details	To set ON/OFF of toner warning display.
	Use case	When preferring to hide the alarm until the toner runs out
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Display, 1: Hide
	Default value	1
	Related service mode	COPIER> OPTION> DSPLY-SW> T-LW-LVL
RMT-CNSL		ON/OFF of MEAP console screen
Lv.1	Details	Selecting “1: ON” enables to obtain log for Function Composer on console screen.
	Use case	When obtaining log for Function Composer
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
UI-SBOX		ON/OFF of Advanced Box screen display
Lv.2	Details	To set ON/OFF of the Advanced Box screen on the Control Panel.
	Use case	When not displaying the Advanced Box screen on the Control Panel
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	EUR: 0, Other: 1
	Related user mode	Preferences> Display Settings> Store Location Display Settings> Advanced Box / Network The setting value is changed to 0 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on.
UI-MEM		ON/OFF of memory media screen display
Lv.2	Details	To set ON/OFF of the memory media screen display on the Control Panel.
	Use case	When not displaying the memory media screen on the Control Panel
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related user mode	Preferences> Display Settings> Store Location Display Settings> Memory Media The setting value is changed to 0 when turning OFF the foregoing user mode, and the value is changed to 1 when turning ON the mode at power-off/on.

COPIER > OPTION > DSPLY-SW		
UI-NAVI		Dis/hide of Tutorial
Lv.2	Details	To set whether to display or hide “Tutorial” in the main menu.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
FCOT-DSP		ON/OFF of FCOT priority mode in usermode
Lv.1	Details	To set whether to display “Color/Black Priority for First Print Time” in the user mode. When 1 is set, the home position of the Primary Transfer Rollers for Y, M, C can be switched. (Equivalent to COPIER> OPTION> FNC-SW> T1HP-POS.)
	Use case	When setting “Color/Black Priority for First Print Time” in the user mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Related service mode	COPIER> OPTION> FNC-SW> T1HP-POS
	Related user mode	Adjustment/Maintenance> Adjust Action> Color/Black Priority for First Print Time
FXMSGSW2		ON/OFF of Fix Belt Uni life criteria
Lv.2	Details	To set whether the total number of sheets fed on Fixing Roller is included as one of the criteria for judging the message indication of the Fixing Assembly replacement. When FXMSG-SW is 1, this setting is enabled.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> DSPLY-SW> FXMSG-SW COPIER> OPTION> FNC-SW> FXWRNLVL COPIER> COUNTER> DRBL-1> FX-BLT
SLS-PTH		[Not used]
UI-CUSTM		ON/OFF of custom menu screen display
Lv.2	Details	To set ON/OFF of the custom menu screen display on the Control Panel.
	Use case	When not displaying the custom menu screen on the Control Panel
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1

COPIER > OPTION > DSPLY-SW		
CNTCNFSW		ON/OFF of Counter Check screen display
Lv.1	Details	To set whether to display the Counter Check screen. When 1 is set, the Counter Check screen can be displayed. The setting value automatically returns to 0 (OFF) when the screen is closed.
	Use case	When checking the counter at servicing
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER>OPTION>BODY>BUSI-SW
SCT-BTN		Set No. of shortcut buttons upper limit
Lv.1	Details	To set an upper limit on the number of shortcut buttons that appear at the top of the Control Panel screen. The settings for shortcut buttons are made in “Setting of Buttons at the Top of the Screen” which is displayed by pressing the advanced menu button on the Main Menu screen.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When 1 is set, the number of shortcut buttons increases from 2 to 4. However, the buttons become smaller in width, and the number of characters that can be displayed decreases. The character strings displayed are specified by the MEAP application allocated to the shortcut button, and may not be fully displayed in some cases. In this case, a measure such as decreasing the number of characters on the MEAP application side needs to be taken.
	Display/adj/set range	0 to 1 0: 2 buttons, 1: 4 buttons
	Default value	0
USER-DSP		Display/hide of login user name
Lv.1	Details	To set whether to display the name of the user who logs in to the machine on the screen of the Control Panel (upper left area).
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Hide, 1: Display(User define), 2:Display(User name)
	Default value	0

COPIER > OPTION > DSPLY-SW		
SDTM-DSP		Display/hide of auto shutdown shift time
Lv.1	Details	To set whether to display or hide auto shutdown shift time menu in user mode.
	Use case	When displaying or hiding auto shutdown shift time menu
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	JP:0, USA:1, EUR:1, AU:1, CN:1, KR:1, TW:1, ASIA:1
	Related user mode	Settings/Registration> Preferences> Time/Energy Settings> Auto Shutdown Time
PRCLNSW		Fixing Pressure Roll clean mssg dspl sw
Lv.2	Details	To set whether to display the message prompting to clean the Fixing Pressure Roller. The timing to display the message can be adjusted in COPIER>OPTION>CLEANING>PR-CLN.
	Use case	When a soiled image occurs because toner adheres to the Fixing Pressure Roller
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related service mode	COPIER> OPTION> CLEANING> PR-CLN

T-8-59

■ IMG-FIX

COPIER > OPTION > IMG-FIX		
FX-WUT		Set of Fixing Assembly warm-up time
Lv.2	Details	To set the warm-up time of the Fixing Assembly, which is performed first time for the day. Use “0: Initial value” in the normal operation. Extend the time as needed when a fixing failure occurs first time for the day.
	Use case	- When a fixing failure occurs first time for the day - In the environment of 15 deg C or lower - When using media out of the specifications
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 4 0: Initial value, 1: Initial value + 30 seconds, 2: Initial value + 60 seconds, 3: Initial value + 120 seconds, 4: Initial value + 180 seconds
	Unit	sec
	Default value	0
TMP-P1-1		Adj of Plain ppr 1 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Plain 1.” Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-P1-2		Plain ppr1ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial ration temperature and print temperature 2 and 3 for “Plain 1”. Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-P2-1		Adj of plain ppr 2 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Plain 2”. Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-P2-2		Plain ppr2 ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial ration temperature and print temperature 2 and 3 for “Plain 2”. Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-H1-1		Adj of heavy ppr 1 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Heavy 1.” Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-H1-2		Heavy ppr1 ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial ration temperature and print temperature 2 and 3 for “Heavy 1”. Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-H2-1		Adj of heavy ppr 2 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Heavy 2”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-H2-2		Heavy ppr2 ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 2 and 3 for “Heavy 2”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-H3-1		Adj of heavy ppr 3 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Heavy 3”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-H3-2		Heavy ppr3 ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 2 and 3 for “Heavy 3”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-H4-1		Adj of heavy ppr 4 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Heavy 4”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-H4-2		Heavy ppr4 ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 2 and 3 for “Heavy 4”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-C1		Coat ppr1 ini rotn temp, print temp 1-3
Lv.2	Details	To adjust the initial rotation temperature and print temperature 1 to 3 for “Coated 1” which paper weight is customized to 106 to 128g/m2. Set a negative value when wrinkles occur. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When wrinkles, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-C2		Coat ppr2 ini rotn temp, print temp 1-3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 1 to 3 for “Coated 2”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	deg C
	Default value	0
TMP-C3		Coat ppr3 ini rotn temp, print temp 1-3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 1 to 3 for “Coated 3”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	deg C
	Default value	0
TMP-C4		Coat ppr4 ini rotn temp, print temp 1-3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 1 to 3 for “Coated 4”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-THIN		Thin ppr ini rotn temp, print temp 1-3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 1 to 3 for “Thin Paper”. Set a negative value when wrinkles or separation failure occurs, and set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When wrinkles, a separation failure, a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-OHT		Transp ini rotn temp, print temp 1-3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 1 to 3 for “Transparency”. Set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
DWN-TMP		Adj of down sequence temp threshold VL
Lv.2	Details	To adjust the threshold value of the temperature at which the machine goes into the down sequence. Use 0 (initial value) in the normal operation. As the value is smaller, the machine is less likely to enter the down sequence. When -4 is set, the down sequence actually becomes OFF.
	Use case	When making adjustments according to the environment and media. Conditions in which the machine is likely to go into the down sequence (the center temperature is likely to be lowered): 500 sheets or more of continuous prints in small size, LL or lower temperature environment, input voltage lower than the rated voltage
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-3 to 3 -3: -9 deg C, -2: -6 deg C, -1: -3 deg C, 0: 0 deg C, 1: +3 deg C, 2: +6 deg C, 3: +9 deg C
	Unit	deg C
	Default value	0
TMP-R1-1		Adj rcycl paper 1 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Recycled 1.” Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-R2-1		Adj rcycl paper 2 print temperature 1
Lv.2	Details	To adjust the print temperature 1 for “Recycled 2.” Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-R1-2		Adj rcycl1 ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial ration temperature and print temperature 2 and 3 for “Recycled 1”. Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-R2-2		Adj rcycl2 ini rotn temp, print temp 2&3
Lv.2	Details	To adjust the initial ration temperature and print temperature 2 and 3 for “Recycled 2”. Set a positive value when a fixing failure occurs, and set a negative value when a separation failure or wrinkles occur. When an image failure occurs, adjust appropriately. Use 0 (initial value) in the normal operation.
	Use case	When a fixing failure, a separation failure, wrinkles or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -3 or less is set, a fixing failure might occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
FX-ERRSW		ON/OFF of Fixing Roller life judgment
Lv.2	Details	To set whether to judge the life of the Fixing Roller using the number of fed sheets. The number of fed sheets is counted by COPIER> COUNTER> DRBL-1> FX-BLT-U. When 1 is set, FX-U-ERR (error display) is enabled.
	Use case	When enabling the judgment of the Fixing Roller life
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT COPIER> OPTION> IMG-FIX> FX-U-ERR
FX-U-ERR		Set Fix Roller life error thresholdVL
Lv.2	Details	To set the threshold value for the number of fed sheets which an error indicating that the Fixing Roller reaches its life is displayed when the life of the Fixing Roller is judged by the number of fed sheets. The number of fed sheets is counted by COPIER> COUNTER> DRBL-1> FX-BLT-U. When FX-ERRSW is 1, this setting is enabled.
	Use case	When enabling the judgment of the Fixing Roller life
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 4 1: 250 K, 2: 300 K, 3: 350 K, 4: 400 K
	Default value	3
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT COPIER> OPTION> IMG-FIX> FX-ERRSW COPIER> OPTION> FNC-SW> FXWRNLVL COPIER> OPTION> DSPLY-SW> FXMSG-SW, FXMSGSW2
LOW-NS		ON/OFF of silent mode at shift to copy
Lv.1	Details	To set whether to activate the Fixing Heat Exhaust Fan (FM6) in silent mode when shifting from standby mode to copy mode. When shifting from standby mode to copy mode, noise occurs because the rotation speed of the Fixing Heat Exhaust Fan is switched from 40% to 70%. When 1 is set, the noise is alleviated by changing the timing of switching the fan rotation speed (silent mode).
	Use case	Upon user’s request (alleviation of noise when shifting to copy mode)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

COPIER > OPTION > IMG-FIX		
FX-WAIT		Change of fixing initial rotation time
Lv.2	Details	To set the initial rotation time according to the temperature condition of the Fixing Assembly. When 0 is set, initial rotation starts once a job is received. When setting a value other than 0, a job is stopped until difference of detected temperatures of the Fixing Main Thermistor and the Sub Thermistor falls within the certain range. If it does not fall within the range after 60 seconds have passed, a job is started.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	With this setting, initial rotation time becomes longer.
	Display/adj/set range	0 to 3 0: Not execute initial rotation 1: Stop a job until temperature difference between the edge and center becomes within 5 deg C 2: Stop a job until temperature difference between the edge and center becomes within 10 deg C 3: Stop a job until temperature difference between the edge and center becomes within 20 deg C
	Default value	0
TMPC1A-2		Adj coated ppr 1A print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 1A. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMPC1B-2		Adj coated ppr 1B print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 1B. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMPC1C-2		Adj coated ppr 1C print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 1C. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-C2-1		Adj of initial rotation temp: coat ppr2
Lv.2	Details	To adjust the initial rotation temperature (Print0) when using coated paper 2. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-C2-2		Adj coated ppr 2 print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 2. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-C3-1		Adj of initial rotation temp: coat ppr3
Lv.2	Details	To adjust the initial rotation temperature (Print 0) when using coated paper 3. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMP-C3-2		Adj coated ppr 3 print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 3. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-C4-2		Adj coated ppr 4 print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 4. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMPC5A-1		Adj of initial rotation temp: coat ppr5A
Lv.2	Details	To adjust the initial rotation temperature (Print 0) when using coated paper 5A. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMPC5A-2		Adj coated ppr 5A print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 5A. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMPC5B-1		Adj of initial rotation temp: coat ppr5B
Lv.2	Details	To adjust the initial rotation temperature (Print 0) when using coated paper 5B. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMPC5B-2		Adj coated ppr 5B print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 5B. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMPC5C-1		Adj of initial rotation temp: coat ppr5C
Lv.2	Details	To adjust the initial rotation temperature (Print 0) when using coated paper 5C. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMPC5C-2		Adj coated ppr 5C print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using coated paper 5C. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMPOHT-1		Adj initial rotation temp: transparency
Lv.2	Details	To adjust the initial rotation temperature (Print 0) when using transparency. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMPOHT-2		Adj transparency print fix ctrl temp
Lv.2	Details	To adjust the print fixing control temperature (Print 1 to 5) when using transparency. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
FX-CU-P1		Adj Copper Shield Plate shft pstn: pln 1
Lv.2	Details	To adjust the shift position of the Copper Shield Plate when using plain paper 1. The setting is applied to all paper sizes.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4 to -3: -6 mm, -2: -3 mm, -1: -1 mm, 0: 0 mm, 1: +1 mm, 2: +3 mm, 3 to 4: +6 mm
	Unit	mm
	Default value	0
FX-CU-P2		Adj Copper Shield Plate shft pstn: pln 2
Lv.2	Details	To adjust the shift position of the Copper Shield Plate when using plain paper 2. The setting is applied to all paper sizes.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4 to -3: -6 mm, -2: -3 mm, -1: -1 mm, 0: 0 mm, 1: +1 mm, 2: +3 mm, 3 to 4: +6 mm
	Unit	mm
	Default value	0

COPIER > OPTION > IMG-FIX		
FX-CU-R1		Adj Copper Shield Plate shft pstn:rcycl1
Lv.2	Details	To adjust the shift position of the Copper Shield Plate when using recycled paper 1. The setting is applied to all paper sizes.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4 to -3: -6 mm, -2: -3 mm, -1: -1 mm, 0: 0 mm, 1: +1 mm, 2: +3 mm, 3 to 4: +6 mm
	Unit	mm
	Default value	0
FX-CU-R2		Adj Copper Shield Plate shft pstn:rcycl2
Lv.2	Details	To adjust the shift position of the Copper Shield Plate when using recycled paper 2. The setting is applied to all paper sizes.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4 to -3: -6 mm, -2: -3 mm, -1: -1 mm, 0: 0 mm, 1: +1 mm, 2: +3 mm, 3 to 4: +6 mm
	Unit	mm
	Default value	0
FX-CU-TN		Adj Copper Shield Plate shft pstn: thin
Lv.2	Details	To adjust the shift position of the Copper Shield Plate when using thin paper. The setting is applied to all paper sizes.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4 to -3: -6 mm, -2: -3 mm, -1: -1 mm, 0: 0 mm, 1: +1 mm, 2: +3 mm, 3 to 4: +6 mm
	Unit	mm
	Default value	0

COPIER > OPTION > IMG-FIX		
FX-CU-OT		Cu Plt shft pstn:excpt pln1/2,rcycl1,thn
Lv.2	Details	To adjust the shift position of the Copper Shield Plate when using paper other than plain paper 1, plain paper 2, recycled paper 1, and thin paper. The setting is applied to all paper sizes.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4 to -3: -6 mm, -2: -3 mm, -1: -1 mm, 0: 0 mm, 1: +1 mm, 2: +3 mm, 3 to 4: +6 mm
	Unit	mm
	Default value	0
WEB-PRS		Set Heat Soaking Roller engagement tmg
Lv.2	Details	To set the number of sheets as the intervals at which the Heat Soaking Roller is engaged. While it is in engagement state, the Edge Fan is turned ON.
	Use case	When overheating occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -1 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: Not used, -3: 0 sheet, -2: 5 sheets, -1: 15 sheets, 0: 27 sheets, 1: 55 sheets, 2: 90 sheets, 3: 150 sheets, 4:Not used
	Unit	sheet
	Default value	0
WEB-TMP		Adj Heat Soaking Roller eng threshold VL
Lv.2	Details	To adjust the threshold value of the edge temperature of the Fixing Roller to which the Heat Soaking Roller is engaged. When the detected temperature of the Fixing Sub Thermistor exceeds the threshold, the Heat Soaking Roller is engaged.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2 to 4: +10 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
EF-TMP11		Set Edge Fan ON condition: initial rotn
Lv.2	Details	To set the condition to turn ON/OFF the Edge Fan at initial rotation. When the detected temperature of the Fixing Sub Thermistor becomes higher than that of the Fixing Main Thermistor for a certain level, the Edge Fan is turned ON. At this time, the Heat Soaking Roller is not engaged. When the temperature difference becomes a certain level or below, the Edge Fan is turned OFF.
	Use case	When overheating, warp, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	With this setting, a fixing failure may occur.
	Display/adj/set range	0 to 3 0: OFF 1: ON when the temperature difference is 25 deg C or more, and OFF when the temperature difference is 20 deg C or less 2: ON when the temperature difference is 15 deg C or more, and OFF when the temperature difference is 10 deg C or less 3: ON when the temperature difference is 5 deg C or more, and OFF when the temperature difference is 0 deg C or less
	Default value	0
EF-TMP21		Edg Fan ON cndtn:nrrw ppr outpt,temp dif
Lv.2	Details	To set the condition to turn ON/OFF the Edge Fan when outputting paper which width is 215.9 mm or less. When the detected temperature of the Fixing Sub Thermistor becomes higher than that of the Fixing Main Thermistor for a certain level, the Edge Fan is turned ON. When the temperature difference becomes below a certain level, the Edge Fan is turned OFF.
	Use case	When overheating, warp, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-2 to 2 -2: ON when the temperature difference is 15 deg C or more, and OFF when the temperature difference is less than 10 deg C -1: ON when the temperature difference is 20 deg C or more, and OFF when the temperature difference is less than 15 deg C 0: ON when the temperature difference is 25 deg C or more, and OFF when the temperature difference is less than 20 deg C 1: ON when the temperature difference is 30 deg C or more, and OFF when the temperature difference is less than 25 deg C 2: ON when the temperature difference is 35 deg C or more, and OFF when the temperature difference is less than 30 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
EF-TMP22		Edg Fan ON cndtn:nrrw ppr outpt,edg temp
Lv.2	Details	To set the condition to turn ON/OFF the Edge Fan when outputting paper which width is 215.9 mm or less. When the detected temperature of the Fixing Sub Thermistor becomes a certain level or higher, the Edge Fan is turned ON. When the detected temperature becomes below a certain level, the Edge Fan is turned OFF.
	Use case	When overheating, warp, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-1 to 1 -1: ON when the detected temperature is 220 deg C or higher, and OFF when the detected temperature is lower than 210 deg C 0: ON when the detected temperature is 230 deg C or higher, and OFF when the detected temperature is lower than 220 deg C 1: ON when the detected temperature is 240 deg C or higher, and OFF when the detected temperature is lower than 230 deg C
	Unit	deg C
	Default value	0
EF-TMP23		Edg Fan ON cndtn:wide ppr outpt,edg temp
Lv.2	Details	To set the condition to turn ON/OFF the Edge Fan when outputting paper which width is larger than 215.9 mm. When the detected temperature of the Fixing Sub Thermistor becomes a certain level or higher, the Edge Fan is turned ON. When the detected temperature becomes below a certain level, the Edge Fan is turned OFF.
	Use case	When overheating, warp, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-1 to 10 -1: ON when the detected temperature is 230 deg C or higher, and OFF when the detected temperature is lower than 220 deg C 0: ON when the detected temperature is 240 deg C or higher, and OFF when the detected temperature is lower than 230 deg C
	Unit	deg C
	Default value	0
DWN-TMP2		Adj Thrmstr temp threshold: dwn seq shft
Lv.2	Details	To adjust the threshold value of the detected temperature of the Thermistor to shift to down sequence. The setting is applied regardless of paper type or paper size.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-3 to 3 -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0 to 3: 0 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
IHOFFTMP		Adj Thrmstr temp threshold: IH power OFF
Lv.2	Details	To adjust the threshold value of the detected temperature of the Thermistor to turn OFF the IH. The setting is applied regardless of paper type or paper size.
	Use case	When overheating, wrinkles, or an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-3 to 3 -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0 to 3: 0 deg C
	Unit	deg C
	Default value	0
FX-L-CHG		Adj of target temp: pressure temperature
Lv.2	Details	To adjust the target temperature according to the pressure temperature. The setting is applied regardless of paper type or paper size.
	Use case	When a mottled image (color unevenness) occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-3 to 3 -3: -9 deg C, -2: -6 deg C, -1: -3 deg C, 0: 0 deg C, 1: +3 deg C, 2: +6 deg C, 3: +9 deg C
	Unit	deg C
	Default value	0
WEB-FEED		Adjustment of Fixing Web feed amount
Lv.2	Details	To adjust the feed amount of the Fixing Web in pulse. Increase the value when soiled back, offset, or web chattering occurs.
	Use case	When soiled back, offset, or web chattering occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the value is larger, the Fixing Web consumption is increased. As the value is decreased, soiled back, offset, or web chattering may occur.
	Display/adj/set range	-3 to 3 -3: -30 pulses, -2: -20 pulses, -1: -10 pulses, 0: 0 pulse, 1: +10 pulses, 2: +20 pulses, 3: +30 pulses
	Default value	0

COPIER > OPTION > IMG-FIX		
COL-SHRT		Stby temp thrshld:s-ppr,lst rtn,prdctvty
Lv.2	Details	To adjust the threshold value of the detected temperature of the Fixing Sub Thermistor to receive a new job at last rotation of a job using small size paper in productivity priority mode. The setting is applied regardless of paper type or paper size.
	Use case	When changing the waiting time after feeding small size paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2 to 4: +10 deg C
	Unit	deg C
	Default value	0
COL-LONG		Stby temp thrshld: s-ppr,lst rtn,quality
Lv.2	Details	To adjust the threshold value of the detected temperature of the Fixing Sub Thermistor to receive a new job at last rotation of a job using small size paper in quality priority mode. The setting is applied regardless of paper type or paper size.
	Use case	When changing the waiting time after feeding small size paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2 to 4: +10 deg C
	Unit	deg C
	Default value	0
FX-MIX1		Set prdctvty/qlty prrty: 1/1SPD, mix ppr
Lv.2	Details	To set whether productivity priority mode or quality priority mode is to be prioritized at 1/1 speed when papers are mixed.
	Use case	When changing whether productivity priority mode or quality priority mode is to be prioritized while papers are mixed
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: def, 1: Productivity priority mode, 2: Quality priority mode
	Default value	0
FX-MIX2		Set prdctvty/qlty prrty: 1/2SPD, mix ppr
Lv.2	Details	To set whether productivity priority mode or quality priority mode is to be prioritized at 1/2 speed when papers are mixed.
	Use case	When changing whether productivity priority mode or quality priority mode is to be prioritized while papers are mixed
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: def, 1: Productivity priority mode, 2: Quality priority mode
	Default value	0

COPIER > OPTION > IMG-FIX		
FX-MIX3		Set prdctvty/qlty prrty: 1/3SPD, mix ppr
Lv.2	Details	To set whether productivity priority mode or quality priority mode is to be prioritized at 1/3 speed when papers are mixed.
	Use case	When changing whether productivity priority mode or quality priority mode is to be prioritized while papers are mixed
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: def, 1: Productivity priority mode, 2: Quality priority mode
	Default value	0
CF-TMP11		Set Ctr Fan ON cndtn: ini rotn, temp dif
Lv.2	Details	To set the condition to turn ON/OFF the Center Fan at initial rotation. When the detected temperature of the Fixing Main Thermistor becomes higher than that of the Fixing Sub Thermistor for a certain level, the Center Fan is turned ON. When the temperature difference becomes a certain level or below, the Center Fan is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 3 -2: Default value -10 deg C -1: Default value -5 deg C 0: Default value 1: Default value +5 deg C 2: Default value +10 deg C 3: Default value +15 deg C
	Default value	0
CF-TMP12		Set Ctr Fan ON cndtn: ini rotn, transp
Lv.2	Details	To set whether to turn ON the Center Fan for transparency at initial rotation. When 1 is set, the Center Fan is turned ON. When the difference of the detected temperatures of the Fixing Main Thermistor and the Sub Thermistor is within a certain range, or it is switched to primary temperature control, it is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

COPIER > OPTION > IMG-FIX		
CF-TMP13		Set Ctr Fan ON cndtn: ini rotn, all ppr
Lv.2	Details	To set whether to turn ON the Center Fan for all paper types at initial rotation. When 0 is set, it is turned ON only for thin paper, plain paper 1, and recycled paper 1. When 1 is set, it is turned ON for all paper types. When the difference of the detected temperatures of the Fixing Main Thermistor and the Sub Thermistor is within a certain range, or it is switched to primary temperature control, it is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
CF-TMP14		Adj fix ctrl temp: ini rotn, Ctr Fan ON
Lv.2	Details	To adjust the fixing control temperature to turn ON the Center Fan at initial rotation.
	Use case	When a fixing failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	0 to 2 0: -10 deg C, 1: -5 deg C, 2: 0 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
CF-TMP21		Set Ctr Fan ON cndtn: ppr feed, temp dif
Lv.2	Details	To set the condition to turn ON/OFF the Center Fan when paper is fed. When the detected temperature of the Fixing Sub Thermistor becomes higher than that of the Fixing Main Thermistor for a certain level, the Center Fan is turned OFF. When the temperature difference becomes a certain level or below, the Center Fan is turned ON.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-3 to 6 When the value obtained by subtracting the detected value of the Center Thermistor from the detected value of the Edge Thermistor becomes the following value, the fan is turned ON/OFF. -3: Default value -15 deg C -2: Default value -10 deg C -1: Default value -5 deg C 0: Default value 1: Default value +5 deg C 2: Default value +10 deg C 3: Default value +15 deg C 4: Default value +20 deg C 5: Default value +25 deg C 6: Default value +30 deg C
	Default value	0
CF-TMP22		Adj fix ctrl temp: ppr feed, Ctr Fan ON
Lv.2	Details	To adjust the fixing control temperature to turn ON the Center Fan when paper is fed.
	Use case	When uneven gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 0 -2: -20 deg C, -1: -10 deg C, 0: 0 deg C
	Default value	0
CF-TMP23		Set Ctr Fan ON cndtn: ppr feed, thin ppr
Lv.2	Details	To set whether to turn ON the Center Fan when feeding thin paper. When 0 is set, it is turned OFF after a specified number of sheets according to the paper width is fed. When 1 is set, it is turned ON while paper is fed. When the difference of detected temperatures of the Fixing Main Thermistor and the Sub Thermistor becomes a certain level or below, it is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs(E339S)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-1 to 1 -1: OFF, 0: OFF after feeding a specified number of sheets, 1: ON
	Default value	0

COPIER > OPTION > IMG-FIX		
CF-TMP24		Set Ctr Fan ON cndtn: ppr feed, plain 1
Lv.2	Details	To set whether to turn ON the Center Fan when feeding plain paper 1. When 0 is set, it is turned OFF after a specified number of sheets according to the paper width is fed. When 1 is set, it is turned ON while paper is fed. When the difference of detected temperatures of the Fixing Main Thermistor and the Sub Thermistor becomes a certain level or below, it is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-1 to 1 -1: OFF, 0: OFF after feeding a specified number of sheets, 1: ON
	Default value	0
CF-TMP25		Set Ctr Fan ON cndtn: ppr feed, rcycl 1
Lv.2	Details	To set whether to turn ON the Center Fan when feeding recycled paper 1. When 0 is set, it is turned OFF after a specified number of sheets according to the paper width is fed. When 1 is set, it is turned ON while paper is fed. When the difference of detected temperatures of the Fixing Main Thermistor and the Sub Thermistor becomes a certain level or below, it is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-1 to 1 -1: OFF, 0: OFF after feeding a specified number of sheets, 1: ON
	Default value	0
CF-TMP26		Set Ctr Fan ON cndtn: ppr feed, transp
Lv.2	Details	To set whether to turn ON the Center Fan when feeding transparency. When -1 is set, it is turned OFF. When 0 is set, it is turned ON/OFF according to the setting for each paper size. When 1 is set, it is turned ON. When the difference of detected temperatures of the Fixing Main Thermistor and the Sub Thermistor becomes a certain level or below, it is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-1 to 1 -1: OFF 0: Based on the setting for each paper size 1: ON (Based on CF-TMP21)
	Default value	0
	Related service mode	COPIER > OPTION > IMG-FIX > CF-TMP21

COPIER > OPTION > IMG-FIX		
CF-TMP27		Set Ctr Fan ON cndtn: ppr feed, all ppr
Lv.2	Details	To set whether to turn ON the Center Fan when feeding all paper size. When 0 is set, it is turned OFF When 0 is set, it is turned ON/OFF according to the setting for each paper size. When 1 is set, it is turned ON. When the difference of detected temperatures of the Fixing Main Thermistor and the Sub Thermistor becomes a certain level or below, it is turned OFF.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-1 to 1 -1: OFF 0: Based on the setting for each paper size 1: ON (Based on CF-TMP21)
	Default value	0
	Related service mode	COPIER > OPTION > IMG-FIX > CF-TMP21
FX-CU-13		Set heat generation wid: 1st/2nd fed sht
Lv.1	Details	To set whether to set the heat generation width to 13 inches for the first 2 fed sheets. When 1 is set, heat is produced for the width of the paper to be fed first.
	Use case	When wrinkles or warp on the trailing edge occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	By setting 1, waiting time may occur when papers are mixed.
	Display/adj/set range	0 to 1 0: 13 inches for the first 2 fed sheets, 1: Width of the first sheet to be fed
	Default value	0
FIX-MODE		Set plain paper 1print fix ctrl temp
Lv.1	Details	To set the print fixing control temperature when using plain paper 1. When 0 is set, normal fixing temperature control mode is applied. When a fixing failure occurs, set 1.
	Use case	When a fixing failure occurs on plain paper 1
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	By setting 1, waiting time may occur when papers are mixed.
	Display/adj/set range	0 to 2 0: Normal fixing temperature control mode, 1: Increase the control temperature 0 to 16 deg C higher than normal (depending on the environment temperature), 2: Not used
	Default value	0

COPIER > OPTION > IMG-FIX		
FIX-RCPR		Set Fixing Assembly reciprocation ctrl
Lv.2	Details	To set the details of the reciprocation control for the Fixing Assembly. When -1 is set, reciprocation is not executed. When 1 is set, reciprocation speed (shift amount per fed sheet) is changed.
	Use case	When alleviating the degree of scratches caused by paper edge
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-1 to 1 -1: Reciprocation OFF, 0: Reciprocation ON, 1: Change the reciprocation speed
	Unit	pulse
	Default value	0
FX-MIX4		Adj min wait: 1/1SPD, mix ppr, prdctvty
Lv.2	Details	To adjust the minimum waiting time required for switching paper size at 1/1 speed when papers which widths are different are mixed in productivity priority mode. When the uneven gloss occurs, increase the value.
	Use case	When changing the waiting time
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the waiting time is shortened, warp may get worse.
	Display/adj/set range	-2 to 2 -2: x1/2 , -1: x2/3, 0: def, 1: x1.5, 2: x2
	Default value	0
FX-MIX5		Adj min wait: 1/1SPD, mix ppr, quality
Lv.2	Details	To adjust the minimum waiting time required for switching paper size at 1/1 speed when papers which widths are different are mixed in quality priority mode. When the uneven gloss occurs, increase the value.
	Use case	When changing the waiting time
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the waiting time is shortened, warp may get worse.
	Display/adj/set range	-2 to 2 -2: x1/2 , -1: x2/3, 0: def, 1: x1.5, 2: x2
	Default value	0
FX-MIX6		Adj min wait: 1/2SPD, mix ppr, prdctvty
Lv.2	Details	To adjust the minimum waiting time required for switching paper size at 1/2 speed when papers which widths are different are mixed in productivity priority mode. When the uneven gloss occurs, increase the value.
	Use case	When changing the waiting time
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the waiting time is shortened, warp may get worse.
	Display/adj/set range	-2 to 2 -2: x1/2 , -1: x2/3, 0: def, 1: x1.5, 2: x2
	Default value	0

COPIER > OPTION > IMG-FIX		
FX-MIX7		Adj min wait: 1/2SPD, mix ppr, quality
Lv.2	Details	To adjust the minimum waiting time required for switching paper size at 1/2 speed when papers which widths are different are mixed in quality priority mode. When the uneven gloss occurs, increase the value.
	Use case	When changing the waiting time
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the waiting time is shortened, warp may get worse.
	Display/adj/set range	-2 to 2 -2: x1/2 , -1: x2/3, 0: def, 1: x1.5, 2: x2
	Default value	0
WEB-AFT		Setting of web feed interval
Lv.1	Details	To set the number of sheets as the intervals at which the web feed operation is executed. If more than the specified number of sheets are fed for a job which requires web cleaning, the soiled web part is fed to bring out clean surface of the web. As the value is smaller, the web feed operation is executed frequently.
	Use case	When a soiled image occurs
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	-3 to 0 -3: 500 sheets, -2: 1000 sheets, -1: 1500 sheets, 0: 2000 sheets
	Unit	sheet
	Default value	0
KIN-SW1		Heat Soak Rol eng/diseng ctrl: 52-81g/m2
Lv.2	Details	To switch engagement/disengagement control of the Heat Soaking Roller when using 52 to 81g/m2 size paper.
	Use case	When leading edge of the 1st side of 2-sided is soiled for width of a full turn of the Pressure Roller
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	In the case of users who perform continuous feeding frequently, the life of the Fixing Belt may be shortened.
	Display/adj/set range	0: Engage/disengage the Heat Soaking Roller according to the number fed sheets 1: Not engage the Heat Soaking Roller only at 1-sided feed 2: Always not engage the Heat Soaking Roller
	Default value	0

COPIER > OPTION > IMG-FIX		
KIN-SW2		Heat Soak Rol eng/diseng ctrl:82-105g/m2
Lv.2	Details	To switch engagement/disengagement control of the Heat Soaking Roller when using 82 to 105g/m2 size paper.
	Use case	When leading edge of the 1st side of 2-sided is soiled for width of a full turn of the Pressure Roller
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	In the case of users who perform continuous feeding frequently, the life of the Fixing Belt may be shortened.
	Display/adj/set range	0: Engage/disengage the Heat Soaking Roller according to the number fed sheets 1: Not engage the Heat Soaking Roller only at 1-sided feed 2: Always not engage the Heat Soaking Roller
	Default value	0
KIN-SW3		Heat Soak Rol eng/diseng ctrl:=/>106g/m2
Lv.2	Details	To switch engagement/disengagement control of the Heat Soaking Roller when using 106g/m2 size paper or larger.
	Use case	When leading edge of the 1st side of 2-sided is soiled for width of a full turn of the Pressure Roller
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	In the case of users who perform continuous feeding frequently, the life of the Fixing Belt may be shortened.
	Display/adj/set range	0: Engage/disengage the Heat Soaking Roller according to the number fed sheets 1: Not engage the Heat Soaking Roller only at 1-sided feed 2: Always not engage the Heat Soaking Roller
	Default value	0
TMPC1A-1		Adj of initial rotation temp: coat ppr1A
Lv.2	Details	To adjust the initial rotation temperature (Print0) when using coated paper 1A. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a negative value when wrinkles occur, and set a positive value when a fixing failure occurs.
	Use case	When wrinkles, a fixing failure, a separation failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMPC1B-1		Adj of initial rotation temp: coat ppr1B
Lv.2	Details	To adjust the initial rotation temperature (Print0) when using coated paper 1B. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a positive value when a fixing failure occurs.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0
TMPC1C-1		Adj of initial rotation temp: coat ppr1C
Lv.2	Details	To adjust the initial rotation temperature (Print0) when using coated paper 1C. As the value is incremented by 1, the temperature changes by 5 deg C. +: Increase -: Decrease Set a positive value when a fixing failure occurs.
	Use case	When a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When -2 or less is set, a fixing failure may occur.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Unit	deg C
	Default value	0

COPIER > OPTION > IMG-FIX		
TMP-THN2		Thin ppr ini rotn temp, print temp 1-3
Lv.2	Details	To adjust the initial rotation temperature, print temperature 1 to 3 for “Thin Paper”. Set a negative value when wrinkles or separation failure occurs, and set a positive value when a fixing failure occurs. In addition, use this mode when an image failure or deterioration of gloss occurs. Use 0 (initial value) in the normal operation.
	Use case	When wrinkles, a separation failure, a fixing failure, an image failure, or deterioration of gloss occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-4 to 4 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C, 3: +15 deg C, 4: +20 deg C
	Default value	0
EF-AFT1		Set edge cooling mode shift temp:lst rtn
Lv.2	Details	To set the temperature to shift to edge cooling mode at last rotation. When either the Edge Thermistor F or R detects the specified temperature, the machine enters edge cooling mode. Normally, when either of the Edge Thermistors detects “0: 180 deg C”, the machine enters edge cooling mode.
	Use case	When a failure (wrinkle, crepe mark, paper curl with a coated paper) occurs This service mode is suitable for the users who make a small quantity of prints at a time.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-2 to 4 Temperature to shit to cooling mode at last rotation. -2: 160 deg C, -1: 170 deg C, 0: 180 deg C, 1: 190 deg C, 2: 200 deg C, 3: 210 deg C, 4: 220 deg C
	Default value	0
EF-AFT2		No. of sht for edg cool mod shft:lst rtn
Lv.2	Details	To set the number of sheets to shift to edge cooling mode at last rotation. When it reaches the specified number, the machine enters edge cooling mode. Normally, when the number of sheets in a stack exceeds “0: 50 sheets”, the machine enters edge cooling mode.
	Use case	When a failure (wrinkle, crepe mark, paper curl with a coated paper) occurs This service mode is suitable for the users who make a large quantity of prints at a time.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	-1 to 5 Number of sheets to shift to edge cooling mode. -1: 25 sheets, 0: 50 sheets, 1: 100 sheets, 2: 150 sheets, 3: 200 sheets, 4: 250 sheets, 5: 300 sheets
	Default value	0

T-8-60

IMG-TR

COPIER > OPTION > IMG-TR		
2TR-RVON		ON/OFF end edge white spot crrct scrn
Lv.2	Details	To set whether to display the screen to set ON/OFF of the paper trailing edge weak bias in user mode. When 1 is set, trailing edge white spot correction screen is displayed in user mode. If ON is set in this screen, weak bias is applied to the paper trailing edge, and white spots at the trailing edge are alleviated.
	Use case	Upon user’s request (when white spots occur at the trailing edge)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1:ON
	Default value	0
	Related service mode	COPIER> OPTION> DSPLY-SW> IMGC-ADJ
	Related user mode	Adjustment/ Maintenance> Adjust Image Quality> Tail End White Patch Correct
TR-BND1		Set ITB toner band dens: Bk plain color
Lv.2	Details	To adjust the density of ITB band in single Bk color mode. As the value is increased, toner consumption can be reduced, but the ITB Cleaning Blade might be flipped.
	Use case	When preferring to reduce toner consumption
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	If the value is too large, the ITB Cleaning Blade might be flipped by friction.
	Display/adj/set range	0 to 2 0: Darker 1: Normal 2: Lighter
	Default value	0
	Related service mode	COPIER> OPTION> IMG-TR> TR-BND2, TRCLN1-P, TRCLN2-P
TR-BND2		Set ITB toner band length:Bk plain color
Lv.2	Details	To adjust the length of ITB band in single Bk color mode. As the value is increased, an image failure due to the ITB Cleaning Blade can be alleviated, but toner consumption is increased.
	Use case	When an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the value is increased, toner consumption is increased.
	Display/adj/set range	0 to 2 0: 10 mm, 1: 100 mm, 2: 210 mm
	Default value	0
	Related service mode	COPIER> OPTION> IMG-TR> TR-BND1, TRCLN1-P, TRCLN2-P

COPIER > OPTION > IMG-TR		
TRCLN1-P		Set ITB toner supply intvl: Bk pln color
Lv.2	Details	To set the intervals at which a toner band is formed on the ITB at last rotation in single Bk color mode. Decrease the setting value when an image failure due to the ITB Cleaning Blade occurs.
	Use case	When an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	If the value is too large, the ITB Cleaning Blade might be flipped by friction.
	Display/adj/set range	0 to 1000
	Unit	sheet
	Default value	70
	Related service mode	COPIER> OPTION> IMG-TR> TR-BND1, TR-BND2, TRCLN2-P
TRCLN2-P		Set of ITB toner supply intvl: ppr intvl
Lv.2	Details	To set the intervals of toner supply at paper intervals in single Bk color mode. Decrease the setting value when an image failure due to the ITB Cleaning Blade occurs.
	Use case	When an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	If the value is too large, the ITB Cleaning Blade might be flipped by friction.
	Display/adj/set range	0 to 1000
	Unit	sheet
	Default value	200
	Related service mode	COPIER> OPTION> IMG-TR> TR-BND1, TR-BND2, TRCLN1-P
ITB-TYPE		[Not used]
TR-BND3		Setting of ITB toner band length: color
Lv.2	Details	To set the length of toner band to be formed on the ITB at color. As the value is increased, an image failure due to the ITB Cleaning Blade can be alleviated, but toner consumption is increased.
	Use case	When an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	If the value is too large, the ITB Cleaning Blade might be flipped by friction.
	Display/adj/set range	0 to 2 0: 10 mm, 1: 100 mm, 2: 210 mm
	Default value	0

COPIER > OPTION > IMG-TR		
TR-BND4		Setting of ITB toner band density: color
Lv.2	Details	To set the density of toner band to be formed on the ITB at color. As the value is increased, toner consumption can be reduced, but the ITB Cleaning Blade might be flipped.
	Use case	When preferring to reduce toner consumption
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the value is increased, toner consumption is increased.
	Display/adj/set range	0 to 2 0: Darker 1: Normal 2: Lighter
	Default value	0
TRCLN3-P		Set ITB tonr supply intvl:clr, last rotn
Lv.2	Details	To set the interval at which a toner band is formed on the ITB at last rotation at color. Decrease the setting value when an image failure due to the ITB Cleaning Blade occurs.
	Use case	When an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	If the value is too large, the ITB Cleaning Blade might be flipped by friction.
	Display/adj/set range	0 to 1000
	Unit	sheet
	Default value	70
TRCLN4-P		Set ITB tonr supply intvl:clr, ppr intvl
Lv.2	Details	To set the interval at which a toner band is formed on the ITB at paper interval at color. Decrease the setting value when an image failure due to the ITB Cleaning Blade occurs.
	Use case	When an image failure occurs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	If the value is too large, the ITB Cleaning Blade might be flipped by friction.
	Display/adj/set range	0 to 1000
	Unit	sheet
	Default value	200

T-8-61

IMG-DEV

COPIER > OPTION > IMG-DEV		
AUTO-DH		ON/OFF of Drum clean at warm-up rotation
Lv.1	Details	To set OFF/ON of the Photosensitive Drum cleaning at warm-up rotations. When setting “1: ON”, set the cleaning time in increments of 1 second with D-CLN-TM.
	Use case	When image smear occurs in an HH environment
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Related service mode	COPIER> OPTION> CLEANING> D-CLN-TM
DEVL-VTH		Set low duty toner ejectn image duty VL
Lv.2	Details	To set the threshold value of the image duty, which is the condition to perform the low duty toner ejection sequence. When any of the average image duty of 4 colors indicates the threshold value or below, low duty toner ejection sequence is executed at the paper interval calculated by dividing the value specified in DEVL-PTH by the value of “threshold value - average image duty value”. There are 5 selections for setting value and they changes automatically depending on the inside temperature. As the value is larger, coarseness is decreased, but productivity is lowered and toner consumption is increased. As the value is smaller, productivity and toner consumption are improved, but coarseness is worsened.
	Use case	While printing low duty (low image ratio) images, - When graininess (coarseness) occurs - When low productivity or high toner consumption is pointed out by the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	1 to 5 The value differs depending on the inside temperature. (Following indicates the case of below 40 deg C, 40 deg C or higher and below 42 deg C, 42 deg C or higher from the left.) 1: 1.5%, 3%, 5% 2: 2%, 3%, 5% 3: 3%, 4%, 5% 4: 5%, 5%, 10% 5: 1%, 2%, 3%
	Default value	2
	Related service mode	COPIER> OPTION> IMG-FIX> DEVL-PTH

COPIER > OPTION > IMG-DEV		
INTPPR-1		Set Wire clean interval in ppr interval
Lv.2	Details	To set the paper interval for automatic cleaning of the Primary Charging Wire and Pre-transfer Charging Wire.
	Use case	- When the density varies dramatically - When decreasing downtime
	Display/adj/set range	0 to 9999
	Unit	sheet
	Default value	4000
DEVL-PTH		Set low duty toner ejectn img duty ttlVL
Lv.1	Details	To set the total value of the image duty, which is the condition to perform the low duty toner ejection sequence. When any of the average image duty of 4 colors indicates the threshold value or below, low duty toner ejection sequence is executed at the paper interval calculated by dividing the total value by the value of “threshold value - average image duty value”. (The value specified in DEVL-VTH is used as a threshold value.)
	Use case	While printing low duty (low image ratio) images, - When graininess (coarseness) occurs - When low productivity or high toner consumption is pointed out by the user
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	0 to 4 0: 50 %, 1: 100 %, 2: 150 %, 3: 200 %, 4: 250 %
	Default value	1
	Related service mode	COPIER> OPTION> IMG-FIX> DEVL-VTH
CDEV-IDL		ON/OFF Dev Ass’y(YMCBk) first idle rotn
Lv.2	Details	To set ON/OFF of idle rotation of the Y, M, C, Bk Developing Assemblies to be performed first time for the day.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
PCHINT-1		ATR patch ppr interval adj (1st limit)
Lv.2	Details	To adjust the paper interval which patch detection is performed by ATR control. (1st limit)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 4 0: 25 sheets, 1: 50 sheets, 2: 100 sheets, 3: 150 sheets, 4: 200 sheets
	Default value	1

COPIER > OPTION > IMG-DEV		
PCHINT-2		ATR patch ppr interval adj (2nd limit)
Lv.2	Details	To adjust the paper interval which patch detection is performed by ATR control. (2nd limit)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 4 0: 100 sheets, 1: 200 sheets, 2: 300 sheets, 3: 400 sheets, 4: 500 sheets
	Default value	1

COPIER > OPTION > IMG-DEV		
PCHINT-V		Adj ATR patch VD counter total VL intvl
Lv.2	Details	To adjust the interval calculated by the total video counter value at which the patch detection is performed in ATR control and weighting at high duty. If any of the average image duty of 4 colors indicates the threshold value or higher, the patch detection of ATR control is executed at the paper interval calculated by dividing the total standard value by the average image duty value. Patch detection is normally executed at the paper interval per 200 sheets; however, if the foregoing condition is satisfied, detection will be executed even though it does not reach the specified number of sheet. When the negative value is specified, weighting (6.5 times) is applied to the video counter total value only if a new Toner Container is set and also in case of high duty (threshold value: 80% or higher). As the value is incremented by 1, the total standard value of video counter is increased by 1000%. When 0 or higher value is specified, weighting is always applied when the duty value indicates the threshold value or higher. Combination of threshold value and weighting differs depending on the setting value. Total standard value of video counter is fixed to 6000%.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-10 to 10 -10: Total standard value 10000 %, -9: 9000 %, -8: 8000 %, -7: 7000 %, -6: 6000 %, -5: 5000 %, -4: 4000 %, -3: 3000 %, -2: 2000 %, -1: 1000 % 0: Threshold value 80 %, weighting 6.5 times 1: 60 %, 6.5 times 2: 40 %, 6.5 times 3: 20 %, 6.5 times 4: 80 %, 8 times 5: 60 %, 8 times 6: 40 %, 8 times 7: 20 %, 8 times 8: 80 %, 10 times 9: 60 %, 10 times 10: 40 %, 10 times
	Default value	-6

COPIER > OPTION > IMG-DEV		
ADJ-VPP		Adj of developing AC bias Vpp
Lv.2	Details	To adjust Vpp of the developing AC bias. Ring marks and uneven sleeve pitch are alleviated when the value is decreased in the - direction, and white spots are alleviated when the value is increased in the + direction. When the value is set to “0”, Vpp is controlled at low speed according to the life of Developing Assembly (in the number of sheets). Other than 0 setting, Vpp is controlled regardless of the life.
	Use case	When image failures (ring marks, white spots) occur
	Caution	When the value is decreased too much in the - direction, density might be lowered.
	Display/adj/set range	-4 to 2 -4: 1.3 kV -3: 1.4 kV -2: 1.5 kV -1: 1.6 kV (1/1 speed), 1.3 kV (1/2, 1/3 speed) 0: 1.6 kV (1/1 speed), 1.4 to 1.6 kV (1/2, 1/3 speed, durability control) 1: 1.6 kV (1/1 speed), 1.5 kV (1/2, 1/3 speed) 2: 1.6 kV
	Default value	0
DMX-OF-Y		Adjustment of Y-color D-max setting
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on Y-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0

COPIER > OPTION > IMG-DEV		
DMX-OF-M		Adjustment of M-color D-max setting
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on M-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0
DMX-OF-C		Adjustment of C-color D-max setting
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on C-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0

COPIER > OPTION > IMG-DEV		
DMX-OF-K		Adjustment of Bk-color D-max setting
Lv.2	Details	To adjust D-max control setting in the case where density of solid area on Bk-color image is not appropriate even when auto gradation adjustment is executed. Increase the value when the density is low and decrease the value when the density is high.
	Use case	When density of solid area on an image is not appropriate even performing auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	-3 to 3
	Default value	0
SLS-TM-Y		Adj Y developer ejectn time:continuous
Lv.2	Details	In case of many continuous jobs, the developer might increase or decrease too much. To keep the proper developer amount, adjust the time which Y-color developer is forcibly ejected.
	Use case	When the developer increases or decreases too much at continuous jobs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 10
	Default value	0
SLS-TM-M		Adj M developer ejectn time:continuous
Lv.2	Details	In case of many continuous jobs, the developer might increase or decrease too much. To keep the proper developer amount, adjust the time which M-color developer is forcibly ejected.
	Use case	When the developer increases or decreases too much at continuous jobs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 10
	Default value	0
SLS-TM-C		Adj C developer ejectn time:continuous
Lv.2	Details	In case of many continuous jobs, the developer might increase or decrease too much. To keep the proper developer amount, adjust the time which C-color developer is forcibly ejected.
	Use case	When the developer increases or decreases too much at continuous jobs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 10
	Default value	0

COPIER > OPTION > IMG-DEV		
SLS-TM-K		Adj Bk developer ejectn time:continuous
Lv.2	Details	In case of many continuous jobs, the developer might increase or decrease too much. To keep the proper developer amount, adjust the time which Bk-color developer is forcibly ejected.
	Use case	When the developer increases or decreases too much at continuous jobs
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 10
	Default value	0
2S-SS-3C		Adj YMC developer ejectn block: 1/2 SPD
Lv.2	Details	When processing many jobs at 1/2 speed (heavy paper), the developer might increase or decrease too much. To keep the proper developer amount, adjust the number of supply blocks until transition to YMC-color developer forcible ejection.
	Use case	When the developer increases or decreases too much due to frequent use of 1/2 speed (heavy paper)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5
	Default value	0
2S-SS-K		Adj Bk developer ejectn block: 1/2 SPD
Lv.2	Details	When processing many jobs at 1/2 speed (heavy paper), the developer might increase or decrease too much. To keep the proper developer amount, adjust the number of supply blocks until transition to Bk-color developer forcible ejection.
	Use case	When the developer increases or decreases too much due to frequent use of 1/2 speed (heavy paper)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5
	Default value	0
3S-SS-3C		Adj YMC developer ejectn block: 1/3 SPD
Lv.2	Details	When processing many jobs at 1/3 speed (heavy paper), the developer might increase or decrease too much. To keep the proper developer amount, adjust the number of supply blocks until transition to YMC-color developer forcible ejection.
	Use case	When the developer increases or decreases too much due to frequent use of 1/3 speed (heavy paper)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5
	Default value	0

COPIER > OPTION > IMG-DEV		
3S-SS-K		Adj Bk developer ejectn block: 1/3 SPD
Lv.2	Details	When processing many jobs at 1/3 speed (heavy paper), the developer might increase or decrease too much. To keep the proper developer amount, adjust the number of supply blocks until transition to Bk-color developer forcible ejection.
	Use case	When the developer increases or decreases too much due to frequent use of 1/3 speed (heavy paper)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5
	Default value	0
BKDH		Set of Drum Heater control
Lv.2	Details	To set the contents of the Drum Heater control according to the humidity.
	Use case	When it is a high humidity environment and the machine is used frequently
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Be sure to turn ON the Environment Heater Switch.
	Display/adj/set range	0 to 2 0: Normal, 1: Turn ON the Drum Heater while the shutter is open in all environments, 2: Heater control in a high humidity environment
	Default value	0

T-8-62

■ IMG-LSR

COPIER > OPTION > IMG-LSR		
PRI-FAN		Setting of Primary Charge Fan ON timing
Lv.2	Details	To set the timing to forcibly turn ON the Primary Charging Suction Fan, Primary Charging Exhaust Fan and Developing/Pre-transfer Charging Fan. When “1” is set, they are always turned ON by full speed and when “2” is set, they are always turned ON by half speed during power-ON.
	Use case	When image is smeared by the drum
	Display/adj/set range	0 to 2 0: Release forcible turn ON, 1: Always ON by full speed, 2: Always ON by half speed
	Default value	0

T-8-63

IMG-RDR

COPIER > OPTION > IMG-RDR		
DFDST-L1		DADF mode dust dtct level adj: ppr intvl
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed at paper interval in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value when black lines appear. As the value is larger, the small dust is more likely detected.
	Use case	- When black line occurs due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range	0 to 255 0: OFF
	Default value	200
	Supplement/memo	Black lines can appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected.
DFDST-L2		DADF mode dust dtct level adj: after job
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed after the job is completed in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value when black lines appear. As the value is larger, the small dust is more likely detected.
	Use case	- When black line occurs due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range	0 to 255 0: OFF
	Default value	200
	Supplement/memo	Black lines can appear on the image if there is dust. With dust detection correction control, the image is corrected to prevent black lines once dust is detected.

COPIER > OPTION > IMG-RDR		
DF2DSTL1		DADF dust dtct lvl adj at ppr intvl:bck
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed at paper interval by the Scanner Unit (paper back) in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Increase the value when black lines appear. As the value is larger, the small dust is more likely detected.
	Use case	- When black line appears due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range	0 to 255 0: OFF
	Default value	200
DF2DSTL2		Adj DADF dust dtct level at job end:bck
Lv.1	Details	To adjust dust detection level with dust detection correction control that is executed by the Scanner Unit (paper back) after the job is completed in DADF mode. Reduce the value in the case of frequent display of cleaning instruction at the time of dust detection. As the value is smaller, the dust is less detected. Decrease the value when black lines appear. As the value is larger, the small dust is more likely detected.
	Use case	- When black line appears due to dust - Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When increasing the value too much, the cleaning instruction screen may appear too often since even small dust that will not be appeared on the image can be detected. When reducing the value too much, black lines may appear on the image.
	Display/adj/set range	0 to 255 0: OFF
	Default value	200

T-8-64

■ IMG-MCON

COPIER > OPTION > IMG-MCON		
PASCAL		Use/no use of auto gradation adj data
Lv.1	Details	To set to use/not to use the gradation adjustment data gamma LUT that is generated by auto gradation adjustment (full/quick adjustment) control. Selection is available as to whether to use gamma LUT at the time of image formation.
	Use case	When PASCAL-related failure occurs/when identifying the cause of PASCAL-related failure
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Initial LUT is used. (Auto gradation adjustment is not used.) 1: Auto gradation adjustment is used. 2 to 3: Not used
	Default value	1
SCR-SLCT		Halftone process in Photo Printout mode
Lv.2	Details	To set halftone process (error diffusion, screen 2 types) in Photo Printout mode when making a copy. Change the setting if the copy image has a problem with the initial setting (Low screen ruling). Select 0 (error diffusion) in the case of moire (suitable for character reproduction). Select 2 (High screen ruling) in the case of rough dots.
	Use case	When moire image or rough dots occurs on copy image
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Error diffusion, 1: Low screen ruling, 2: High screen ruling
	Default value	1
	Related user mode	Function Settings> Copy> Photo Printout Mode
TMC-SLCT		Setting of error diffusion coefficient
Lv.2	Details	To set coefficient to be used for error diffusion process. Specify according to the level of granularity and dot stability.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Small granularity/low dot stability 1: Small granularity/low dot stability (color mode), Large granularity/high dot stability (black mode) 2: Large granularity/high dot stability
	Default value	2

COPIER > OPTION > IMG-MCON		
PRN-FLG		Select of image area flag (PDL image)
Lv.2	Details	To set the image area flag for the image processing which is performed when a PDL image fails to be compressed at a specified compression rate. If an image fails to be compressed at a specified compression rate, the following operations are performed as default: - Processing to prioritize reproduction of text - Replacing Bk-color to black plain color Set 1 when moire occurs or jaggy is significant. Set 2 when not preferring to replace Bk color with single Bk color.
	Use case	- When moire occurs or jaggy is significant in case of printing an image containing many halftone dots or photos - When avoiding to replace Bk-color with single black color
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This setting trades off with reproducibility of text.
	Display/adj/set range	0 to 2 0: High screen ruling, gray compensation LUT 1: Error diffusion, gray compensation LUT 2: High screen ruling, normal LUT
	Default value	0
SCN-FLG		Select of image area flag (copy image)
Lv.2	Details	To set the image area flag for the image processing which is performed when a scanned image fails to be compressed at a specified compression rate. If an image fails to be compressed at a specified compression rate, processing to prioritize reproduction of text is performed by default. Set 1 when an image contains many halftone photo images. Set 2 when an image contains many printed photos.
	Use case	When copying an image which contains many halftone dots and photos
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This setting trades off with reproducibility of text.
	Display/adj/set range	0 to 2 0: Text 1: Halftone photo image 2: Printed photos
	Default value	0

COPIER > OPTION > IMG-MCON		
TNR-DWN		Set of toner deposit amount reduction
Lv.2	Details	To reduce the toner deposit amount when toner scatters or paper winds around the Fixing Assembly in the case of full color. When 1 is set, blur of images is decreased, but the hue is changed.
	Use case	When an image is blurred due to toner scattering, etc. in the case of full color
	Display/adj/set range	0 to 2 0: Standard 1: Reduce toner amount both for 1-sided and 2-sided modes 2: Standard for 1-sided mode and reduce toner amount for both sides in 2-sided mode
	Default value	0
TMIC-BK		ON/OFF of TMIC Bk_LUT end edge correct
Lv.2	Details	To set ON/OFF of the trailing edge adjustment of Bk_LUT for PDL and for copy which are used by TMIC. When the trailing edge adjustment is set to ON, the density of the high density area becomes high, and consequently text and thin lines become clear. While an image becomes clear, the hue of the gradation area of photos, etc. is changed.
	Use case	When thin lines are partly missing or characters are faded
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: ON for PDL, OFF for copy 1: OFF for PDL, OFF for copy 2: ON for PDL, ON for copy 3: OFF for PDL, ON for copy
	Default value	2
DH-MODE		Set ptch data at Dhalf except full crrct
Lv.2	Details	To set whether to use the high-density patch data that has been scanned by D-half control of full correction at the time of D-half control other than full correction.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Used, 1: Not used
	Default value	0
DH-TMG		Set auto D-max/half control exe interval
Lv.2	Details	To set the paper interval to execute auto D-max/D-half control. D-max/D-half control is executed at the time of warm-up rotations after completion of job with specified number of sheets.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 15000
	Unit	sheet
	Default value	1000

COPIER > OPTION > IMG-MCON		
MIX-FLG		Set img processing at img composition
Lv.2	Details	To set the image processing which is performed when an image fails to be compressed at a specified compression rate by the Main Controller upon image composition.
	Use case	When an image processing failure occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
	Default value	0
REPORT-Z		Set of image processing at report print
Lv.1	Details	To set the image processing which is performed when printing a report.
	Use case	When there is a request for image improvement
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
	Default value	0

COPIER > OPTION > IMG-MCON		
IFXEML-Z		Set img proc at clr iFAX,mail recv print
Lv.1	Details	To set the image processing which is performed when printing color iFAX or received e-mail.
	Use case	When there is a request for image improvement
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
	Default value	0
BMLNKS-Z		Set img proc at BMLinkS reception print
Lv.1	Details	To set the image processing which is performed when printing received BMLinkS.
	Use case	When there is a request for image improvement
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Equivalent to PDL text mode (Black text is reproduced with 4 colors. Error diffused image. The hue of the photo area is more vivid than that of 2.) 1: Equivalent to PDL photo mode (Black text is reproduced with 4 colors. Screen processed image.) 2: Equivalent to scanned text mode (Black text is reproduced with a single Bk color. Error diffused image. The hue of the photo area might be different from that of 0.) 3: Equivalent to scanned photo mode (Black text is reproduced with a single Bk color. Screen processed image.)
	Default value	0
	Supplement/memo	BMLinkS (Business Machine Linkage Service): An integrated network OA device interface

COPIER > OPTION > IMG-MCON		
REDU-CNT		Set toner deposit amount limt at clr adj
Lv.2	Details	To set whether to limit the toner deposit amount at color adjustment (color balance, fine adjustment of density). When 0 is set, the color adjustment value is reflected to an image precisely, but toner scattering in the Transfer Assembly and Fixing Assembly might occur, and paper might wind around the Fixing Assembly.
	Use case	- Upon user's request - When reflecting the color adjustment value to an image precisely
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When 0 is set, toner scattering in the Transfer Assembly and Fixing Assembly might occur, and paper might wind around the Fixing Assembly.
	Display/adj/set range	0 to 1 0: Toner deposit amount is not limited. 1: Toner deposit amount is limited to the specified amount.
	Default value	1
VP-ART		Setting of line art processing
Lv.2	Details	To set outline processing for line art on scalable PDF. In the outline processing, a binary image outline is extracted in the field which is recognized as line art, and is converted into vector data. Specify whether to convert the binary image outline into vector data or to recognize it as one line (as a thin line). For the thin line, the line width can be specified. Change this value when you want to obtain an output of a wide-width line as one line rather than as an outline (when you want to prioritize edit operation as a line rather than image quality).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 99
	Default value	1

COPIER > OPTION > IMG-MCON		
VP-TXT		Set of character vectorization process
Lv.2	Details	To set vectorization processing for text on scalable PDF. In the vectorization processing, a binary image outline is extracted in the field which is recognized as text, and is converted into vector data. In regular vectorization, function approximation is not used for small text not to change the image quality. When the value is changed, function approximation processing is executed for small text, which realizes smooth text although the image quality is changed. Change this value when you want to prioritize smoothness in small text.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 99
	Default value	1
PASCL-TY		Set of paper type for auto gradation adj
Lv.2	Details	Auto gradation adjustment is normally executed with the recommended paper specified for each location. However, if you want to change the paper type, use this setting to change the paper type.
	Use case	When executing the auto gradation adjustment using a paper other than the recommended paper type
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not change the setting in the normal operation.
	Display/adj/set range	1 to 3 1: CS-814 (Except for USA and Europe. Mainly for Japan) 2: Hammermill (For USA) 3: Mondi (For Europe)
	Default value	The value differs according to the location.
AST-SEL		Adj of advanced smoothing effect
Lv.2	Details	To adjust the smoothing effect which is set in the advanced smoothing UI. Set 3 if the effect is not improved by selecting "High" on the UI. Set 0 if too much effect is obtained even though "Low" is set.
	Use case	When image failures (jaggy, moire) occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3
	Default value	2
	Supplement/memo	AST: Advanced Smoozing Technology

COPIER > OPTION > IMG-MCON		
REGM-SEL		Adj of fine-line density correction
Lv.2	Details	To adjust the fine line and text density which is set in user mode (fine density correction). Set 4 if density is too low even though +2 is set in user mode and set 0 if density is too high even though -2 is set in user mode.
	Use case	When line and text adjusted by fine line density adjustment is too dark or too light in the case of 1200 dpi print
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 4
	Default value	2
	Supplement/memo	REGM-SEL: REos GaMma SELect
ERS-SEL		Effective Resolution System Proc mthd
Lv.1	Details	To set the processing method of Effective Resolution System for images and texts. Select one of 1 to 7 when moire (a symptom of hue changing depending on the location) occurs on a patterned image with 1200 dpi.
	Use case	When moire occurs on a patterned image with 1200 dpi
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 7
	Default value	0
	Related user mode	Settings/Registration> Function Settings> Printer> Printer Settings> Settings> Print Quality> Resolution> Superfine
L-PWR-SW		Adjustment of thin line width
Lv.2	Details	To adjust the line width of thin lines. As the value is larger, lines become thicker.
	Use case	When enhancing the reproducibility of thin lines
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Execute Auto Adjust Gradation (Full Adjust).
	Display/adj/set range	0 to 3 0: No adjustment, 1: 10 %, 2: 20 %, 3: 30 %
	Default value	0
SCR-SW		Set of low screen ruling dither
Lv.1	Details	To set the dithering method for low screen ruling. When changing the value, confirm the change by setting "1: Low screen ruling" in COPIER> TEST> PG> TXPH.
	Use case	Upon user's request (Dot dithering is used)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Execute full adjustment of auto gradation adjustment.
	Display/adj/set range	0 to 1 0: Line dithering, 1: Dot dithering
	Default value	0
	Related service mode	COPIER> TEST> PG> TXPH

COPIER > OPTION > IMG-MCON		
PRESTART		Setting to extend initial rotation time
Lv.2	Details	To set whether to extend the time from start of initial rotation to image formation. When hue is not stable at the start of printing, engine can be stable by extending the initial rotation time.
	Use case	When hue is not stable at the time of printing in first few sheets
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF and then ON the main power supply.
	Display/adj/set range	0 to 5
	Unit	sec
	Default value	0
CL-RDCTN		High compress PDF TX clr reduct mode
Lv.1	Details	To set whether to execute the color reduction processing mode at high compression PDF (text mode) transmission. Set 1 when image quality is deteriorated at high compression PDF (text mode) transmission. Image quality is improved by executing the color reduction processing mode.
	Use case	Upon user's request (improvement of image quality)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
PSCL-TBL		Set auto gradation adjustment parameters
Lv.1	Details	To set the parameters of auto gradation adjustment (full adjustment). When 0 is set, the parameters are optimized for GF-C081 (81 g/m2) standard paper (Canon-recommended paper). When 1 is set, the parameters are optimized for 64 g/m2 paper.
	Use case	When paper arc occurs on 64 g/m2 paper at auto gradation adjustment
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Execute full adjustment of auto gradation adjustment.
	Caution	Be sure to execute auto gradation adjustment (full adjustment) after the setting is done.
	Display/adj/set range	0 to 3 0: Standard paper (81 g/m2), 1: Plain paper (other than 81 g/m2), 2 to 3: Not used
	Default value	0

COPIER > OPTION > IMG-MCON		
BGE-OFS		Fine adj of background adjustment level
Lv.2	Details	To make a fine adjustment of the background adjustment (background removal) level which can be set manually. Break up the adjustment values into smaller ones when user does not satisfy with the default adjustment values.
	Use case	When color fogging occurs on the output image when copying yellowed blank paper as an original
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	Since the background color is set to be washed out with this mode, not only the background of yellowed blank paper, but also other light colors (light blue, etc.) are washed out.
	Display/adj/set range	-15 to 15
	Default value	0
	Related user mode	Copy> Options> Density> Background Density

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IMG-SPD

COPIER > OPTION > IMG-SPD		
ARC-INT1		Set of ARCDAT interruption interval
Lv.2	Details	To set the number of sheets as the intervals at which ARCDAT control is executed. When the number of sheets reaches the specified value, ARCDAT control is executed by interrupting an ongoing job. If the value is too large, the density of image becomes different before and after the interruption. If the value is too small, the productivity is lowered. Actual setting value is calculated by dividing the entry value by 0.9 and rounding up after the decimal points. (e.g.: If an entry value is 100, setting value will be 122.)
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	10 to 1000
	Unit	sheet
	Default value	100
	Related service mode	COPIER> OPTION> IMG-SPD> ARC-INT2
ARC-INT2		Set ARCDAT exe interval: last rotation
Lv.2	Details	To set the number of sheets which ARCDAT control is not executed, from the start of a job. ARCDAT control which is supposed to be executed during the specified number of sheets is executed at last rotation of the previous job. Since the number of interruptions during a job is reduced, the productivity is enhanced. However, the number of times of ARCDAT control executed at last rotation might be increased depending on the print conditions. Actual setting value is calculated by dividing the entry value by 0.9 and rounding up after the decimal points. (e.g.: If an entry value is 25, setting value will be 28.)
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Do not set a larger value than ARC-INT1.
	Display/adj/set range	5 to 1000
	Unit	sheet
	Default value	25
	Related service mode	COPIER> OPTION> IMG-SPD> ARC-INT1

COPIER > OPTION > IMG-SPD		
CHG-INT		Set dischg crrnt ctrl intvl: last rotn
Lv.2	Details	To set the number of sheets as the intervals at which discharge current control for Y, M, and C is executed at last rotation. When the number of sheets reaches the specified value, discharge current control is executed at last rotation of the job. If the value is too large, Y, M, C image failure occurs before and after the execution. If the value is too small, the productivity is lowered.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 10000
	Unit	sheet
	Default value	0
COAT-SW		Setting of coated paper feeding speed
Lv.1	Details	To set the feeding speed (1/3, 1/2 speed) for coated paper (105g/m2 or more) 1/3 speed: Proper gloss mode (22ppm) 1/2 speed: High productivity mode (35ppm)
	Use case	When improving productivity in printing on coated paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: 1/3 speed, 1: 1/2 speed
	Default value	0
TAB-SW		ON/OFF of cleaning at tab paper feeding
Lv.1	Details	To set whether to clean when tab paper is fed. When printing an image on a whole tab area of tab paper, the backside of the succeeding paper is soiled. When 1 is set, cleaning is executed every time a tab paper is fed. Soiled backside can be prevented, but productivity decreases.
	Use case	- When the backside of the succeeding paper to tab paper is soiled - Upon user's request (to improve quality)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to get approval from the user in advance by telling that
	Display/adj/set range	0 to 2 0: OFF, 1: ON, 2: Not used
	Default value	0

T-8-66

■ CLEANING

COPIER > OPTION > CLEANING		
W-CLN-P		Set last rotation simple wire cln intvl
Lv.2	Details	To set the paper interval for automatic cleaning of the Primary Charging Wire. The Primary Charging Wire is cleaned (1 reciprocation) at the time of last rotation after completion of job with every specified number of sheets. The operation is enabled when the setting value of COPIER> OPTION> CLEANING> W-CLN-PH is 1: ON.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	50 to 10000
	Unit	sheet
	Default value	2000
	Related service mode	COPIER> OPTION> CLEANING> W-CLN-PH
W-CLN-T		Set of Pre-trns Chg Wire auto cln intvl
Lv.2	Details	To set the paper interval for automatic cleaning of the Pre-transfer Charging Wire. Cleaning is executed at the time of last rotation after completion of job with every specified number of sheets. The operation is enabled when the setting value of COPIER> OPTION> CLEANING> W-CLN-PH is 1: ON.
	Use case	Upon user's request
	Display/adj/set range	50 to 10000
	Unit	sheet
	Default value	2000
	Related service mode	COPIER> OPTION> CLEANING> W-CLN-PH
D-CLN-TM		Set of warm-up rotation Drum clean time
Lv.2	Details	To adjust the time for cleaning the surface of the Photosensitive Drum which is performed at warm-up rotations. This item is enabled when AUTO-DH is 1: ON.
	Use case	When image smear occurs in a HH environment
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 300
	Unit	sec
	Default value	1
	Related service mode	COPIER> OPTION> IMG-FIX> AUTO-DH

COPIER > OPTION > CLEANING		
OHP-PTH		Set of ITB clean transp threshold value
Lv.2	Details	When a large number of transparencies is fed, surface active agent which coats the surface of an transparency adheres to the ITB, and consequently the transfer efficiency is lowered, causing an image failure. After feeding a certain number of transparencies, a patch is formed on the ITB, and the ITB Cleaning Blade scrapes it off together with surface active agent. This setting is used to set the threshold value for the number of fed transparency which is the condition to execute ITB cleaning.
	Use case	When an image failure occurs due to lowering of the transfer efficiency
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 100 0: Not executed
	Unit	sheet
	Default value	15
W-CLN-PH		ON/OFF of Charging Wire auto cleaning
Lv.2	Details	To set ON/OFF of automatic cleaning of the Primary Charging Wire and Pre-transfer Charging Wire.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Related service mode	COPIER> OPTION> CLEANING> W-CLN-P, W-CLN-T
CORE-CLN		Set Copper Shield Plt Shaft clean intvl
Lv.2	Details	To set the number of sheets as the intervals (frequency) to clean the Shift Shaft of the Copper Shield Plate. When 0 is set, cleaning is executed every 1000 sheets. Decrease the value if Copper Shield Plate shift error occurs frequently. When 2 is set, cleaning is not executed.
	Use case	When Copper Shield Plate shift error occurs frequently
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the value is decreased (frequency of cleaning is increased), last rotation time may be increased.
	Display/adj/set range	-2 to 2 -2: 250 sheets, -1: 500 sheets, 0: 1000 sheets, 1: 2000 sheets, 2: Cleaning is not executed
	Unit	sheet
	Default value	0

COPIER > OPTION > CLEANING		
WEB-CLN		Setting of Fixing Web cleaning interval
Lv.2	Details	To set the number of sheets as the intervals (frequency) to execute cleaning with the Fixing Web. When 0 is set, cleaning is executed every 100 sheets. When 4 is set, it is not executed.
	Use case	When soiled paper edge or lines on the paper edge occurs frequently
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	As the value is decreased (frequency of cleaning is increased), the Fixing Web consumption is increased.
	Display/adj/set range	-3 to 4 -3: 25 sheets, -2: 50 sheets, -1: 75 sheets, 0: 100 sheets, 1: 150 sheets, 2: 200 sheets, 3: 300 sheets, 4: Cleaning is not executed
	Default value	0
PR-CLN		Set Fix Pressure Roll clean dspl condtn
Lv.2	Details	To set the conditions to display the message prompting to clean the Fixing Pressure Roller. When the number of continuous 1-sided prints (total value for this mode) exceeds the setting value while COPIER>OPTION>DSPLY-SW>PRCLNSW is set to ON, the message prompting to execute cleaning is displayed. By executing a 2-sided job or cleaning, the total value for this mode is reset.
	Use case	When a soiled image occurs because toner adheres to the Fixing Pressure Roller
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 50 1: 1,000 sheets, 2: 2,000 sheets (default), ..., 50: 50,000 sheets
	Default value	2
	Related service mode	COPIER> OPTION> DSPLY-SW> PRCLNSW

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■ ENV-SET

COPIER > OPTION > ENV-SET		
ENVP-INT		Temp, humid &Fix Roll temp log get cycle
Lv.1	Details	To set the cycle to obtain log of the temperature and humidity inside the machine and the surface temperature of the Fixing Roller. As the value is incremented by 1, the cycle is increased by 1 minute. Obtained log can be displayed by selecting the following: COPIER > DISPLAY > ENVRNT.
	Use case	At problem analysis
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 480
	Unit	min
	Default value	60
	Related service mode	COPIER> DISPLAY> ENVRNT
DRY-CISU		ON/OFF of condensation prevention mode
Lv.1	Details	To set ON/OFF of condensation mode. When droplets are appeared on the Scanner Unit due to condensation and image failure or E225 occurs, set “1: ON”. By selecting 1, the Scanner Unit (paper front) stops the fan for 15 seconds and the Scanner Unit (paper back) lights LED for 30 seconds from the next startup.
	Use case	When droplets appear on the Scanner Unit due to condensation and image failure or E225 occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF (Normal mode), 1: ON (Anti-condensation mode)
	Default value	0

T-8-68

FEED-SW

COPIER > OPTION > FEED-SW		
EVLP-SPD		Envelope feeding speed setting
Lv.1	Details	To set the envelope feeding speed. By feeding an envelop at 1/2 speed (default) in the case of a high humidity environment, the glue flap may adhere at the time of fixing. As a result of that, the envelop may not be opened. By setting to 1/1 speed, adhesion can be prevented, but fixing might be deteriorated in a low humidity environment.
	Use case	When a glue flap of envelope adheres
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	The fixing is deteriorated by setting 1/1 speed in a low humidity environment.
	Display/adj/set range	0 to 5 0: 0 %, 1: +2 %, 3: +6 %, 4: +8 %, 5: +10 %
	Default value	0
DK5-REST		Adj paper level for Multi Deck (Upper)
Lv.1	Details	To adjust the threshold value for paper level to be determined as “no paper” in Multi Deck (Upper). When the setting value is increased for the case that too many sheets are remained in the Deck, paper can be used almost to the limit. As the value is incremented by 1, the paper level decreases by approx. 20 sheets.
	Use case	Upon user’s request
	Caution	The number of remaining papers varies according to the air-floatation condition.
	Display/adj/set range	0 to 5
	Unit	sheet
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK6-REST, DK7-REST
DK6-REST		Adj paper level for Multi Deck (Middle)
Lv.1	Details	To adjust the threshold value for paper level to be determined as “no paper” in Multi Deck (Middle). When the setting value is increased for the case that too many sheets are remained in the Deck, paper can be used almost to the limit. As the value is incremented by 1, the paper level decreases by approx. 20 sheets.
	Use case	Upon user’s request
	Caution	The number of remaining papers varies according to the air-floatation condition.
	Display/adj/set range	0 to 5
	Unit	sheet
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK5-REST, DK7-REST

COPIER > OPTION > FEED-SW		
DK7-REST		Adj paper level for Multi Deck (Lower)
Lv.1	Details	To adjust the threshold value for paper level to be determined as “no paper” in Multi Deck (Lower). When the setting value is increased for the case that too many sheets are remained in the Deck, paper can be used almost to the limit. As the value is incremented by 1, the paper level decreases by approx. 20 sheets.
	Use case	Upon user’s request
	Caution	The number of remaining papers varies according to the air-floatation condition.
	Display/adj/set range	0 to 5
	Unit	sheet
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK5-REST, DK6-REST
REG-SPD2		Speed adj of Rgst Roller: 1/2 speed
Lv.2	Details	To adjust the Registration Roller speed when 1/2 speed is set for heavy paper/transparency, etc. Increase the value if the image at the leading edge of paper shrinks in the feeding direction, and decrease the value if it expands. Decrease the value if wavy-line image occurs. If these symptoms are not alleviated after adjustment is made, replace the Registration Roller.
	Display/adj/set range	-30 to 30
	Unit	%
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> REG-SPD, REG-SPD3
REG-SPD3		Speed adj of Rgst Roller: 1/3 speed
Lv.2	Details	To adjust the Registration Roller speed when 1/3 speed is set for heavy paper/coated paper, etc. Increase the value if the image at the leading edge of paper shrinks in the feeding direction, and decrease the value if it expands. Decrease the value if wavy-line image occurs. If these symptoms are not alleviated after adjustment is made, replace the Registration Roller.
	Display/adj/set range	-30 to 30
	Unit	%
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> REG-SPD, REG-SPD2

COPIER > OPTION > FEED-SW		
REG-SPD		Speed adj of Rgst Roller: plain paper
Lv.2	Details	To adjust the Registration Roller speed when 1/1 speed is set for plain paper, etc. Increase the value if the image at the leading edge of paper shrinks in the feeding direction, and decrease the value if it expands. Decrease the value if wavy-line image occurs. If these symptoms are not alleviated after adjustment is made, replace the Registration Roller.
	Display/adj/set range	-30 to 30
	Unit	%
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> REG-SPD2, REG-SPD3
INSRT-SW		Insert ppr presence/absence jdgmt ON/OFF
Lv.1	Details	To set ON/OFF of paper presence/absence judgment of the Inserter. When 1 is set, a job is started before the Inserter starts paper detections so productivity is improved..
	Use case	Upon user's request (improvement of productivity when using the Inserter)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	If there is no insertion sheet in the Inserter while 1 is set, pages will be out of order. Consequently, a lot of papers being fed from the host machine will be handled as jam papers.
	Display/adj/set range	0 to 1 0: ON (starting pickup after confirming the presence of papers) 1: OFF (starting pickup without judging paper presence and absence)
	Default value	0

COPIER > OPTION > FEED-SW		
PINT-REG		Set ppr intvl img pstn crrct frequency
Lv.2	Details	To set the paper interval for executing the paper interval image position correction control. As the paper interval is larger (low frequency of execution), color displacement tends to occur. This control is executed at warm-up rotation to be performed first time for the day and after jam processing regardless the setting value.
	Use case	Upon user's request (shortening the time required for paper interval control)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When increasing the paper interval, confirm the tolerance of color displacement with the user.
	Display/adj/set range	0 to 5 0: 1000 images* 1: 600 images* or when the temperature of the Developing Assembly changes by 2 deg C or more 2: 1000 images* or when the temperature of the Developing Assembly changes by 2 deg C or more 3: 1000 images* and when the temperature of the Laser Scanner changes by 3 deg C or more or when the temperature of the Developing Assembly changes by 2 deg C or more 4: 2000 images* 5: No correction * The number of images differs depending on the process speed.
	Default value	0
DK2-TURN		ON/OFF of Left Deck Pickup Rol last rotn
Lv.1	Details	To set whether to execute last rotation of the Pickup Roller on the Left Deck for 50 msec after completion of job. As the usage is extended, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. By rotating the Pickup Roller after completion of job, it can reduce wear of the Separation Roller.
	Use case	- When frequency of use is relatively low - When pickup jam tends to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-TURN, DK3-TURN, DK4-TURN, DK5-TURN, DK6-TURN, DK7-TURN

COPIER > OPTION > FEED-SW		
DK3-TURN		ON/OFF of Cassette3 Pickup Rol last rotn
Lv.1	Details	To set whether to execute last rotation of the Pickup Roller on the Cassette 3 for 50 msec after completion of job. As the usage is extended, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. By rotating the Pickup Roller after completion of job, it can reduce wear of the Separation Roller.
	Use case	- When frequency of use is relatively low - When pickup jam tends to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK4-TURN, DK5-TURN, DK6-TURN, DK7-TURN
DK4-TURN		ON/OFF of Cassette4 Pickup Rol last rotn
Lv.1	Details	To set whether to execute last rotation of the Pickup Roller on the Cassette 4 for 50 msec after completion of job. As the usage is extended, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. By rotating the Pickup Roller after completion of job, it can reduce wear of the Separation Roller.
	Use case	- When frequency of use is relatively low - When pickup jam tends to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK3-TURN, DK5-TURN, DK6-TURN, DK7-TURN

COPIER > OPTION > FEED-SW		
DK1-TURN		ON/OFF Right Deck Pickup Roll last rotn
Lv.1	Details	To set whether to execute last rotation of the Pickup Roller on the Right Deck for 50 msec after completion of job. As the usage is extended, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. By rotating the Pickup Roller after completion of job, it can reduce wear of the Separation Roller.
	Use case	- When frequency of use is relatively low - When pickup jam tends to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK2-TURN, DK3-TURN, DK4-TURN, DK5-TURN, DK6-TURN, DK7-TURN
DK5-TURN		ON/OFF M-Deck (upr) Pickup Rol last rotn
Lv.1	Details	To set whether to execute last rotation of the Pickup Roller on the Multi Deck (Upper) for 50 msec after completion of job. As the usage is extended, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. By rotating the Pickup Roller after completion of job, it can reduce wear of the Separation Roller.
	Use case	- When frequency of use is relatively low - When pickup jam tends to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK3-TURN, DK4-TURN, DK6-TURN, DK7-TURN

COPIER > OPTION > FEED-SW		
DK6-TURN		ON/OFF M-Deck (Mid) Pickup Rol last rotn
Lv.1	Details	To set whether to execute last rotation of the Pickup Roller on the Multi Deck (Middle) for 50 msec after completion of job. As the usage is extended, part of the Separation Roller engaged with the Pickup Roller become worn and the roller stops the rotation. As a result of that, jam may occur. By rotating the Pickup Roller after completion of job, it can reduce wear of the Separation Roller.
	Use case	- When frequency of use is relatively low - When pickup jam tends to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK3-TURN, DK4-TURN, DK5-TURN, DK7-TURN
DK7-TURN		ON/OFF M-Deck (Low) Pickup Rol last rotn
Lv.1	Details	To set whether to execute last rotation of the Pickup Roller on the Multi Deck (Lower) for 50 msec after completion of job. As the usage is extended, a part of the Separation Roller engaged with the Pickup Roller becomes worn and the roller stops rotation. As a result of that, jam may occur. By rotating the Pickup Roller after completion of job, it can reduce wear of the Separation Roller.
	Use case	- When frequency of use is relatively low - When pickup jam tends to occur
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-TURN, DK2-TURN, DK3-TURN, DK4-TURN, DK5-TURN, DK6-TURN

COPIER > OPTION > FEED-SW		
DK1-AIR		ON/OFF of PDF Deck Lite air assist
Lv.1	Details	To set ON/OFF of the POD Deck Lite air assist. In the initial settings, the air assist is OFF for plain paper or heavy paper, and ON for coated paper, texture paper, heavy paper 2 to 5, OHT, etc. When a jam or double feed error frequently occurs with plain paper, etc., set the value to 1. When the transfer performance is low with coated paper, texture paper, etc., set the value to 2.
	Use case	- When a jam or double feed error frequently occurs with plain paper or heavy paper 1 - When the transfer performance is low with coated paper, texture paper, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: Initial setting, 1: ON, 2: OFF
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK2-AIR, DK3-AIR, DK4-AIR
DK2-AIR		ON/OFF of Multi Deck (Upper) air assist
Lv.1	Details	To set ON/OFF of the POD Deck (Upper) air assist. In the initial settings, the air assist is OFF for plain paper or heavy paper, and ON for coated paper, texture paper, heavy paper 2 to 5, OHT, etc. When a jam or double feed error frequently occurs with plain paper, etc., set the value to 1. When the transfer performance is low with coated paper, texture paper, etc., set the value to 2.
	Use case	- When a jam or double feed error frequently occurs with plain paper or heavy paper 1 - When the transfer performance is low with coated paper, texture paper, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: Initial setting, 1: ON, 2: OFF
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-AIR, DK3-AIR, DK4-AIR

COPIER > OPTION > FEED-SW		
DK3-AIR		ON/OFF of Multi Deck (Middle) air assist
Lv.1	Details	To set ON/OFF of the POD Deck (Middle) air assist. In the initial settings, the air assist is OFF for plain paper or heavy paper, and ON for coated paper, texture paper, heavy paper 2 to 5, OHT, etc. When a jam or double feed error frequently occurs with plain paper, etc., set the value to 1. When the transfer performance is low with coated paper, texture paper, etc., set the value to 2.
	Use case	- When a jam or double feed error frequently occurs with plain paper or heavy paper 1 - When the transfer performance is low with coated paper, texture paper, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: Initial setting, 1: ON, 2: OFF
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-AIR, DK2-AIR, DK4-AIR
DK4-AIR		ON/OFF of Multi Deck (Lower) air assist
Lv.1	Details	To set ON/OFF of the POD Deck (Lower) air assist. In the initial settings, the air assist is OFF for plain paper or heavy paper, and ON for coated paper, texture paper, heavy paper 2 to 5, OHT, etc. When a jam or double feed error frequently occurs with plain paper, etc., set the value to 1. When the transfer performance is low with coated paper, texture paper, etc., set the value to 2.
	Use case	- When a jam or double feed error frequently occurs with plain paper or heavy paper 1 - When the transfer performance is low with coated paper, texture paper, etc.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: Initial setting, 1: ON, 2: OFF
	Default value	0
	Related service mode	COPIER> OPTION> FEED-SW> DK1-AIR, DK2-AIR, DK3-AIR

COPIER > OPTION > FEED-SW		
TFL-RTC		Set delvry dest at rcvry after tray full
Lv.1	Details	To select the delivery destination for a job with multiple pages after recovering the Delivery Tray that reaches the full level. When 0 (default) is set, a job is output from the delivery destination again from which the last job was delivered. When 1 is set, a job is output from the delivery destination which priority is set as high at “Output Tray Settings” in user mode.
	Use case	When changing the delivery tray
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Output from the tray from which the last job was output. 1: Output from the delivery destination which priority is high among the delivery trays.
	Default value	0
	Related user mode	Function Settings> Common> Paper Output Settings> Output Tray Settings
D-MXDSZ		Prdctvty prrty mod in media mix: 2-sided
Lv.1	Details	At a 2-sided job in media mixed situation, productivity is reduced because paper circulation inside of the machine is stopped. When 1 (productivity priority mode) is set, productivity improves because paper circulation is not stopped.
	Use case	Upon user’s request (Improving productivity in media mixed situation
	Adj/set/operate method	Enter the setting value and press OK key.
	Display/adj/set range	0 to 1 0: Normal mode, 1: Productivity priority mode
	Default value	0
USZ-FEED		ON/OFF Job set/ppr source ppr size chck
Lv.1	Details	To set whether to check if the paper size set for the job matches the paper size set on the paper source. When 1 is set, papers are picked up without checking even user defined size papers that differ from the job setting size are set on a paper source.
	Use case	When forcibly picking up papers even the paper size setting differs between a job and a paper source
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

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■ NETWORK

COPIER > OPTION > NETWORK		
RAW-DATA		Setting of received data print mode
Lv.2	Details	To set print mode for the received image data. This item is used to identify the cause whether it's due to image data or image processing in the case of problem with received image.
	Use case	When a problem with received image occurs
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set the value back to "0: Normal print operation" after recovering from the trouble.
	Display/adj/set range	0 to 1 0: Normal print operation, 1: Print with original data without image processing
	Default value	0
IFAX-LIM		No. of max print lines at IFAX reception
Lv.2	Details	To set the maximum number of lines for e-mail text to be printed when receiving IFAX. Setting of this item can prevent endless printing of the attached file data in the case of receiving an error e-mail or failure in interpretation of the context. Selecting 0 prints the header/footer in 1 sheet when receiving e-mail text without attached file.
	Use case	When preventing endless print in the case of failure in reception
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: E-mail text not printed, 999: Unlimited
	Default value	500
SMTPTXPN		Setting of SMTP TX port number
Lv.2	Details	To set SMTP transmission port number.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	25
SMTPRXPN		Setting of SMTP reception port number
Lv.2	Details	To set SMTP reception port number.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	25

COPIER > OPTION > NETWORK		
POP3PN		Setting of POP3 reception port number
Lv.2	Details	To set POP3 reception port number.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	110
FTPTXPN		Specification of SEND port (FTP) number
Lv.2	Details	To specify address port (FTP) number for SEND.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	21
STS-PORT		ON/OFF of TOT sync status comctn port
Lv.2	Details	To set ON/OFF for Inquiry/Response (sync)-mode status communication port with T.O.T. Select "1: ON" in the case of connecting the PC and the machine with the crossover cable while Service NAVI is used.
	Use case	When the Service NAVI is used
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> NETWORK> CMD-PORT
	Supplement/memo	T.O.T: TUIF over TCP. Communication protocol to be used for communication with the built-in application (UI) and the internal application such as COPY/ SEND/ BOX, etc. (Canon's own protocol).
CMD-PORT		ON/OFF TOTasync command comctn port
Lv.2	Details	To set ON/OFF for asynchronous command communication port with T.O.T. Select "1: ON" in the case of connecting the PC and the machine with the crossover cable while Service NAVI is used.
	Use case	When the Service NAVI is used
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	COPIER> OPTION> NETWORK> STS-PORT
	Supplement/memo	T.O.T: TUIF over TCP. Communication protocol to be used for communication with the built-in application (UI) and the internal application such as COPY/ SEND/ BOX, etc. (Canon's own protocol).

COPIER > OPTION > NETWORK		
NS-CMD5		Limit CRAM-MD5 auth method at SMTP auth
Lv.2	Details	To restrict use of CRAM-MD5 authentication method at the time of SMTP authentication.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value	0
	Supplement/memo	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.
NS-GSAPI		Limit GSSAPI auth method at SMTP auth
Lv.2	Details	To restrict use of GSSAPI authentication method at the time of SMTP authentication.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value	0
	Supplement/memo	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.
NS-NTLM		Limit NTLM auth method at SMTP auth
Lv.2	Details	To restrict use of NTLM authentication method at the time of SMTP authentication.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value	0
	Supplement/memo	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.

COPIER > OPTION > NETWORK		
NS-PLNWS		Limit plaintext auth at SMTP auth encry
Lv.2	Details	To restrict use of PLAIN/LOGIN authentication, which is plaintext authentication, at the time of SMTP authentication under the environment where the communication packet is encrypted.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value	0
	Supplement/memo	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.
NS-PLN		Limit plaintext auth at SMTPauth noencry
Lv.2	Details	To restrict use of PLAIN/LOGIN authentication, which is plaintext authentication, at the time of SMTP authentication under the environment where the communication packet is not encrypted.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value	0
NS-LGN		Limit LOGIN authentication at SMTP auth
Lv.2	Details	To restrict use of LOGIN authentication at the time of SMTP authentication.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: SMTP server-dependent, 1: Not used
	Default value	0
	Supplement/memo	SMTP authentication: Protocol in which user authentication function is added to SMTP, which is the protocol to be used for e-mail transmission. At the time of e-mail transmission, this protocol executes authentication of the user account and the password between the SMTP server and the user to approve e-mail transmission only when it's authenticated.

COPIER > OPTION > NETWORK		
MEAP-PN		HTTP port No.setting of MEAP application
Lv.2	Details	To set HTTP port number of MEAP application.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not specify port 8080 when the print server is connected. Otherwise, you cannot browse the device RUI in which MEAP authentication application is running (Port 8080 is reserved for redirection of EFI Controller to the iR side.)
	Display/adj/set range	1 to 65535
	Default value	8000
CHNG-STS		Set of TOT status connection port number
Lv.2	Details	To set the port number for status connection with T.O.T.
	Use case	When the Service NAVI is used
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 65535
	Default value	20010
	Related service mode	COPIER> OPTION> NETWORK> STS-PORT
CHNG-CMD		Set of TOT command connection port No.
Lv.2	Details	To set the port number for command connection with T.O.T.
	Use case	When the Service NAVI is used
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 65535
	Default value	20000
	Related service mode	COPIER> OPTION> NETWORK> CMD-PORT
MEAP-SSL		HTTPS port setting of MEAP
Lv.2	Details	To set the port of HTTPS server in the case of using SSL with HTTP of MEAP.
	Use case	When setting HTTPS port for MEAP
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	8443
LPD-PORT		Setting of LPD port number
Lv.2	Details	To set the LPD port number.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 65535
	Default value	515
	Supplement/memo	LPD port: Network port for TCP/IP communication when making prints through network.

COPIER > OPTION > NETWORK		
WUEV-SW		Setting of sleep notification execution
Lv.2	Details	To set whether to notify the sleep mode to the application (imageWARE, etc) on the network when shifting to/recovering from the sleep mode.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Notified, 1: Not notified
	Default value	0
WUEV-INT		Setting of sleep notification interval
Lv.2	Details	To set the interval of sleep notification.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified.
	Display/adj/set range	60 to 65535
	Unit	sec
	Default value	600
	Related service mode	COPIER> OPTION> NETWORK> WUEV-SW
WUEV-POT		Port number setting for sleep notice
Lv.2	Details	To set port number of the PC to notify the sleep mode.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified.
	Display/adj/set range	1 to 65535
	Default value	11427
	Related service mode	COPIER> OPTION> NETWORK> WUEV-SW
WUEV-RTR		Setting of sleep notification range
Lv.2	Details	To set the number of available routers to the target for sleep notification.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This is active when COPIER> OPTION> NETWORK> WUEV-SW is set to 0: Notified.
	Display/adj/set range	0 to 254
	Default value	3
	Related service mode	COPIER> OPTION> NETWORK> WUEV-SW

COPIER > OPTION > NETWORK		
WUEN-LIV		Recovery time setting after sleep notice
Lv.2	Details	To set the time from the sleep start from network without job assignment until the mode is shifted to the sleep mode.
	Use case	When setting the startup time after sleep notification
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 600
	Unit	sec
	Default value	15
DHCP-12		ON/OFF of DHCP-option 12 request
Lv.2	Details	To set ON/OFF of inquiry on the host name (Option 12) which uses Option 55 of DHCP. Selecting OFF can prevent DHCP packet from including Option 12 or Option 81 under the packet-monitoring network environment.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Supplement/memo	DHCP:Dynamic Host Configuration Protocol
DHCP-81		ON/OFF IPaddress dynamic chng in DHCP-81
Lv.2	Details	To set ON/OFF for dynamic change of IP address by Option 81 of DHCP. Selecting OFF can prevent DHCP packet from including Option 12 or Option 81 under the packet-monitoring network environment. Selecting ON enables dynamic change of IP address by Option 81 of DHCP in the case that the dynamic DNS setting is ON in user mode.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to set ON for the dynamic DNS setting in user mode to enable dynamic change of IP address.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Supplement/memo	DHCP:Dynamic Host Configuration Protocol

COPIER > OPTION > NETWORK		
IFX-CHIG		Set operation by IFAX recv e-mail text
Lv.1	Details	To set the number of characters for the IFAX received e-mail text, so that the e-mail is not printed/forwarded when the characters in the text is less than the number of specified characters. This machine can output blank paper because some senders send e-mail text consisting of linefeed codes only. In such case, specify 2 (number of characters) so that there will be no output of blank paper. In the case of specifying any number other than 0, header/footer is printed/forwarded in 1 sheet only if the e-mail (body) text is less than the specified value while no TIFF file is attached. As the value is incremented by 1, the number of target characters in e-mail body text is increased by 1 character.
	Use case	When reducing printouts of blank paper due to e-mail received by IFAX
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to get approval from the user by telling that there will be no print of e-mail (body) text if the number of characters is less than the specified value.
	Display/adj/set range	0 to 999 0: E-mail text is not ignored.
	Unit	char
	Default value	0
	Supplement/memo	1 Japanese Kanji character is calculated as 2 bytes, and the control codes (such as linefeed code, etc) are included in the number of characters.
DNSTRANS		Setting of DNS transfer priority
Lv.1	Details	To set priority order of the protocol (IPv4/IPv6) to be used for DNS query. In the case of using both IPv6 and IPv4 while the DNS server supports IPv4, it takes time because of timeout when executing DNS query with priority on IPv6. The time can be shortened by placing priority on IPv4.
	Use case	When it takes time to execute DNS query with priority on IPv6 because the DNS server supports IPv4
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: IPv4, 1: IPv6
	Default value	1

COPIER > OPTION > NETWORK		
PROXYRES		Setting of proxy response to Windows
Lv.2	Details	To set whether to provide proxy response or return the device status when an inquiry is received via Windows while the device is in sleep mode.
	Use case	When executing status response for query from Windows correctly
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: No proxy response, 1: Proxy response
	Default value	1
WOLTRANS		Setting of sleep recovery protocol
Lv.1	Details	To set the protocol for recovery from sleep mode according to the value of WOL (Wake On LAN) trans. Reception of a specific network packet is one of the requirements for the device to recover from sleep mode. When the number of network protocols supported by the device increases, the types of network packets which activate recovery from sleep mode vary. However, there is a possibility that the existing network protocol is actually used. Select the type of network packet which activates recovery from sleep mode according to the environment where the device is used.
	Use case	When selecting protocol for sleep recovery
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 3 1: WSD and SNMP, 2: WSD and CPCA, 3: CPCA and SNMP
	Default value	1
802XTOUT		Set of IEEE802.1X authentication timeout
Lv.1	Details	To set timeout value for IEEE802.1X authentication. If the device executes 802.1X authentication, change the wait time for response from the authentication server.
	Use case	When response from the authentication server is slow/fast
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	10 to 120
	Unit	sec
	Default value	30
IKERETRY		Setting of IKE retry times
Lv.1	Details	To set the number of retries in the case of no response from the communication target at the time of IKE packet transmission.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3
	Default value	1
	Supplement/memo	IKE: Internet Key Exchange

COPIER > OPTION > NETWORK		
SPDALDEL		Initialization of SPD value
Lv.2	Details	To initialize all the SPD values that are under management. SPD values can be initialized without clearing SRAM.
	Use case	At the time of SPD value mismatch when IPSec Board is added
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Supplement/memo	SPD: Database that manages SA (Security Association). SPD value is managed when IPSec Board is used. Normally, SRAM needs to be cleared in the case of mismatch in SPD value.
NCONF-SW		ON/OFF of Network Configurator function
Lv.1	Details	To set ON/OFF of Network Configurator function. If the user does not use the function, select OFF to prevent remote attack through network.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Supplement/memo	Network Configurator function is a function to be used for communication with NetSpot Device Installer, etc., and the network setting can be changed from the remote.
IKEINTVL		Setting of IKE retry interval
Lv.1	Details	To set retry interval in the case of no response from the communication target at the time of IKE packet transmission.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 10
	Unit	sec
	Default value	5
	Supplement/memo	IKE: Internet Key Exchange
IPSDEBLV		Setting of IPSec debug level
Lv.2	Details	For R&D use
	Use case	For R&D use
	Adj/set/operate method	For R&D use
	Display/adj/set range	0 to 10
	Default value	0

COPIER > OPTION > NETWORK		
SP-LINK		Mode setting at 1W sleep
Lv.1	Details	To set the mode to shift to sleep mode When 0 is set, 10base-T standby is executed, therefore standby power 1W is realized in sleep mode. When 1 is set, like existing models, the machine enters sleep mode after negotiation.
	Use case	When shifting to sleep mode after negotiation
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Shift to sleep mode with 10base-T 1: Shift to sleep mode after negotiation
	Default value	0
AFS-JOB		Set of FAX server job reception port
Lv.1	Details	To set the reception port of the fax server to which a fax client sends jobs.
	Use case	When changing the job reception port of the fax server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	20317
	Related service mode	COPIER> OPTION> NETWORK> AFC-EVNT
AFC-JOB		Set of FAX client job sending port
Lv.1	Details	To set the port of a fax client from which jobs are sent to the fax server.
	Use case	When changing the job sending port of a fax client
	Display/adj/set range	0 to 65535
	Default value	20317
	Related service mode	COPIER> OPTION> NETWORK> AFS-JOB, AFC-EVNT
AFC-EVNT		Set of FAX client event reception port
Lv.1	Details	To set the event notification reception port of a fax client.
	Use case	When changing the event notification reception port of a fax client
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535
	Default value	29400
	Related service mode	COPIER> OPTION> NETWORK> AFS-JOB

COPIER > OPTION > NETWORK		
ILOGMODE		Setting of Firewall range
Lv.1	Details	To set all protocols or TCP/UDP/ICMP unicast as the target of Firewall. When 0 is set, the machine responds to ARP, ICMP multicast and broadcast which have no direct relation, and consequently the number of logs is increased. When 1 is set, the machine filters TCP, UDP and ICMP unicast only.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: All protocols support mode 1: TCP/UDP/ICMP unicast support mode 2, 3: Not used
	Default value	0
ILOGKEEP		Setting of IP Filter log time
Lv.1	Details	To set the retention time from the log time blocked by IP Filter. When access is made again from a same address which was blocked by IP Filter before, if it is within the retention time from the previous log time, its log is not recorded. If access is frequently made from a same IP address, the log record of the UI might be filled with its logs. If the user considers that a single log for a same IP address is enough, set the longer retention time.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 48 0: 1 minute (special mode) 1 to 48: 1 hour to 48 hours
	Default value	1
IPTBROAD		Set to allow broad/multicast TX
Lv.1	Details	To set whether to send broadcast packets and multicast packets. Transmission of broadcast packets and multicast packets is permitted without specifying an exception address. It is permitted within the device even if it is rejected in the default setting of the IPv4/v6 transmission filter. Set "1: Disabled" when the user does not want to send them.
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 5 0: Enabled, 1: Disabled, 2 to 5: Not used
	Default value	0

COPIER > OPTION > NETWORK		
PFWFTPRT		Set of RST reply at IP filter FTP SEND
Lv.1	Details	When FTP SEND is executed using an IP filter by which packets from a specific remote PC are rejected, SYN is returned to the port 113 if the PC supports authentication of the FTP port 113. However, since the IP filter blocks the packets, the block logs are increased and the performance is lowered. When 1 is set, RST is returned to the port 113 without blocking packets.
	Use case	When executing FTP SEND against the OS which supports authentication of the FTP port 113 while the IP filter is enabled
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
IPMTU		Setting of MTU size
Lv.1	Details	To set MTU size of network packet. This item is used when performing SEND communication between locations connected with Ethernet in a field environment where MTU black hole problem occurs.
	Use case	When MTU black hole problem occur
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	With IPv6, use of MTU which size is less than 1280 bytes is not recommended by RFC. Therefore, when setting IPv6 to ON and MTU to 7 or smaller, communication using IPv6 may not be available.
	Display/adj/set range	1 to 10 1: 600 bytes, 2: 700 bytes, ..., 9: 1400 bytes, 10: 1500 bytes
	Unit	byte
	Default value	10
DDNSINTV		Set of DDNS periodical update interval
Lv.1	Details	DNS registration is executed only once at start-up with the current iR, so the registered contents are deleted in an environment where the DNS server settings are deleted at intervals. To set the interval of DDNS periodical update for not deleting the registered contents.
	Use case	When the DNS server settings are deleted at intervals
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 48 0: No periodical update, 1: 1-hour interval, 2: 2-hour interval, ..., 47: 47-hour interval, 48: 48-hour interval
	Unit	hour
	Default value	24

COPIER > OPTION > NETWORK		
PRCLTYPE		Setting of dedicated protocol type
Lv.2	Details	To switch the type of dedicated protocol.
	Use case	Upon user's request (Assumed to make change from the default value only for customization.)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: TYPE 0 (Compatible in conventional manner), 1: TYPE 1
	Default value	0
VLAN-SW		Switch for VLAN participation packets
Lv.2	Details	Switch for sending packets for participating dynamic VLAN at startup. For the packets to be sent, a static IP address is set as the sender.
	Use case	When allowing a device whose IP address has not been decided yet to participate in VLAN by sending packets for participating dynamic VLAN at startup
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0: Packets for participating in dynamic VLAN are not sent. 1: Packets for participating in dynamic VLAN are sent.
	Default value	0
	Related service mode	COPIER > OPTION > NETWORK > VLAN-PKT
	Supplement/memo	VLAN: Virtual LAN A method for realizing grouping of terminals depending on the HUB, switch connection port, MAC address, protocol, etc.
VLAN-PKT		Set of number of VLAN packets to send
Lv.2	Details	To set the number of packets for participating in VLAN to be sent from the Main Controller when the LAN cable is connected or when the device recovers from deep sleep.
	Use case	When setting the number of packets to be sent with the setting made to send packets for participating in VLAN
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This setting is ignored when the setting is made not to send packets for participating in VLAN (VLAN-SW=0).
	Display/adj/set range	0 to 10 VLAN participation packets of three times as much as the setting value are sent. Example) Setting value 1 3 (=1*3) sets of VLAN participation packet are sent.
	Default value	1
	Related service mode	COPIER > OPTION > NETWORK > VLAN-SW
	Supplement/memo	VLAN: Virtual LAN A method for realizing grouping of terminals depending on the HUB, switch connection port, MAC address, protocol, etc.

COPIER > OPTION > NETWORK		
SSLMODE		Setting of HTTP/HTTPS port open/close
Lv.2	Details	To set whether to open or close HTTP/HTTPS port. When 1 is set, HTTP port is opened whereas HTTPS port is closed. When 2 is set, HTTP port is closed whereas HTTPS port is opened.
	Use case	When limiting the port to open because of security concern
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Normal, 1: Open HTTP port (80/8000) only, 2: Open HTTPS port (443/8443) only
	Default value	0
SSLSTRNG		Allow weak encryption algorithm for SSL
Lv.2	Details	To set whether to allow using weak encryption algorithm for SSL. When 1 is set, weak encryption algorithm cannot be used.
	Use case	When prohibiting weak encryption algorithm because of security concern
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal mode, 1: Secure mode (Not used TLS_RSA_WITH_RC4_128_SHA, TLS_RSA_WITH_RC4_128_MD5)
	Default value	0

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■ CUSTOM

COPIER > OPTION > CUSTOM		
SC-L-CNT		Set large paper jdgmt reference at scan
Lv.1	Details	To set the judgment reference of the scan counter as to which to use B4 or LTR to determine large size. The threshold is determined by the combination with the setting of B4-L-CNT. SC-L-CNT=0, B4-L-CNT=0: paper exceeding B4 is determined as large size, paper with B4 or smaller is determined as small size. SC-L-CNT=0, B4-L-CNT=1: paper with B4 or larger is determined as large size, paper smaller than B4 is determined as small size.
	Use case	As needed
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: B4 size, 1: LTR size
	Default value	0
	Related service mode	COPIER> OPTION> USER> B4-L-CNT
SCANTYPE		Switch of DADF + Reader
Lv.1	Details	To switch to a different type DADF + Reader Unit.
	Use case	At installation
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Reverse Duplex DADF + Reader, 1: 1-Path Duplex DADF + Reader
	Default value	1
ABK-TOOL		Allow access from address book mntc tool
Lv.1	Details	To set whether to accept import from the address book maintenance tool.
	Use case	When executing import from the address book maintenance tool
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
	Supplement/memo	Address book maintenance tool: Tool provided from CMJ.
DEV-SP1		Device special settings 1
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000

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DEV-SP2		Device special settings 2
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP3		Device special settings 3
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP4		Device special settings 4
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP5		Device special settings 5
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP6		Device special settings 6
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000

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DEV-SP7		Device special settings 7
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP8		Device special settings 8
Lv.2	Details	To execute the device special settings.
	Use case	To execute the device special setting.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Change the setting value in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
USEUPTNR		Set Toner Container use-up mode
Lv.1	Details	To set rotation operation when Toner Container is used up. As the value is larger, the time the Toner Container Drive Motor keeps driving after the Toner Container can be replaced becomes longer. Toner in the Hopper is used up further, and it becomes possible to make the time until image formation is stopped (replacement timing of the Toner Container) longer.
	Use case	Upon user's request
	Caution	When the setting value is 1, if the toner consumption is high (at the time of continuous output of high duty image), toner in the Hopper may be used up before the replacement timing of the Toner Container.
	Display/adj/set range	0 to 2 0: 50 rotations , 1: OFF, 2: 80 rotations
	Default value	0
DFEJCLED		ON/OFF of DADF delivery LED
Lv.1	Details	To set whether to light up the delivery LED of DADF.
	Use case	Upon user's request (The LED is too bright.)
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0

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RDEV-SP1		RCON device special settings 1
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP2		RCON device special settings 2
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP3		RCON device special settings 3
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP4		RCON device special settings 4
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP5		RCON device special settings 5
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0

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RDEV-SP6		RCON device special settings 6
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP7		RCON device special settings 7
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0
RDEV-SP8		RCON device special settings 8
Lv.2	Details	To execute the device special setting.
	Use case	For customization, etc.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Use this mode only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	0

T-8-71

■ USER

COPIER > OPTION > USER		
COPY-LIM		Setting of upper limit for copy
Lv.1	Details	To set the upper limit value for copy.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 9999
	Default value	999
SLEEP		ON/OFF of auto sleep function
Lv.1	Details	To set ON/OFF of auto sleep function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Supplement/memo	The time to shift to the sleep mode can be set in the user mode (Preferences> Timer/Energy Settings> Auto Sleep Time).
SIZE-DET		ON/OFF of original size detect function
Lv.2	Details	To set ON/OFF of original size detection function.
	Use case	Upon user's request (glare of the Scan Lamp, etc)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1, ON
	Default value	1
COUNTER1		Display of software counter 1
Lv.1	Details	To display counter type for software counter 1 on the Counter Check screen.
	Use case	Upon user/dealer's request
	Adj/set/operate method	N/A (Display only)
	Caution	Display only. No change is available.
	Display/adj/set range	0 to 999 0: No registration
	Default value	The value differs according to the location.
COUNTER2		Setting of software counter 2
Lv.1	Details	To set counter type for software counter 2 on the Counter Check screen.
	Use case	Upon user/dealer's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: No registration
	Default value	The value differs according to the location.

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COUNTER3		Setting of software counter 3
Lv.1	Details	To set counter type for software counter 3 on the Counter Check screen.
	Use case	Upon user/dealer's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: No registration
	Default value	The value differs according to the location.
COUNTER4		Setting of software counter 4
Lv.1	Details	To set counter type for software counter 4 on the Counter Check screen.
	Use case	Upon user/dealer's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: No registration
	Default value	The value differs according to the location.
COUNTER5		Setting of software counter 5
Lv.1	Details	To set counter type for software counter 5 on the Counter Check screen.
	Use case	Upon user/dealer's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: No registration
	Default value	0
COUNTER6		Setting of software counter 6
Lv.1	Details	To set counter type for software counter 6 on the Counter Check screen.
	Use case	Upon user/dealer's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: No registration
	Default value	0

COPIER > OPTION > USER		
DATE-DSP		Setting of date/time display format
Lv.2	Details	To set date/time display format according to the country or region. After the display format is set with this mode, the order of date is reflected to the followings: Preferences > Timer/Energy Settings > Date/Time Settings, and report output.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: YYMM/DD, 1: DD/MMYY, 2: MM/DD/YY
	Default value	The value differs according to the location.
	Related user mode	Preferences > Timer/Energy Settings > Date/Time Settings
MB-CCV		Control card usage limit for Mail Box
Lv.2	Details	To restrict use of control card for Mail Box.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Unlimited, 1: Limited
	Default value	1
CONTROL		Charge setting of PDL job
Lv.1	Details	To set charge count transmission of PDL job to the connected charge management device (Coin Manager or non-Canon-made control card).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: No charge, 1: Charge
	Default value	0
B4-L-CNT		Count setting of B4 size
Lv.1	Details	To set B4 count with software counter 1 to 8 as to whether B4 is counted as large size or small size. Selecting 1 counts B4 or larger size paper as large size while paper smaller than B4 size as small size.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Small size, 1: Large size
	Default value	0
	Related service mode	COPIER> OPTION> CUSTOM> SC-L-CNT

COPIER > OPTION > USER		
TRY-STP		Set of suspension at full Finisher Tray
Lv.2	Details	To set whether to suspend or continue output when the full Finisher Tray is detected.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: At detection of full tray, 1: Detection of height only
	Default value	0
MF-LG-ST		Display/hide of long original mode
Lv.2	Details	To set whether to display or hide the [Long Original] button. When 1 is set, [Long Original] button is displayed in Copy> Options screen and the long length paper becomes available.
	Use case	Upon user's request (use of long original or long length paper)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Long length paper is delivered from the Second Delivery Outlet (excluding delivery from the Inner Finisher).
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
CNT-DISP		Display/hide of serial number
Lv.2	Details	To set whether to display or hide the serial number on the Counter Check screen.
	Use case	When setting to display/hide serial number on the Counter Check screen
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Display, 1: Hide
	Default value	0
COPY-JOB		Setting of copy job reservation
Lv.1	Details	To set whether to allow copy job reservation when the Card Reader/ Coin Manager is used.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Enabled, 1: Disabled
	Default value	0

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OP-SZ-DT		Orgnl size dtct ON/OFF at copyboard open
Lv.2	Details	To set ON/OFF of original size detection while the Copyboard is opened. When “0: OFF” is set, enter original size manually from the Control Panel. When “1: ON” is set, original size is detected automatically.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
NW-SCAN		Setting of network scan function usage
Lv.2	Details	To set whether to allow use of network scan function.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not change this mode in Japan. - For PS/PCL machines for outside Japan, fix the setting value as “1: Enabled”. For others, permit the use.
	Display/adj/set range	0 to1 0: Disabled, 1: Enabled
	Default value	1
INS-C-S		Setting of Inserter function expansion
Lv.2	Details	To set whether the Inserter supports covers only or both covers and insertion sheets.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0:
	Default value	1
HDCR-DSP		Setting of HDD complete delete method
Lv.2	Details	To set data deletion method of HDD data complete deletion function.
	Use case	When switching the deletion method in HDD data complete deletion mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 4 1: 1-time deletion with 0 data, 2: 1-time deletion with random data, 3: 3-time deletion with random data, 4: DOD (1st time: a series of fixed values, 2nd time: a series of complement of fixed values, 3rd time: random data)
	Default value	1
	Supplement/memo	HDD Initialize All Data/Settings: A function to completely delete data on HDD by overwriting with 0 (null) data or random data to the file data when logically deleting file on HDD (deleting management information data).

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JOB-INVL		Job intvl setting at interruption copy
Lv.2	Details	To set output interval between jobs at the time of interruption copy. Sorting is difficult after interruption copy because of the continuous output of the next job. Paper interval becomes longer when starting pickup for the next job after the last sheet of the previous job is delivered.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Continuous output of the interruption copy and the next job 1: Starting pickup for the next job after the interruption copy is delivered all. 2: Starting pickup for the next job after the previous job is delivered all. (For all jobs)
	Default value	0
LGSW-DSP		ON/OFF of “Log display ON/OFF setting”
Lv.2	Details	To set whether to display “Management Settings> Device Management> Display Log” in user mode. When “1: ON” is set, “Display Log” is displayed in the “Device Management” screen. When ON is set, the logs of each job are displayed in “System Status.” When “0: OFF” is set, “Display Log” is not displayed in the “Device Management” screen, and the logs of each job are not displayed either.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Related user mode	Management Settings > Device Management > Display Log
TAB-ROT		Set of landscape img rotn at PDL:tab ppr
Lv.1	Details	To set whether to rotate landscape image by 180 degrees when PDL print is made on tab paper. When “1: Rotated” is set, image is rotated.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not rotated, 1: Rotated
	Default value	0

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PR-PSESW		Display/hide of output pause button
Lv.1	Details	To set whether to display or hide [Pause Printing] button on the system status/stop screen.
	Use case	- Upon user's request - When promptly stopping the print job in operation or under reservation
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
IDPRN-SW		Charge target job set of dept mngm cntr
Lv.1	Details	To set the job type that advances the department management counter.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: PRINT category: Inbox Print, Report Print, Send Local Print, PDL Print COPY category: COPY 1: PRINT category: Report Print, Send Local Print, PDL Print COPY category: COPY, Inbox Print
	Default value	0
CPRT-DSP		ON/OFF of [Print Charge Log] button
Lv.1	Details	To set whether to display the [Print Charge Log] button to print the charge logs on the charge log screen in user mode. When "1: ON" is set, the button is displayed in Management Settings> Charge Management> Charge Log Screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related user mode	Management Settings > Charge Management > Charge Log

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PCL-COPY		Set of PCL COPIES command control method
Lv.2	Details	To set the binder control method of COPIES command with PCL. Select whether to use the control method of Canon-made PCL or use the same control method of non-Canon-made PCL.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535 0: Control method of Canon-made PCL (following the value of COPIES command that is specified for each page to control on a page basis) 1: Control method of non-Canon-made PCL (handling the value of COPIES command, which is specified for page 1 when collating, as bind figure while the value of COPIES command for the next page or later is invalid. Same control applies as Canon-made PCL when not collating) 2 to 65535: For future use
	Default value	0
CNT-SW		Set default dspl items on charge counter
Lv.1	Details	To set default display items of the charge counter on the Counter Check screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this mode
	Display/adj/set range	0 to 1 0: Counter 1 - Total 1: 101 Counter 2 - Total (Black 1): 108 Counter 3 - Copy (Full Color + Single Color/1): 232 Counter 4 - Total A (Full Color + Single Color/1): 149 1: Counter 1 - Total 2: 102 Counter 2 - Copy (Full Color + Single Color/2): 231 Counter 3 - Total A (Full Color + Single Color/2): 148 Counter 4 - Copy (Black 2): 222 Counter 5 - Total A (Black 2): 133
	Default value	0

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TAB-ACC		ON/OFF of auto cst change for tab ppr
Lv.1	Details	To set to enable/disable auto cassette change when tab paper runs out.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to instruct the user to thoroughly comply the following: - Use tab paper with the same number of tabs. - Set tab paper. Be sure to comply the above; otherwise, proper print is not available and it can cause soiling inside the machine because of toner.
	Display/adj/set range	0 to 1 0: Auto cassette change disabled, 1: Auto cassette change enabled
	Default value	1
BCNT-AST		Set of inbox print charge target job
Lv.1	Details	To set the job type that advances the count in inbox print with NE Controller (ASSIST).
	Use case	When switching the job type that is subject to counting of the inbox print with NE Controller
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: PDL job, 1: Copy job
	Default value	0
PRJOB-CP		Set count TX at RX/report print
Lv.2	Details	To set to enable/disable a page-basis count pulse transmission to the charge management device at the time of reception print or report print.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: No transmission, 1: Transmission
	Default value	0
	Supplement/memo	Charging management device: Coin manager, Non-Canon-made control card

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DFLT-CPY		Setting of color mode for copy
Lv.1	Details	To set the default color mode for copy operation.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Based on Auto/ACS/Printer Driver settings, 1: Color mode, 2: Black mode
	Default value	JP:0, USA:0, EUR:2, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Function Settings> Copy> Select Color Settings for Copy> Use Auto (Color/Black) Selection
DFLT-BOX		Set of color mode for inbox print
Lv.1	Details	To set the default color mode for inbox print operation.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Based on Auto/ACS/Printer Driver settings, 1: Color mode, 2: Black mode
	Default value	JP:0, USA:0, EUR:2, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Function Settings> Copy> Select Color Settings for Copy> Use Auto (Color/Black) Selection
DOC-REM		Display/hide of original removal message
Lv.1	Details	To set whether to display or hide the message to remove original when scanning with DADF without opening/closing DADF after scanning with the Copyboard.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
DPT-ID-7		Password entry set at dept ID reg/auth
Lv.2	Details	To set whether to enter a password at the time of registration/authentication of department ID. With the setting to require entry, entry of 7-digit password is required beside department ID.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Department ID only, 1: 7-digit (password) entry
	Default value	0

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RUI-RJT		Connct set at invalid auth from remoteUI
Lv.2	Details	To set whether to disconnect HTTP port when the machine receives invalid authentication from remote UI 3 times.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Continued connection, 1: Disconnected
	Default value	0
SND-RATE		Set compress ratio at SEND high compress
Lv.2	Details	To set the compression ratio when the data compression ratio for SEND (transmission) is set to "Compact". As the value is larger, the compression ratio is higher (the file size becomes small).
	Use case	When making the transmission file size smaller
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	As the value is too large, an image is deteriorated.
	Display/adj/set range	0 to 2 0: Compression ratio 1/16, 1: Compression ratio 1/20, 2: Compression ratio 1/24
	Default value	0
	Related user mode	Function Settings > Send > Common Settings > Data Compression Ratio
CTM-S06		Set of password delete from export file
Lv.2	Details	To set whether to delete password for file transmission address from export file. When 1 is set, the password of file transmission target is deleted at the time of exporting address book data from remote UI.
	Use case	- Upon user's request - When preventing information leak
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Retained, 1: Deleted
	Default value	1

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FREG-SW		Dspl/hide of MEAP counter free rgst area
Lv.2	Details	To set whether to display or hide the free register area of MEAP counter for SEND.
	Use case	At problem analysis
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Do not use this at the normal service. - Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Supplement/memo	Individual count-up (counter advance) of MEAP application is available in the free register area of MEAP counter.
IFAX-SZL		Setting of IFAX send size limit
Lv.2	Details	To set for restricting data size at the time of IFAX transmission that does not go through the server. With the setting to restrict the data size, it is to be #830 error in the case of sending data that exceeds the upper limit value. In the case that the data goes through the server, the size of transmission data is always restricted.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Limited, 1: Unlimited (Restriction applies when data goes through the server.)
	Default value	1
	Related user mode	Function Settings > Send > E-Mail/I-Fax Settings > Maximum Data Size for Sending
	Supplement/memo	Specify the upper limit value for transmission data size in user mode.

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IFAX-PGD		Set page split TX at IFax Simple mode TX
Lv.2	Details	To set whether to allow split-data transmission on a page basis in the case that the transmission size in I-Fax Simple mode exceeds the upper limit value.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	In the case to enable split-data transmission, be sure to receive approval from the user in advance by explaining the following: - No guarantee for page order on the reception side - There is a possibility of interruption of other received jobs between pages.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
	Related user mode	Function Settings > Send > E-Mail/I-Fax Settings > Maximum Data Size for Sending
	Supplement/memo	Specify the upper limit value for transmission data size in user mode.
MEAPSAFE		Setting of MEAP safe mode
Lv.2	Details	To set safe mode for MEAP platform. MPSF is displayed on the Control Panel in safe mode. In safe mode, MEAP application is stopped while just the system application, which starts with initial state, is activated. This mode enables obtaining log for cause analysis of MEAP failure.
	Use case	Perform system recovery processing when MEAP platform fails to be activated due to resource conflict between MEAP applications, service registration or use order.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal mode, 1: Safe mode
	Default value	0
TRAY-FLL		Set of target tray for tray full notice
Lv.2	Details	To set the tray which is the target of an output tray full notification.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: All trays to which paper can be output, 1: All trays which are specified as the dedicated trays
	Default value	0

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PRNT-POS		ON/OFF of all pauses at error job cancel
Lv.2	Details	To set whether to pause the print operation of following jobs when a job is canceled due to an error inside the machine (#037, etc.) except service calls during PDL print.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
AFN-PSWD		Access limit setting to user mode
Lv.2	Details	To set whether to enter a password when accessing to the user mode. When 1 is set, password entry of system administrator is required after pressing Settings/Registration key.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Password is not required, 1: Password is required
	Default value	0
PTJAM-RC		Auto reprint setting at PDL print jam
Lv.2	Details	To set whether to automatically restart printing after clearing jam that occurs with PDL print.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not automatically reprinted, 1: Automatically reprinted
	Default value	1
PDL-NCSW		Card mngm setting for PDL print job
Lv.2	Details	To set to make PDL print job be subject to card management by the Card Reader. With the setting to enable this mode, PDL print is available only when the card ID of the card inserted to the Card Reader matches the department ID.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: PDL print is available with no card inserted. 1: PDL print is available only when the card ID matches the department ID in the case that the card is inserted.
	Default value	0

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SLP-SLCT		Usage setting of network applications
Lv.2	Details	With the setting to use network-related application, the machine can be recovered through network because it does not shift to sleep mode 1. For this machine to recover from sleep mode 1 through network, a particular packet needs to be received; however, the existing network-related application does not send this packet. With the setting not to use the network-related application, this machine cannot recover from sleep mode 1 through network when it gets into sleep mode 1.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this at the normal service.
	Display/adj/set range	0 to 1 0: Not used (Shift to sleep mode 1 is available.) 1: Used (Shift to sleep mode 1 is not available.)
	Default value	0
	Supplement/memo	Network-related application: NetSpot Accountant, imageWARE
PS-MODE		Compatible mode setting at PS usage
Lv.2	Details	To set the image processing at PS print. Although the same line width is set, it may differ depending on the drawing position. By selecting 8, line widths which vary depending on the drawing position can be uniformed.
	Use case	At replacement
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 65535 0 to 7: Spare 8: Strokeadjustment is enabled. 9 to 65535: Spare
	Default value	0

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CNCT-RLZ		Setting of connection serialize function
Lv.2	Details	Connection serialize is a function to assure job grouping function of imageWARE Output Manager Select Edition V1.0. The setting to enable this mode can avoid job rearrangement because the machine does not receive job data from other connection until it completes job data reception from the current connection.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Supplement/memo	Connection: Connection to be established through network between multiple hosts (PC, etc). Job grouping function: A function of imageWARE Output Manager Select Edition V1.0 to prevent job interruption from other PC by group job (sending multiple jobs in 1 session at job transmission).
COUNTER7		Setting of software counter 7
Lv.1	Details	To set counter type for software counter 7 on the Counter Check screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: No registration
	Default value	0
COUNTER8		Setting of software counter 8
Lv.1	Details	To set counter type for software counter 8 on the Counter Check screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 999 0: No registration
	Default value	0
2C-CT-SW		Set of color counter at 2-color mode
Lv.2	Details	To set whether to use the single color counter or full color counter for count-up in 2-color mode.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Single color counter, 1: Full color counter
	Default value	JP:0, USA:1, EUR:1, AU:1, CN:1, KR:1, TW:1, ASIA:1

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JA-FUNC		ON/OFF of job archive function
Lv.2	Details	To set ON/OFF of job archive function.
	Use case	When setting job archive function
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Changing this mode is not available in service mode, but reference is available (in service mode). This mode is available only with the MEAP program that supports job archive.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
JA-JOB		Setting of job archive target job
Lv.2	Details	To set the job type subject to job archive. With the job archive function enabled, archive operation is executed when executing the target job.
	Use case	When setting job archive function
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Changing this mode is not available in service mode, but reference is available (in service mode). This mode is available only with the MEAP program that supports job archive.
	Display/adj/set range	0: N/A, 3: Limited to FAX/IFAX, 0xFFFFFFFF: All jobs
	Default value	0
	Related service mode	COPIER > OPTION > USER > JA-FUNC
JA-RESTR		Setting of job archive limit items
Lv.2	Details	To set restriction items for job archive specification. With job archive function enabled, follow the setting to execute operation to restrict specification.
	Use case	When setting restriction items for job archive
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Changing this mode is not available in service mode, but reference is available (in service mode). This mode is available only with the MEAP program that supports job archive.
	Display/adj/set range	0 to 1 0: OFF, 1: ON 32 specification restrictions with Bit definition Bit0: Function to obtain image file (0: OFF, 1: ON) Bit1: Function to compose form registration (0: OFF, 1: ON) Bit2: Function to edit document (0: OFF, 1: ON)
	Default value	0
	Related service mode	COPIER > OPTION > USER > JA-FUNC

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LDAP-SW		Search condition set for LDAP server
Lv.1	Details	To set the condition to search e-mail address, etc. from LDAP server.
	Use case	When specifying condition to search e-mail address, etc. from LDAP server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 5 0: Includes the next, 1: Not include the next, 2: Equivalent to the next, 3: Not equivalent to the next, 4: Starts with the next, 5: Finishes with the next
	Default value	4
	Supplement/memo	LDAP (Lightweight Directory Access Protocol): Registering LDAP server enables to search e-mail address, etc. from LDAP server and the result can be registered in the Address Book, etc. Registration is available by the following: Set Destination > Register LDAP Server
FROM-OF		Deletion of e-mail sender's address
Lv.1	Details	To set whether to delete the sender's address (From) at the time of e-mail transmission.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Retained, 1: Deleted
	Default value	0
DOM-ADD		Additional entry of e-mail destn domain
Lv.2	Details	To set to automatically add the domain specified in user mode to the sending address (To) entered at the time of e-mail transmission. If specifying "xxx.com" as a domain in user mode in advance, just entering "aaa" enables to display "aaa@xxx.com" when sending e-mail.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Not added, 1: Added
	Default value	0

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FILE-OF		File send prohibition to entered address
Lv.1	Details	To set to prohibit the file transmission to entered address. File transmission is not available by entering the address because of no “File” display on the transmission screen. The addresses already registered in the Address Book can be selected, but even if a job is sent, it is to be a transmission error. (End code #762 is displayed.)
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- The addresses already registered in the Address Book can be selected, but it is to be a transmission error. Therefore, be sure to receive approval from the user in advance to delete the address. Set the transmission prohibition after deleting the address. - When #762 is displayed without executing the procedure above, explain the user that it is different from the description in the User’s Guide.
	Display/adj/set range	0 to 1 0: Enabled, 1: Disabled
	Default value	0
MAIL-OF		Mail send prohibition to entered address
Lv.1	Details	To set to prohibit the e-mail transmission to entered address. E-mail transmission is not available by entering the address because of no “E-Mail” display on the transmission screen. The addresses already registered in the Address Book can be selected, but even if a job is sent, it is to be a transmission error. (End code #762 is displayed.)
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- The addresses already registered in the Address Book can be selected, but it is to be a transmission error. Therefore, be sure to receive approval from the user in advance to delete the address. Set the transmission prohibition after deleting the address. - When #762 is displayed without executing the procedure above, explain the user that it is different from the description in the User’s Guide.
	Display/adj/set range	0 to 1 0: Enabled, 1: Disabled
	Default value	0

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IFAX-OF		IFAX send prohibition to entered address
Lv.1	Details	To set to prohibit the IFAX transmission to entered address. I-Fax transmission is not available by entering the address because of no “I-Fax” display on the transmission screen. The addresses already registered in the Address Book can be selected, but even if a job is sent, it is to be a transmission error. (End code #762 is displayed.)
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- The addresses already registered in the Address Book can be selected, but it is to be a transmission error. Therefore, be sure to receive approval from the user in advance to delete the address. Set the transmission prohibition after deleting the address. - When #762 is displayed without executing the procedure above, explain the user that it is different from the description in the User’s Guide.
	Display/adj/set range	0 to 1 0: Enabled, 1: Disabled
	Default value	0
LDAP-DEF		Initial condtn set of LDAP server search
Lv.1	Details	To set initial condition for search target attribute that is specified at the time of LDAP server Details search.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 6 0: Name, 1: E-mail, 2: FAX, 3: Organization, 4: Organization unit, 5: No registration 1 (any setting), 6: No registration 2 (any setting)
	Default value	0
	Related service mode	COPIER > OPTION > USER > LDAP-SW
JA-DPI		Display of job archive record resolution
Lv.2	Details	To display the resolution of images for job archives recorded in jobs other than FAX reception and I-Fax reception, etc. Only display is available in service mode. The setting is available only in the MEAP applications which support job archiving.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: No conversion, 1: 100 x 100 dpi, 2: 200 x 200 dpi, 3: 300 x 300 dpi
	Default value	3

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JA-COMPR		Dspl job archive record compress ratio
Lv.2	Details	To display the compression ratio of images for job archives recorded in jobs other than FAX reception and I-Fax reception, etc. Only display is available in service mode. The setting is available only in the MEAP applications which support job archiving.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 5 0: No conversion, 1: Compression ratio 1/4, 2: Compression ratio 1/8, 3: Compression ratio 1/16, 4: Compression ratio 1/32, 5: Compression ratio 1/64
	Default value	3
DK3-ASST		Set of M-Deck(Middle) Air Heater control
Lv.1	Details	To set the condition to turn on the Air Heater at the Multi Deck (Middle) in accordance with media/environment. When the media is switched from non-coated paper to coated paper, pickup operation does not start until the temperature of the Air Heater reaches the specified temperature; thus, waiting time occurs. By selecting 1, the Air Heater is ON only for the coated paper. When the use environment is near the threshold for turning ON/OFF the Air Heater, switching occurs frequently, which increases the wait time. By selecting 2, the heater is always ON regardless of media and environment.
	Use case	Upon user's request (shorten the wait time)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When selecting 2, be sure to receive approval from the user in advance after explaining that there is a possibility that transfer performance may decrease if humidity decreases.
	Display/adj/set range	0 to 2 0: ON/OFF depending on the media/environment condition 1: ON only for the coated paper 2: Always ON (No environment/media-dependant)
	Default value	0

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FREE-DSP		Display/hide of charge disable screen
Lv.2	Details	To set whether to display or hide the charge disable screen for switching between charge and no charge. The hardware switch for switching charge/no charge in the Coin Manager enables the mode in which all the services are available for free (store manager mode) by temporarily releasing the charging system. Even without the hardware switch, the mode can be switched with the software switch when it is set to display the charge disable screen in Settings/Registration.
	Use case	When enabling all the services to be provided for free by temporarily releasing the charging system
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
TNRB-SW		Display/hide of Toner Container counter
Lv.2	Details	To set whether to display the Toner Container counter on the Counter Check screen.
	Use case	When not showing the screen to users
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: Hide, 1: Display (Toner Container counter only), 2: Display (Toner Container counter + ejection counter)
	Default value	JP:0, USA:2, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
CLR-TIM		Set of HDD Encry Kit data delete timing
Lv.2	Details	To set the timing to completely delete the data when HDD Encryption Kit is used. Selecting 0 may reduce the job processing speed because page data that has been already processed is deleted while the other job is in process, causing overload to CPU and HDD access. Selecting 1 improves the job processing speed because the process is executed after a job is completed.
	Use case	Upon request to improve the job processing speed
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: During job process, 1: After the job is completed
	Default value	0

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JA-FORMT		Display of job archive record format
Lv.2	Details	To display the format of images for job archives recorded in jobs other than FAX reception and IFAX reception, etc. Whether the images processed by Packet JPEG are recorded in Packet JPEG, or converted into Raster JPEG and then recorded is displayed. Only display is available in service mode. The setting is available only in the MEAP applications which support job archiving.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Packet JPEG, 1: Raster JPEG
	Default value	0
HDCR-DSW		Dspl/hide of HDD complete delete ON/OFF
Lv.1	Details	To set whether to display or hide "Hard Disk Data Complete Deletion" in user mode. With this setting, HDD data complete deletion function is available with ON/OFF button on the screen.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
	Related user mode	Management Settings > Data Management > HDD Data Complete Deletion > Hard Disk Data Complete Deletion

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DK1-ASST		Set of P-Deck Air Heater control
Lv.1	Details	To set the condition to turn on the Air Heater at the POD Deck Lite in accordance with media/environment. When the media is switched from non-coated paper to coated paper, pickup operation does not start until the temperature of the Air Heater reaches the specified temperature; thus, waiting time occurs. By selecting 1, the Air Heater is ON only for the coated paper. When the use environment is near the threshold for turning ON/OFF the Air Heater, switching occurs frequently, which increases the wait time. By selecting 2, the heater is always ON regardless of media and environment.
	Use case	Upon user's request (shorten the wait time)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When selecting 2, be sure to receive approval from the user in advance after explaining that there is a possibility that transfer performance may decrease if humidity decreases.
	Display/adj/set range	0 to 2 0: ON/OFF depending on the media/environment condition 1: ON only for the coated paper 2: Always ON (No environment/media-dependant)
	Default value	0
DK4-ASST		Set of M-Deck (Lower) Air Heater control
Lv.1	Details	To set the condition to turn on the Air Heater at the Multi Deck (Lower) in accordance with media/environment. When the media is switched from non-coated paper to coated paper, pickup operation does not start until the temperature of the Air Heater reaches the specified temperature; thus, waiting time occurs. By selecting 1, the Air Heater is ON only for the coated paper. When the use environment is near the threshold for turning ON/OFF the Air Heater, switching occurs frequently, which increases the wait time. By selecting 2, the heater is always ON regardless of media and environment.
	Use case	Upon user's request (shorten the wait time)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When selecting 2, be sure to receive approval from the user in advance after explaining that there is a possibility that transfer performance may decrease if humidity decreases.
	Display/adj/set range	0 to 2 0: ON/OFF depending on the media/environment condition 1: ON only for the coated paper 2: Always ON (No environment/media-dependant)
	Default value	0

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DK2-ASST		Set of M-Deck (Upper) Air Heater control
Lv.1	Details	To set the condition to turn on the Air Heater at the Multi Deck (Upper) in accordance with media/environment. When the media is switched from non-coated paper to coated paper, pickup operation does not start until the temperature of the Air Heater reaches the specified temperature; thus, waiting time occurs. By selecting 1, the Air Heater is ON only for the coated paper. When the use environment is near the threshold for turning ON/OFF the Air Heater, switching occurs frequently, which increases the wait time. By selecting 2, the heater is always ON regardless of media and environment.
	Use case	Upon user's request (shorten the wait time)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When selecting 2, be sure to receive approval from the user in advance after explaining that there is a possibility that transfer performance may decrease if humidity decreases.
	Display/adj/set range	0 to 2 0: ON/OFF depending on the media/environment condition 1: ON only for the coated paper 2: Always ON (No environment/media-dependant)
	Default value	0
SNMP-COA		Inside comty name SNMPaccess limit:admin
Lv.2	Details	To restrict SNMP access by the community name (administrator right) that is kept internally. This machine internally retains the community name (administrator right) other than the SNMP community name that is specified in user mode. Canon-made utility software, such as NetSpot, uses this community name. Because of security concern, select 0/1 in the case to restrict SNMP access with the internal community name.
	Use case	When restricting SNMP access with the community name (administrator right) that is retained internally
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: OFF, 1: Read only, 2: Read/Write
	Default value	1
	Related user mode	Preferences> Network> SNMP Settings> Community Name 1 Settings

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SNMP-COU		Inside comty name SNMP access limit:user
Lv.2	Details	To restrict SNMP access by the community name (user right) that is kept internally. This machine internally retains the community name (user right) other than the SNMP community name that is specified in user mode. Canon-made utility software, such as NetSpot, uses this community name. Because of security concern, select 0/1 in the case to restrict SNMP access with the internal community name.
	Use case	When restricting SNMP access with the community name (user right) that is retained internally
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2 0: OFF, 1: Read only, 2: Read/Write
	Default value	2
	Related user mode	Preferences> Network> SNMP Settings> Community Name 2 Settings
BWCL-DSP		Display/hide of clr/B&W selection screen
Lv.2	Details	To set whether to display the color/B&W selection screen to select the default of the color mode.
	Use case	When displaying the color mode default selection screen
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
SCALL-SW		Display/hide of Service Call button
Lv.1	Details	To set whether to display or hide the Service Call button on the Control Panel.
	Use case	When the sales company supports service initiated by the Service Call button
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
SCALLCMP		Set of repair request complete notice
Lv.1	Details	With this setting enabled, a notification of repair completion is sent to UGW server to clear the repair-request status that is retained internally.
	Use case	When service technician uses this mode after completing repair
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0

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USBH-DSP		Display/hide of “Use USB Host”
Lv.2	Details	To set whether to display “Preferences> External Interface> USB Settings> Use USB Host”. By selecting “1: Display”, whether to use USB host on USB Settings screen can be selected.
	Use case	When switching to display or hide “Use USB Host” on USB Settings screen
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related user mode	Preferences> External Interface> USB Settings> Use USB Host
USBM-DSP		Dspl/hide of USB ex-memory device driver
Lv.2	Details	To set whether to display “Preferences> External Interface> USB Settings> Use MEAP Driver for External USB Device”. By selecting “0: Hide”, the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB external memory device.
	Use case	When prohibiting the user administrator to change the setting of “Use MEAP Driver for USB External Device”, set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
	Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for USB External Device
USBI-DSP		Dspl/hide of USB input device driver set
Lv.2	Details	To set whether to display “Preferences> External Interface> USB Settings> Use MEAP Driver for USB Input Device”. By selecting “0: Hide”, the item is not displayed, and the user administrator cannot change the setting of the MEAP driver for the USB input device.
	Use case	When prohibiting the user administrator to change the setting of “Use MEAP Driver for USB Input Device”, set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
	Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for USB Input Device

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CTCHKDSP		Display/hide of Print List
Lv.1	Details	To set whether to display or hide “Print List” on the Counter Check screen. Model name, serial number information, counter check date and counter information can be output as Total Page Count List.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	1
USBB-DSP		[Not used]
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for Bluetooth Device
USBR-DSP		Dspl/hide of USB infrared device driver
Lv.2	Details	To set whether to display “Preferences > External Interface > USB Settings > Use MEAP Driver for USB Infrared Device.”
	Use case	When prohibiting the user administrator to change the setting of “Use MEAP Driver for USB Infrared Device,” set 0 after the specified setting is completed.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for Bluetooth Device
POL-SCAN		Dspl/hide Rights Management Server set
Lv.1	Details	When “1: Display” is set, the Rights Management Server function screen is displayed. While the Rights Management Server function is a standard feature, it is possible to hide if not necessary.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0

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W-TN-DSP		Spec of Waste Toner Cntner rplce display
Lv.1	Details	To display animation showing the restoration procedure when the Waste Toner Container is full. When "1" is set, the procedure for replacing the Waste Toner Container is displayed.
	Use case	When displaying the animation showing the procedure for the user to replace the Waste Toner Container
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Animation not displayed.Specification for replacement by a service technician. 1: Animation displayed.Specification for replacement by a user.
	Default value	0
JA-SBOX		Setting of linking with Advanced Box:SAM
Lv.2	Details	To set the link with Advanced Box when iW SAM is enabled. When 1 is set, linking with Advanced Box is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-DFAX		Setting of direct fax transmission: SAM
Lv.2	Details	To set the direct fax transmission when iW SAM is enabled. When 1 is set, the direct fax transmission is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-REP		Setting of TX Report with image: SAM
Lv.2	Details	To set the TX Report with image when iW SAM is enabled. When 1 is set, the TX Report with image is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-FREP		Setting of Fax TX Report with image: SAM
Lv.2	Details	To set the Fax TX Report with image when iW SAM is enabled. When 1 is set, the Fax TX Report with image is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0

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JA-BOX		Setting of Inbox document operation: SAM
Lv.2	Details	To set the operation for Inbox document at the time of iW SAM When 1 is set, the Inbox document can be operated.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-FORM		Setting of image composition: SAM
Lv.2	Details	To set the image composition when iW SAM is enabled. When 1 is set, the image composition is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-PREV		Setting of preview page deletion: SAM
Lv.2	Details	To set whether a page is deleted from the scan preview screen at the time of iW SAM When 1 is set, a page is deleted from the scan preview screen.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-PULL		Setting of network scan: SAM
Lv.2	Details	To set the network scan when iW SAM is enabled. When 1 is set, the network scan is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-PDLB		Set of printer driver multi box save:SAM
Lv.2	Details	To set whether a document can be simultaneously saved to multiple Inboxes from the printer driver at the time of iW SAM. When 1 is set, a document can be saved to multiple Inboxes from the printer driver.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-JOBK		Setting of job merge allowance:SAM
Lv.2	Details	To set whether merging jobs is allowed when iW SAM is enabled. When 1 is set, jobs can be merged.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0

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JA-JDF		Setting of JDF: SAM
Lv.2	Details	To set the use of JDF when iW SAM is enabled. When 1 is set, JDF can be used.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-RUI		Setting of Inbox document access: SAM
Lv.2	Details	To set the Inbox document access from remote UI at the time of iW SAM When 1 is set, accessing to the Inbox document from remote UI is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
JA-WEB		Setting of Inbox document upload: SAM
Lv.2	Details	To set the Inbox document upload with the Web browser at the time of iW SAM. When 1 is set, uploading of the Inbox document with the Web Browser is enabled.
	Use case	When the operation restriction is cleared at the time of iW SAM
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0
CS-ACC		Set paper source switch in color mode
Lv.1	Details	To change “Paper Drawer Auto Selection On/Off” in user mode to switch of paper source in color mode. When 1 is set, the meaning of ON/OFF of “Paper Drawer Auto Selection On/Off” screen changes. ON: Paper sources that can be selected when color mode is other than “B&W” OFF: Paper sources that can be selected when color mode is “B&W”
	Use case	When switching the paper source in color mode
	Display/adj/set range	0 to 1 0: Same as conventional machines, 1: Paper source switch in color mode
	Default value	0
	Related user mode	Function Settings > Common > Paper Feed Settings > Paper Drawer Auto Selection On/Off

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EXP-CRYP		Confdntial encrypt ON/OFF:add book exprt
Lv.1	Details	To set whether to encrypt the confidential part (password part) in the Address Book when exporting the address book and device settings via RUI. When 0 is set, the confidential part in the address book is exported without encryption.
	Use case	When there is a need to export password without encryption because of operation and tool
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure not to allow the user to execute export without encryption because of security concern.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
SLEEP1SW		Power supply when shifting to SLEEP1
Lv.1	Details	When shifting to SLEEP1 mode, the power stops to be supplied, so it takes time to activate after a job is received. When 1 is set, the power keeps to be supplied even after shifting to SLEEP1 mode, so the activation of job processing becomes earlier.
	Use case	Upon user’s request (when job processing after shifting to SLEEP1 is slow)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
CNCL-ATH		ON/OFF of auth at secure job stop
Lv.1	Details	To set whether to conduct authentication when stopping a secure job in the secure print screen. When 0 is set, pressing [Stop] button deletes the secure job immediately. By setting 1 when user authentication is not conducted, the authentication screen is displayed and only the jobs which authentication was succeeded are deleted, so security for the secure job is enhanced.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

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EZY-SCRP		ON/OFF of secure print simple auth
Lv.1	Details	To set whether to conduct secure print simple authentication. When 1 is set, secured print, encryption secured print and inbox print are received, but the normal print jobs are canceled. If the password “3758211” is entered at job sending, authentication by entering the password on the Control Panel is not required. If the password is not entered at job sending, authentication by entering the password on the Control Panel is necessary at job output. In addition, the following selection is added as auto deletion time of secure job: 10 minutes, 20 minutes, 30 minutes
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
DMN-MTCH		ON/OFF of secure print domain judgment
Lv.1	Details	To set whether to display only the job which matches the domain in the “My Job Status” screen of the secure print. When 1 is set, only the job which matches the user name and domain name is displayed in the “My Job Status” screen, so the job which does not match the domain is not displayed.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Supplement/memo	The “My Job Status” screen is displayed when login service is used. Only the job of user who logs in is displayed.
SMD-EXPT		Setting of export target data: remote UI
Lv.1	Details	To set whether to export “service mode data” from remote UI. When 1 is set, “service mode data” is displayed as the target data of export on remote UI. When installing more than 1 machine at the same time, the same service mode data can be registered.
	Use case	When installing more than 1 machine at the same time
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
	Supplement/memo	By selecting “service mode data” as the target data of export on remote UI after setting SMD-EXPT to 1, service mode data can be exported from remote UI.

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SNDSTREN		Set of setting delete aftr scan and send
Lv.1	Details	To set whether to delete the transmission settings except for the address after transmission from the “Scan and Send” screen.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Delete, 1: Retain
	Default value	JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
FAXSTREN		Set of setting delete aftr fax transmit
Lv.1	Details	To set whether to delete the transmission settings except for the address after transmission from the “Fax” screen.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Delete, 1: Retain
	Default value	JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0

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U1-NAME		Dspl/hide of ppr name: ppr size group U1
Lv.2	Details	To set whether to display or hide paper name at paper size group U1 detection.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
U2-NAME		Dspl/hide of ppr name: ppr size group U2
Lv.2	Details	To set whether to display or hide paper name at paper size group U2 detection.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
U3-NAME		Dspl/hide of ppr name: ppr size group U3
Lv.2	Details	To set whether to display or hide paper name at paper size group U3 detection.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
U4-NAME		Dspl/hide of ppr name: ppr size group U4
Lv.2	Details	To set whether to display or hide paper name at paper size group U4 detection.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0

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P-SZ-C1		Setting of Right Deck paper size
Lv.1	Details	To set the paper size used in the Right Deck.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 2 0: A4, 1: B5, 2: LTR
	Default value	0
P-SZ-C2		Setting of Left Deck paper size
Lv.1	Details	To set the paper size used in the Left Deck.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 2 0: A4, 1: B5, 2: LTR
	Default value	0
D1-CURL		Set of curl correct at Right Deck pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from the Right Deck. As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to the Right Deck in "Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer" in user mode.
	Use case	Upon user's request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer

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D2-CURL		Set of curl correct at Left Deck pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from the Left Deck. As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to the Left Deck in “Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer
D3-CURL		Set of curl correct at Cassette 3 pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from Cassette 3. As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to Cassette 3 in “Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer

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D4-CURL		Set of curl correct at Cassette 4 pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from Cassette 4. As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to Cassette 4 in “Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer
D5-CURL		Set curl correct at Deck/POD Deck pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from the Paper Deck/POD Deck Lite. As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to the POD Deck Lite in “Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer

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D6-CURL		Set of curl correct at MP tray pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from the Multi-purpose Tray. As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to the Paper Deck in “Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer
D7-CURL		Set curl correct at M-Deck (Upr) pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from the Multi Deck (Upper). As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to the Multi Deck (Upper) in “Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer

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D8-CURL		Set curl correct at M-Deck (Mid) pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from the Multi Deck (Middle). As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to the Multi Deck (Middle) in “Adjustment/Maintenance > Adjust Action > Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer
D9-CURL		Set curl correct at M-Deck (Lowr) pickup
Lv.1	Details	To set the curl correction level for the sheets picked up from the Multi Deck (Lower). As the value is incremented by 1, the curl correction level is increased. Regardless of face-up or face-down, increase the value in the case of upward curl and decrease it in the case of downward curl. When this setting is made, the same curl correction level is applied to all media. This setting is linked with the value specified to the Multi Deck (Lower) in “Adjustment/Maintenance > Adjust Action > Correct Curl for Each Paper Drawer” in user mode.
	Use case	Upon user’s request
	Display/adj/set range	-10 to 10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Action> Correct Curl for Each Paper Drawer
CST3-P1		Setting of Cst3 paper size (A5R/STMTR)
Lv.1	Details	To set the paper size used in Cassette 3.
	Use case	When setting the paper size for the Cassette 3
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: A5R, 1: STMTR
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> A5R/STMTR Paper Selection

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CST3-P2		Setting of Cst3 paper size (B5/EXEC)
Lv.1	Details	To set the paper size used in Cassette 3.
	Use case	When setting the paper size for the Cassette 3
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: B5, 1: EXEC
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> B5/EXEC Paper Selection
CST4-P1		Setting of Cst4 paper size (A5R/STMTR)
Lv.1	Details	To set the paper size used in Cassette 4.
	Use case	When setting the paper size for the Cassette 4
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: A5R, 1: STMTR
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> A5R/STMTR Paper Selection
CST4-P2		Setting of Cst4 paper size (B5/EXEC)
Lv.1	Details	To set the paper size used in Cassette 4.
	Use case	When setting the paper size for the Cassette 4
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: B5, 1: EXEC
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> B5/EXEC Paper Selection
CST5-P1		Setting of M-Deck (Upr) paper size
Lv.1	Details	To set the paper size used in the Multi Deck (Upper).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: A5R, 1: STMTR
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> A5R/STMTR Paper Selection

COPIER > OPTION > CST		
CST5-P2		Setting of M-Deck (Upr) paper size
Lv.1	Details	To set the paper size used in the Multi Deck (Upper).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: B5, 1: EXEC
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> B5/EXEC Paper Selection
CST6-P1		Setting of M-Deck (Mid) paper size
Lv.1	Details	To set the paper size used in the Multi Deck (Middle).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: A5R,1: STMTR
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> A5R/STMTR Paper Selection
CST6-P2		Setting of M-Deck (Mid) paper size
Lv.1	Details	To set the paper size used in the Multi Deck (Middle).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: B5, 1: EXEC
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> B5/EXEC Paper Selection
CST7-P1		Setting of M-Deck (Lowr) paper size
Lv.1	Details	To set the paper size used in the Multi Deck (Lower).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: A5R,1: STMTR
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> A5R/STMTR Paper Selection

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CST7-P2		Setting of M-Deck (Lowr) paper size
Lv.1	Details	To set the paper size used in the Multi Deck (Lower).
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Be sure to match with the hardware setting size.
	Display/adj/set range	0 to 1 0: B5, 1: EXEC
	Default value	JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Paper Settings> B5/EXEC Paper Selection
CST3-U1		Set Cst3 area-spec stdrd size ppr ctgry1
Lv.1	Details	To set the area-specific standard size paper category 1 used in Cassette 3.
	Use case	When setting area-specific standard size paper for the Cassette 3
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 43 0: Do not use special papers, 1 to 22: Not used, 23: K-LGL-R, 24: FLSP, 25: A-FLSP, 26: OFI, 27: E-OFI, 28: B-OFI, 29: Not used, 30: A-LTRR, 31: Not used, 32: G-LTRR, 33: A-LGL, 34: G-LGL, 35 to 36: Not used, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43 : Not used
	Default value	0
CST3-U3		Set Cst3 area-spec stdrd size ppr ctgry3
Lv.1	Details	To set the area-specific standard size paper category 3 used in Cassette 3.
	Use case	When setting area-specific standard size paper for the Cassette 3
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 31 0: Do not use special papers, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST4-U1		Set Cst4 area-spec stdrd size ppr ctgry1
Lv.1	Details	To set the area-specific standard size paper category 1 used in Cassette 4.
	Use case	When setting area-specific standard size paper for the Cassette 4
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 43 0: Do not use special papers, 1 to 22: Not used, 23: K-LGL-R, 24: FLSP, 25: A-FLSP, 26: OFI, 27: E-OFI, 28: B-OFI, 29: Not used, 30: A-LTRR, 31: Not used, 32: G-LTRR, 33: A-LGL, 34: G-LGL, 35 to 36: Not used, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43 : Not used
	Default value	0

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CST4-U3		Set Cst4 area-spec stdrd size ppr ctgry3
Lv.1	Details	To set the area-specific standard size paper category 3 used in Cassette 4.
	Use case	When setting area-specific standard size paper for the Cassette 4
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 31 0: Do not use special papers, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST5-U1		MDeck(Upr) special paper category1
Lv.1	Details	To set the special paper category 1 used in the Multi Deck (Upper).
	Use case	When setting area-specific standard size paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 43 0: Do not use special papers, 1 to 22: Not used, 23: K-LGL-R, 24: FLSP, 25: A-FLSP, 26: OFI, 27: E-OFI, 28: B-OFI, 29: Not used, 30: A-LTRR, 31: Not used, 32: G-LTRR, 33: A-LGL, 34: G-LGL, 35 to 36: Not used, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43 : Not used
	Default value	0
CST5-U3		MDeck(Upr) special paper category3
Lv.1	Details	To set the special paper category 3 used in the Multi Deck (Upper).
	Use case	When setting area-specific standard size paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 31 0: Do not use special papers, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST6-U1		MDeck(Mid) special ppr category1
Lv.1	Details	To set the special paper category 1 used in the Multi Deck (Middle).
	Use case	When setting area-specific standard size paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 43 0: Do not use special papers, 1 to 22: Not used, 23: K-LGL-R, 24: FLSP, 25: A-FLSP, 26: OFI, 27: E-OFI, 28: B-OFI, 29: Not used, 30: A-LTRR, 31: Not used, 32: G-LTRR, 33: A-LGL, 34: G-LGL, 35 to 36: Not used, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43 : Not used
	Default value	0

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CST6-U3		MDeck(Mid) special ppr category3
Lv.1	Details	To set the special paper category 3 used in the Multi Deck (Middle).
	Use case	When setting area-specific standard size paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 31 0: Do not use special papers, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0
CST7-U1		MDeck(Low) special ppr category1
Lv.1	Details	To set the special paper category 1 used in the Multi Deck (Lower).
	Use case	When setting area-specific standard size paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 43 0: Do not use special papers, 1 to 22: Not used, 23: K-LGL-R, 24: FLSP, 25: A-FLSP, 26: OFI, 27: E-OFI, 28: B-OFI, 29: Not used, 30: A-LTRR, 31: Not used, 32: G-LTRR, 33: A-LGL, 34: G-LGL, 35 to 36: Not used, 37: M-OFI, 38 to 41: Not used, 42: FA4, 43 : Not used
	Default value	0
CST7-U3		MDeck(Low) special ppr category3
Lv.1	Details	To set the special paper category 3 used in the Multi Deck (Lower).
	Use case	When setting area-specific standard size paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 31 0: Do not use special papers, 1 to 21: Not used, 22: K-LGL, 23 to 28: Not used, 29: A-LTR, 30: Not used, 31: G-LTR
	Default value	0

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COIN		Setting of charge management
Lv.1	Details	To set charge management method.
	Use case	At installation of Coin Manager
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Following items are automatically specified when changing the value to 3 (from 0 to 2) when setting 3. The change will not be returned even if changing back the value to 0 to 2 (from 3) once the mode has been changed. - COPIER> OPTION> USER> CONTROL, AFN-PSWD=1 - COPIER> OPTION> NETWORK> DA-CNCT=1 - COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX=0 - Preferences> Network> TCP/IP Settings> IPv4 Settings> IP Address Range Settings> RX/Print Range: Permit IPv4 Address=ON - Preferences> Network> TCP/IP Settings> IPv6 Settings> IP Address Range Settings> RX/Print Range: Permit IPv6 Address=ON - Preferences> Network > TCP/IP Settings > FTP Print Settings > Use FTP Printing=OFF - Preferences> Network> TCP/IP Settings> IPP Print Settings=ON - Preferences> Network> SMB Server Settings> SMB Printer Settings> Use SMB=ON - Function Settings> Send> E-mail/I-Fax Settings> Communication Settings> SMTP Receive, POP=OFF Following items are automatically specified when changing the value to 4 (from 0 to 2) when setting 4. The change will not be returned even if changing back the value to 0 to 2 (from 4) once the mode has been changed. - COPIER> OPTION> USER> AFN-PSWD=1 - COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX, UI-RSCAN, UI-EPRNT, UI-HOLD=0 - Management Settings> Device Management> Display Log=OFF
	Display/adj/set range	0 to 7 0: No charge 1: Charge with Coin Manager 2: Charge with remote counter 3: Charge with DA (only in Japan) 4: Charge with this machine itself 5: New SC mode 6: External charge mode 6 7: External charge mode 7
	Default value	0
	Related service mode	COPIER> OPTION> USER> CONTROL COPIER> OPTION> FNC-SW> DA-CNCT COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX

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	Related user mode	Function Settings > Send > E-Mail/I-Fax Settings > Communication Settings Preferences> Network > TCP/IP Settings > DNS Settings > FTP Print Settings Preferences> Network > TCP/IP Settings > DNS Settings > IPP Print Settings
	Supplement/memo	Control card can be used with “0: No charge”. DA: Digital Accessory
DK-P		Setting of Paper Deck paper size
Lv.1	Details	To set the paper size used in the Paper Deck.
	Display/adj/set range	0 to 2 0: A4, 1: B5, 2: LTR
	Default value	0
CARD-SW		Screen set when Coin Manager connected
Lv.1	Details	To set coin or card that the user is urged to insert on the Control Panel when the Coin Manager is connected.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: Coin, 1: Card, 2: Coin and card, 3: Card (for customization)
	Default value	0
STPL-LMT		Set number of sheets for saddle stitch
Lv.2	Details	To set the number of sheets for saddle stitch
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 3 0: 5 sheets without white band (6 sheets when a cover is included) 1: 10 sheets without white band (11 sheets when a cover is included) 2: 10 sheets with white band (11 sheets when a cover is included) 3: 15 sheets with white band (16 sheets when a cover is included)
	Default value	4
SC-TYPE		Set of Coin Manager supported machine
Lv.2	Details	To set the machine that supports the Coin Manager.
	Use case	Upon user’s request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Do not use this setting for the machines other than the ones that support the Coin Manager.
	Display/adj/set range	0 to 1 0: Machine installed in convenience stores, 1: Self-operated copy machine
	Default value	0

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CC-SPSW		Support setting of control card I/F
Lv.2	Details	To set support level for control card (CCIV/CCV) interface. To keep processing performance of printer engine, select “1: Priority on speed”. To correctly stop the output by the upper limit number of sheets, select “2: Priority on upper limit number of sheets”.
	Use case	Upon user’s request (when connecting to the external counter management system using the control card interface)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	With priority on speed, output cannot be correctly stopped by the upper limit number of sheets. With priority on the upper limit number of sheets, processing performance of the printer engine is decreased depending on pickup location.
	Display/adj/set range	0 to 2 0: No support, 1: Priority on speed, 2: Priority on upper limit number of sheets
	Default value	0
UNIT-PRC		Setting of Coin Manager currency unit
Lv.2	Details	To set currency unit to be handled with Coin Manager
	Use case	At installation of Coin Manager
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 6 0: Japanese yen, 1: Euro, 2: Pound, 3: Swiss Franc, 4: Dollar, 5: No currency unit (no fractional unit), 6: No currency unit (with fractional unit)
	Default value	0
DA-PUCT		Set pickup/delivery comctn at DA charge
Lv.2	Details	When a pickup and delivery notification error occurs due to network failure, etc., the print operation might be done without charging. This is to set the number of sheets that can be picked up after the machine receives Ack single from DA. When the value is decreased, the number of prints to be made without charging is decreased, but the productivity may decrease. When the value is increased, the productivity does not decrease, but the number of prints to be made without charging is increased.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	As the value is smaller, the number of prints to be made without charging is decreased, but the productivity might be lowered.
	Display/adj/set range	2 to 10
	Default value	6
	Supplement/memo	DA: Digital Accessory

COPIER > OPTION > ACC		
MIN-PRC		Set of Coin Manager minimum price
Lv.1	Details	To set the minimum amount to be handled with Coin Manager. Enter 10 when specifying 10 Japanese yen as the minimum amount to be handled with the Coin Manager that supports Japanese yen. In the case to specify 1 to 4 (Euro/Pound/Swiss Franc/Dollar) by going through the following: COPIER> OPTION> ACC > UNIT-PRC, entry is in fractional unit. Entry of 50 indicates 50 cents ($ 0.50).
	Use case	At installation of Coin Manager
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This mode is enabled when selecting 4 for the following: COPIER > OPTION > ACC > COIN.
	Display/adj/set range	0 to 9999
	Default value	10
	Related service mode	COPIER> OPTION> ACC> COIN, UNIT-PRC
	Supplement/memo	As for the charging amount, it causes an error if specifying the value that is smaller than the minimum currency unit with Settings/Registration mode.
MAX-PRC		Set of Coin Manager maximum price
Lv.1	Details	To set the maximum amount to be handled with Coin Manager. Enter 8800 when specifying 8800 Japanese yen as the maximum amount to be handled with the Coin Manager that supports Japanese yen. In the case to specify 1 to 4 (Euro/Pound/Swiss Franc/Dollar) by going through the following: COPIER> OPTION> ACC > UNIT-PRC, entry is in fractional unit. Entry of 50 indicates 50 cents ($ 0.50).
	Use case	At installation of Coin Manager
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	This mode is enabled when selecting 4 for the following: COPIER > OPTION > ACC > COIN.
	Display/adj/set range	0 to 9999
	Default value	8800
	Related service mode	COPIER> OPTION> ACC> COIN, UNIT-PRC
	Supplement/memo	As for charging amount, it causes an error if specifying the value that is larger than the maximum currency unit with Settings/Registration mode.

COPIER > OPTION > ACC		
MIC-TUN		Manual adj of voice recognize microphone
Lv.1	Details	To manually adjust the voice receiving level (sensitivity) of the connected voice recognition microphone. Microphone sensitivity is automatically tuned in user mode; however, adjust it manually as needed.
	Use case	When the sensitivity of microphone is not improved by auto tuning
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 255
	Default value	128
	Related user mode	Preferences > Accessibility > Voice Navigation Settings > Tune Microphone
SRL-SPSW		Setting of Serial I/F Kit support
Lv.1	Details	To set the support level of the Serial Interface Kit. To keep processing performance of printer engine, select “1: Priority on speed”. To correctly stop the output by the upper limit number of sheets, select “2: Priority on upper limit number of sheets”.
	Use case	At installation of Serial Interface Kit
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	With priority on speed, output cannot be correctly stopped by the upper limit number of sheets. With priority on the upper limit number of sheets, processing performance of the printer engine is decreased depending on pickup location.
	Display/adj/set range	0 to 2 0: No support, 1: Priority on speed, 2: Priority on upper limit number of sheets
	Default value	0
PDL-THR		Norm PDL print set: External charge mode
Lv.2	Details	To set the normal PDL print processing when setting external charge mode 6/7 with COIN. When 0 is set, a job is canceled. When 1 is set, a job is executed.
	Use case	When setting the normal PDL print in external charge mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Cancel, 1: Execute
	Default value	0
	Related service mode	COPIER> OPTION> ACC> COIN

COPIER > OPTION > ACC		
CR-TYPE		Setting of Card Reader
Lv.1	Details	To set the model of the Card Reader. Set 0 in the case of connecting the Card Reader-C1. It operates even 0 is set, but recognition rate decreases.
	Use case	When connecting the Card Reader-F1
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Card Reader-F1, 1: Card Reader-C1
	Default value	0

T-8-74

■ INT-FACE

COPIER > OPTION > INT-FACE		
IMG-CONT		Connection setting of print server
Lv.1	Details	To set connection with print server.
	Use case	At installation
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 5 0: Normal mode (Print server not connected), 1, 2: Not used, 3: Print server connected, 4, 5: Not used
	Default value	0
AP-OPT		Output set of appli with print server
Lv.2	Details	To set whether to permit output from the application (PrintMe) equipped with print server.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 2
	Default value	0
AP-ACCNT		Job dept ID set of appli w/ print server
Lv.2	Details	To set department ID to the print job from the application (PrintMe) equipped with print server.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 9999999
	Default value	0
AP-CODE		Set output pass code from print server
Lv.2	Details	To set the pass code for output from print server.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 9999999
	Default value	0
NWCT-TM		Timeout setting of network connection
Lv.2	Details	To set the time to keep network connection between this machine and the PC application (keep-alive setting). As the value is incremented by 1, the time is increased by 1 minute.
	Use case	When PC application is connected
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 5
	Unit	min
	Default value	5
	Supplement/memo	Expected PC application: Network print application, E-mail function, cascade copy, MEAP network application, etc.

COPIER > OPTION > INT-FACE		
CNT-TYPE		Display of print server connection
Lv.1	Details	To display an automatically connected print server.
	Use case	At installation of print server
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 999
	Default value	1
AUTHMODE		Setting to allow print server connection
Lv.2	Details	To set whether to permit the print server connection prohibited models to connect the printer server. When “0: Disabled” is set, even if a machine is connected to the print server, it is not activated correctly and fails to make prints. When “1: Enabled” is set, specific models only can be connected to the print server.
	Use case	For customization
	Display/adj/set range	0 to 1 0: Disabled, 1: Enabled
	Default value	0

T-8-75

■ LCNS-TR

COPIER > OPTION > LCNS-TR		
ST-SEND		Installation state dspl of SEND function
Lv.2	Details	To display installation state of SEND function when disabling the function with license transfer.
	Use case	When checking whether SEND function is installed
	Adj/set/operate method	1) Select ST-SEND. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-SEND.
	Display/adj/set range	0 to 1
	Default value	1
TR-SEND		Trns license key dspl of SEND function
Lv.2	Details	To display transfer license key to use SEND function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-SEND. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SEND.
	Display/adj/set range	24 digits
OF-SEND		[Not used]
ST-ENPDF		Installation state dspl of encrypted PDF
Lv.2	Details	To display installation state of encrypted PDF transmission function when disabling the function with license transfer.
	Use case	When checking whether encrypted PDF transmission function is installed
	Adj/set/operate method	1) Select ST-ENPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-ENPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-ENPDF		Trns license key dspl of encrypted PDF
Lv.2	Details	To display transfer license key to use encrypted PDF transmission function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-ENPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-ENPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
OF-ENPDF		[Not used]

COPIER > OPTION > LCNS-TR		
ST-SPDF		Installation state dspl searchable PDF
Lv.2	Details	To display installation state of searchable PDF when disabling the function with license transfer.
	Use case	When checking whether searchable PDF is installed
	Adj/set/operate method	1) Select ST-SPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-SPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-SPDF		Trns license key dspl of searchable PDF
Lv.2	Details	To display transfer license key to use searchable PDF when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-SPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
OF-SPDF		[Not used]
ST-EXPDF		Instal state dspl encryPDF+searchblPDF
Lv.2	Details	To display installation state of encrypted PDF + searchable PDF when disabling the function with license transfer.
	Use case	When checking whether encrypted PDF + searchable PDF are installed
	Adj/set/operate method	1) Select ST-EXPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-EXPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-EXPDF		Trns license key of encryPDF+searchblPDF
Lv.2	Details	To display transfer license key to use encrypted PDF + searchable PDF when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-EXPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-EXPDF.
	Caution	This mode is enabled when SEND function is installed for Japan.
	Display/adj/set range	24 digits
OF-EXPDF		[Not used]

COPIER > OPTION > LCNS-TR		
ST-PDFDR		Install state dspl of direct print PDF
Lv.2	Details	To display installation state of direct print PDF function when disabling the function with license transfer.
	Use case	When checking whether direct print PDF function is installed
	Adj/set/operate method	1) Select ST-PDFDR. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PDFDR.
	Display/adj/set range	0 to 1
	Default value	0
TR-PDFDR		Trns lcns key dspl of direct print PDF
Lv.2	Details	To display transfer license key to use direct print PDF function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PDFDR. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PDFDR.
	Display/adj/set range	24 digits
OF-PDFDR		[Not used]
ST-SCR		Install state dspl of encry secure print
Lv.2	Details	To display installation state of encrypted secure print when disabling the function with license transfer.
	Use case	When checking whether encrypted secure print is installed
	Adj/set/operate method	1) Select ST-SCR. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-SCR.
	Display/adj/set range	0 to 1
	Default value	0
TR-SCR		Trns license key dspl encry secure print
Lv.2	Details	To display transfer license key to use encrypted secure print when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-SCR. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SCR.
	Caution	This mode is enabled when there is “3DES+USH-H” Board.
	Display/adj/set range	24 digits
OF-SCR		[Not used]

COPIER > OPTION > LCNS-TR		
ST-BRDIM		Install state dspl of BarDIMM function
Lv.2	Details	To display installation state of BarDIMM function when disabling the function with license transfer.
	Use case	When checking whether BarDIMM function is installed
	Adj/set/operate method	1) Select ST-BRDIM. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-BRDIM.
	Display/adj/set range	0 to 1
	Default value	0
TR-BRDIM		Transfer license key dspl BarDIMM func
Lv.2	Details	To display transfer license key to use BarDIMM function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-BRDIM. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-BRDIM.
	Display/adj/set range	24 digits
OF-BRDIM		[Not used]
ST-VNC		Install state dspl of Remote Oprtr Soft
Lv.2	Details	To display installation state of Remote Operators Software when disabling the function with license transfer.
	Use case	When checking whether Remote Operators Software is installed
	Adj/set/operate method	1) Select ST-VNC. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-VNC.
	Display/adj/set range	0 to 1
	Default value	0
TR-VNC		Trns lcns dspl of Remote Operators Softl
Lv.2	Details	To display transfer license key to use Remote Operators Software when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-VNC. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-VNC.
	Display/adj/set range	24 digits
OF-VNC		[Not used]

COPIER > OPTION > LCNS-TR		
ST-WEB		Install state dspl Web Access Software
Lv.2	Details	To display installation state of Web Access Software when disabling the function with license transfer.
	Use case	When checking whether Web Access Software is installed
	Adj/set/operate method	1) Select ST-WEB. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-WEB.
	Display/adj/set range	0 to 1
	Default value	0
TR-WEB		Trns license key dspl of Web Access Soft
Lv.2	Details	To display transfer license key to use Web Access Software when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-WEB. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-WEB.
	Display/adj/set range	24 digits
OF-WEB		[Not used]
ST-HRPDF		Install state dspl of high compress PDF
Lv.2	Details	To display installation state of high compression PDF function when disabling the function with license transfer.
	Use case	When checking whether high compression PDF function is installed
	Adj/set/operate method	1) Select ST-HRPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-HRPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-HRPDF		Trns lcns key dspl of high compress PDF
Lv.2	Details	To display transfer license key to use high compression PDF function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-HRPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-HRPDF.
	Display/adj/set range	24 digits
OF-HRPDF		[Not used]

COPIER > OPTION > LCNS-TR		
ST-TRSND		Install state dspl trial SEND function
Lv.2	Details	To display installation state of trial SEND function when disabling the function with license transfer.
	Use case	When checking whether trial SEND function is installed
	Adj/set/operate method	1) Select ST-TRSND. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-TRSND.
	Display/adj/set range	0 to 1
	Default value	0
TR-TRSND		Trns lcns key dspl trial SEND function
Lv.2	Details	To display transfer license key to use trial SEND function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-TRSND. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-TRSND.
	Display/adj/set range	24 digits
OF-TRSND		[Not used]
ST-WTMRK		Install state dspl of secure watermark
Lv.2	Details	To display installation state of secure watermark function when disabling the function with license transfer.
	Use case	When checking whether secure watermark function is installed
	Adj/set/operate method	1) Select ST-WTMRK. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-WTMRK.
	Display/adj/set range	0 to 1
	Default value	0
TR-WTMRK		Trns license key dspl secure watermark
Lv.2	Details	To display transfer license key to use secure watermark function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-WTMRK. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-WTMRK.
	Display/adj/set range	24 digits
OF-WTMRK		[Not used]

COPIER > OPTION > LCNS-TR		
ST-TSPDF		Install state dspl of time stamp PDF: JP
Lv.2	Details	To display installation state of time stamp PDF transmission function (JP only) when disabling the function with license transfer.
	Use case	When checking whether time stamp PDF transmission function (JP only) is installed
	Adj/set/operate method	1) Select ST-TSPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-TSPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-TSPDF		Trns lcns key dspl of time stamp PDF: JP
Lv.2	Details	To display transfer license key to use time stamp PDF transmission function (JP only) when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-TSPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-TSPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
OF-TSPDF		[Not used]
ST-USPDF		Install state dspl of dgtl user sign PDF
Lv.2	Details	To display installation state of digital user signature PDF transmission function when disabling the function with license transfer.
	Use case	When checking whether digital user signature PDF transmission function is installed
	Adj/set/operate method	1) Select ST-USPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-USPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-USPDF		Trns lcns key dspl of dgtl user sign PDF
Lv.2	Details	To display transfer license key to use digital user signature PDF transmission function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-USPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-USPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
OF-USPDF		[Not used]

COPIER > OPTION > LCNS-TR		
ST-DVPDF		Install state dspl of device sign PDF
Lv.2	Details	To display installation state of device signature PDF transmission function when disabling the function with license transfer.
	Use case	When checking whether device signature PDF transmission function is installed
	Adj/set/operate method	1) Select ST-DVPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-DVPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-DVPDF		Trns lcns key dspl of device sign PDF
Lv.2	Details	To display transfer license key to use device signature PDF transmission function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-DVPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-DVPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
OF-DVPDF		[Not used]
ST-SCPDF		Install state dspl of Trace & Smooth PDF
Lv.2	Details	To display installation state of Trace & Smooth PDF when disabling the function with license transfer.
	Use case	When checking whether Trace & Smooth PDF is installed
	Adj/set/operate method	1) Select ST-SCPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-SCPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-SCPDF		Trns license key dspl Trace&Smooth PDF
Lv.2	Details	To display transfer license key to use Trace & Smooth PDF when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-SCPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-SCPDF.
	Caution	This mode is enabled when SEND function is installed.
	Display/adj/set range	24 digits
OF-SCPDF		[Not used]

COPIER > OPTION > LCNS-TR		
ST-AMS		Instal state dspl of Access Mngm System
Lv.2	Details	To display installation state of Access Management System when disabling the function with license transfer.
	Use case	When checking whether Access Management System is installed
	Adj/set/operate method	1) Select ST-AMS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-AMS.
	Display/adj/set range	0 to 1
	Default value	0
TR-AMS		Trns lcns key dspl of Access Mngm System
Lv.2	Details	To display transfer license key to use Access Management System when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-AMS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-AMS.
	Display/adj/set range	24 digits
OF-AMS		[Not used]
ST-ERDS		Inst state dspl: monitor service func
Lv.2	Details	To display installation state of monitoring service function when disabling the function with license transfer.
	Use case	When checking whether monitoring service function is installed
	Adj/set/operate method	1) Select ST-ERDS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-ERDS.
	Display/adj/set range	0 to 1
	Default value	0
	Supplement/memo	Monitoring service function: A function to send charge counter to the third party's charge server.
TR-ERDS		Trn lcns key dspl: monitor service func
Lv.2	Details	To display transfer license key to use monitoring service function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-ERDS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-ERDS.
	Display/adj/set range	24 digits
	Supplement/memo	Monitoring service function: A function to send charge counter to the third party's charge server.
OF-ERDS		[Not used]

COPIER > OPTION > LCNS-TR		
ST-PS		Install state display of PS function
Lv.2	Details	To display installation state of PS function when disabling the function with license transfer.
	Use case	When checking whether PS function is installed
	Adj/set/operate method	1) Select ST-PS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PS.
	Display/adj/set range	0 to 1
	Default value	0
TR-PS		Transfer license key dspl of PS function
Lv.2	Details	To display transfer license key to use PS function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PS.
	Display/adj/set range	24 digits
OF-PS		[Not used]
ST-PCL		Installation state dspl of PCL function
Lv.2	Details	To display installation state of PCL function when disabling the function with license transfer.
	Use case	When checking whether PCL function is installed
	Adj/set/operate method	1) Select ST-PCL. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PCL.
	Display/adj/set range	0 to 1
	Default value	0
TR-PCL		Transfer license key dspl PCL function
Lv.2	Details	To display transfer license key to use PS function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PCL. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PCL.
	Display/adj/set range	24 digits
OF-PCL		[Not used]

COPIER > OPTION > LCNS-TR		
ST-PSLI5		Installation state display of PS/UFR II
Lv.2	Details	To display installation state of PS/UFR II function when disabling the function with license transfer.
	Use case	When checking whether PS/UFR II is installed
	Adj/set/operate method	1) Select ST-PSLI5. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PSLI5.
	Display/adj/set range	0 to 1
	Default value	0
TR-PSLI5		Transfer license key dspl of PS/UFR II
Lv.2	Details	To display transfer license key to use PS/UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSLI5. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSLI5.
	Display/adj/set range	24 digits
OF-PSLI5		[Not used]
ST-LIPS5		Installation state display of UFR II
Lv.2	Details	To display installation state of UFR II function when disabling the function with license transfer.
	Use case	When checking whether UFR II function is installed
	Adj/set/operate method	1) Select ST-LIPS5. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-LIPS5.
	Display/adj/set range	0 to 1
	Default value	0
TR-LIPS5		Transfer lcns key dspl UFR II function
Lv.2	Details	To display transfer license key to use UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-LIPS5. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LIPS5.
	Display/adj/set range	24 digits
OF-LIPS5		[Not used]

COPIER > OPTION > LCNS-TR		
ST-LIPS4		Install state display of LIPS4 func: JP
Lv.2	Details	To display installation state of LIPS4 function (JP only) when disabling the function with license transfer.
	Use case	When checking whether LIPS4 function (JP only) is installed
	Adj/set/operate method	1) Select ST-LIPS4. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-LIPS4.
	Display/adj/set range	0 to 1
	Default value	0
TR-LIPS4		Trns license key dspl of LIPS4 func: JP
Lv.2	Details	To display transfer license key to use LIPS4 function (JP only) when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-LIPS4. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LIPS4.
	Display/adj/set range	24 digits
OF-LIPS4		[Not used]
ST-PSPCL		Install state dspl of PS/PCL function
Lv.2	Details	To display installation state of PS/PCL function when disabling the function with license transfer.
	Use case	When checking whether PS/PCL function is installed
	Adj/set/operate method	1) Select ST-PSPCL. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PSPCL.
	Display/adj/set range	0 to 1
	Default value	0
TR-PSPCL		Transfer license key dspl of PS/PCL func
Lv.2	Details	To display transfer license key to use PS/PCL function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSPCL. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSPCL.
	Display/adj/set range	24 digits
OF-PSPCL		[Not used]

COPIER > OPTION > LCNS-TR		
ST-PCLUF		Install state dspl PCL/UFR II function
Lv.2	Details	To display installation state of PCL/UFR II function when disabling the function with license transfer.
	Use case	When checking whether PCL/UFR II function is installed
	Adj/set/operate method	1) Select ST-PCLUF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PCLUF.
	Display/adj/set range	0 to 1
	Default value	0
TR-PCLUF		Trns license key dspl of PCL/UFR II func
Lv.2	Details	To display transfer license key to use PCL/UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PCLUF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PCLUF.
	Display/adj/set range	24 digits
OF-PCLUF		[Not used]
ST-PSLIP		Installation state dspl of PS function
Lv.2	Details	To display installation state of PS function when disabling the function with license transfer.
	Use case	When checking whether PS function is installed
	Adj/set/operate method	1) Select ST-PSLIP. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PSLIP.
	Display/adj/set range	0 to 1
	Default value	0
TR-PSLIP		Transfer license key dspl of PS function
Lv.2	Details	To display transfer license key to use PS function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSLIP. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSLIP.
	Display/adj/set range	24 digits
OF-PSLIP		[Not used]

COPIER > OPTION > LCNS-TR		
ST-PSPCU		Install state dspl of PS/PCL/UFR II func
Lv.2	Details	To display installation state of PS/PCL/UFR II function when disabling the function with license transfer.
	Use case	When checking whether PS/PCL/UFR II function is installed
	Adj/set/operate method	1) Select ST-PSPCU. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-PSPCU.
	Display/adj/set range	0 to 1
	Default value	0
TR-PSPCU		Trns lcns key dspl of PS/PCL/UFR II func
Lv.2	Details	To display transfer license key to use PS/PCL/UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-PSPCU. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-PSPCU.
	Display/adj/set range	24 digits
OF-PSPCU		[Not used]
ST-LXUFR		Install state dspl of UFR II function
Lv.2	Details	To display installation state of UFR II function when disabling the function with license transfer.
	Use case	When checking whether UFR II function is installed
	Adj/set/operate method	1) Select ST-LXUFR. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-LXUFR.
	Display/adj/set range	0 to 1
	Default value	1
TR-LXUFR		Trns license key dspl of UFR II function
Lv.2	Details	To display transfer license key to use UFR II function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-LXUFR. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-LXUFR.
	Display/adj/set range	24 digits
OF-LXUFR		[Not used]

COPIER > OPTION > LCNS-TR		
ST-HDCR2		Install state dspl:HDD Init All Data/Set
Lv.2	Details	To display installation state of HDD Initialize All Data/Settings when disabling the function with license transfer.
	Use case	When checking whether HDD Initialize All Data/Settings is installed
	Adj/set/operate method	1) Select ST-HDCR2. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-HDCR2.
	Display/adj/set range	0 to 1
	Default value	0
TR-HDCR2		Trns lcns key dspl:HDD Init All Data/Set
Lv.2	Details	To display transfer license key to use HDD Initialize All Data/Settings when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-HDCR2. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-HDCR2.
	Display/adj/set range	24 digits
OF-HDCR2		[Not used]
ST-JBLK		Install state dspl of Document Scan Lock
Lv.2	Details	To display installation state of Document Scan Lock when disabling the function with license transfer.
	Use case	When checking whether Document Scan Lock is installed
	Adj/set/operate method	1) Select ST-JBLK. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-JBLK.
	Display/adj/set range	0 to 1
	Default value	0
TR-JBLK		Trns lcns key dspl of Document Scan Lock
Lv.2	Details	To display transfer license key to use Document Scan Lock when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-JBLK. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-JBLK.
	Display/adj/set range	24 digits
OF-JBLK		[Not used]

COPIER > OPTION > LCNS-TR		
ST-AFAX		Installation state dspl of remote fax
Lv.2	Details	To display installation state of remote fax client function when disabling the function with license transfer.
	Use case	When checking whether remote fax client function is installed
	Adj/set/operate method	1) Select ST-AFAX. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-AFAX.
	Display/adj/set range	0 to 1
	Default value	0
TR-AFAX		Transfer license key dspl of remote fax
Lv.2	Details	To display transfer license key to use remote fax client function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-AFAX. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-AFAX.
	Display/adj/set range	24 digits
OF-AFAX		[Not used]
ST-REPDF		Install state dspl:reader extensions PDF
Lv.2	Details	To display installation state of reader extensions PDF function when disabling the function with license transfer.
	Use case	When checking whether reader extensions PDF function is installed
	Adj/set/operate method	1) Select ST-REPDF. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-REPDF.
	Display/adj/set range	0 to 1
	Default value	0
TR-REPDF		Trns lcns key dspl:reader extensions PDF
Lv.2	Details	To display transfer license key to use reader extensions PDF function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-REPDF. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-REPDF.
	Display/adj/set range	24 digits
OF-REPDF		[Not used]

COPIER > OPTION > LCNS-TR		
ST-OOXML		Install state dspl of Office Open XML
Lv.2	Details	To display installation state of Office Open XML transmission function when disabling the function with license transfer.
	Use case	When checking whether Office Open XML transmission function is installed
	Adj/set/operate method	1) Select ST-OOXML. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-OOXML.
	Display/adj/set range	0 to 1
	Default value	0
TR-OOXML		Trns lcns key dspl of Office Open XML
Lv.2	Details	To display transfer license key to use Office Open XML when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-OOXML. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-OOXML.
	Display/adj/set range	24 digits
OF-OOXML		[Not used]
ST-XPS		Install state dspl of direct print XPS
Lv.2	Details	To display installation state of direct print XPS when disabling the function with license transfer.
	Use case	When checking whether direct print XPS is installed
	Adj/set/operate method	1) Select ST-XPS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-XPS.
	Display/adj/set range	0 to 1
	Default value	0
TR-XPS		Trns lcns key dspl of direct print XPS
Lv.2	Details	To display transfer license key to use direct print XPS when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-XPS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-XPS.
	Display/adj/set range	24 digits
OF-XPS		[Not used]

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ST-2600		Instal state dspl: IEEE2600.1 scrty func
Lv.2	Details	To display installation state of security function of IEEE2600.1 when disabling the function with license transfer.
	Use case	When checking whether security function of IEEE2600.1 is installed
	Adj/set/operate method	1) Select ST-2600. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-2600.
	Display/adj/set range	0 to 1
	Default value	0
TR-2600		Trn lcns key dspl: IEEE2600.1 scrty func
Lv.2	Details	To display transfer license key to use security function of IEEE2600.1 when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-2600. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-2600.
	Display/adj/set range	24 digits
OF-2600		[Not used]
ST-OPFNT		Install status display of PCL Font Set
Lv.2	Details	To display the installation status of PCL Font Set when transfer is disabled
	Use case	When checking whether PCL option font is installed
	Adj/set/operate method	1) Select ST-OPFNT. 2) Enter 0, and then press OK key. The transfer license key is displayed under ST-OPFNT.
	Display/adj/set range	0 to 1
	Default value	0
TR-OPFNT		Trns lcns key display of PCL Font Set
Lv.2	Details	To display transfer license key to use PCL Font Set function with Policy when transfer is disabled.
	Use case	- When replacing HDD - When replacing the device
	Adj/set/operate method	1) Select TR-OPFNT. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-OPFNT.
	Display/adj/set range	24 digits
OF-OPFNT		License deactivation of PCL Font Set
Lv.2	Details	To deactivate the license of PCL Font Set when disabling the function with license transfer.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

COPIER > OPTION > LCNS-TR		
ST-NCAPT		Install state display of NetCap func
Lv.2	Details	To display installation state of network packet capture function when disabling the function with license transfer.
	Use case	When checking whether network packet capture function is installed
	Adj/set/operate method	1) Select ST-NCAPT. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-NCAPT.
	Display/adj/set range	0 to 1 0: Not installed, 1: Installed When operation finished normally: OK!
	Default value	0
TR-NCAPT		Transfer license key dspl of NetCap func
Lv.2	Details	To display transfer license key to use network packet capture function when disabling the function with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-NCAPT. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-NCAPT.
	Display/adj/set range	License key (24 characters)
OF-NCAPT		Lcns deactivation of NetCap function
Lv.2	Details	To deactivate the license of network packet capture function when disabling the function with license transfer.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

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TEST

PG

COPIER > TEST > PG		
TYPE		Test print
Lv.1	Details	To execute the test print.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key. Test print is executed.
	Caution	Be sure to return the value to 0 after the test print output.
	Display/adj/set range	0 to 100 0: Image from CCD (Normal print) 1 to 3: For R&D use 4: 16 gradations 5: Whole-area halftone image 6: Grid 7 to 9: For R&D use 10: MCYBk horizontal stripes 11: For R&D use 12: YMCBk 64 gradations 13: For R&D use 14: Full color 16 gradations 15 to 100: For R&D use
	Default value	0
TXPH		Setting of test print image mode
Lv.1	Details	To set the image mode at the time of test print output. This mode is enabled for test print only.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 6 0: Error diffusion 1: Low screen ruling (approx. 133 to 190 lines) 2: High screen ruling (approx. 200 to 268 lines) 3: Copy screen (approx. 220 lines) 4: REOS screen (no screen structure) 5 to 6: Not used
THRU		Image correction table use at test print
Lv.1	Details	To set whether to use the image correction table at the time of test print output.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Used, 1: Not used

COPIER > TEST > PG		
DENS-Y		Adj of Y-color density at test print
Lv.1	Details	To adjust Y-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
DENS-M		Adj of M-color density at test print
Lv.1	Details	To adjust M-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
DENS-C		Adj of C-color density at test print
Lv.1	Details	To adjust C-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
DENS-K		Adj of Bk-color density at test print
Lv.1	Details	To adjust Bk-color density when performing test print (TYPE=5). As the value is larger, the image gets darker.
	Use case	At test print (TYPE=5)
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 255
COLOR-Y		Y-color output setting at test print
Lv.1	Details	To make a setting of Y-color output for test print. The setting is applied to all types. When setting “COLOR-Y” to 1 and other items to “0”, a single Y color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output
COLOR-M		M-color output setting at test print
Lv.1	Details	To make a setting of M-color output for test print. The setting is applied to all types. When setting “COLOR-M” to 1 and other items to “0”, a single M color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output

COPIER > TEST > PG		
COLOR-C		C-color output setting at test print
Lv.1	Details	To make a setting of C-color output for test print. The setting is applied to all types. When setting “COLOR-C” to 1 and other items to “0”, a single C color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output
COLOR-K		Bk-color output setting at test print
Lv.1	Details	To make a setting of Bk-color output for test print. The setting is applied to all types. When setting “COLOR-K” to 1 and other items to “0”, a single Bk color is output.
	Use case	At test print
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Not output, 1: Output
F/M-SW		Setting of PG full color/mono color
Lv.1	Details	To set for the output in full color/monochrome color with PG.
	Use case	When separating (identifying) the cause whether it’s due to color or monochrome.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Full color, 1: Single color
	Default value	0
PG-PICK		Setting of test print paper source
Lv.1	Details	To set the paper source at the time of test print output.
	Use case	- At problem analysis - At test print output
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 19 1: Right Deck, 2: Left Deck, 3: Cassette3, 4: Cassette4, 5: POD Deck Lite/Paper Deck, 6 Multi-purpose Tray, 7 to 16: Not used, 17: Multi Deck (Upper) 18: Multi Deck (Middle), 19: Multi Deck (Lower)
2-SIDE		Setting of PG 2-sided mode
Lv.1	Details	To set 1-sided/2-sided print for PG output.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: 1-sided, 1: 2-sided
	Default value	0

COPIER > TEST > PG		
PG-QTY		Setting of PG output quantity
Lv.1	Details	To set the number of sheets for PG output.
	Use case	At problem analysis
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 999
	Unit	sheet
	Default value	1
FINISH		Accessory processing function test print
Lv.1	Details	To execute the test print relating to accessory processing function.
	Use case	When checking operation of accessory processing function
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 99 0: N/A 1: Staple (front) *1 2: Staple (2 points) *1 3: Staple (rear) *1 4: Booklet (saddle stitch) *1 5: Z-fold (single sleeve) *1 6: 2-fold *1 7: C-fold *2 8: V-fold *2 9: 4-fold *2 10: Z-fold (out-3-fold) *2 11: Punch (Inner Puncher) *3 12: Multiple-hole punch *4 13: Shift *1 14 to 99: Spare (for future use) *1 Finisher, *2 Multi-folding machine, *3 Inner Puncher, *4 Multiple-hole Puncher
	Default value	0
	Related service mode	COPIER> TEST> PG> PG-QTY

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NETWORK

COPIER > TEST > NETWORK		
PING		Network connection check
Lv.1	Details	To check connection between this machine and TCP/IP network.
	Use case	- When checking network connection at the time of installation - At network connection failure
	Adj/set/operate method	1) Turn OFF the main power switch. 2) Connect the network cable to this machine, and then turn ON the main power switch. 3) Inform the system administrator at user's site that installation of this machine is complete, and ask for network setting. 4) Ask the system administrator to check the network connection, and check the remote host address of PING transmission target. 5) Select the item and enter the remote host address, and then press OK key and Start key. OK: Connection is normal. Checking procedure is complete. NG: Connection failed. Go to step 6) if the cable connection is OK. In case of cable connection failure, connect again and then go to step 5). 6) Select the item and enter loopback address, and then press OK key and Start key. OK: TCP/IP setting of this machine is normal. Go to step 7) to check NIC. NG: TCP/IP setting of this machine has failure. Go to step 3) to check the setting again. 7) Select the item and enter the local host address, and then press OK key. OK: Network setting of this machine and NIC are normal. Inform the system administrator that the trouble is due to network environment and ask for countermeasure. NG: Connection failure/fault with NIC. Check connection of NIC/ replace NIC.
	Display/adj/set range	0.0.0.0 to 255.255.255.255 At normal state: OK, At failure occurrence: NG
	Supplement/memo	- Remote host address: IP address of PC terminal in network. - Loopback address: 127.0.0.1. Checking TCP/IP of this machine is AZ733available because the signal is returned before NIC. - NIC: Network interface board - Local host address: IP address of this machine
BML-DISP		Set System Monitor scrn: BMlinks support
Lv.2	Details	To set whether to only display the device configuration in the System Monitor screen when supporting BMlinks. When 1 is set, the Status and Log are not displayed.
	Use case	When supporting BMlinks
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Ordinary System Monitor screen 1: Screen in which only the device configuration is displayed
	Default value	0

COPIER > TEST > NETWORK		
IPV6-ADR		Setting of PING send address (IPv6)
Lv.1	Details	To set the IPv6 address to send PING. When PING is sent to this address by COPIER> TEST> NETWORK> PING-IP6, the network connection condition in the IPv6 environment can be checked.
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	- Enter a consistent character string as an address of IPv6. - Enter an address within 39 characters including hexadecimal numbers (0 to 9, a to f) and a separator (:).
	Display/adj/set range	Up to 40 characters including hexadecimal numbers (0 to 9, A to F) and a separator (:)
	Related service mode	COPIER> TEST> NETWORK> PING-IP6
PING-IP6		PING transmission to IPv6 address
Lv.1	Details	To send PING to the address specified by IPV6-ADR. The network connection condition in the IPv6 environment can be checked.
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	COPIER> TEST> NETWORK> IPV6-ADR
IPSECPOL		Polling test of IPSec Encryption Board
Lv.1	Details	To execute polling test of IPSec Encryption Board. To check whether a hardware failure has occurred.
	Use case	When checking whether a hardware failure has occurred to the IPSec Encryption Board
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	At normal state: OK At failure occurrence: NG (0: The board cannot be recognized. 1: An error occurred to the result.)
IPSECINT		Interrupt test of IPSec Encryption Board
Lv.1	Details	To execute the interrupt test of IPSec Encryption Board. To check whether a hardware failure has occurred.
	Use case	When checking whether a hardware failure has occurred to the IPSec Encryption Board
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	At normal state: OK At failure occurrence: NG (0: The board cannot be recognized. 1: An error occurred to the result.)

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NET-CAP

COPIER > TEST > NET-CAP		
CAPOFFON		ON/OFF of NetCap function
Lv.2	Details	To set ON/OFF of network packet capture function.
	Use case	When switching ON/OFF of network packet capture function
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
STT-STP		Start and stop of network packet capture
Lv.2	Details	To start and stop network packet capture.
	Use case	When starting and stopping network packet capture
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Stop, 1: Start
	Default value	0
CAPSTATE		Status of NetCap function
Lv.2	Details	To display the status of network packet capture function
	Use case	When displaying the status of network packet capture function
	Adj/set/operate method	None
	Display/adj/set range	0 to 4
	Default value	0
PONSTART		Start of NetCap function at power-on
Lv.2	Details	To set whether to enable network packet capture function from power-on.
	Use case	When switching whether to enable network packet capture function from power-on
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1
	Default value	0
OVERWRIT		Data overwriting control:NetCap function
Lv.2	Details	To set whether to finish capturing or continue overwriting when HDD becomes full.
	Use case	When setting whether to finish capturing or continue overwriting when HDD becomes full
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: No overwriting (finish network packet capture), 1: Overwriting
	Default value	0

COPIER > TEST > NET-CAP		
PAYLOAD		Payload discard: NetCap function
Lv.2	Details	To set whether to discard payload of captured packet.
	Use case	When setting whether to discard payload of captured packet
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: Save captured packet data as is, 1: Discard payload and save the packet data
	Default value	0
FILE-CLR		Deletion of file: NetCap function
Lv.2	Details	To delete data collected by network packet capture function.
	Use case	When deleting data collected by network packet capture function
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
SIMPFILT		Settings of packet data filtering
Lv.2	Details	To set whether to perform filtering when capturing packet data. When 0 is set, filtering is not performed (All the data are captured.) When 1 is set, packet data is captured only when the receiver's or sender's address coincides with the Mac address of this machine.
	Use case	At problem analysis (at packet data analysis)
	Display/adj/set range	0 to 2 0: Not filtered, 1: Filtered 2: Not used
ENCDATA		Setting of packet data encryption
Lv.2	Details	To set whether to encrypt the packet data when writing the captured packet data to the USB memory.
	Use case	- At problem analysis (at packet data analysis) - When improving security of written packet data
	Caution	This setting is enabled only when writing data to the USB memory. Even when the packet data is loaded using SST, the file is specified, therefore the setting is disabled.
	Display/adj/set range	0 to 2 0: Encrypted (encrypted file) 1: Not encrypted (plain text file) 2: Encrypted (encrypted file + plain text file)
	Default value	0

T-8-79

COUNTER

TOTAL

COPIER > COUNTER > TOTAL		
SERVICE1		Service-purposed total counter 1
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
SERVICE2		Service-purposed total counter 2
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 2, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
COPY		Total copy counter
Lv.1	Details	To count up when the paper is delivered outside the machine. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
PDL-PRT		PDL print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at PDL print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
FAX-PRT		FAX reception print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at FAX reception. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
BOX-PRT		Inbox print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at Inbox print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
RPT-PRT		Report print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at report print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
2-SIDE		2-sided copy/print counter
Lv.1	Details	To count up when the paper is delivered outside the machine according to the charge counter at 2-sided copy/print. Large size: 1, small size: 1 A blank sheet is not counted.
	Display/adj/set range	0 to 99999999
SCAN		Scan counter
Lv.1	Details	To count the number of scan operations according to the charge counter when the scanning operation is complete. Large size: 1, small size: 1
	Display/adj/set range	0 to 99999999

T-8-80

■ PICK-UP

COPIER > COUNTER > PICK-UP		
C1		Cassette 1 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	sheet
C2		Cassette 2 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	sheet
C3		Cassette 3 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	sheet
C4		Cassette 4 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	sheet
MF		Multi-purpose Tray pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	sheet
DK		Deck pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	sheet
2-SIDE		2-sided pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Unit	sheet
D1		POD Upper Deck pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the total counter of POD Upper Deck
	Unit	sheet
	Default value	0
D2		POD Middle Deck pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the total counter of POD Middle Deck
	Unit	sheet
	Default value	0
D3		POD Lower Deck pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the total counter of POD Lower Deck
	Unit	sheet
	Default value	0

T-8-81

■ FEEDER

COPIER > COUNTER > FEEDER		
FEED		DADF original pickup total counter
Lv.1	Details	DADF original pickup total counter
	Use case	When checking the total counter of original pickup by DADF
	Unit	sheet
DFOP-CNT		DADF hinge open/close counter
Lv.1	Details	DADF hinge open/close counter
	Use case	When checking the DADF hinge open/close counter
	Unit	time

T-8-82

JAM

COPIER > COUNTER > JAM		
TOTAL		Printer total jam counter
Lv.1	Details	Printer total jam counter
	Use case	When checking the total jam counter of printer
	Unit	time
FEEDER		Feeder total jam counter
Lv.1	Details	Feeder total jam counter
	Use case	When checking the total jam counter of feeder
	Unit	time
SORTER		Finisher total jam counter
Lv.1	Details	Finisher total jam counter
	Use case	When checking the total jam counter of finisher
	Unit	time
2-SIDE		Duplex Unit jam counter
Lv.1	Details	Duplex Unit jam counter
	Use case	When checking the jam counter of Duplex Unit
	Unit	time
MF		Multi-purpose Tray jam counter
Lv.1	Details	Multi-purpose Tray jam counter
	Use case	When checking the jam counter of Multi-purpose Tray
	Unit	time
C1		Right Deck jam counter
Lv.1	Details	Right Deck jam counter
	Use case	When checking the jam counter of machine's Right Deck
	Unit	time
C2		Left Deck jam counter
Lv.1	Details	Left Deck jam counter
	Use case	When checking the jam counter of machine's Left Deck
	Unit	time
C3		Cassette 3 pickup jam counter
Lv.1	Details	Cassette 3 pickup jam counter
	Use case	When checking the jam counter of machine's Cassette 3
	Unit	time
C4		Cassette 4 pickup jam counter
Lv.1	Details	Cassette 4 pickup jam counter
	Use case	When checking the jam counter of machine's Cassette 4
	Unit	time
DK		POD Deck Lite jam counter
Lv.1	Details	POD Deck Lite jam counter
	Use case	When checking the jam counter of POD Deck Lite
	Unit	time

COPIER > COUNTER > JAM		
MDK1		Multi Deck (Upper) jam counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the jam counter of Multi Deck (Upper)
	Unit	time
	Default value	0
MDK2		Multi Deck (Middle) jam counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the jam counter of Multi Deck (Middle)
	Unit	time
	Default value	0
MDK3		Multi Deck (Lower) jam counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the jam counter of Multi Deck (Lower)
	Unit	time
	Default value	0

T-8-83

MISC

COPIER > COUNTER > MISC		
T-SPLY-Y		Y toner supply counter
Lv.1	Details	Number of Y color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	block
	Default value	0
T-SPLY-M		M toner supply counter
Lv.1	Details	Number of M color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	block
	Default value	0
T-SPLY-C		C toner supply counter
Lv.1	Details	Number of C color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	block
	Default value	0
T-SPLY-K		Bk toner supply counter
Lv.1	Details	Number of Bk color toner supply blocks. Counted for every one rotation of Toner Stirring Screw.
	Use case	When checking the usage status of toner
	Unit	block
	Default value	0
ALLPW-ON		Number of DCON PCB power-on times
Lv.1	Details	Number of power-on times (Non-all-night Power Unit). To count up when power is turned ON (Non-all-night Power Unit).
	Use case	When checking the usage status of the product
	Unit	time
HDD-ON		Number of HDD start-up times
Lv.1	Details	To count up at HDD start-up.
	Use case	When checking the usage status of the product
	Unit	time
ST-NDL		Staple needle counter
Lv.1	Details	To count the use of the staple needle.
	Unit	time
	Default value	0
ENT-PTH		Entrance paper path counter
Lv.1	Details	Entrance paper path counter
	Unit	sheet
	Default value	0

COPIER > COUNTER > MISC		
TRAY-CHA		Tray change counter
Lv.1	Details	Tray change counter
	Unit	time
	Default value	0
PUNCH		Punch Unit counter
Lv.1	Details	Punch Unit counter
	Unit	time
	Default value	0
PUN-CAB		Punch Unit Cable counter
Lv.1	Details	Punch Unit Cable counter
	Unit	time
	Default value	0
PUN-WST		Punch waste counter
Lv.1	Details	Punch Unit punch waste counter
	Default value	0
SADDLE		Saddle paper path counter
Lv.1	Details	Saddle paper path counter
	Unit	sheet
	Default value	0
SDL-STPL		Saddle Staple counter
Lv.1	Details	Saddle Staple Unit counter
	Unit	time
	Default value	0
SDL-NDL		Saddle staple needle counter
Lv.1	Details	Saddle staple needle counter
	Unit	time
	Default value	0
ESC-PTH		Escape paper path counter
Lv.1	Details	Escape paper path counter
	Unit	sheet
	Default value	0
SUC-A-Y		For R&D use
SUC-A-M		For R&D use
SUC-A-C		For R&D use
SUC-A-K		For R&D use

COPIER > COUNTER > MISC		
FX-WEB		Web Level Sensor parts counter
Lv.1	Details	To display the accumulated number of sheets fed through the web (on a small size conversion basis) after the Web Level Sensor is turned ON. 1st line: Total counter value from the previous replacement 2nd line: Estimated life value To reset the number of fed sheets (DRBL-1/FX-WEB1 to 4, MISC/FX-WEB) by pressing the Clear key. (Use this mode when replacing the web and Fixing Unit.)
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Unit	sheet
	Default value	0
	Related service mode	COPIER> COUNTER>DRBL-1>FIX-WEB COPIER> DISPLAY> FIXING> FX-WEB-TM1 to 8

T-8-84

■ JOB

COPIER > COUNTER > JOB		
DVPAPLEN		Average paper length of job
Lv.1	Details	Average paper length in the period from when the printer engine starts printing operation to when it stops the operation. Since the printer engine considers small jobs that are executed continuously as a large job, the average paper length affects calculation of the life.
	Use case	When checking the consumption level of parts/replacing the parts
	Display/adj/set range	0 to 99999999
	Unit	mm
	Default value	0
DVRUNLEN		Average distance of job
Lv.1	Details	Average running distance in the period from when the printer engine starts printing operation to when it stops the operation. Since the printer engine considers small jobs that are executed continuously as a large job, the average running distance affects calculation of the life.
	Use case	When checking the consumption level of parts/replacing the parts
	Display/adj/set range	0 to 99999999
	Unit	mm
	Default value	0

T-8-85

PRDC-1

COPIER > COUNTER > PRDC-1		
PRM-WIRE		Primary Charging Wire parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PRM-GRID		Grid Plate parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PO-WIRE		Pre-transfer Charging Wire parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PRM-CLN		Primary Charge Wire Clean Pad prts cntr
Lv.1	Details	Primary Charging Wire Cleaning Pad 1, 2 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > PRDC-1		
PO-CLN		Pre-transfer Chg Wire Cln Pad prts cntr
Lv.1	Details	Pre-transfer Charging Wire Cleaning Pad 1, 2 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PRM-CLN2		Prmry Charge Wire Cleanr Pad2 prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PO-CLN2		Pre-trn Chg Wire Clnr Pad2 parts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PO-UNIT		Pre-transfer Charging Ass'y parts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > PRDC-1		
PRM-UNIT		Primary Charging Assembly parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
GRID-PAD		Grid Cleaning Pad parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
OZ-FIL1		Ozone Filter parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
AR-FIL1		Dustproof Filter parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > PRDC-1		
TN-FIL1		Toner Filter parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

T-8-86

DRBL-1

COPIER > COUNTER > DRBL-1		
TR-BLT		ITB parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
2TR-ROLL		Sec Transfer Outer Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
TR-STC-H		Sec Transfer Static Eliminator prts cntr
Lv.1	Details	Secondary Transfer Static Eliminator 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
2TR-INRL		Sec Transfer Inner Roller parts counter
Lv.1	Details	Secondary Transfer Inner Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
ITB-BLD1		ITB Cleaning Blade parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PT-DRM		Bk Photosensitive Drum parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
CLN-BLD		Drum Cleaning Blade (Bk) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
DV-UNT-C		Developing Assembly (C) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
DV-UNT-Y		Developing Assembly (Y) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
DV-UNT-M		Developing Assembly (M) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
DV-UNT-K		Developing Assembly (Bk) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C1-PU-RL		Right Deck Pickup Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
C1-SP-RL		Right Deck Separation Roller parts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
C1-FD-RL		Right Deck Feed Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C2-PU-RL		Left Deck Pickup Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C2-SP-RL		Left Deck Separation Roller prts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-1		
C2-FD-RL		Left Deck Feed Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C3-PU-RL		Cassette 3 Pickup Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C3-SP-RL		Cassette 3 Separation Roller parts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C3-FD-RL		Cassette 3 Feed Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
C4-PU-RL		Cassette 4 Pickup Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C4-SP-RL		Cassette 4 Separation Roller parts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
C4-FD-RL		Cassette 4 Feed Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
M-SP-RL		Multi-purpose Tray Sprtn Roll prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-1		
M-FD-RL		Multi-purpose Tray Feed Roll prts cntr
Lv.1	Details	Multi-purpose Tray Feed Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
WST-TNR		Waste Toner Container parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	image
	Default value	0
ITB-SCRP		ITB Inner Scraper Holder parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
FX-BLT-U		Fixing Roller parts counter
Lv.1	Details	To display the accumulated number of paper transported through Fixing Roller on a small size conversion basis. 1st line: Total counter value from the previous replacement 2nd line: Estimated life By pressing Clear key, the accumulated number of paper transported through Fixing Roller, the running time of the Fixing Roller (FX-U-TM1 to 8), and displacement control steering setting value (FX-U-STR) are reset.
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
	Related service mode	COPIER> DISPLAY> FIXING> BLT-TM, BLT-TM1 to 8, BLT2-TM1 to 8
PT-DR-Y		Y Photosensitive Drum parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
PT-DR-M		M Photosensitive Drum parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
PT-DR-C		C Photosensitive Drum parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
1TR-RL-Y		Primary Transfer Roller(Y) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
1TR-RL-M		Primary Transfer Roller(M) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
1TR-RL-C		Primary Transfer Roller(C) parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
1TR-RL-K		Primary Transfer Roller(Bk) prts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
SU-SHT-K		Drum Clean Scoop-up Sheet (Bk) prts cntr
Lv.1	Details	Drum Cleaning Scoop-up Sheet (Bk) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
EDGE-F-K		Edge Scraper (Bk) parts counter
Lv.1	Details	Edge Scraper 1, 2 (Bk) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-1		
FX-L		Pressure Roller parts counter
Lv.1	Details	To display the accumulated number of sheets fed through Pressure Roller on a small size conversion basis. 1st line: Total counter value from the previous replacement 2nd line: Estimated life value By pressing Clear key, the accumulated number of sheets fed through Pressure Roller and the running time of the Pressure Roller (FX-L-TM1 to 8) are reset.
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Related service mode	COPIER> DISPLAY> FIXING> FX-L-TM1 to 8
FX-WEB1		Dspl/clear fed sht: Web, s-size convs
Lv.1	Details	To display the accumulated number of sheets fed through the web (on a small size conversion basis, and including web take-up in cleaning mode). 1st line: Total counter value from the previous replacement 2nd line: Estimated life value To reset the number of fed sheets (DRBL-1/FX-WEB1 to 4, MISC/FX-WEB) by pressing the Clear key. (Use this mode when replacing the web and Fixing Unit.)
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Related service mode	COPIER> COUNTER>MISC>FIX-WEB DRBL-1>FX-WEB1 to 4

COPIER > COUNTER > DRBL-1		
FX-WEB2		Dspl/clear fed sht:web N-SPD,s-siz convs
Lv.1	Details	To display the number of fed sheets (on a small size conversion basis) when feeding the web at normal speed. 1st line: Total counter value from the previous replacement 2nd line: Estimated life value To reset the number of fed sheets (DRBL-1/FX-WEB1 to 4, MISC/FX-WEB) by pressing the Clear key. (Use this mode when replacing the web and Fixing Unit.)
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Related service mode	COPIER> COUNTER>MISC>FIX-WEB DRBL-1>FX-WEB1 to 4
FX-WEB3		Dspl/clear fed sht:web W-SPD,s-siz convs
Lv.1	Details	To display the number of fed sheets (on a small size conversion basis) when feeding the web at double speed. 1st line: Total counter value from the previous replacement 2nd line: Estimated life value To reset the number of fed sheets (DRBL-1/FX-WEB1 to 4, MISC/FX-WEB) by pressing the Clear key. (Use this mode when replacing the web and Fixing Unit.)
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Related service mode	COPIER> COUNTER>MISC>FIX-WEB DRBL-1>FX-WEB1 to 4

COPIER > COUNTER > DRBL-1		
FX-WEB4		Dspl/clear fed sht:web clean,s-siz convs
Lv.1	Details	To display the number of fed sheets (on a small size conversion basis) at cleaning operation. 1st line: Total counter value from the previous replacement 2nd line: Estimated life value To reset the number of fed sheets (DRBL-1/FX-WEB1 to 4, MISC/FX-WEB) by pressing the Clear key. (Use this mode when replacing the web and Fixing Unit.)
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Related service mode	COPIER> COUNTER>MISC>FIX-WEB DRBL-1>FX-WEB1 to 4
FX-UH-RL		Fixing Heat Soaking Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life value
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

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■ DRBL-2

COPIER > COUNTER > DRBL-2		
DF-PU-RL		Pickup Roller parts counter: DADF
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
DF-FD-RL		Feed Roller parts counter: DADF
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
DF-SP-RL		Separation Roller parts counter: DADF
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
LNT-TAP1		Dust Removal Sheet 1 counter: DADF
Lv.1	Details	Dust-colleting 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
LNT-TAP2		Dust Removal Sheet 2 counter: DADF
Lv.1	Details	Dust-colleting typeE 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
STAMP		Stamp parts counter: DADF
Lv.1	Details	To display the estimated life and parts counter of DADF stamp. 1st line: Total counter value from the previous replacement 2nd line: Estimated life to be entered by operator
	Use case	At replacement
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
PD-PU-RL		Pickup Roller parts counter: Deck
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-SP-RL		Separation Roller parts counter: Deck
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-PU-CL		Upr Deck Pickup Clutch prts cntr:M Deck
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-FD-RL		Feed Roller parts counter: Deck
Lv.1	Details	Feed Roller of Paper Deck/POD Deck Lite/Multi Deck (Upper) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
PD-PU-SL		Upr Deck Pickup Solend prts cntr: M Deck
Lv.1	Details	Pickup Roller Release Solenoid 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
FIN-STPR		Stapler parts counter/B1
Lv.1	Details	Stapler Unit 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
SDL-STPL		Saddle Stapler parts counter
Lv.1	Details	Saddle Stapler Unit 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
FN-BFFRL		Buffer Roller parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-2		
DL-STC-L		Static Eliminator prts cntr/B1
Lv.1	Details	Swing Guide Assembly Static Eliminator (Front/Rear) Delivery Static Eliminator (Left) 1st line: Total counter value from the previous replacement 2nd line: Estimated life to be entered by operator
	Use case	At replacement
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
DL-STC-R		Static Eliminator prts cntr/B1
Lv.1	Details	Feed Guide Assembly Static Eliminator Delivery Static Eliminator (Right) 1st line: Total counter value from the previous replacement 2nd line: Estimated life to be entered by operator
	Use case	At replacement
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
ENT-STC		Inlet Static Eliminator prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
CENT-STC		Swinging Sttc Elim prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0

COPIER > COUNTER > DRBL-2		
BACK-ROL		Paper Return Roller parts counter
Lv.1	Details	Paper Return Roller (Front/Rear) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
STK-STC		Stck Delv Rol Sttc Elim prts cntr
Lv.1	Details	Process delivery static eliminator 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IS-P-RL1		Pickup Roll prts cntr: INS-H1/J1, PF/INS
Lv.1	Details	INS-H1: Upper Tray Pickup Roller INS-J1, PF/INS: Inserter Pickup Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
IS-S-RL1		Sprtn Roll prts cntr: INS-H1/J1, PF/INS
Lv.1	Details	INS-H1: Upper Tray Separation Roller INS-J1, PF/INS: Inserter Separation Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IS-F-RL1		Feed Roller prts cntr: INS-H1/J1, PF/INS
Lv.1	Details	INS-H1: Upper Tray Feed Roller INS-J1, PF/INS: Inserter Feed Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IS-TQLM1		Drv Torq Limt prts cntr:INS-H1/J1,PF/INS
Lv.1	Details	INS-H1: Upper Tray Torque Limiter INS-J1, PF/INS: Inserter Drive Torque Limiter 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
IS-P-RL2		Lowr Tray Pickup Roll prts cntr: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IS-S-RL2		Lower Tray Sprtn Roll parts cntr: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IS-F-RL2		Lower Tray Feed Roller prts cntr: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IS-TQLM2		Lower Tray Torque Limt prts cntr: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

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BEHL-RL		Stck Tray Ppr Rtnr Roll prts cntr
Lv.1	Details	Stacking Tray Paper Retainer Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IU-ELM		Sttc Elim parts counter: P-Puncher IFU
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
DIESET1		Die set 1 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET2		Die set 2 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET3		Die set 3 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET4		Die set 4 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET5		Die set 5 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET6		Die set 6 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET7		Die set 7 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET8		Die set 8 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET9		Die set 9 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET10		Die set 10 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET11		Die set 11 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET12		Die set 12 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET13		Die set 13 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET14		Die set 14 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET15		Die set 15 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET16		Die set 16 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET17		Die set 17 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET18		Die set 18 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET19		Die set 19 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET20		Die set 20 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET21		Die set 21 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET22		Die set 22 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET23		Die set 23 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET24		Die set 24 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET25		Die set 25 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET26		Die set 26 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET27		Die set 27 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET28		Die set 28 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET29		Die set 29 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET30		Die set 30 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET31		Die set 31 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET32		Die set 32 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET33		Die set 33 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET34		Die set 34 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET35		Die set 35 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET36		Die set 36 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET37		Die set 37 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET38		Die set 38 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET39		Die set 39 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET40		Die set 40 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET41		Die set 41 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET42		Die set 42 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET43		Die set 43 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET44		Die set 44 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET45		Die set 45 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET46		Die set 46 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET47		Die set 47 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET48		Die set 48 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET49		Die set 49 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET50		Die set 50 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET51		Die set 51 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET52		Die set 52 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET53		Die set 53 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET54		Die set 54 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET55		Die set 55 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET56		Die set 56 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET57		Die set 57 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET58		Die set 58 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET59		Die set 59 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET60		Die set 60 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET61		Die set 61 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET62		Die set 62 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET63		Die set 63 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET64		Die set 64 parts counter: P-puncher
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item and press the Clear key. To change the estimated life: Select the item, enter the value and press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

COPIER > COUNTER > DRBL-2		
BEHLTQLM		Tray 1/2 Torque Limt parts cntr
Lv.1	Details	Process Tray Torque Limiter (Tray 1/2 Paper Retainer) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
SWG-RL		Proc Tray Ppr Rtn Roll prts cntr
Lv.1	Details	Process Tray Paper Return Roller (Front/Rear) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
SWG-DL-1		Swng Ejectn Roll (F/R) prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
SWG-DL-2		Delivery Upr Roll (Ctr) prts cntr
Lv.1	Details	Swing Guide Delivery Upper Roller (Center) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
SHT-CL		Swng Guide Electmag Clt prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
SHT-TQLM		Shutter Torque Limiter prts cntr
Lv.1	Details	Stack Wall Lower Assembly Torque Limiter (Shutter) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
SWG-TQLM		Process Tray Torq Limt prts cntr
Lv.1	Details	Process Tray Torque Limiter (Process Tray Paper Retainer) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
SUB-TQLM		Sub Guide Torque Limt prts cntr
Lv.1	Details	Process Tray Torque Limiter (Sub Guide) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
TRY-TQLM		Tray 1 Torque Limiter prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
TR2-TQLM		Tray 2 Torque Limiter prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
SWG-RB		Proc Tray Ppr Rtnr Rubr prts cntr
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
TRM-GD		Scar Prev Sheet Plate prts cntr: Trimmer
Lv.1	Details	Scar Prevention Sheet (Upper/Lower) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
IS-CL2		Lowr Tray Electmag Clt prts cntr: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
IS-ELM1		Thru Fd Inlt Sttc Elim prts cntr: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
IS-CL1		Upr Tray Electmag Clt parts cntr: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
IS-RV-SL		Reverse Solenoid parts counter: INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
IS-ELM2		Thru Feed Out Sttc Elim prts cntr:INS-H1
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PF-ELM2		Thru Feed Out Sttc Elim prts cntr: PFU
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

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PF-CL2		Pre-fold Lowr Rol Drv Clt2 prts cntr:PFU
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
PF-ELM1		Thru Feed Inlet Sttc Elim prts cntr: PFU
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PF-CL1		Pre-fold Lowr Rol Drv Clt1 prts cntr:PFU
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
PF-RL-SL		Fold/Separation Solenoid parts cntr: PFU
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
PF-FL-SL		Thru/Fold Flapper Solend parts cntr: PFU
Lv.1	Details	Through/Fold Branch Flapper Solenoid 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-PU-R2		Mid Deck Pickup Roll parts cntr: M Deck
Lv.1	Details	Middle Deck Pickup Roller (Front/Rear) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-SP-R2		Mid Deck Sprtn Roll parts cntr: M Deck
Lv.1	Details	Middle Deck Separation Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
PD-FD-R2		Mid Deck Feed Roller parts cntr: M Deck
Lv.1	Details	Middle Deck Pickup/Feed Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-PU-C2		Mid Deck Pickup Clutch prts cntr: M Deck
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
PD-PU-S2		Mid Deck Pickup Solend prts cntr: M Deck
Lv.1	Details	Middle Deck Pickup Roller Release Solenoid 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
PD-PU-R3		Lowr Deck Pickup Roll parts cntr: M Deck
Lv.1	Details	Lower Deck Pickup Roller (Front/Rear) 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-SP-R3		Lower Deck Sprtn Roll parts cntr: M Deck
Lv.1	Details	Lower Deck Separation Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
PD-FD-R3		Lower Deck Feed Roller prts cntr: M Deck
Lv.1	Details	Lower Deck Pickup/Feed Roller 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
PD-PU-C3		Lowr Deck Pickup Clutch prts cntr:M Deck
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	time
	Default value	0
PD-PU-S3		Lowr Deck Pickup Solend prts cntr:M Deck
Lv.1	Details	Lower Deck Pickup Roller Release Solenoid 1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
TRM-CUT		Trimmer Unit trimming counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Default value	0
IS-COLL1		Horz Fd Drv Roll prts cntr:INS-J1,PF/INS
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

COPIER > COUNTER > DRBL-2		
IS-COLL2		Fold Uni Ppr Fd Drv Rol prts cntr:PF/INS
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0
SWG-SL		Swing Solenoid parts counter
Lv.1	Details	1st line: Total counter value from the previous replacement 2nd line: Estimated life
	Use case	When checking the consumption level of parts/replacing the parts
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	Clear the counter value after replacement.
	Display/adj/set range	0 to 99999999
	Unit	sheet
	Default value	0

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T-CNTR

COPIER > COUNTER > T-CNTR		
YELLOW		Y Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 Y color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container
MAGENTA		M Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 M color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container
CYAN		C Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 C color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container
BLACK		Bk Toner Container counter
Lv.1	Details	To count up in the unit of 0.1 Bk color Toner Container consumed.
	Use case	When checking the consumption volume of Toner Container

T-8-89

V-CNTR

COPIER > COUNTER > V-CNTR		
TOTAL		Video count total counter
Lv.1	Details	To display distribution of total video count for each color. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
YELLOW		Video count Y counter
Lv.1	Details	To display distribution of yellow video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
MAGENTA		Video count M counter
Lv.1	Details	To display distribution of magenta video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
CYAN		Video count C counter
Lv.1	Details	To display distribution of cyan video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count
BLACK		Video count Bk counter
Lv.1	Details	To display distribution of black video count. Small size: 1, Large size: 1
	Use case	When checking distribution of video count

T-8-90

SORTER

COPIER > COUNTER > SORTER		
DIESET1		Punching tonal on die set 1: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 1.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET2		Punching tonal on die set 2: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 2.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET3		Punching tonal on die set 3: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 3.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET4		Punching tonal on die set 4: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 4.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET5		Punching tonal on die set 5: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 5.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET6		Punching tonal on die set 6: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 6.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET7		Punching tonal on die set 7: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 7.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET8		Punching tonal on die set 8: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 8.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET9		Punching tonal on die set 9: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 9.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET10		Punching tonal on die set 10: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 10.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET11		Punching tonal on die set 11: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 11.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET12		Punching tonal on die set 12: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 12.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET13		Punching tonal on die set 13: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 13.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET14		Punching tonal on die set 14: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 14.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET15		Punching tonal on die set 15: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 15.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET16		Punching tonal on die set 16: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 16.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET17		Punching tonal on die set 17: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 17.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET18		Punching tonal on die set 18: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 18.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET19		Punching tonal on die set 19: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 19.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET20		Punching tonal on die set 20: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 20.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET21		Punching tonal on die set 21: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 21.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET22		Punching tonal on die set 22: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 22.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET23		Punching tonal on die set 23: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 23.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET24		Punching tonal on die set 24: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 24.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET25		Punching tonal on die set 25: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 25.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET26		Punching tonal on die set 26: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 26.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET27		Punching tonal on die set 27: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 27.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET28		Punching tonal on die set 28: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 28.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET29		Punching tonal on die set 29: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 29.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET30		Punching tonal on die set 30: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 30.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET31		Punching tonal on die set 31: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 31.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET32		Punching tonal on die set 32: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 32.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET33		Punching tonal on die set 33: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 33.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET34		Punching tonal on die set 34: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 34.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET35		Punching tonal on die set 35: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 35.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET36		Punching tonal on die set 36: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 36.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET37		Punching tonal on die set 37: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 37.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET38		Punching tonal on die set 38: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 38.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET39		Punching tonal on die set 39: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 39.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET40		Punching tonal on die set 40: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 40.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET41		Punching tonal on die set 41: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 41.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET42		Punching tonal on die set 42: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 42.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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DIESET43		Punching tonal on die set 43: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 43.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET44		Punching tonal on die set 44: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 44.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET45		Punching tonal on die set 45: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 45.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET46		Punching tonal on die set 46: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 46.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET47		Punching tonal on die set 47: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 47.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET48		Punching tonal on die set 48: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 48.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

COPIER > COUNTER > SORTER		
DIESET49		Punching tonal on die set 49: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 49.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET50		Punching tonal on die set 50: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 50.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET51		Punching tonal on die set 51: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 51.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET52		Punching tonal on die set 52: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 52.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET53		Punching tonal on die set 53: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 53.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET54		Punching tonal on die set 54: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 54.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

COPIER > COUNTER > SORTER		
DIESET55		Punching tonal on die set 55: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 55.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET56		Punching tonal on die set 56: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 56.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET57		Punching tonal on die set 57: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 57.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET58		Punching tonal on die set 58: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 58.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET59		Punching tonal on die set 59: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 59.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET60		Punching tonal on die set 60: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 60.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

COPIER > COUNTER > SORTER		
DIESET61		Punching tonal on die set 61: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 61.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET62		Punching tonal on die set 62: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 62.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET63		Punching tonal on die set 63: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 63.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1
DIESET64		Punching tonal on die set 64: P-Puncher
Lv.1	Details	Display the total number of punching performed by the Pro-Puncher die set 64.
	Use case	At the time of checking the usage of each die set
	Unit	time
	Default value	0
	Supplement/memo	Product name of P-Puncher: Professional Puncher-C1

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V2-CNTR

COPIER > COUNTER > V2-CNTR		
TOTAL		Video count total counter
Lv.1	Details	To display distribution of total video count for each color. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
YELLOW		Video count Y counter
Lv.1	Details	To display distribution of yellow video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
MAGENTA		Video count M counter
Lv.1	Details	To display distribution of magenta video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
CYAN		Video count C counter
Lv.1	Details	To display distribution of cyan video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count
BLACK		Video count Bk counter
Lv.1	Details	To display distribution of black video count. Small size: 1, Large size: 2
	Use case	When checking distribution of video count

T-8-92

■ FIXING

COPIER > COUNTER > FIXING		
FX-CNT		Fixing Assembly feed counter
Lv.1	Details	To display the accumulated number of paper transported through Fixing Assembly on a small size conversion basis.
	Use case	When checking durability of Fixing Assembly
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key. To change the estimated life: Select the item, enter the value, and then press OK key.
	Caution	When clearing the counter, press Clear key at FX-BLT-U and FX-BLT-L.
	Default value	0
	Related service mode	COPIER> COUNTER> DRBL-1> FX-BLT-U, FX-L,FX-KIN,FX-WEB

T-8-93

■ LF

COPIER > COUNTER > LF		
Y-DRM-LF		Display of Drum Unit (Y) life
Lv.1	Details	To display how much the Drum Unit (Y) is close to the end of life in % (percentage). When a new part is set, the value becomes 0%.
	Use case	When checking the life of Drum Unit
	Display/adj/set range	0 to 100
	Unit	%
	Default value	0
M-DRM-LF		Display of Drum Unit (M) life
Lv.1	Details	To display how much the Drum Unit (M) is close to the end of life in % (percentage). When a new part is set, the value becomes 0%.
	Use case	When checking the life of Drum Unit
	Display/adj/set range	0 to 100
	Unit	%
	Default value	0
C-DRM-LF		Display of Drum Unit (C) life
Lv.1	Details	To display how much the Drum Unit (C) is close to the end of life in % (percentage). When a new part is set, the value becomes 0%.
	Use case	When checking the life of Drum Unit
	Display/adj/set range	0 to 100
	Unit	%
	Default value	0
K-DRM-LF		Display of Drum Unit (Bk) life
Lv.1	Details	To display how much the Drum Unit (Bk) is close to the end of life in % (percentage). When a new part is set, the value becomes 0%.
	Use case	When checking the life of Drum Unit
	Display/adj/set range	0 to 100
	Unit	%
	Default value	0

T-8-94

FEEDER

DISPLAY

FEEDER > DISPLAY		
FEEDSIZE		Dspl of original size detected by DADF
Lv.1	Details	To display the original size detected by DADF.
TRY-WIDE		Distance of Original Width Detect Slider
Lv.1	Details	To display the distance between the Original Width Detection Sliders.
	Use case	At original size detection error
	Adj/set/operate method	Check whether the value matching the slide position is displayed when the Original Width Slider is moved to the specified size width position.
	Display/adj/set range	0 to approx. 2970
	Unit	mm
SPSN-LMN		Dspl Post-sprtn Sensr emission voltage
Lv.1	Details	To display the light-emitting voltage value for the Post-separation Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
SPSN-RCV		Dspl of Post-sprtn Sensr recv voltage
Lv.1	Details	To display the light-receiving voltage value for the Post-separation Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper.
	Display/adj/set range	0 to 255
RDSN-LMN		Dspl of Lead Sensor emission voltage
Lv.1	Details	To display the light-emitting voltage value for the Lead Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
RDSN-RCV		Display of Lead Sensor reception voltage
Lv.1	Details	To display the light-receiving voltage value for the Lead Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper.
	Display/adj/set range	0 to 255
DRSN-LMN		Dspl of Delivery Sensor emit voltg
Lv.1	Details	To display the light-emitting voltage value for the Delivery Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
DRSN-RCV		Dspl of Delivery Sensor recv voltg
Lv.1	Details	To display the light-receiving voltage value for the Delivery Sensor.
	Use case	When jams frequently occur
	Adj/set/operate method	Remove and insert the paper at the sensor position, and check the value at presence/absence of the paper.
	Display/adj/set range	0 to 255
RGSN-LMN		Display of Rgst Sensor emission voltage
Lv.1	Details	To display the light-emitting voltage value for the Registration Sensor.
	Use case	When jams frequently occur
	Display/adj/set range	0 to 255
RGSN-RCV		Display of Rgst Sensor reception voltage
Lv.1	Details	To display the light-receiving voltage value for the Registration Sensor.
	Use case	When jams frequently occur
	Display/adj/set range	0 to 1023

T-8-95

ADJUST

FEEDER > ADJUST		
DOCST		Adj of DADF img lead edge margin: front
Lv.1	Details	To adjust the margin at the leading edge of the image for DADF scanning. Execute when the output image after DADF installation is displaced. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1 mm. (The image moves in the direction of the leading edge of the sheet.)
	Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
LA-SPEED		Fine adj of DADF image magnifictn: front
Lv.1	Details	To adjust the image magnification ratio in vertical scanning direction for DADF scanning. As the value is incremented by 1, the image is reduced by 0.1 % in vertical scanning direction. (The feeding speed increases, and the image is reduced.)
	Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-30 to 30
	Unit	%
	Default value	0
DOCST2		Adj of DADF img lead edge margin: back
Lv.1	Details	To adjust the margin at the leading edge of the image for DADF scanning. Execute when the output image after DADF installation is displaced. When replacing the Reader Controller PCB/clearing RAM data, enter the value of service label. As the value is incremented by 1, the margin at the leading edge of the image is decreased by 0.1 mm. (The image moves in the direction of the leading edge of the sheet.)
	Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

FEEDER > ADJUST		
LA-SPD2		Fine adj of DADF image magnifictn: back
Lv.1	Details	To adjust the image magnification ratio in vertical scanning direction for DADF scanning. As the value is incremented by 1, the image is reduced by 0.1 % in vertical scanning direction. (The feeding speed increases, and the image is reduced.)
	Use case	- When installing DADF - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-200 to 200
	Unit	%
	Default value	0
ADJMSCN1		Zoom adj in 2-sided horz scan way: front
Lv.1	Details	To make a fine adjustment of the front side image magnification ratio in horizontal scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in horizontal scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	%
	Default value	0
ADJMSCN2		Zoom adj in 2-sided horz scan way: back
Lv.1	Details	To make a fine adjustment of the back side image magnification ratio in horizontal scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in horizontal scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	%
	Default value	0

FEEDER > ADJUST		
ADJSSCN1		Zoom adj in 2-sided vert scan way: front
Lv.1	Details	To make a fine adjustment of the front side image magnification ratio in vertical scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in vertical scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	%
	Default value	0
ADJSSCN2		Zoom adj in 2-sided vert scan way: back
Lv.1	Details	To make a fine adjustment of the back side image magnification ratio in vertical scanning direction at the time of DADF duplex scanning. As the value is incremented by 1, the image is reduced by 0.1 % in vertical scanning direction.
	Use case	When a displacement occurs to the front/back side image magnification ratio at the time of duplex scanning
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	%
	Default value	0

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FUNCTION

FEEDER > FUNCTION		
SENS-INT		Initialization of DADF Sensors
Lv.1	Details	To initialize DADF Sensors.
	Use case	When replacing Reader Controller PCB / Post-separation Sensor 1 (SR2) / Post-separation Sensor 2 (SR3) / Post-separation Sensor 3 (PCB2) / Registration Sensor (PCB3) / Lead Sensor 1 (PCB4) / Lead Sensor 2 (SR5)
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
MTR-CHK		Specification of DADF Operation Motor
Lv.1	Details	To specify the DADF Motor to operate. The motor is activated by MTR-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 9 0: Pickup Motor (M1), 1: Feed Motor (M2), 2: Registration Motor (M3), 3: Read Motor (M4), 4: Delivery Motor (M5), 5: Disengagement Motor 1 (M6), 6: Disengagement Motor 2 (M7), 7: Tray Lifter Motor (M8), 8: Glass Shift Motor (M9), 9: Pickup Roller Unit Lifter Motor (M10)
TRY-A4		Adj of DADF Tray width detect ref 1: A4
Lv.1	Details	To automatically adjust the paper width detection reference point 1 for the DADF Tray. (A4)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
TRY-A5R		Adj of DADF Tray width detect ref 2: A5R
Lv.1	Details	To automatically adjust the paper width detection reference point 2 for the DADF Tray. (A5R)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
TRY-LTR		Adj of DADF Tray width detect ref 1: LTR
Lv.1	Details	To automatically adjust the paper width detection reference point 1 for the DADF Tray. (LTR)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None

FEEDER > FUNCTION		
TRY-LTRR		Adj of DADF Tray width detect ref2: LTRR
Lv.1	Details	To automatically adjust the paper width detection reference point 2 for the DADF Tray. (LTRR)
	Use case	- When replacing the Original Width Volume (VR) - When replacing the Reader Controller PCB/clearing RAM data
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
FEED-CHK		Specify DADF individual feed mode
Lv.1	Details	To specify the feed mode for DADF. Feed operation is activated by FEED-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 3 0: 1-sided pickup/delivery operation 1: 2-sided pickup/delivery operation 2: 1-sided pickup/delivery operation (with stamp) 3: 2-sided pickup/delivery operation (with stamp)
	Related service mode	FEEDER> FUNCTION> FEED-ON
FAN-CHK		Specification of DADF Operation Fan
Lv.1	Details	To specify the DADF Fan to operate. The fan is activated by FAN-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 1 0: Motor Driver Cooling Fan (FM1), 1: Read Motor Cooling Fan (FM2)
	Related service mode	FEEDER> FUNCTION>FAN-ON
FAN-ON		Operation check of DADF Fan
Lv.1	Details	To start operation check of the Fan specified by FAN-CHK.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Display/adj/set range	None
	Related service mode	FEEDER> FUNCTION> FAN-CHK

FEEDER > FUNCTION		
SL-CHK		Specification of DADF Operation Solenoid
Lv.1	Details	To specify the DADF solenoid to operate. The solenoid is activated by SL-ON.
	Use case	At operation check
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	0 to 1 0: Disengagement Solenoid (SL1), 1: Stamp Solenoid (SL2)
	Related service mode	FEEDER> FUNCTION> SL-ON
SL-ON		Operation check of DADF Solenoid
Lv.1	Details	To start operation check of the solenoid specified by SL-CHK.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Display/adj/set range	None
	Related service mode	FEEDER> FUNCTION> SL-CHK
MTR-ON		Operation check of Motor
Lv.1	Details	To start operation check of the motor specified by MTR-CHK.
	Use case	At operation check
	Adj/set/operate method	1) Select the item, and then press OK key. The unit operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution	Be sure to press the OK key again after execution. The operation automatically stops after approximately 5 seconds, but is not completed unless the OK key is pressed (STOP is not displayed).
	Display/adj/set range	None
	Related service mode	FEEDER> FUNCTION> MTR-CHK
ROLL-CLN		Rotation of DADF Rollers
Lv.1	Details	To rotate the DADF Rollers for cleaning. Clean the roller with lint-free paper moistened with alcohol while it is rotating.
	Use case	At roller cleaning
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Clean the rotating rollers with lint-free paper moistened with alcohol. 3) Press OK key. The rollers stop.
	Display/adj/set range	None

FEEDER > FUNCTION		
FEED-ON		Operation check of DADF individual feed
Lv.1	Details	To start operation check of the feed mode specified by FEED-CHK.
	Use case	At operation check
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	None
	Related service mode	FEEDER> FUNCTION> FEED-CHK

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SORTER

ADJUST

SORTER > ADJUST		
PNCH-HLE		Adj of punch hole pstn from paper edge
Lv.1	Details	Adjust the vertical registration of the paper to be punched. Incrementing the value by 1 moves the punch hole position toward the edge. +: Toward inlet direction -: Toward delivery direction
	Use case	Upon user's request
	Display/adj/set range	-4 to 2
	Unit	mm
	Default value	0
PNCH-Y		Adj punch hole side rgst pstn (Booklet)
Lv.1	Details	To adjust the punch hole in side registration direction. As the value is incremented by 1, the punch hole moves by 0.1 mm. +: Toward rear -: Toward front
	Use case	When the punch hole is misaligned in the side registration direction
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-5 to 5
	Unit	mm
	Default value	0
PF-A3Z1		Adj of A3 Z-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of A3 paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-A3Z2		Adj of A3 Z-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of A3 paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0

SORTER > ADJUST		
PF-B4Z1		Adj of B4 Z-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of B4 paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-B4Z2		Adj of B4 Z-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of B4 paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-A4RZ1		Adj of A4R Z-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of A4R paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-A4RZ2		Adj of A4R Z-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of A4R paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0

SORTER > ADJUST		
PF-LDRZ1		Adj of LDR Z-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of LDR paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-LDRZ2		Adj of LDR Z-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of LDR paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-LGLZ1		Adj of LGL Z-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of LGL paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-LGLZ2		Adj of LGL Z-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of LGL paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0

SORTER > ADJUST		
PFLTRRZ1		Adj of LTRR Z-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of LTRR paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PFLTRRZ2		Adj of LTRR Z-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of LTRR paper Z-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-A4RC1		Adj of A4R C-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of A4R paper C-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-30 to 75
	Unit	mm
	Default value	0
PF-A4RC2		Adj of A4R C-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of A4R paper C-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-75 to 45
	Unit	mm
	Default value	0

SORTER > ADJUST		
PFLTRRC1		Adj of LTRR C-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of LTRR paper C-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-30 to 75
	Unit	mm
	Default value	0
PFLTRRC2		Adj of LTRR C-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of LTRR paper C-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-75 to 45
	Unit	mm
	Default value	0
PF-A4R31		Adj of A4R out-3-fold position(1st): PFU
Lv.1	Details	To adjust the 1st fold position of A4R paper out-3-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-A4R32		Adj of A4R out-3-fold position(2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of A4R paper out-3-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0

SORTER > ADJUST		
PFLTRR31		Adj of LTRR out-3-fold pstn (1st): PFU
Lv.1	Details	To adjust the 1st fold position of LTRR paper out-3-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PFLTRR32		Adj of LTRR out-3-fold pstn (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of LTRR paper out-3-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-A4R41		Adj of A4R 4-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of A4R paper 4-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-75 to 30
	Unit	mm
	Default value	0
PF-A4R42		Adj of A4R 4-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of A4R paper 4-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0

SORTER > ADJUST		
PFLTRR41		Adj of LTRR 4-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of LTRR paper 4-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-75 to 30
	Unit	mm
	Default value	0
PFLTRR42		Adj of LTRR 4-fold position (2nd): PFU
Lv.1	Details	To adjust the 2nd fold position of LTRR paper 4-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-65 to 65
	Unit	mm
	Default value	0
PF-A4R21		Adj of A4R 2-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of A4R paper 2-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-75 to 30
	Unit	mm
	Default value	0
PFLTRR21		Adj of LTRR 2-fold position (1st): PFU
Lv.1	Details	To adjust the 1st fold position of LTRR paper 2-fold position on Paper Folding Unit. As the value is incremented by 1, the fold position moves by 0.1 mm.
	Use case	When the fold position adjustment in user mode is inadequate
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-75 to 30
	Unit	mm
	Default value	0

SORTER > ADJUST		
PRCS-ALG		Adj Process Tray Align Plate width: Bklt
Lv.1	Details	To adjust the width of Alignment Plate on Finisher Process Tray Assembly. As the value is incremented by 1, the width of Alignment Plate is increased by 0.1 mm. +: Increase (widen) -: Decrease (narrow)
	Use case	When the paper displacement occurs on paper stack
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
STP-F1		Front 1-staple position : Bklt
Lv.1	Details	To adjust the A4R/LGL/LTRR paper front 1-staple position on Finisher (Fin-K1). As the value is incremented by 1, the staple position moves by 0.1 mm. +: Toward front -: Toward rear To adjust the A4 paper front 1-staple position on Finisher (Fin-L1). As the value is incremented by 1, the staple position moves by 0.49 mm. +: Toward rear -: Toward front
	Use case	Fin-K1: When the A4R/LGL/LTRR paper front staple position is displaced Fin-L1: When the A4R/LGL/LTRR paper front staple position is displaced
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	Fin-K1: -50 to 50 Fin-L1: -6 to 6
	Unit	mm

SORTER > ADJUST		
STP-F2		Front 1-staple position: Bklt
Lv.1	Details	To adjust the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper front 1-staple position on Finisher (Fin-K1). As the value is incremented by 1, the staple position moves by 0.1 mm. +: Toward front -: Toward rear To adjust the A4R paper front 1-staple position on Finisher (Fin-L1). As the value is incremented by 1, the staple position moves by 0.49 mm. +: Toward rear -: Toward front
	Use case	Fin-K1: When the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper front staple position is displaced Fin-L1: When the A4R paper front staple position is displaced
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	Fin-K1: -50 to 50 Fin-L1: -6 to 6
	Unit	mm
STP-R1		Rear 1-staple position : Bklt
Lv.1	Details	To adjust the A4R/LGL/LTRR paper rear 1-staple position on Finisher (Fin-K1). As the value is incremented by 1, the staple position moves by 0.1 mm. +: Toward front -: Toward rear To adjust the A4 paper rear 1-staple position on Finisher (Fin-L1). As the value is incremented by 1, the staple position moves by 0.49 mm. +: Toward rear -: Toward front
	Use case	Fin-K1: When the A4R/LGL/LTRR paper rear staple position is displaced Fin-L1: When the A4 paper rear staple position is displaced
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	Fin-K1: -50 to 50 Fin-L1: -6 to 6
	Unit	mm

SORTER > ADJUST		
STP-R2		Rear 1-staple position : Bklt
Lv.1	Details	To adjust the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper rear 1-staple position on Finisher (Fin-K1). As the value is incremented by 1, the staple position moves by 0.1 mm. +: Toward front -: Toward rear To adjust the A4R paper rear 1-staple position on Finisher (Fin-L1). As the value is incremented by 1, the staple position moves by 0.49 mm. +: Toward rear -: Toward front
	Use case	Fin-K1: When the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper rear staple position is displaced Fin-L1: When the A4R paper rear staple position is displaced
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	Fin-K1: -50 to 50 Fin-L1: -6 to 6
	Unit	mm
STP-2P		Adj front/rear 2-staple position: Bklt
Lv.1	Details	To adjust the front/rear 2-staple position on Finisher. As the value is incremented by 1, the staple position moves by 0.1 mm. +: Toward front -: Toward rear
	Use case	When the front/rear 2-staple position is displaced
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-25 to 25
	Unit	mm
	Default value	?
BFF-SFT		Paper displace amount on buffer: Bklt
Lv.1	Details	To adjust the paper displacement amount on Finisher Buffer Assembly. As the value is incremented by 1, the paper position moves by 0.1 mm. +: -:
	Use case	When the paper displacement occurs on the 1st to 3rd sheets of the 2nd sets (B5/A4/LTR) and later
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

SORTER > ADJUST		
PNCH-X		Punch hole position in feed way: Bklt
Lv.1	Details	To adjust the punch hole position on Finisher in feed direction. As the value is incremented by 1, the punch hole moves by 0.1 mm. +: Toward delivery direction -: Toward inlet direction
	Use case	When the punch hole is displaced in feed direction
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-20 to 20
	Unit	mm
	Default value	0
TRM-RG1		Skew adj (small size): Bklt
Lv.1	Details	To adjust the skew of A4 size or smaller paper stack on Finisher Trimmer. As the value is incremented by 1, the paper stack stop position moves by 0.1 mm. +: Toward delivery direction -: Toward inlet direction
	Use case	When the skew occurs on A4 or smaller paper stack
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
TRM-RG2		Skew adj (large size): Bklt
Lv.1	Details	To adjust the skew of paper stack larger than A4 size on Finisher Trimmer. As the value is incremented by 1, the paper stack stop position moves by 0.1 mm. +: Toward delivery direction -: Toward inlet direction
	Use case	When the skew occurs on paper stack larger than A4 size
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

SORTER > ADJUST		
TRM-CUT1		Trimming position adj (small size): Bklt
Lv.1	Details	To adjust the trimming position of A4 size or smaller paper stack on Finisher Trimmer. As the value is incremented by 1, the paper stack stop position moves by 0.1 mm. +: Toward delivery direction -: Toward inlet direction
	Use case	When the trimming position is displaced on A4 or smaller paper stack
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
TRM-CUT2		Trimming position adj (large size): Bklt
Lv.1	Details	To adjust the trimming position of the paper stack larger than A4 size on Finisher Trimmer. As the value is incremented by 1, the paper stack stop position moves by 0.1 mm. +: Toward delivery direction -: Toward inlet direction
	Use case	When the trimming position is displaced on the paper stack larger than A4 size
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0
BFF-SFT2		Paper displace amount on buffer: Bklt
Lv.1	Details	To adjust the paper displacement amount on Finisher Buffer Assembly. As the value is incremented by 1, the paper position moves by 0.1 mm. +: -:
	Use case	When the paper displacement occurs on the 2nd to 3rd sheets of the 2nd sets (B5/A4/LTR) and later
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-50 to 50
	Unit	mm
	Default value	0

SORTER > ADJUST		
SDL-STP		Adj of Saddle Stitcher staple position
Lv.1	Details	(Fin-K1) To adjust the staple position of Saddle Stitcher. As the value is incremented by 1, the staple position moves by 0.1mm. +: Toward front -: Toward rear (Fin-L1) Adjust the staple position for saddle stitching. Incrementing the value by 1 moves the staple position 0.5 mm downward.
	Use case	When the staple position of the Saddle Stitcher is displaced
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	Fin-K1: -20 to 20 Fin-L1: -3 to 3
	Unit	mm
	Default value	0
SDL-FLD		Adj of Saddle Stitcher fold position
Lv.1	Details	To adjust the fold position of Saddle Stitcher. As the value is incremented by 1, the fold position moves by 0.1mm.
	Use case	When the fold position of the Saddle Stitcher is displaced
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-20 to 20
	Unit	mm
	Default value	0
SDL-ALG		Adj of Saddle Stitcher alignment width
Lv.1	Details	(Fin-K1) To adjust the alignment width of Saddle Stitcher. As the value is incremented by 1, the alignment width is increased by mm. +: -: (Fin-L1) Adjust the travel length of the alignment plate for saddle stitching.
	Use case	When the misalignment occurs within a paper stack on the Saddle Stitcher
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	Fin-K1: -20 to 20 Fin-L1: 0 to 1
	Unit	mm
	Default value	0

SORTER > ADJUST		
SDL-RLPT		Adj Sddl Sttch Diseng Roll diseng amount
Lv.1	Details	To adjust the disengagement amount of Saddle Stitcher Disengagement Roller. As the value is incremented by 1, the disengagement amount is increased by mm. +: -:
	Use case	When the feed failure (with thin paper, etc.) occurs on the Saddle Stitcher
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-20 to 20
	Unit	mm
	Default value	0
SDL-RLFD		Adj Sddl Sttch Diseng Roller feed amount
Lv.1	Details	To adjust the feed amount of Saddle Stitcher Disengagement Roller. As the value is incremented by 1, the feed amount is increased by mm. +: -:
	Use case	When the feed failure (with thin paper, etc.) occurs on the Saddle Stitcher
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-20 to 20
	Unit	mm
	Default value	0
SDL-RLHD		Adj Sddl Sttch Diseng Roll fold position
Lv.1	Details	To adjust the fold position of Saddle Stitcher Disengagement Roller. As the value is incremented by 1, the fold position moves by mm. +: -:
	Use case	To adjust the fold position of Saddle Stitcher Disengagement Roller. As the value is incremented by 1, the fold position moves by mm. +: -:
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	-20 to 20
	Unit	mm
	Default value	0

SORTER > ADJUST		
BFR-UPA4		Adj Swng Roll rising tmg for A4
Lv.1	Details	To adjust the Swing Roller rise timing when A4 size paper is waited in the buffer path. As the value is incremented by 1, the rise timing becomes early by 1 msec.
	Use case	When misalignment occurs in A4 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	msec
	Default value	0
BFR-UPB5		Adj Swng Roll rising tmg for B5
Lv.1	Details	To adjust the Swing Roller rise timing when B5 size paper is waited in the buffer path. As the value is incremented by 1, the rise timing becomes early by 1 msec.
	Use case	When misalignment occurs in B5 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	msec
	Default value	0
BFR-UPLT		Adj Swng Roll rising tmg for LTR
Lv.1	Details	To adjust the Swing Roller rise timing when LTR size paper is waited in the buffer path. As the value is incremented by 1, the rise timing becomes early by 1 msec.
	Use case	When misalignment occurs in LTR size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	msec
	Default value	0
RTR-DWA4		Adj Ppr Rtn Roll fall tmg (A4)
Lv.1	Details	To adjust the Paper Return Roller fall timing when A4 size paper is waited in the buffer path. As the value is incremented by 1, the fall timing becomes early by 1 msec.
	Use case	When misalignment occurs in A4 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	msec
	Default value	0

SORTER > ADJUST		
RTR-DWB5		Adj Ppr Rtn Roll fall tmg (B5)
Lv.1	Details	To adjust the Paper Return Roller fall timing when B5 size paper is waited in the buffer path. As the value is incremented by 1, the fall timing becomes early by 1 msec.
	Use case	When misalignment occurs in B5 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	msec
	Default value	0
RTR-DWLT		Adj Ppr Rtn Roll fall tmg (LTR)
Lv.1	Details	To adjust the Paper Return Roller fall timing when LTR size paper is waited in the buffer path. As the value is incremented by 1, the fall timing becomes early by 1 msec.
	Use case	When misalignment occurs in LTR size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	msec
	Default value	0
BF-SB-A4		Adj switchback position for A4
Lv.1	Details	To adjust the paper switchback position when A4 size paper is waited in the buffer path. As the value is incremented by 1, the switchback amount is increased by 1 mm.
	Use case	When misalignment occurs in A4 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	mm
	Default value	0
BF-SB-B5		Adj switchback position for B5
Lv.1	Details	To adjust the paper switchback position when B5 size paper is waited in the buffer path. As the value is incremented by 1, the switchback amount is increased by 1 mm.
	Use case	When misalignment occurs in B5 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	mm
	Default value	0

SORTER > ADJUST		
BF-SB-LT		Adj switchback position for LTR
Lv.1	Details	To adjust the paper switchback position when LTR size paper is waited in the buffer path. As the value is incremented by 1, the switchback amount is increased by 1 mm.
	Use case	When misalignment occurs in LTR size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 50
	Unit	mm
	Default value	0
RTR-UPA4		Adj Ppr Rtn Roll rise angle(A4)
Lv.1	Details	To adjust the Paper Return Roller rise angle when processing is performed to A4 size paper. As the value is incremented by 1, the roller rise angle is increased by 1 degree.
	Use case	When misalignment occurs in A4 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 44
	Unit	deg C
	Default value	0
RTR-UPB5		Adj Ppr Rtn Roll rise angle(B5)
Lv.1	Details	To adjust the Paper Return Roller rise angle when processing is performed to B5 size paper. As the value is incremented by 1, the roller rise angle is increased by 1 degree.
	Use case	When misalignment occurs in B5 size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 44
	Unit	deg C
	Default value	0
RTR-UPLT		Adj Ppr Rtn Roll rise angle(LTR)
Lv.1	Details	To adjust the Paper Return Roller rise angle when processing is performed to LTR size paper. As the value is incremented by 1, the roller rise angle is increased by 1 degree.
	Use case	When misalignment occurs in LTR size buffer paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	1 to 44
	Unit	deg C
	Default value	0

SORTER > ADJUST		
PUNCH-SB		Adj Punch Unit ppr swback amount
Lv.1	Details	To adjust the paper switchback amount in the high accuracy punch mode of Finisher. As the value is incremented by 1, the switchback amount is increased by 1 mm.
	Use case	When the punch accuracy deteriorates in the paper feed direction
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	2 to 4
	Unit	mm
	Default value	0
ST-ALG1		Adj Stacker A4 size align pstn
Lv.1	Details	To adjust the A4 size paper alignment position. As the value is incremented by 1, the travel length of the Alignment Plate is increased by 0.42 mm.
	Use case	When misalignment occurs in A4 size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	mm
	Default value	0
ST-ALG2		Adj Stacker LTR size align pstn
Lv.1	Details	To adjust the LTR size paper alignment position. As the value is incremented by 1, the travel length of the Alignment Plate is increased by 0.42 mm.
	Use case	When misalignment occurs in LTR size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 10
	Unit	mm
	Default value	0
STP-F3		Adj A4R frt stpl pstn (<45 deg)
Lv.1	Details	To adjust the one front staple position on the A4R size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49 mm.
	Use case	When misalignment occurs at the front staple position on A4R size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0

SORTER > ADJUST		
STP-F4		Adj LTRR frt stpl pstn (<45 deg)
Lv.1	Details	To adjust the one front staple position on the LTRR size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49 mm.
	Use case	When misalignment occurs at the front staple position on LTRR size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0
STP-R3		Adj A4R rear stpl pstn (<45 deg)
Lv.1	Details	To adjust the one rear staple position on the A4R size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49 mm.
	Use case	When misalignment occurs at the rear staple position on A4R size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0
STP-R4		Adj LTRRL rear stpl pstn(<45 deg)
Lv.1	Details	To adjust the one rear staple position on the LTRR size paper. As the value is incremented by 1, the staple position moves to the rear side by 0.49 mm.
	Use case	When misalignment occurs at the rear staple position on LTRR size paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-6 to 6
	Unit	mm
	Default value	0
SW-UP-RL		Adj of Swing Roller falling pstn
Lv.1	Details	To adjust the Swing Roller fall position. As the value is incremented by 1, the Swing Roller fall position moves downward by 0.2 mm.
	Use case	When paper fails to be transported to the Processing Tray and misalignment occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-17 to 33
	Unit	mm
	Default value	0

SORTER > ADJUST		
PRCS-RET		Adj Process Tray return amount
Lv.1	Details	To adjust the pull-back amount of the paper on the Processing Tray. As the value is incremented by 1, the pull-back amount is decreased by 1.4 mm.
	Use case	When the paper is bent in the Processing Tray
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 5
	Unit	mm
	Default value	0
UP-CL		Setting of upward curl prev mode
Lv.1	Details	Set 1 when upward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs.
	Use case	When upward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
DW-CL		Setting downward curl prev mode
Lv.1	Details	Set 1 when downward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs.
	Use case	When downward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
THC-CL		Setting heavy ppr curl prev mode
Lv.1	Details	Set 1 when upward curl occurs on the heavy paper delivered. When 1 is set, the amount of Stack Tray descension for stack delivery increases. The paper surface detection is performed for every sheet, not for every 5 sheets.
	Use case	When upward curl occurs on the heavy paper delivered
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

SORTER > ADJUST		
THC-PUSH		Setting heavy ppr out prev mode
Lv.1	Details	Set 1 when the already stacked paper is pushed out at the time of heavy paper delivery. When 1 is set, the Stack Tray moves down temporarily before the heavy paper is delivered to the Processing Tray if the leading sheet is heavy paper.
	Use case	When the already stacked paper is pushed out at the time of heavy paper delivery
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
OFST-STC		Set poor offset stack prev mode
Lv.1	Details	Set 1 when paper is not appropriately stacked in the small size offset mode. When 1 is set, buffer operation is not performed in the small size offset mode.
	Use case	When paper is not appropriately stacked in the small size offset mode
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
THN-STC		Set poor thin ppr stack prev mode
Lv.1	Details	Set 1 when thin paper is not appropriately stacked. When 1 is set, the stacking condition of thin paper improves.
	Use case	When thin paper is not appropriately stacked
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
STP-P-CH		Set stpl stack displace prev mode
Lv.1	Details	Set 1 when the paper on the top is misaligned in the staple delivery mode. When 1 is set, paper stack alignment operation is executed twice immediately before stapling.
	Use case	When the paper on the top is misaligned in the staple delivery mode
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

SORTER > ADJUST		
TRY-NIS		Set tray switch noise reduct mode
Lv.1	Details	Set 1 when the operation noise after switching the Stack Tray is loud. When 1 is set, the Stack Tray rise operation becomes slow.
	Use case	When the operation noise after switching the Stack Tray is loud
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
TRY-SU		Set tray switching speedup mode
Lv.1	Details	Set 1 when the Stack Tray switching time is long. When 1 is set, the Stack Tray rise speed becomes fast.
	Use case	When the Stack Tray switching time is long
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
FIN-NIS		Set tray drive noise reduct mode
Lv.1	Details	Set 1 when the Finisher operation noise is loud. When 1 is set, the initial Finisher operation is minimized.
	Use case	When the Finisher operation noise is loud
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
1SHT-SHF		Set 1-sheet Offset+Collate
Lv.1	Details	Set 1 when enabling Offset and Collate for 1-sheet document.
	Use case	When enabling Offset and Collate for 1-sheet document
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
SDL-SWCH		Sddl stack capacity switch mode
Lv.1	Details	Set 1 when increasing the stacking capacity for saddle stitching. When 1 is set, the stacking capacity increases over the upper limit.
	Use case	When increasing the stacking capacity for perfect binding
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

SORTER > ADJUST		
SDL-ALM		Set sddl full stack alarm mode
Lv.1	Details	Set 1 when disabling the stack full alarm for saddle stitching.
	Use case	When disabling the stack full alarm for saddle stitching
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
Z-FL-CH		Set Z-fold stapleable quantity
Lv.1	Details	To set the maximum number of stitch pages in Z-fold stapling. This item is used to prevent missing pages in Z-fold stapling by decreasing the maximum number of stitch pages.
	Use case	When missing pages occurs in Z-fold stapling
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: 10 sheets, 1: 5 sheets
	Unit	sheet
	Default value	0
THN-STCL		Set Poor Stck of Large/Thin Ppr Prev Mod
Lv.1	Details	Set 1 when large/thin paper is not appropriately stacked. When 1 is set, the stacking condition of large/thin paper improves.
	Use case	When large/thin paper is not appropriately stacked.
	Adj/set/operate method	After inputting value, press the OK key.
	Caution	When 1 is set, the stack delivery speed deceases.
	Display/adj/set range	0 to 1 0: Normal, 1: Prevention mode
	Default value	0
SW-ADJ		Swing guide height adjustment
Lv.1	Details	To adjust the height of the swing guide. As the value is changed by 1, the height of swing guide is increased/decreased by 0.23 mm. +: increase (high) -: decrease (low)
	Use case	When adjusting the height of the Swing Guide at the time that nip pressure is high
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-10 to 4
	Unit	mm

SORTER > ADJUST		
GRP-ALG		Gripper standby position adjustment
Lv.1	Details	To adjust the standby position of the gripper to change the gripping timing. As the value is changed by 1, the standby position of gripper is increased/decreased by 0.12 mm. +: increase (early) -: decrease (late)
	Use case	When adjusting the timing that the Gripper grabs a paper stack
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-40 to 40
	Unit	mm
PRTN-ALG		Paper retainer position adjustment
Lv.1	Details	To adjust the fall amount of the paper retainer. As the value is changed by 1, the fall amount of paper retainer is increased/decreased by 0.65 degrees. +: increase (down) -: decrease (up)
	Use case	When adjusting the position where the Paper Retainer comes into contact with paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-12 to 12
BFF-SFT3		Ppr shft amnt adjustment-3: buffer path
Lv.1	Details	To adjust the paper dislocation amount (between 3rd sheet and 4th sheet) of buffer assembly of the finisher. As the value is changed by 1, the paper dislocation amount is increased/decreased by 0.1 mm. +:increase -:decrease
	Use case	When the paper displacement occurs on the 3rd and 4th sheets of the 2nd sets (B5/A4/LTR) and later
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm

SORTER > ADJUST		
BFF-SFT4		Ppr shft amnt adjustment-4: buffer path
Lv.1	Details	To adjust the paper dislocation amount (between 4th sheet and 5th sheet) of buffer assembly of the finisher. As the value is changed by 1, the paper dislocation amount is increased/decreased by 0.1 mm. +:increase -:decrease
	Use case	When the paper displacement occurs on the 4th and 5th sheets of the 2nd sets (B5/A4/LTR) and later
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	-50 to 50
	Unit	mm

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FUNCTION

SORTER > FUNCTION		
FN-SENS1		Adj punched ppr size sensor output: Bklt
Lv.1	Details	To automatically adjust the output of A3/LDR/B4/A4R/B5R Sensors on the Finisher Punch Unit in order.
	Use case	- When installing/replacing the Punch Unit - When replacing the Punch Waste Sensor - When replacing the Finisher Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
FN-SENS2		Adj Punch Waste Sensor output: Booklet
Lv.1	Details	To automatically adjust the output of Punch Waste Sensor on the Finisher Punch Unit.
	Use case	- When installing/replacing the Punch Unit - When replacing the Punch Waste Sensor - When replacing the Finisher Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
FIN-BK-R		Controller PCB backup data read: Staple
Lv.1	Details	To read the backup data from Finisher Controller PCB and save to the hard disk.
	Use case	When replacing the Finisher Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	In processing: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode	SORTER> FUNCTION> FIN-BK-W
FIN-BK-W		Controller PCB backup data write: Staple
Lv.1	Details	To write the backup data saved on the hard disk to Finisher Controller PCB.
	Use case	When replacing the Finisher Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	In processing: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode	SORTER> FUNCTION> FIN-BK-R
VR1-A4R		Adj Upr Tray width volume (A4R):Inserter
Lv.1	Details	To adjust the paper minimum width (A4R) of Inserter Upper Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray
	Adj/set/operate method	1) Set the A4R paper on the Inserter Upper Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.

SORTER > FUNCTION		
VR1-A4		Adj Upr Tray width volume (A4):Inserter
Lv.1	Details	To adjust the paper minimum width (A4) of Inserter Upper Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray
	Adj/set/operate method	1) Set the A4 paper on the Inserter Upper Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.
VR1-LTRR		Adj Upr Tray width vol (LTRR): Inserter
Lv.1	Details	To adjust the paper minimum width (LTRR) of Inserter Upper Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray
	Adj/set/operate method	1) Set the LTRR paper on the Inserter Upper Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.
VR1-LTR		Adj Upr Tray width volume (LTR):Inserter
Lv.1	Details	To adjust the paper minimum width (LTR) of Inserter Upper Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Upper Tray
	Adj/set/operate method	1) Set the LTR paper on the Inserter Upper Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.
VR2-A4R		Adj Lower Tray width vol (A4R): Inserter
Lv.1	Details	To adjust the paper minimum width (A4R) of Inserter Lower Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray
	Adj/set/operate method	1) Set the A4R paper on the Inserter Lower Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.
VR2-A4		Adj Lower Tray width vol (A4): Inserter
Lv.1	Details	To adjust the paper minimum width (A4) of Inserter Lower Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray
	Adj/set/operate method	1) Set the A4 paper on the Inserter Lower Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.

SORTER > FUNCTION		
VR2-LTRR		Adj Lower Tray width vol (LTRR):Inserter
Lv.1	Details	To adjust the paper minimum width (LTRR) of Inserter Lower Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray
	Adj/set/operate method	1) Set the LTRR paper on the Inserter Lower Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.
VR2-LTR		Adj Lower Tray width vol (LTR): Inserter
Lv.1	Details	To adjust the paper minimum width (LTR) of Inserter Lower Tray automatically.
	Use case	When the size mismatch jam is incorrectly detected at the pickup from Inserter Lower Tray
	Adj/set/operate method	1) Set the LTR paper on the Inserter Lower Tray and align it with the width of Slide Guide. 2) Select the item, and then press OK key.
FIN-CON		Controller PCB RAM clear: Booklet
Lv.1	Details	To execute the RAM clear of Finisher Controller PCB to delete all the adjustment contents and counter information.
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	- Output the service mode setting values by P-PRINT before execution. After execution, enter the necessary setting values. - RAM clear is executed After the main power is turned OFF/ON.
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT
PF-CON		Controller PCB RAM clear: PFU
Lv.1	Details	To execute the RAM clear of Inserter/Folder Controller PCB on Paper Folding Unit to delete all the adjustment contents and counter information.
	Adj/set/operate method	Select the item, and then press OK key.
PF-SENS1		Adj Speed Down Timing Sensor output: PFU
Lv.1	Details	To adjust the output of Slowdown Timing Sensor on Paper Folding Unit automatically.
	Use case	- When replacing the Slowdown Timing Sensor - When replacing the Inserter/Folder Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
PF-SENS2		Adj Release Timing Sensor output: PFU
Lv.1	Details	To adjust the output of Release Timing Sensor on Paper Folding Unit automatically.
	Use case	- When replacing the Release Timing Sensor - When replacing the Inserter/Folder Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.

SORTER > FUNCTION		
PF-SENS3		Adj Fold Position Sensor output: PFU
Lv.1	Details	To adjust the output of Fold Position Sensor on Paper Folding Unit automatically.
	Use case	- When replacing the Fold Position Sensor - When replacing the Inserter/Folder Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
PF-SENS4		Adj Upper Stopper Path Sensor output:PFU
Lv.1	Details	To adjust the output of Upper Stopper Path Sensor on Paper Folding Unit automatically.
	Use case	- When replacing the Upper Stopper Path Sensor - When replacing the Inserter/Folder Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
TRM-SENS		Adj of Trimmer Dust Sensr output:Booklet
Lv.1	Details	To adjust the output of Saddle Dust Sensor on Saddle Unit automatically.
	Use case	- When installing the Trimmer - When replacing the Trimmer Dust Sensor - When replacing the Saddle Controller PCB
	Adj/set/operate method	Select the item, and then press OK key.
IS-CON		DC Controller PCB RAM clear: Inserter
Lv.1	Details	To execute the RAM clear of Inserter DC Controller PCB to delete all the adjustment contents and counter information.
	Adj/set/operate method	Select the item, and then press OK key.

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OPTION

SORTER > OPTION		
BLNK-SW		Set Sddl Fin fold pstn margin: Staple
Lv.1	Details	To set the margin width of fold position on Saddle Finisher.
	Use case	When changing the margin width of fold position
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal, 1: Wider
	Default value	0
MD-SPRTN		Set restriction at Finisher error:Staple
Lv.1	Details	To set whether to stop the machine when an error occurs at Finisher.
	Use case	When preferring to run the machine at Finisher error occurrence
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When “1” is set, staple operation or alignment operation is not executed. Set “0” normally.
	Display/adj/set range	0 to 1 0: Normal, 1: Function restriction
	Default value	0
BUFF-SW		ON/OFF of buffer operation
Lv.1	Details	To set ON/OFF of the buffer operation during the small size stapling mode
	Use case	When the misalign of paper is caused by the electrostatic charge between the paper during the the small size stapling mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When the buffer operation is set to OFF, productivity decreases.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Supplement/memo	This setting can be also made with DIP switch of the Finisher. For details, refer to the Service Manual for Finisher.

SORTER > OPTION		
TRY-OVER		Set limit of stack capacity
Lv.1	Details	To set the limit of stack capacity for Z-fold paper and half hold paper. (“Stack over” is detected when the paper is stacked over the limit of stack height.) If the limit of stack capacity is removed, paper can be stacked beyond the maximum stack capacity.
	Use case	When stacking the paper beyond the maximum stack capacity of tray.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Tell users and get an agreement that when the high density paper is stacked until the maximum volume, a tray may not be able to move up.
	Display/adj/set range	0 to 1 0: Normal operation, 1: Remove the stack limit
	Default value	0
PUCH-SW		High-prdctvty/-accurcy punch mode
Lv.1	Details	To switch the high-productivity punch mode or high-accuracy punch mode of Finisher.
	Use case	When switching the high-productivity punch mode or high-accuracy punch mode
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1
	Default value	0
ALG-IMPR		Set Finisher alignment mode
Lv.1	Details	To set the special mode for improving the alignment condition.
	Use case	When using the special mode for improving the alignment condition
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 20
	Default value	0
BUFF-SW2		Setting Finisher buffer operation
Lv.1	Details	To set ON/OFF of buffer operation in the Finisher. When 1 is set, the alignment condition of the paper delivered from the lower path may be improved, but productivity decreases.
	Use case	When misalignment occurs in the buffer paper delivered from the lower path
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When the buffer operation is set to OFF, productivity decreases.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0

SORTER > OPTION		
1SHT-SRT		Setting of 1-sheet Offset&Collate
Lv.1	Details	To set ON/OFF of Offset&Collate for 1-sheet document. When 1 is set, Offset&Collate for 1-sheet document is enabled, but the paper is not appropriately stacked.
	Use case	When preferring to execute 1-sheet Offset&Collate with low stacking condition
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
SD-LMTLS		Set sddl delivery limitless oprtn
Lv.1	Details	To set ON/OFF of the Finisher Saddle Assembly limitless delivery operation. When 1 is set, “stack over” does not occur and saddle operation can be performed continuously, but the stacking condition decreases.
	Use case	When preferring to perform saddle operation continuously
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When limitless operation is set to ON, the saddle stacking condition decreases.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
SD-STCNB		Set sddl delivery stack quantity
Lv.1	Details	To increase the saddle stacking number. When 1 is set, the “saddle stack over” count is increased, and the stacking number increases.
	Use case	When preferring to increase the stacking number of the Saddle Delivery Assembly
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1
	Default value	0

SORTER > OPTION		
BUFF-THK		Set buffer oprtn for heavy paper
Lv.1	Details	To set ON/OFF of buffer operation for heavy paper (181 to 220g/m2). When 1 is set, productivity of sort and staple mode of Finisher is improved, but the stacking condition decreases.
	Use case	When improving productivity of sort and staple mode for heavy paper (181 to 220 g/m2)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When improving productivity, the stacking condition may decrease.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	SORTER> OPTION> PRD-PRTY
PRCS-SP1		Set stacking speed at sort
Lv.1	Details	(Fin-K1) When stacking heavy paper (181g/m2 or more) on the Finisher Process Tray, the speed is normally decreased. When 1 is set, the stacking speed at sort mode does not decrease and productivity is improved, but the stacking condition may decrease. (Fin-L1)Setting the feed speed change when transporting paper to the rear end assist of the processing tray.
	Use case	(Fin-K1) When improving productivity of sort mode for heavy paper (181 g/m2 or more) (Fin-L1) When the misalign of paper is caused by the poor return during the sort mode or the stay pull mode.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When improving productivity, the stacking condition may decrease.
	Display/adj/set range	0 to 1 0: Speed is decreased, 1: Speed is not decreased
	Default value	Fin-K1:0 Fin-L1:1
PRCS-SP2		Set stack SPD at Hvy sort/staple
Lv.1	Details	When stacking heavy paper (181g/m2 or more) on the Finisher Process Tray, the speed is normally decreased. When 1 is set, the stacking speed at sort and staple mode does not decrease and productivity is improved, but the stacking condition may decrease.
	Use case	When improving productivity of sort and staple mode for heavy paper (181 g/m2 or more)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When improving productivity, the stacking condition may decrease.
	Display/adj/set range	0 to 1 0: Speed is decreased, 1: Speed is not decreased
	Default value	0

SORTER > OPTION		
BUFF-MX1		Buffer oprtn at mixed weight sort
Lv.1	Details	To set ON/OFF of buffer operation when mixing papers which weights are different. When 1 is set, productivity of sort mode of Finisher is improved, but the stacking condition decreases.
	Use case	When improving productivity of sort mode in the case of mixing papers which weights are different
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When improving productivity, the stacking condition may decrease.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
BUFF-MX2		Buffer at mix weight sort/staple
Lv.1	Details	To set ON/OFF of buffer operation when mixing papers which weights are different. When 1 is set, productivity of sort and staple mode of Finisher is improved, but the stacking condition decreases.
	Use case	When improving productivity of sort and staple mode in the case of mixing papers which weights are different
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When improving productivity, the stacking condition may decrease.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
	Related service mode	SORTER> OPTION> PRD-PRTY
PRCS-MX1		Set stck SPD at mix ppr type sort
Lv.1	Details	The speed is decreased when stacking papers on the Finisher Process Tray in the case of mixing papers which the paper types (paper weight or paper material) differ. When 1 is set, the stacking speed at sort mode does not decrease and productivity is improved, but the stacking condition may decrease.
	Use case	When improving productivity of sort mode in the case of mixing papers which the paper types differ
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When improving productivity, the stacking condition may decrease.
	Display/adj/set range	0 to 1 0: Speed is decreased, 1: Speed is not decreased
	Default value	0

SORTER > OPTION		
PRCS-MX2		Stck SPD at mix ppr sort/staple
Lv.1	Details	The speed is decreased when stacking papers on the Finisher Process Tray in the case of mixing papers which the paper types (paper weight or paper material) differ. When 1 is set, the stacking speed at sort and staple mode does not decrease and productivity is improved, but the stacking condition may decrease.
	Use case	When improving productivity of sort and staple mode in the case of mixing papers which paper types differ
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When improving productivity, the stacking condition may decrease.
	Display/adj/set range	0 to 1 0: Speed is decreased, 1: Speed is not decreased
	Default value	0
BUF-THK1		Set No. of buffer for hvy ppr 1
Lv.1	Details	To set the number of heavy paper 1 (91 to 180g/m2) for buffer. When 1 is set, productivity of staple mode of Finisher is improved.
	Use case	When prioritizing productivity of staple mode of Finisher using heavy paper 1
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: 2 sheets, 1: 3 sheets
	Default value	0
PRD-PRTY		Prdctvty prrty btch at sort/staple
Lv.1	Details	To simultaneously set productivity priority. When 1 is set, productivity of sort and staple mode of Finisher's corresponding items is improved.
	Use case	When prioritizing productivity of sort and staple mode of Finisher
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Normal, 1: Priority on productivity
	Default value	0
SLD-BCK		Set bleed-thru improvement mode
Lv.1	Details	When the back of the coated paper as the cover is soiled, set 1/2.
	Use case	When the backside of the paper is soiled while coated paper is used as cover
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	Productivity is improved, but jam or misalignment might occur.
	Display/adj/set range	0 to 2 0: OFF, 1: ON (coated paper + recycled paper), 2: ON (coated paper + plain paper)
	Default value	0

SORTER > OPTION		
STCR-DWN		Set occasional misalign prev mode
Lv.1	Details	To set ON/OFF of occasional misalignment prevention mode. When misalignment in feed direction occurs at approx. every 30 sheets for thin/plain paper (105g/m2 and less), set 1.
	Use case	When misalignment in feed direction occurs occasionally for thin/ plain paper
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
PRCS-SP3		Chng ppr stck SPD for non-buf mod: Fin
Lv.1	Details	When the value is changed to 1, the paper stack speed becomes slow in the non-buffer mode.
	Use case	When misalignment due to too much paper return (buckling on the trailing edge) occurs in staple mode for thin/plain paper
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When setting this mode, the feeding speed of non-buffered paper to the Process Tray is changed, so it may be necessary to readjust the Process Tray pull-back amount (SORTER> ADJUST> PRCS-RET).
	Display/adj/set range	0 to 8 0: 700 mm/sec 1: 650 mm/sec 2: 600 mm/sec 3: 550 mm/sec 4: 500 mm/sec 5: 450 mm/sec 6 to 8: 450 mm/sec
	Default value	0
	Related service mode	SORTER > ADJUST > PRCS-RET
NSRT-STC		Set poor stack prev mode at non-collate
Lv.1	Details	Set this mode when the stackability at non-collate delivery is low. With this setting, the stackability at non-collate delivery is improved.
	Use case	When the stackability at non-collating is low
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 2 0: Deliver printed paper to the Stack Tray in non-collate mode 1: Deliver 2-sided printed paper via the Processing Tray in non-collate mode 2: Deliver 1-sided/2-sided printed paper via the Processing Tray in non-collate mode 1: ON
	Default value	1

SORTER > OPTION		
THN-TRSW		Narrow width paper jam prevention
Lv.1	Details	Set this mode when a delivery stationary jam occurs at the time of delivering thin paper (63g/m2 and less) which width direction is 139.6 mm and smaller to the Stacker.
	Use case	When delivery stationary jam occurs at the time of delivering thin paper (63g/m2 and less) which width direction is 139.6 mm and smaller to the First/Second Tray
	Adj/set/operate method	1) Enter the setting value and press OK key.
	Display/adj/set range	0 to 1 0: Deliver to the destination specified on UI 1: Deliver to the Tray on the host machine
	Default value	0
THN-SW		Switch thin ppr stack cpcty: Stack Tray
Lv.1	Details	When this mode is enabled, stack capacity of the Stack Tray for thin paper is increased. Stack capacity is changed from the capacity for large size paper to the capacity for small size paper.
	Use case	When increasing the stack capacity of the tray for thin paper
	Adj/set/operate method	1) Enter the setting value and press OK key. 2) Turn OFF/ON the main power.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
SWGUP-SW		ON/OFF of swing unit escape operation
Lv.1	Details	To set ON/OFF of the swing unit escape operation for the 1st sheet of thin paper
	Use case	When corner bend occurs on the first sheet while feeding thin paper
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0
CALG-SW		ON/OFF ctr align oprtn: corner-stpl mode
Lv.1	Details	To set whether to perform center alignment operation in corner-staple mode.
	Use case	When switching the alignment position from center to front/rear side
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range	0 to 1 0: OFF (Center alignment), 1: ON (Front/rear side alignment)
	Default value	0

T-8-100

BOARD

OPTION

BOARD > OPTION		
MENU-1		Hide/dspl of printer setting menu lvl 1
Lv.2	Details	To set whether to display or hide the level 1 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
MENU-2		Hide/dspl of printer setting menu lvl 2
Lv.2	Details	To set whether to display or hide the level 2 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
MENU-3		Hide/dspl of printer setting menu lvl 3
Lv.2	Details	To set whether to display or hide the level 3 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
MENU-4		Hide/dspl of printer setting menu lvl 4
Lv.2	Details	To set whether to display or hide the level 4 of printer setting menu.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0
SURF-OFF		UFR board function ON/OFF
Lv.1	Details	To set ON/OFF of the function according to the SURF board connection status.
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

BOARD > OPTION		
TR-DSP		Hide/dspl of toner reduction function
Lv.2	Details	To set whether to display or hide the toner reduction function.
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range	0 to 1 0: Hide, 1: Display
	Default value	0

T-8-101

Installation

- How to look at this Installation Procedure
- Checking Before Installation
- Checking the Contents
- Unpacking
- Installation

How to look at this Installation Procedure

Description on the parts included in the package

The parts with a diagonal line in the contents list will not be used.

In the case of using the components

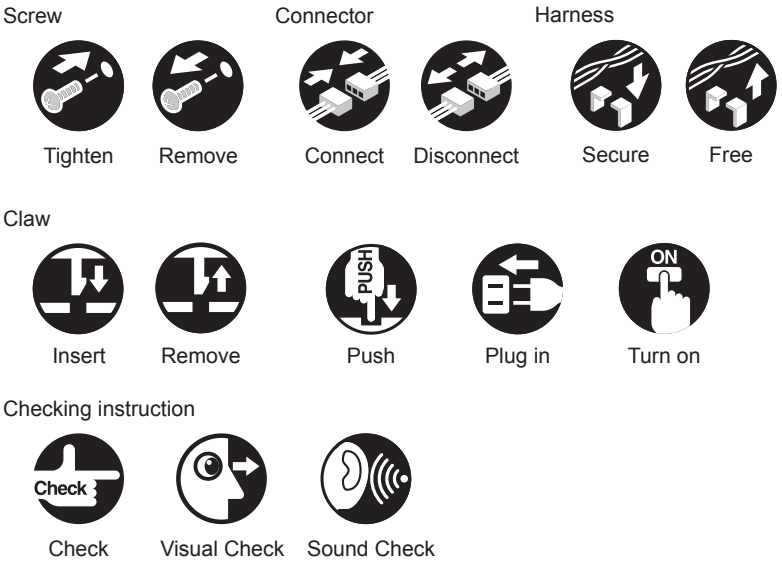
After unpacking, check the parts included in the package by referring to the illustration of “Components” in this Installation Procedure.

Packaged Item

F-9-1

Symbol marks in the illustration

Symbol marks are used in this Installation Procedure for the frequent work/operation. Check the descriptions below.



F-9-2

Checking Before Installation

Following shows requirements for the installation site.
Therefore, it is desirable to see the installation site in advance before bringing in the machine to the user’s site.

Checking Power Supply

1) There must be a power outlet properly grounded and rated as indicated (+, -10%) for exclusive use by the machine.

Checking the Installation Environment

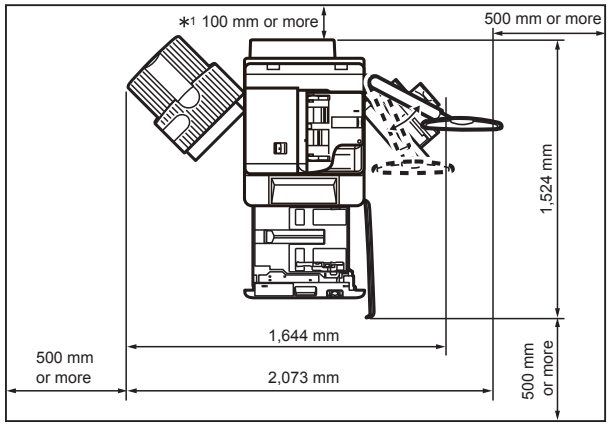
1) The environment of the installation site must be in the range as shown below.
   Avoid installation near the faucet, water boiler, humidifier or refrigerator.
   Guaranteed range for operation/image, Temperature: 10.0 to 30.0 deg C, Humidity: 20 to 80%
2) It is desirable to hang curtains over the window if the machine is installed near the source of fire, a dusty area, or a place subject to generation of ammonia gas or direct sunlight.
3) Room odor can be bothering when running the machine for a long time in a poorly-ventilated room although the ozone amount generated while running this equipment does not harm human health. Be sure to provide adequate ventilation of the room to keep the work environment comfortable.

Checking Installation Space

1) The foot of this equipment should be in contact with the floor. This equipment should be kept on the level.
2) The machine must be away from the wall by 100 mm or more to secure a sufficient space to operate the machine.

For iR-ADV C9280 PRO/C9270 Series

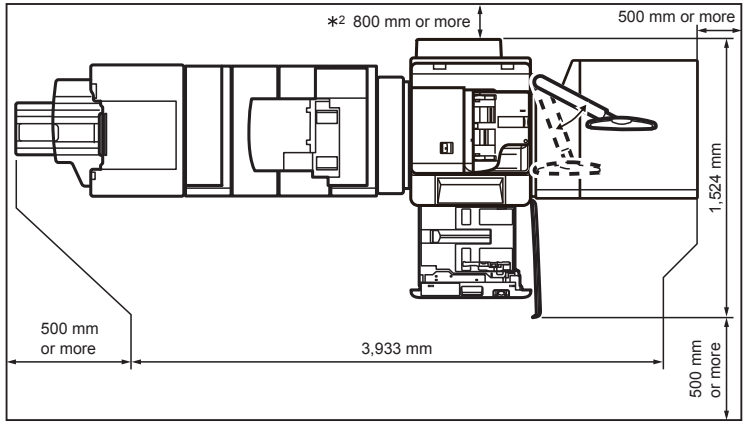
- When the Copy Tray-P1 and Duplex Color Image Reader Unit-F1 are attached.



F-9-3

NOTE:
*1 : Make sure to provide at least 800 mm of space if you attach one or more of the following: Paper Folding Unit-G1, Professional Puncher-C1, Document Insertion Unit-H1, or Multi-drawer Paper Deck-A1.

- When the Booklet Finisher-K1, Paper Folding Unit-G1, Professional Puncher Integration Unit-B1, Professional Puncher-C1, Document Insertion Unit-H1, Buffer Pass Unit-J1, Duplex Color Image Reader Unit-F1, and Multi-drawer Paper Deck-A1 are attached.

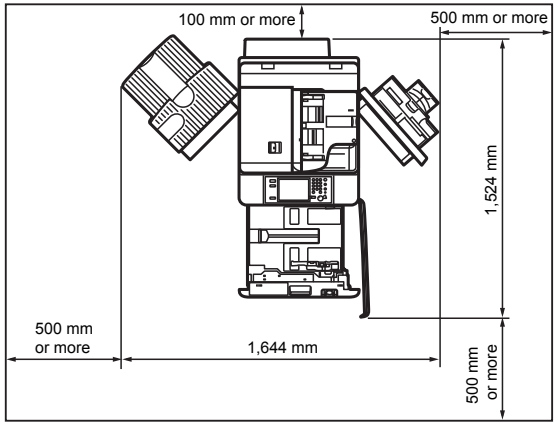


F-9-4

NOTE:
*2 : Make sure to provide at least 100 mm of space if none of the Paper Folding Unit-G1, Professional Puncher-C1, Document Insertion Unit-H1, or Multi-drawer Paper Deck-A1 is attached.

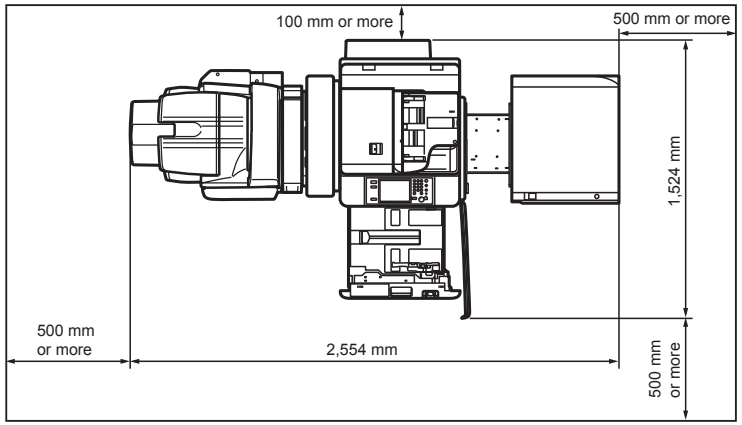
For iR-ADV C7280/C7270/C7260 Series

- When the Copy Tray-P1 and Duplex Color Image Reader Unit-F1 are attached.



F-9-5

- When the Booklet Finisher-L1, External 2/3 Hole Puncher-A1, Buffer Pass Unit-J1, Duplex Color Image Reader Unit-F1, and POD Deck Lite-A1 are attached.

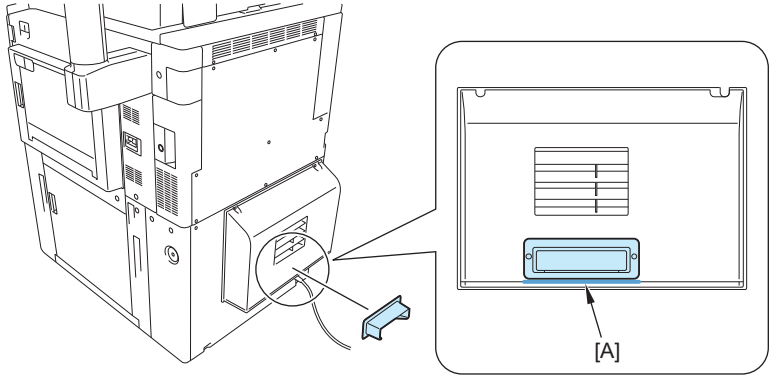


F-9-6

3) To install the host machine, install it in a well-ventilated place. Especially when there are multiple host machines, be sure to locate the machine where the machine is free from direct exhaust of other machines. Be sure to keep the machine away from the air-inlet duct which is used for ventilation of the room.

4) When it is difficult to secure a space at rear side, install the following spacer to the duct at bottom of rear side.
   - FL2-9160

NOTE:
Be sure that the spacer is not overlapped with the [A] area when installing it.



F-9-7

Points to Note at Installation Work

Take note of the following points when installing the host machine.

1) Moving the host machine from a cool place to a warm place can generate condensation, causing moisture beads on the metal surface. Using the host machine while the machine is condensed can cause image failure. Therefore, when moving the machine from a cool place to a warm place to install, unpack the host machine and leave it for 2 hours or more before the installation work so that the machine becomes used to the room temperature.

2) Be sure to work with a group of 4 or more people to install the host machine.

CAUTION:
Be sure to first complete the installation of the host machine only, and then perform checking after power-on.

Table of options combination

NOTE:
- Following table shows the combination of options to be installed at the right side of the Host Machine.
- Refer to the table below to install the options described in the table. Be sure to check the combination before the installation work.

	Utility Tray	Voice Guidance Kit	Voice Operation Kit	Card Reader
Utility Tray	-	No	No	Yes
Voice Guidance Kit	No	-	No	Yes
Voice Operation Kit	No	No	-	Yes
Card Reader	Yes	Yes	Yes	-

T-9-1

Yes: installation is available, No: installation is not available

Order to Install the Host Machine and the Options

NOTE:
In the case of installing the Host Machine and the other options at the same time, follow the order as described below to install the options first so that the installation operability is improved.

1. Checking Before Installation
2. Unpacking
3. IInstalling the Upright Arm (for the models in which the Upright Control Panel is equipped as standard)
4. Installation of the Reader Unit or the Printer Cover
5. Installation of the Upright Control Panel (for the models in which the Upright Control Panel is equipped as standard)
6. Installation of the Buffer Path Unit (for the models in which the Buffer Path Unit is equipped as standard)
7. Installation of the Pickup Assembly
8. Installation of the Process Unit
9. Installation of the Black Developing Assembly
10. Installing the USB Device Port (only with the products designed for Europe)
11. Installation of the Noise Reduction Cover
12. Securing the Host Machine
13. Preparation for Main Power Connection
14. Turning ON the Main Power
15. Installation of Toner Container
16. Settings at Installation
17. Setting the Deck
18. Setting the Paper Cassette
19. Auto Gradation Adjustment
20. Image Position Adjustment

Types of the Accessory Box

The Accessory Box packed with the host machine differs depending on the models; thus, be sure to check the contents by referring the following table.

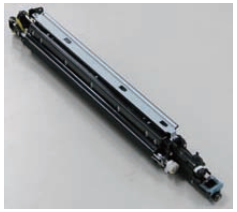
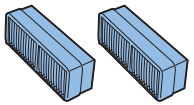
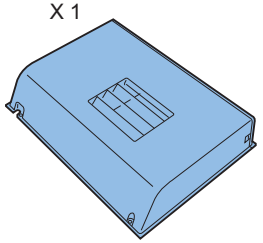
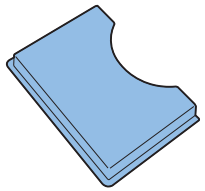
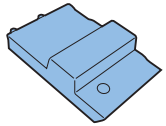
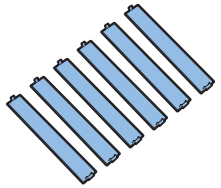
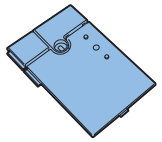
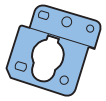
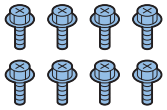
Model	Area	Accessory Box 1	Accessory Box 2	Accessory Box 3	Accessory Box 4	Accessory Box 5	Accessory Box 6
C9280 PRO	USA	Yes	Yes	Yes	Yes	-	-
C9280 PRO	Europe	Yes	Yes	Yes	Yes	-	Yes
C9280 PRO	Asia/Oceania	Yes	Yes	-	-	-	-
C9280 PRO	China	Yes	Yes	-	Yes	Yes	-
C9280 PRO	Korea	Yes	Yes	-	-	Yes	-
C9280 PRO	Taiwan	Yes	Yes	-	-	-	-
C9270 PRO	USA	Yes	Yes	Yes	Yes	-	-
C9270 PRO	Asia/Oceania	Yes	Yes	-	-	-	-
C9270 PRO	China	Yes	Yes	-	Yes	Yes	-
C9270 PRO	Taiwan	Yes	Yes	-	-	-	-
C7280i	Europe	Yes	Yes	Yes	Yes	-	Yes
C7270	USA	Yes	Yes	Yes	Yes	-	-
C7270i	Europe	Yes	Yes	Yes	Yes	-	Yes
C7270	Asia/Oceania	Yes	Yes	-	-	-	-
C7270	Korea	Yes	Yes	-	-	Yes	-
C7260	USA	Yes	Yes	Yes	Yes	-	-
C7260i	Europe	Yes	Yes	Yes	Yes	-	Yes
C7260	Asia/Oceania	Yes	Yes	-	-	-	-
C7260	Korea	Yes	Yes	-	-	Yes	-

T-9-2

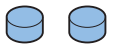
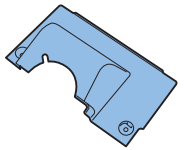
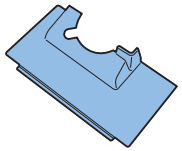
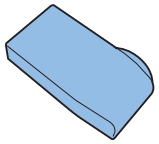
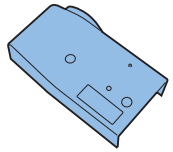
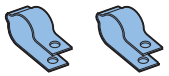
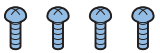
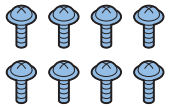
Yes: included in the package

Checking the Contents

Accessory Box 1 (for the models with the Upright Control Panel)

☐ [1] Color Developing Assembly X 3 	☐ [2] Black Developing Assembly X 1 	☐ [3] Color Drum Unit X 3 
☐ [4] Filter X 2 	☐ [5] Noise Reduction Cover X 1 	☐ [6] Service Book Holder X 1 
☐ [7] ITB Inner Cover X 1 	☐ [8] Handle Cover X 6 	☐ [9] Right Rear Cover X 1 
☐ [10] Reader Fixing Plate R X 1 	☐ [11] Reader Fixing Plate L X 1 	☐ [12] Screw (RS Tightening; M4x8) X 8 

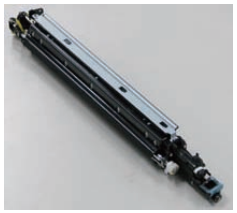
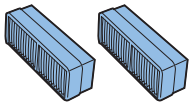
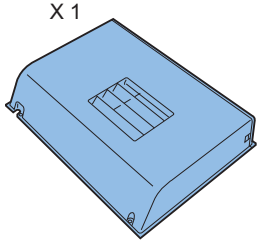
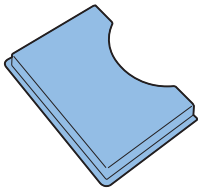
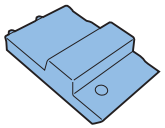
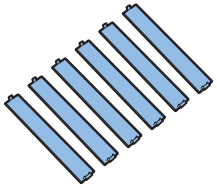
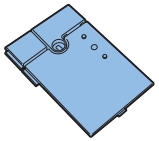
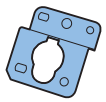
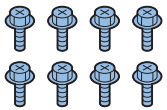
F-9-8

☐ [13] Screw (TP; M4x8) X 4 	☐ [14] Rubber Cap X 1 	☐ [15] Screw (RS Tightening black; M4x12) X 2 
☐ [16] Screw (Binding; M4x10) X 1 	☐ [17] Rubber Cap X 2 	☐ [18] Joint Cover R X 1 
☐ [19] Joint Cover L X 1 	☐ [20] Front Base Cover X 1 	☐ [21] Rear Base Cover X 1 
☐ [22] Cable Clamp X 2 	☐ [23] Screw (P Tightening; M3x8) X 4 	☐ [24] Screw (TP; M4x8) X 8 

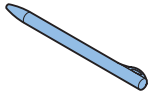
F-9-9

NOTE:
[8] : Use the 6 covers when the Buffer Path Unit is not installed. Use 4 of them when it is installed.
[9], [10], [11], [12], [13], [14] : Use the parts at the installation of the Reader Unit or the Printer Cover.

Accessory Box 1 (for the models with the Flat Control Panel)

☐ [1] Color Developing Assembly X 3 	☐ [2] Black Developing Assembly X 1 	☐ [3] Color Drum Unit X 3 
☐ [4] Filter X 2 	☐ [5] Noise Reduction Cover X 1 	☐ [6] Service Book Holder X 1 
☐ [7] ITB Inner Cover X 1 	☐ [8] Handle Cover X 6 	☐ [9] Right Rear Cover X 1 
☐ [10] Reader Fixing Plate R X 1 	☐ [11] Reader Fixing Plate L X 1 	☐ [12] Screw (RS Tightening; M4x8) X 8 

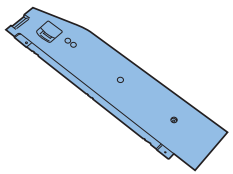
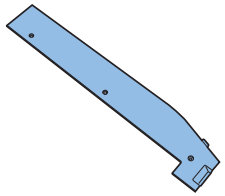
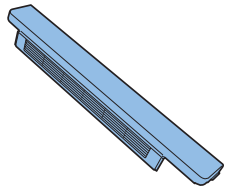
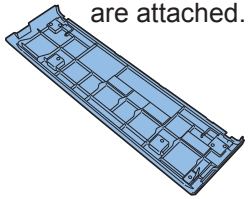
F-9-10

☐ [13] Screw (TP; M4x8) X 4 	☐ [14] Rubber Cap X 1 	☐ [15] Screw (RS Tightening black; M4x12) X 2 
☐ [16] Screw (Binding; M4x10) X 1 	☐ [17] Touch Pen X 1 	

F-9-11

NOTE:
[8] : Use the 6 covers when the Buffer Path Unit is not installed. Use 4 of them when it is installed.
[9], [10], [11], [12], [13], [14] : Use the parts at the installation of the Reader Unit or the Printer Cover.

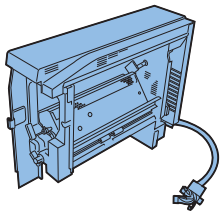
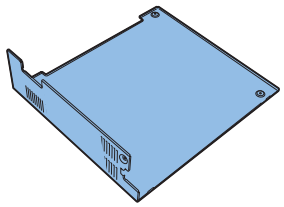
Accessory Box 2

☐ [1] Right Upper Cover 1 X 1 	☐ [2] Left Upper Cover X 1 	☐ [3] Box Upper Cover X 1 
☐ [4] Front Upper Cover X 1 Two Hinge Shafts are attached. 		

F-9-12

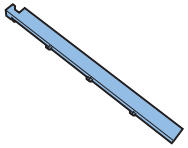
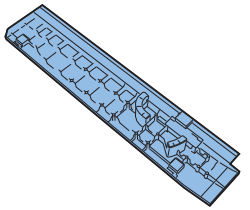
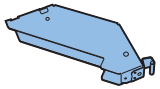
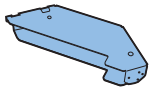
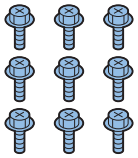
NOTE:
[1], [2], [3] : Use the parts at the installation of the Reader Unit or the Printer Cover.

Accessory Box 3 (for the model in which the Buffer Path Unit is equipped as standard)

☐ [1] Buffer Path Unit X 1 	☐ [2] Connecting Harness Cover X 1 	☐ [3] BufferLeft Lower Cover X 1 

F-9-13

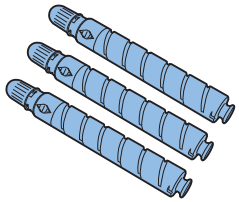
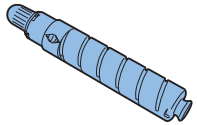
Accessory Box 4 (for the model in which the Buffer Path Unit is equipped as standard)

☐ [1] Delivery Outlet Upper Guide X 1 	☐ [2] Buffer Front Cover X 1 	☐ [3] Cover Support Plate (Front) X 1 
☐ [4] Cover Support Plate (Rear) X 1 	☐ [5] Hinge Shaft X 2 	☐ [6] Screw (RS Tightening; M4x8) X 9 
☐ [7] Screw (P Tightening; M4x10) X 1 	☐ [8] Wire Saddle X 1 	

F-9-14

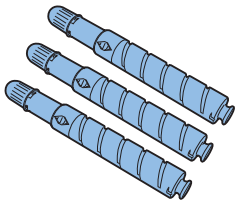
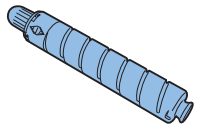
Accessory Box 5 (Toner Container)

iR-ADV C9280 PRO/C9270 PRO

[1] Color Toner Container X 3	[2] Black Toner Container X 1
	

F-9-15

iR-ADV C7270/C7260

[1] Color Toner Container X 3	[2] Black Toner Container X 1
	

F-9-16

Accessory Box 6 (only with the products designed for Europe)

[1] Waste Toner Container X 1

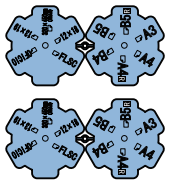
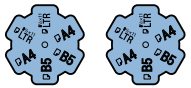
F-9-17

Upper area of the Host Machine (for the models with the Upright Control Panel)

[1] Upright Control Panel X 1

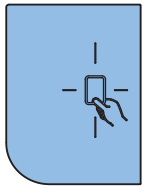
F-9-18

Inside of the Cassette (Lower)

[1] Size Plate R X 2	[2] Size Plate L X 2
	

F-9-19

USB Device Port (only with the products designed for Europe)

[1] Case Sheet X 1	[2] Cushion X 4
	

F-9-20

● CD/Guides

Check the contents against the following.

	USA	Europe		Asia Oceania	China	Korea	Taiwan
		C9280 PRO	C7280i C7270i C7260i				
e-Manual CD	1pc	2pc	2pc	1pc	1pc	1pc	1pc
Setup Guide	1pc	-	-	1pc	1pc	1pc	1pc
Basic Operation Guide	1pc	-	-	1pc	1pc	1pc	1pc
Before Using This Machine	1pc	-	-	1pc	1pc	1pc	1pc
AMS KIT Software/Manual CD	1pc	-	-	-	-	-	-
AMS Introduction Booklet	1pc	-	-	-	-	-	-
Users Guide	-	1pc	1pc	-	-	-	-
UFRII User Software CD	1pc	-	1pc	1pc	1pc	1pc	1pc
PCL User Software CD	-	-	1pc	-	-	-	-
iW Enterprise Management Console CD	1pc	-	-	-	-	-	-
iW Management Console CD	-	2pc	2pc	1pc	1pc	1pc	1pc
Main Unit Warranty	-	-	-	-	-	1pc	-
Chinese Warranty sheet	-	-	-	-	1pc	-	-
Service Log Book	-	-	-	-	1pc	-	-
Guarantee Card	-	-	-	-	1pc	-	-
HDD-related Option Integration Installation Procedure	-	-	-	-	1pc	-	-

T-9-3

Unpacking

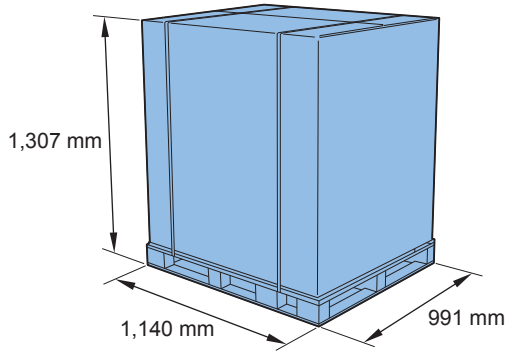
Unpacking

CAUTION:

The host machine weights about 220 kg. For safety, be sure to work carefully to move and install the machine.

Be sure to work with a group of 4 or more people to install the Host Machine.

NOTE:
The dimension of the Host Machine and the transport container is as shown in the figure. Be sure to secure a space to unpack, and then start the installation work.



F-9-21

☐

1) Remove the tapes attaching the host machine and the Package Box and bring down the Package Box from the pallet.

CAUTION:

Be careful not to drop the Box when removing the tapes.

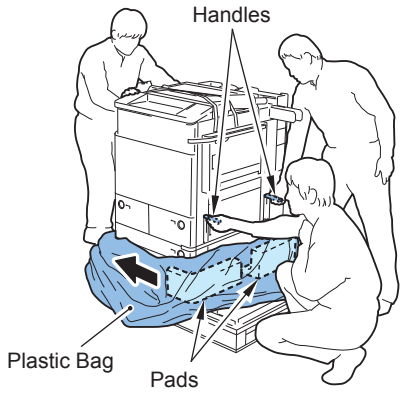
2) Pull the plastic bag all the way down.

☐

3) Hold the handles at the right side of the host machine and lift the host machine to remove the pad. Put the plastic bag aside in the direction of the arrow.

CAUTION:

Be sure not to lift the host machine too much. Otherwise, it will lose the balance.



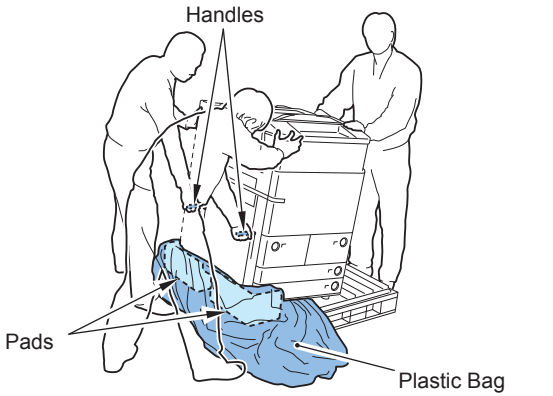
F-9-22

☐

4) Hold the handles at the left side of the host machine and lift the host machine to remove the pad and the plastic bag.

CAUTION:

Be sure not to lift the host machine too much. Otherwise, it will lose the balance.



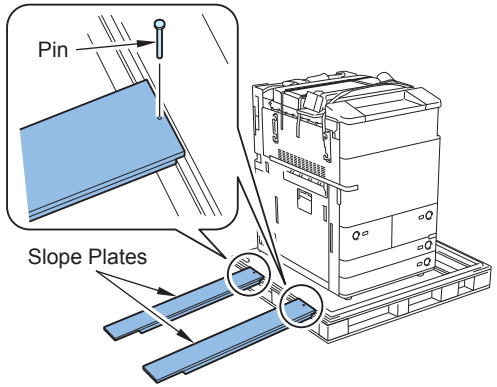
F-9-23

☐

5) Take out the 2 Slope Plates stored at the right side of the Pallet and remove the 2 pins which are secured at the back of the Slope Plate with tape.

☐

6) Turn around the 2 Slope Plates to install as shown in the figure, and then fit the pin-holes of the pallet with the pin-holes of the Slope Plates to put the 2 pins into the holes.

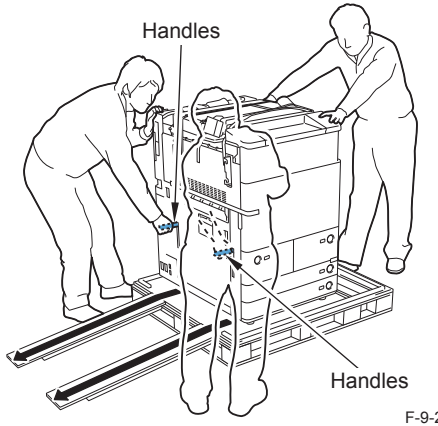


F-9-24

☐

7) Hold the handles at the left side of the host machine, and then, while supporting the corner of the host machine, fit the casters to the center of the Slope Plate to slowly bring the machine down.

CAUTION:
Be careful not to make the casters off from the Slope Plate.



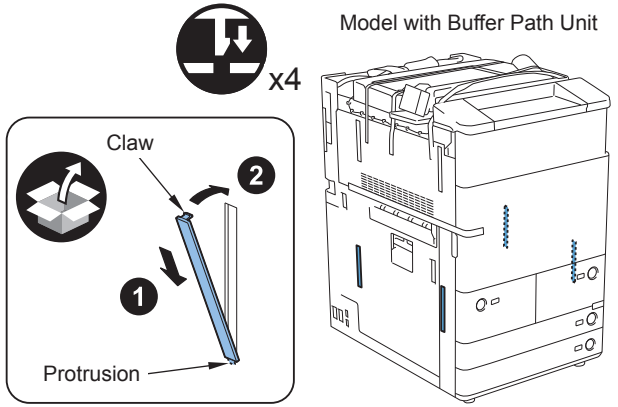
F-9-25

☐

8) Install the Handle Cover.

< Model with Buffer Path Unit: Using 4 Handle Covers >

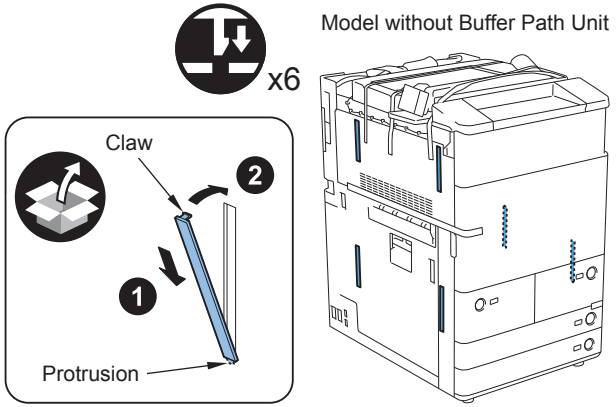
- 4 Protrusions
- 4 Claws



F-9-26

< Model without Buffer Path Unit: Using 6 Handle Covers >

- 6 Protrusions
- 6 Claws

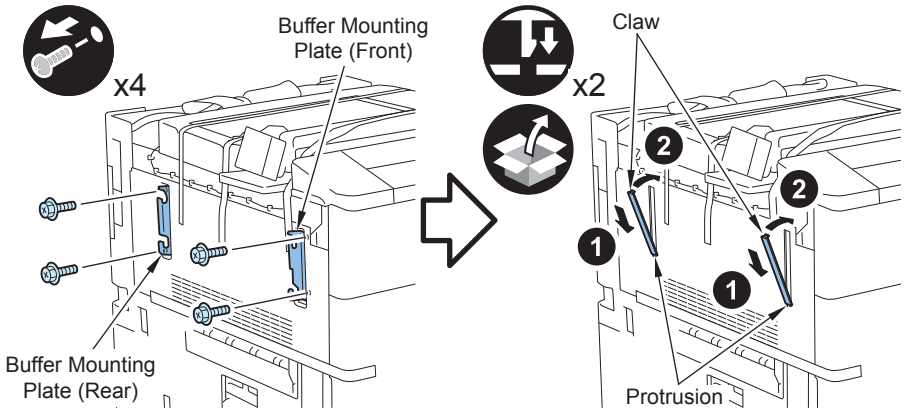


F-9-27

☐

9) When not installing the Buffer Path Unit with the model with Buffer Path Unit, remove the Buffer Mounting Plate (Front) and the Buffer Mounting Plate (Rear), and install the 2 Handle Cover.

- 4 Screws
- 2 Protrusions
- 2 Claws



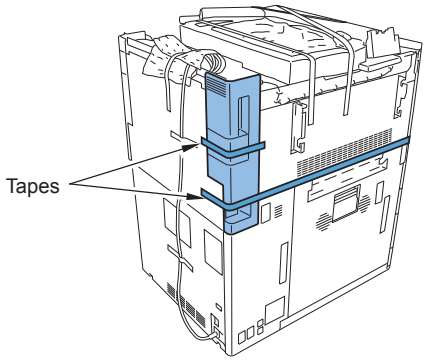
F-9-28

☐

10) Remove the tapes to remove the Left Box Cover.

CAUTION:

Because the Left Box Cover is not secured with the screw, be careful not to drop the Box Cover when removing the tapes.



F-9-29

☐

11) Remove the tapes attached over the outer surface of the host machine.

Installing the Upright Arm

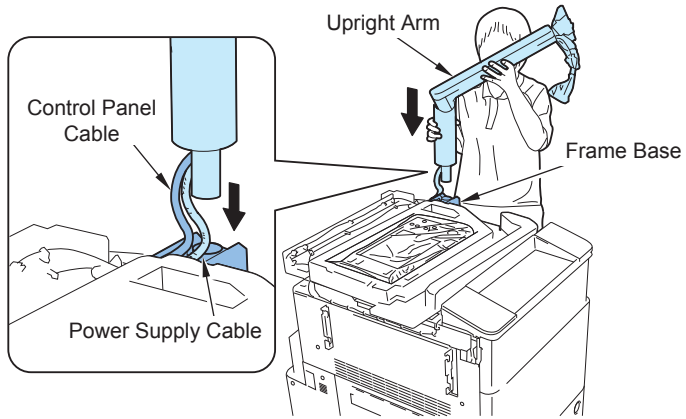
NOTE:
Perform the models in which the Upright Control Panel is equipped as standard.
In the case of Upright Control Panel model, be sure to perform the following procedure.

☐

1) Put the Upright Arm straight into the round hole of the Frame Base.

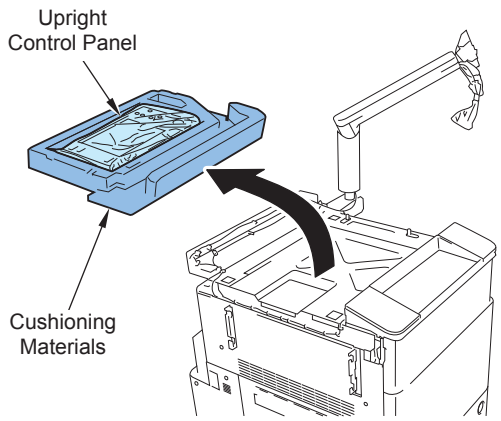
CAUTION:

- When installing the Upright Arm, be sure to place the cables as indicated in the figure below.
- Be careful not to get the cable caught when installing the Upright Arm.



☐

2) Bring down the Upright Control Panel together with the cushioning materials from the host machine.

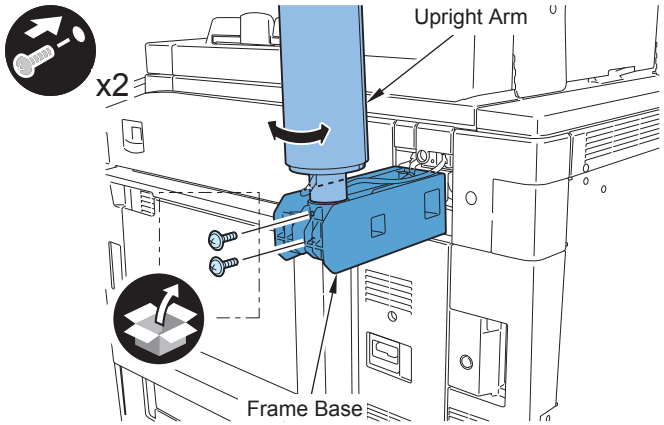


F-9-30

☐

3) Align the hole on the Upright Arm and the hole on the Frame Base, and secure the Upright Arm in place.

- 2 Screws (TP; M4 x 8)

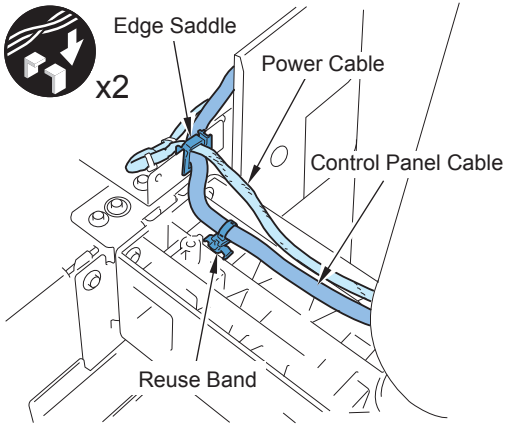


F-9-31

☐

4) Secure the Control Panel Cable with the reuse band.

NOTE:
Check that the Control Panel Cable and the Power Supply Cable are secured in place using the Edge Saddle.

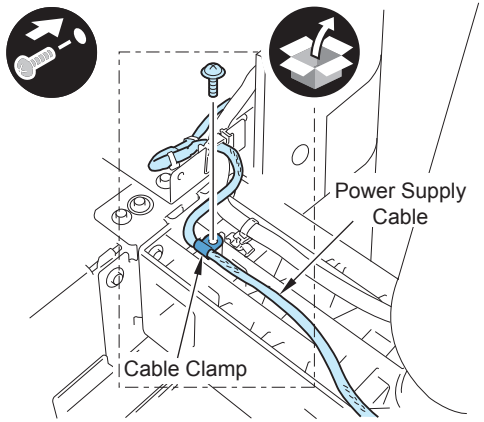


F-9-32

☐

5) Secure the Power Supply Cable with the cable clamp.

- 1 screw (TP: M4x8)



F-9-33

Installation

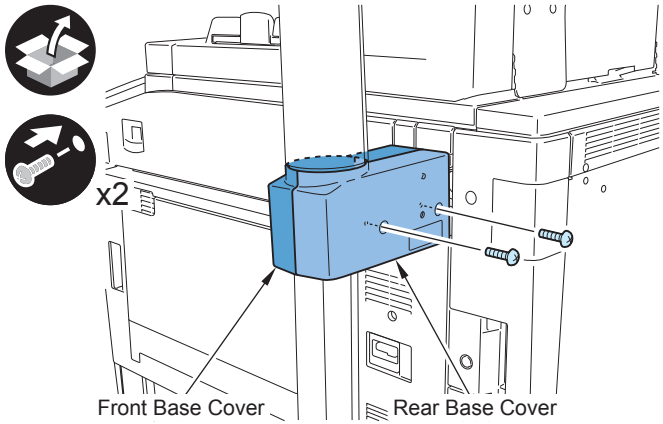
NOTE:
- When installing the host machine and Reader Unit or Printer Cover simultaneously, be sure to install the Reader Unit or Printer Cover after completing "Unpacking > Installing the Upright Arm".
- When installing the Reader Unit, refer to “Installation Procedure of the Reader Unit”.
- When installing the Reader Unit, be sure to execute the following work after the installation.
- In the case of using the machine as a printer model, refer to “Installation Procedure of the Printer Cover-B1”.

Installation of the Upright Control Panel

☐

1) Install the Front Base Cover and the Rear Base Cover.

- 2 Screws (P tightening; M3 x 8)



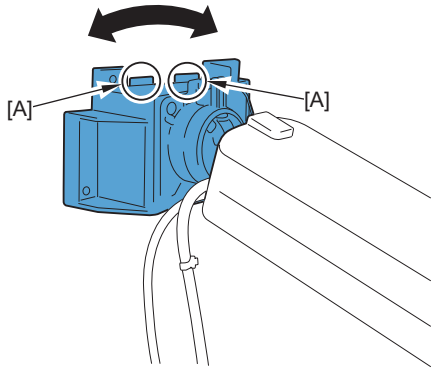
F-9-34

☐

2) Remove the packing tapes on the Upright Control Panel.

☐

3) Turn the Panel Base to make the [A] part with protrusion come to the upper side.



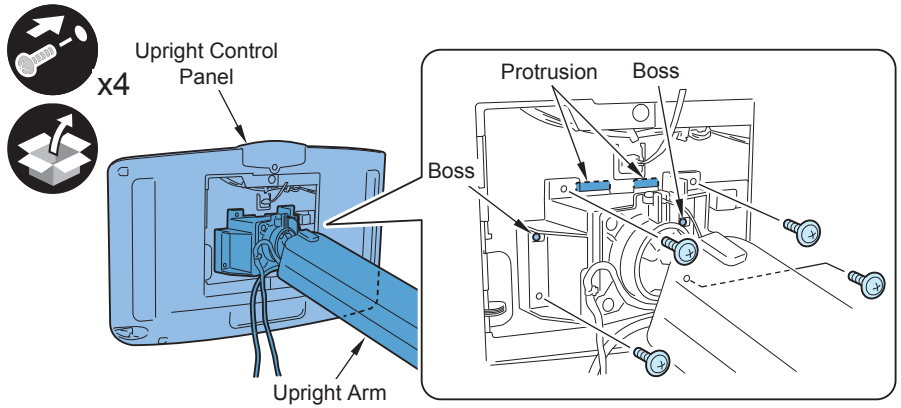
F-9-35

☐

4) Install the Upright Control Panel to the Upright Arm.

- 2 Protrusions
- 2 Bosses
- 4 Screws (TP; M4 x 8)

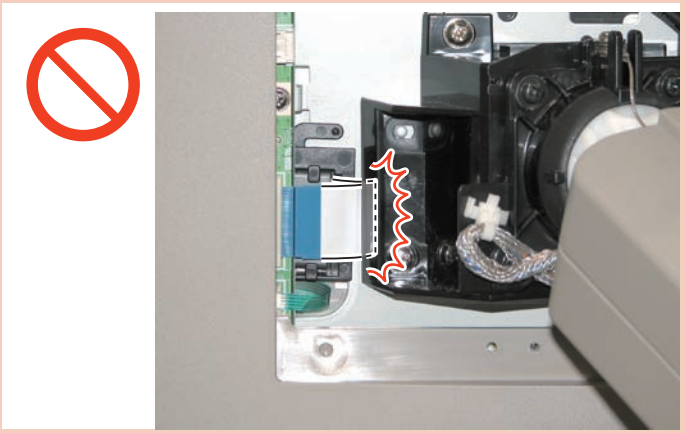
NOTE:
When installing the Upright Control Panel, be sure to tighten the upper screw first.



F-9-36

CAUTION:

Be careful not to trap the Flexible Cable with the Panel Base.



F-9-37

☐

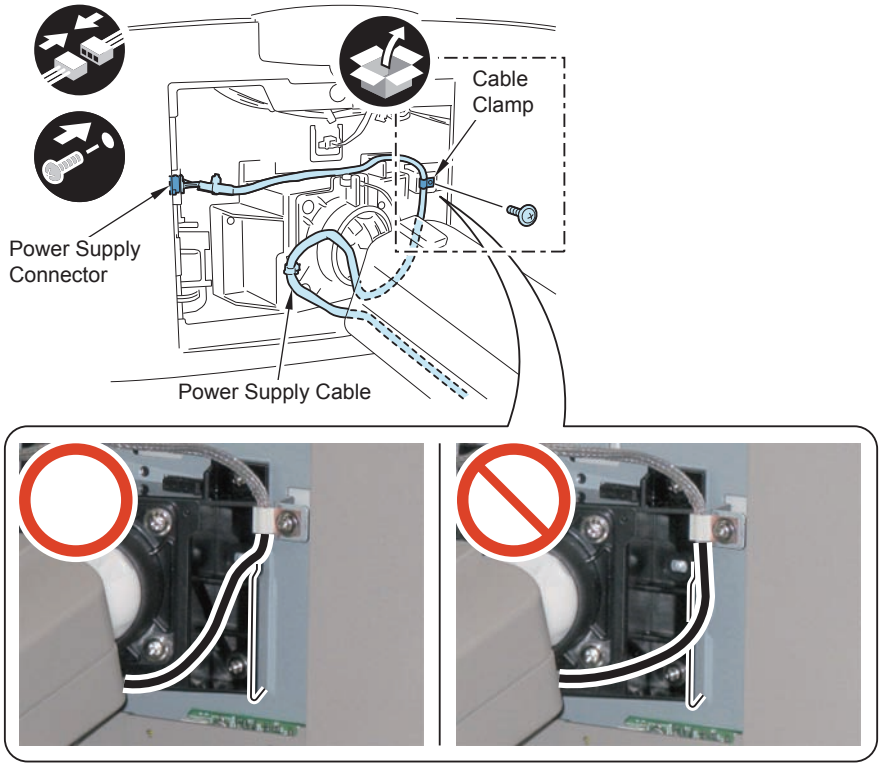
5) Route the Power Supply Cable as shown in the figure and connect the Power Supply Connector.

6) Fix the cable with the Cable Clamp.

- 1 Screw (TP; M4 x 8)

CAUTION:

- Be sure not to route the Power Supply Cable in clockwise direction.
- Route the Power Supply Cable at the bottom of the Cable Clamp to place inside the black guide.

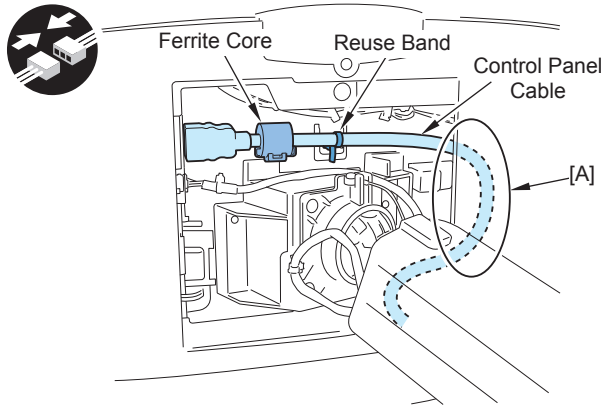


F-9-38

☐

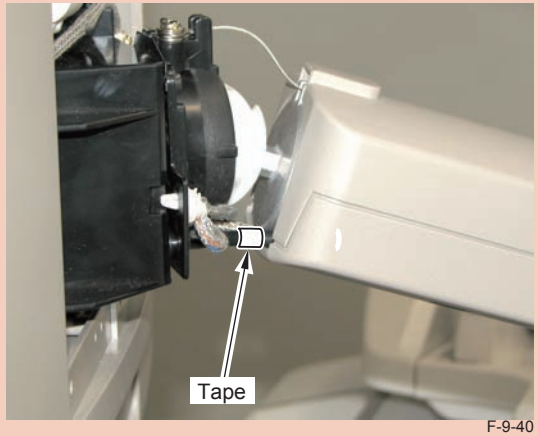
7) Route the Control Panel Cable as shown in the figure and connect the Control Panel Connector.
8) Secure the cable with the Reuse Band and cut the extra part.

CAUTION:
- Be sure not to route the Power Supply Cable in clockwise direction.
- Be sure to store the slack [A] of the Control Panel Cable inside the cover.



F-9-39

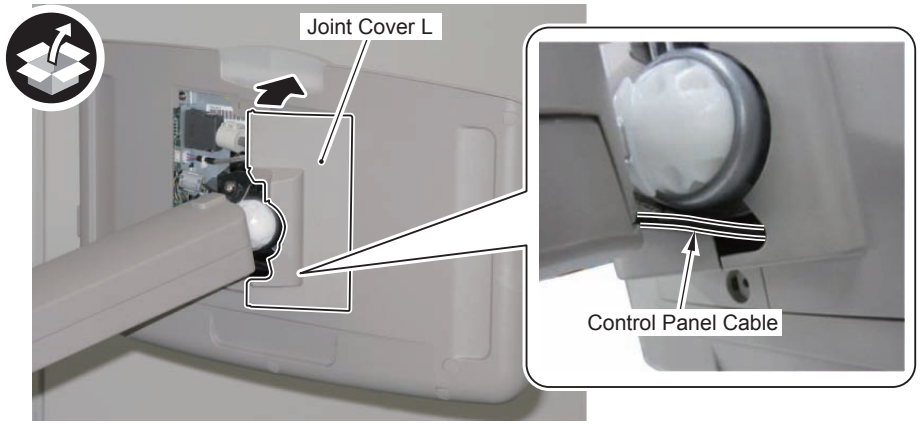
CAUTION:
Check that the tape of the Control Panel Cable is outside the Pipe Cover.
If not, be sure to adjust cable so that the tape can be seen.



F-9-40

☐

9) Install the Joint Cover L.

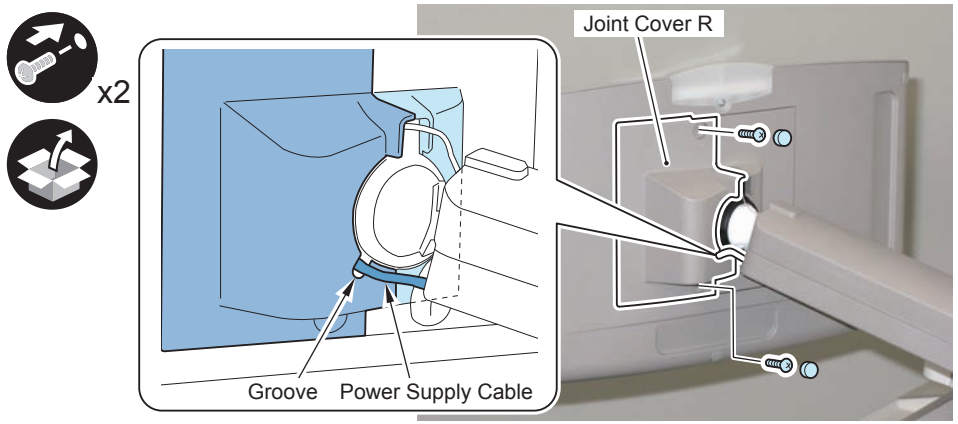


F-9-41

☐

10) Install the Joint Cover R.
- 2 Screws (P tightening; M3 x 8)
- 2 Rubber Caps

CAUTION:
Be sure to put the Power Cable through groove on the Joint Cover R.



F-9-42

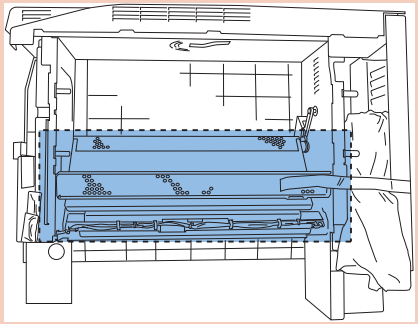
Installation of the Buffer Path Unit

Unpacking

NOTE:
Be sure to open the plastic before starting the work. Holding the Buffer Path Unit while the plastic is wrapped around can cause the Buffer Path Unit slipped over.

CAUTION:

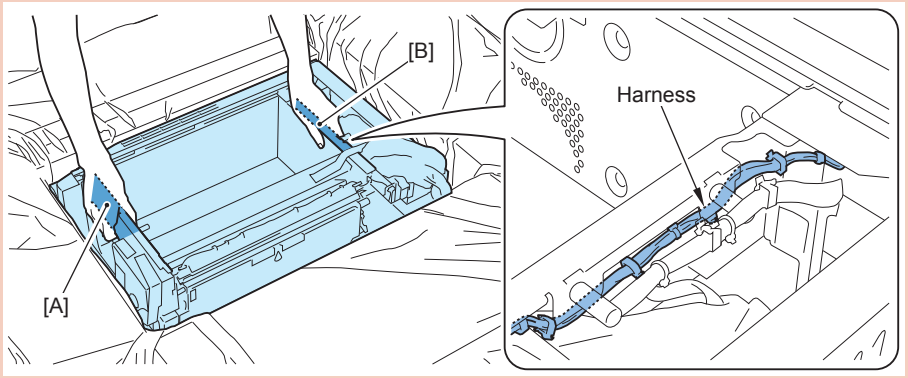
Do no hold inside the dashed frame as shown in the figure; otherwise, it can cause the Paper Path Guide deformed.



F-9-43

CAUTION:

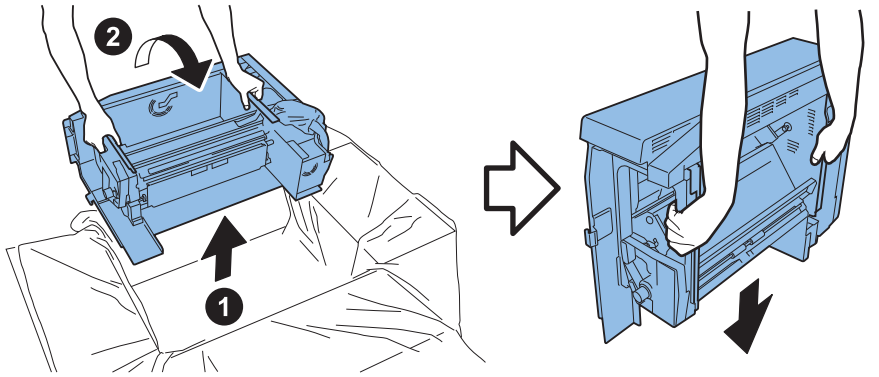
Be sure to hold Frame [A] and Frame [B] areas of the Buffer Path Unit. Avoid the harness to hold [B] area; otherwise, the harness can be damaged.



F-9-44

☐

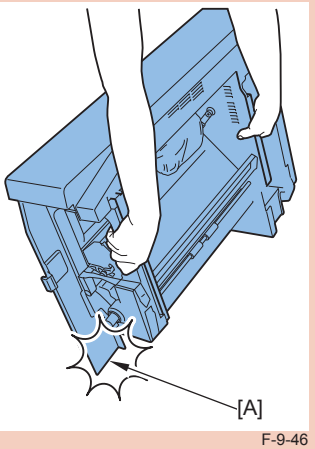
1) Lift the Buffer Path Unit straight upward, and then place the bottom of the Buffer Path Unit facing down.



F-9-45

CAUTION:

Do not move the Buffer Path Unit while making [A] area as the supporting point nor place it on the floor while the Unit is tilted; otherwise, [A] area can be deformed.



F-9-46

☐

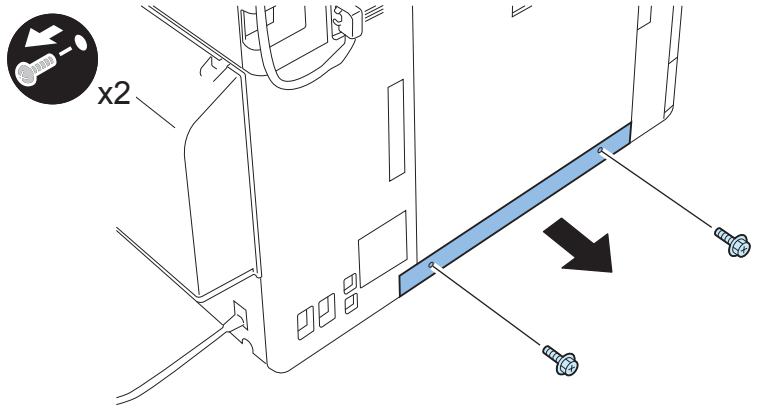
2) Remove the tapes.

Installation Procedure

☐

1) Remove the Left Lower Cover 1.

- 2 Screws (the removed Left Lower Cover and the screws are not used)

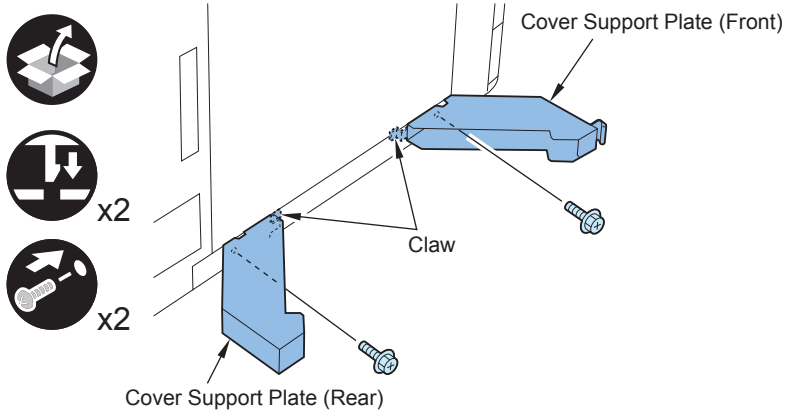


F-9-47

☐

2) Install the Cover Support Plate (Front) and the Cover Support Plate (Rear).

- 2 Claws
- 2 Screws (RS tightening; M4 x 8)

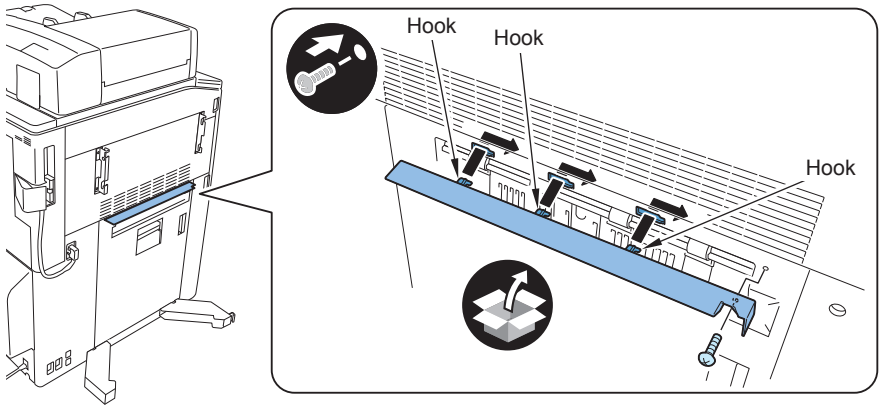


F-9-48

☐

3) Put the 3 hooks of the Delivery Outlet Upper Guide into the holes of the Reverse Door Cover, and slide in the direction of the arrow to install the Delivery Outlet Upper Guide.

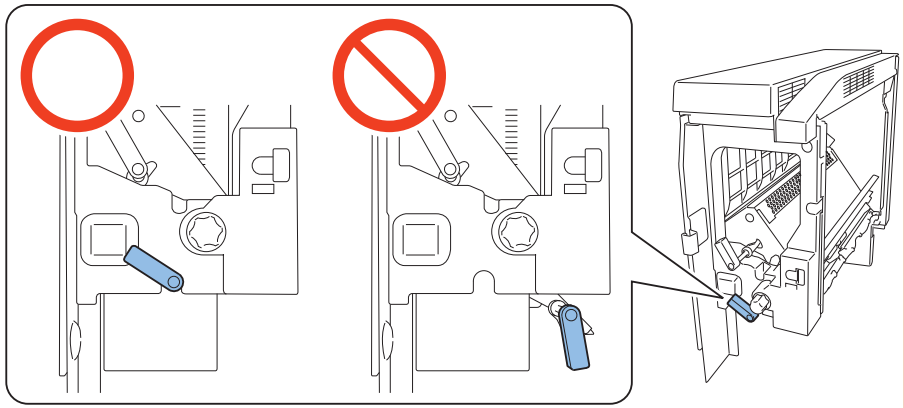
- 1 Screw (Binding; M4 x 10)



F-9-49

CAUTION:

Before installing the Buffer Path Unit to the Host Machine, check that the Jam Process Lever is positioned as shown in the figure.

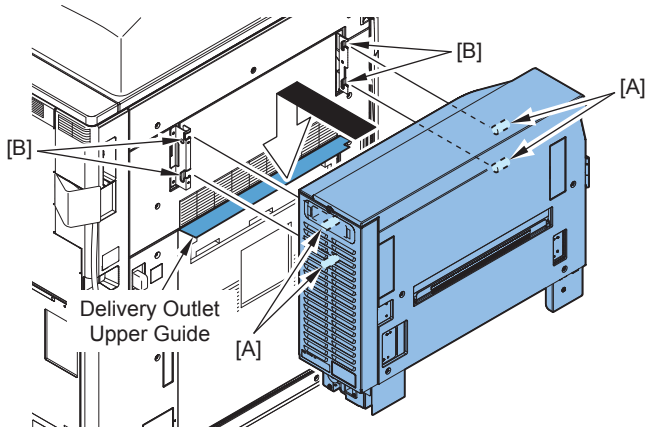


F-9-50

☐

4) Put the 4 shafts [A] of the Buffer Path Unit into the 4 U-shaped slots [B] on the left side of the host machine, and install the equipment.

CAUTION:
Be careful not to come in contact with Delivery Outlet Upper Guide at installation.

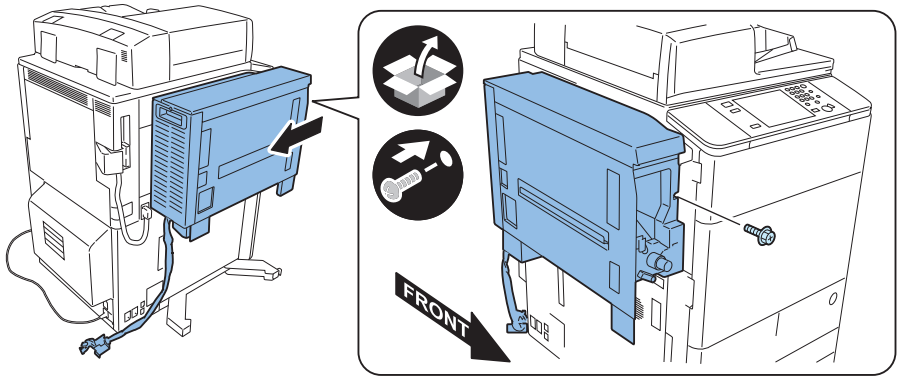


F-9-51

☐

5) Shift the Buffer Path Unit in the direction of the arrow, and fix it while pushing it on the Buffer Mounting Plate (Front).

- 1 Screw (RS tightening; M4 x 8)

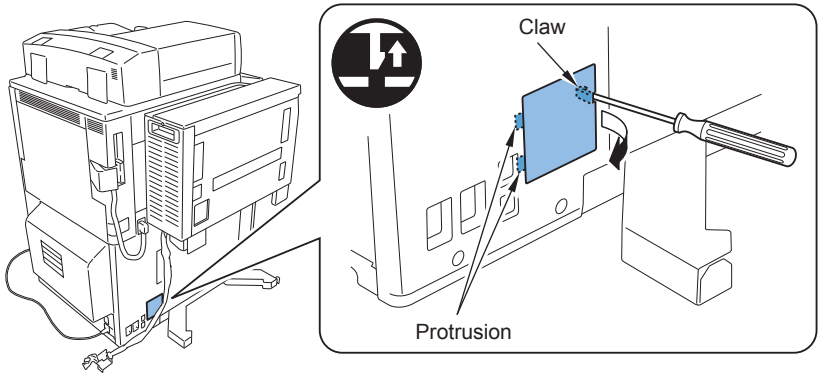


F-9-52

☐

6) Insert a flat-blade screwdriver, and remove the Connector Cover. (The removed Connector Cover will not be used.)

- 1 Claw
- 2 Protrusions



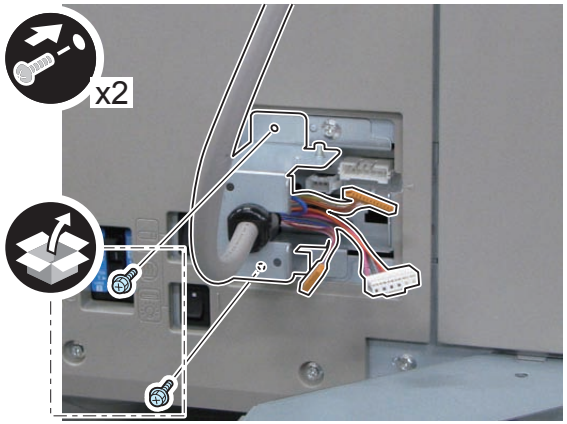
F-9-53

☐

7) Install the Connecting Harness Stopping Plate.

- 2 Screws (RS Tightening; M4 x 8)

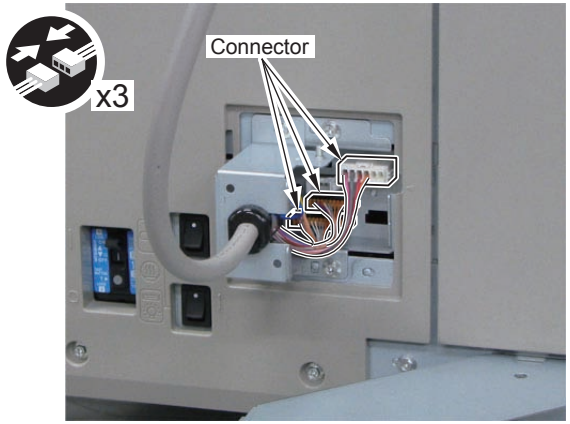
CAUTION:
Be careful not to trap the harnesses with the Connecting Harness Stopping Plate.



F-9-54

☐

8) Connect the 3 connectors to the host machine.

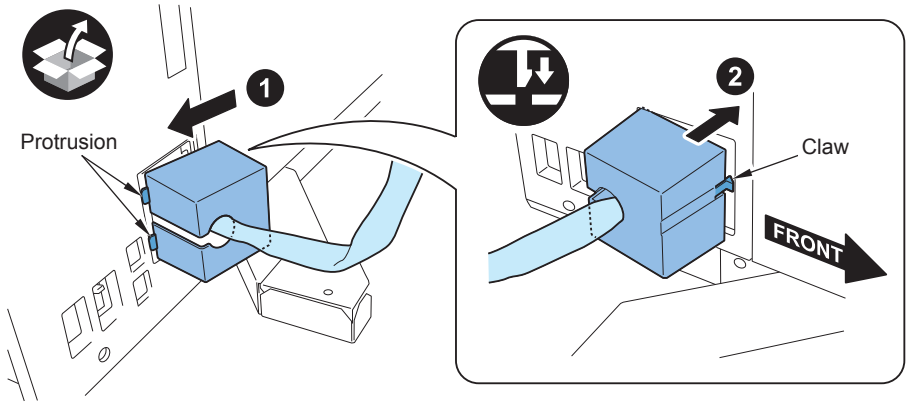


F-9-55

☐

9) Put the Buffer Cable through the groove of the Connecting Harness Cover, and install the Connecting Harness Cover to the host machine.

- 2 Protrusions
- 1 Claw



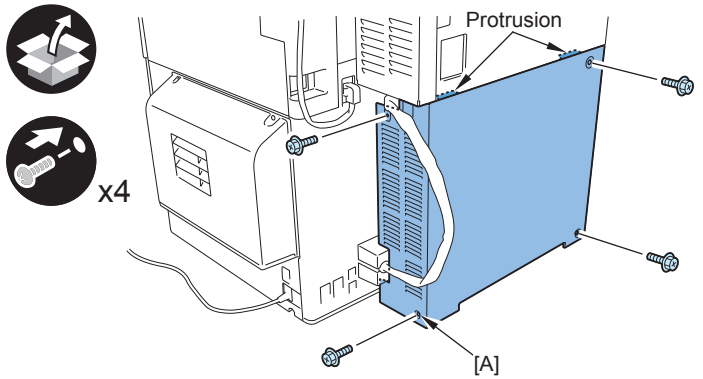
F-9-56

☐

10) Install the Buffer Left Lower Cover.

- 2 Protrusions
- 4 Screws (RS tightening; M4 x 8)

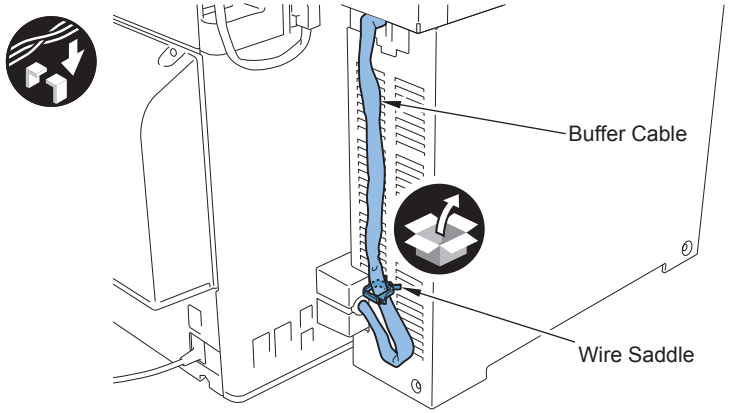
NOTE:
In case of connecting to the downstream equipment, secure the cover at the [A] point together with the Shunt Cable.



F-9-57

☐

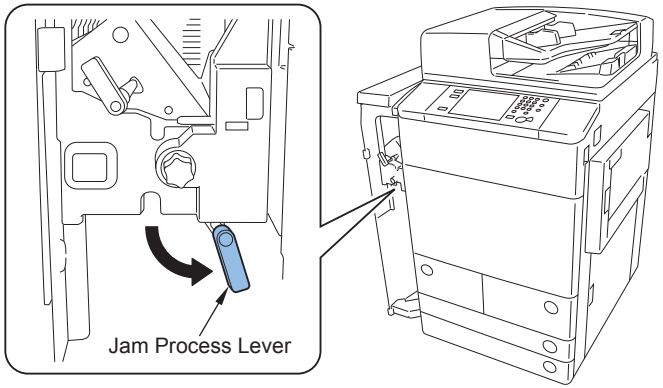
11) Install the Wire Saddle and secure the Buffer Cable with the Wire Saddle.



F-9-58

☐

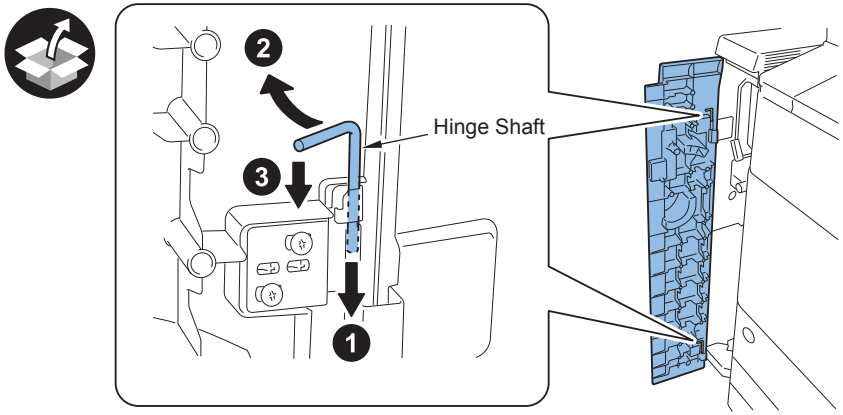
12) Rotate the Jam Process Lever in counter clockwise direction and make the machine in paper pass condition shown in the figure below.



F-9-59

☐

13) Align the hinge positions of the Buffer Front Cover and the Buffer Path Unit in 2 places, and insert the Hinge Shaft in the direction of the arrow.



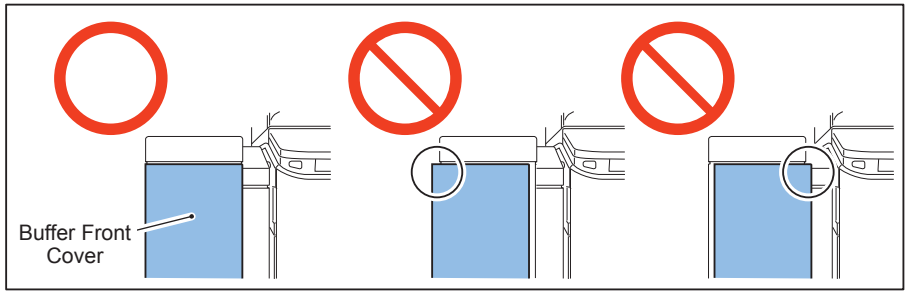
F-9-60

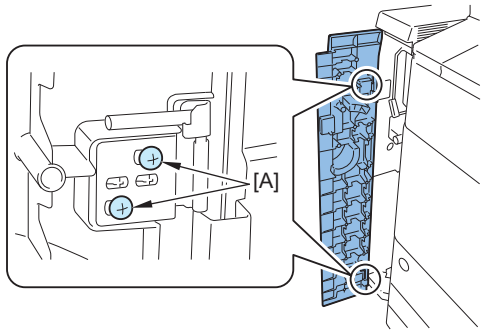
☐

14) Close the Buffer Front Cover.

☐

15) When the Buffer Front Cover is misaligned when viewed from the front, loosen 2 screws [A], and after adjusting the side position of the Front Cover, tighten screws.





F-9-61

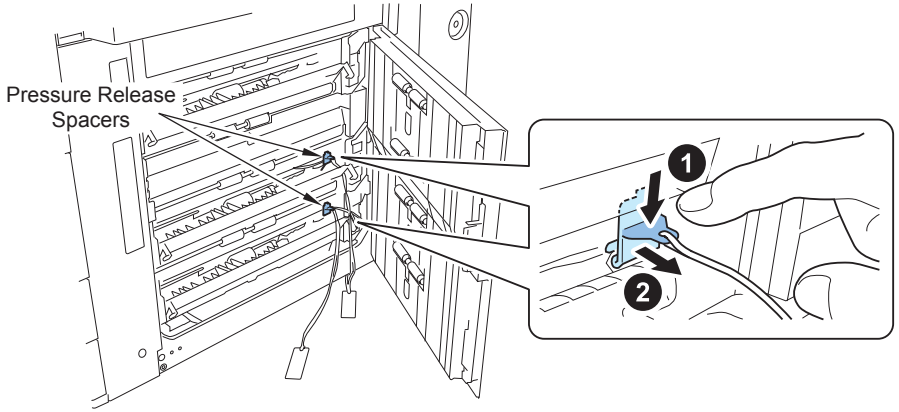
Installation of the Pickup Assembly

☐

1) Remove 2 pieces of shipping tags from Right Lower Cover 3.

☐

2) Open the Vertical Path Cover and remove the 2 Pressure Release Spacers at the pickup slot of each cassette.



F-9-62

☐

3) Close the Vertical Path Cover.

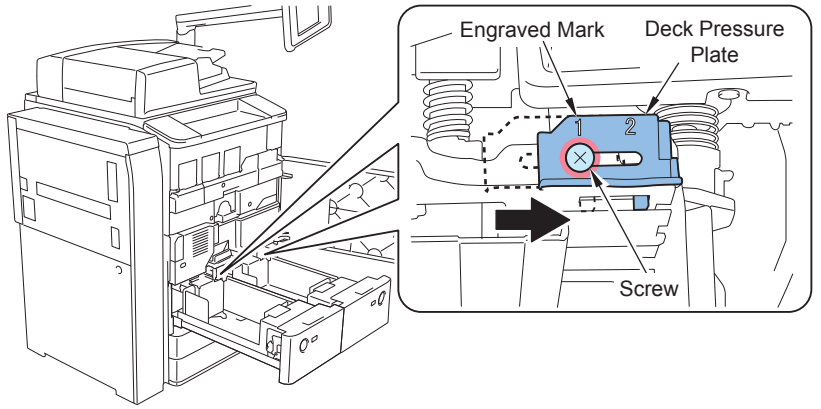
4) Open the Front Cover.

5) Press the Release Button, and open the Left/Right Deck.

NOTE:
Be sure to release the Release button slowly because it may not come out if releasing it abruptly.

☐

6) Loosen the screw to slide the Deck Pressure Plate in the direction of the arrow and check that the screw is positioned at the engraved mark “1”, and then tighten the screw.



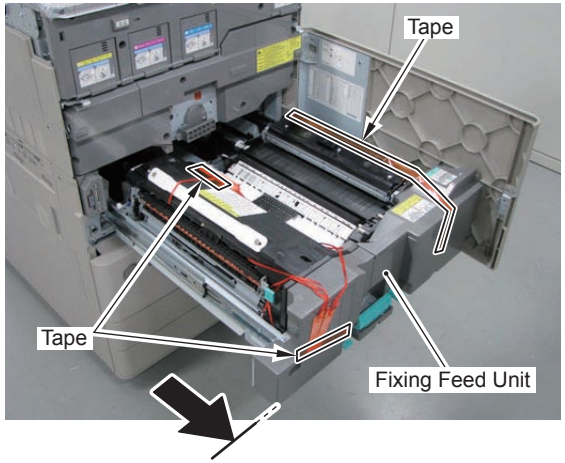
F-9-63

☐

7) Close the Left and the Right Decks.

☐

8) Remove the tape by pulling out the Fixing Feed Unit fully toward the front.



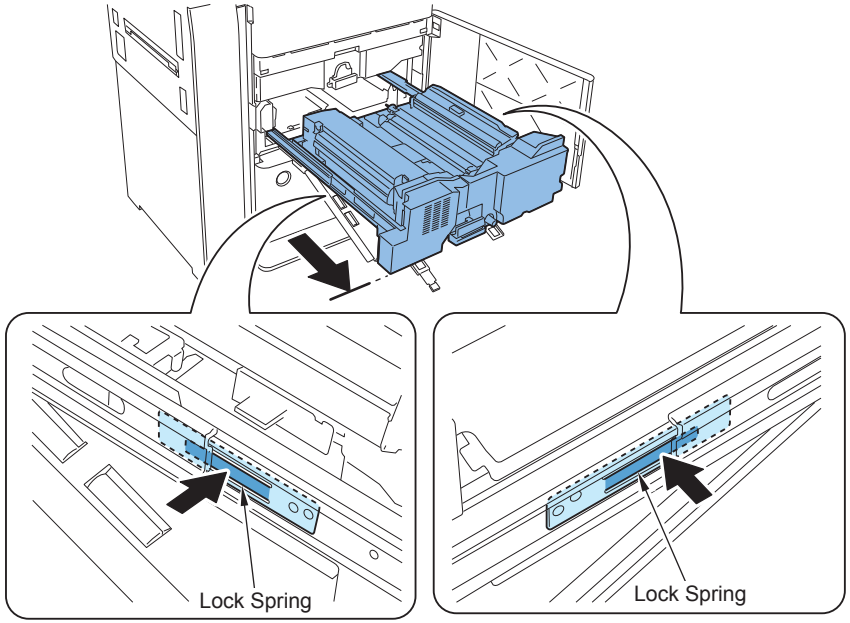
F-9-64

☐

9) Push the 2 Lock Springs of the Rails (both sides) to release the lock and further pull out the Fixing Feed Unit until it stops.

CAUTION:

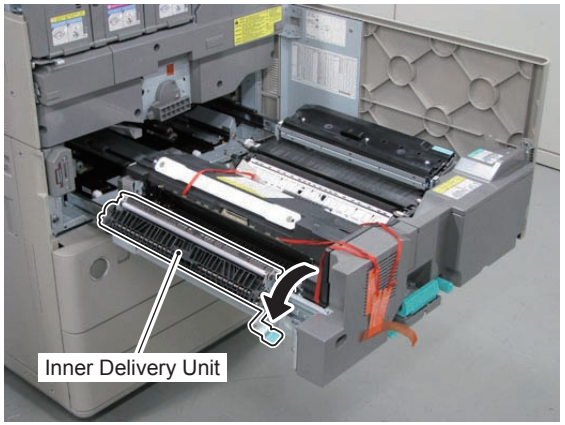
Do not release the Lock Springs at the rear side of the Rails (both sides); otherwise the Frame of the Fixing Feed Unit can be off.



F-9-65

☐

10) Open the Inner Delivery Unit.

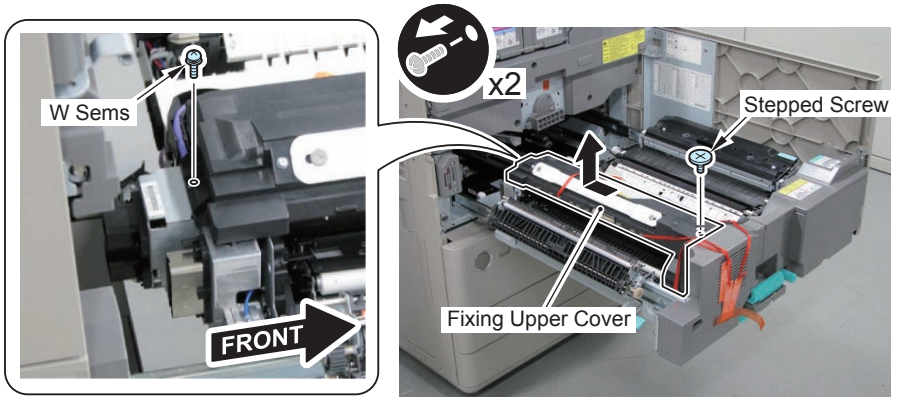


F-9-66

☐

11) Remove the Fixing Upper Cover.

- 1 Stepped Screw
- 1 Screw (W Sems)

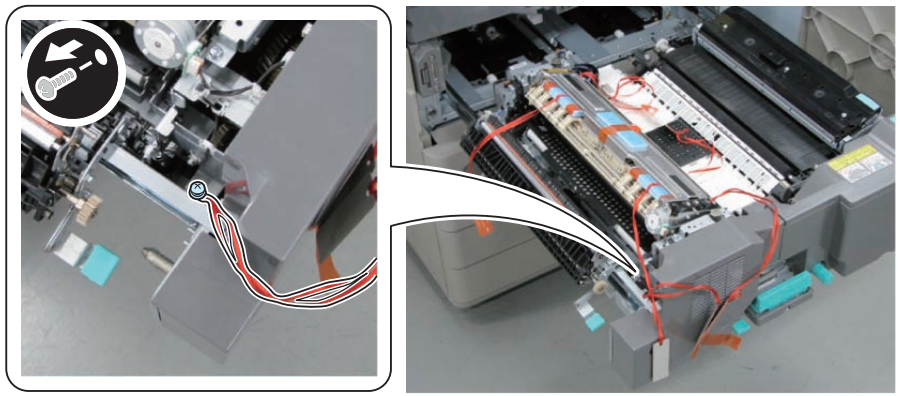


F-9-67

☐

12) Remove the Stepped Screw with the tag. (The removed Stepped Screw will not be used.)

NOTE:
It is desirable to keep the removed Stepped Screw (M3x18.5) because it may be used when moving the host machine.

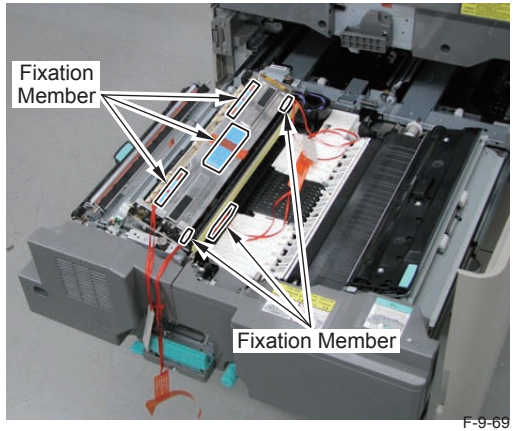


F-9-68

☐

13) Remove the 6 Fixation Members.

NOTE:
It is desirable to keep the Fixation Members because they may be used when moving the host machine.



F-9-69

☐

14) Install the Fixing Upper Cover. (2 Screws)
15) Close the Inner Delivery Unit.
16) Close the Fixing Feed Unit.

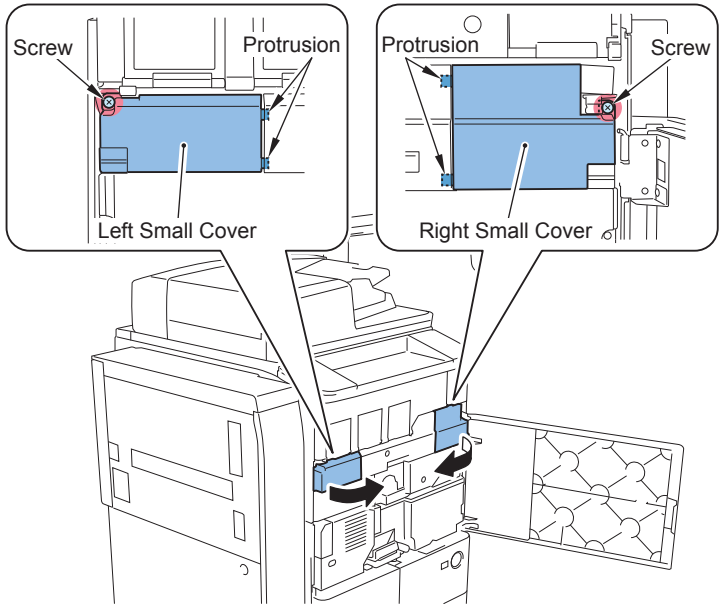
Installation of the Process Unit

☐

1) Remove the Left Small Cover and the Right Small Cover of the Process Unit Inner Cover.

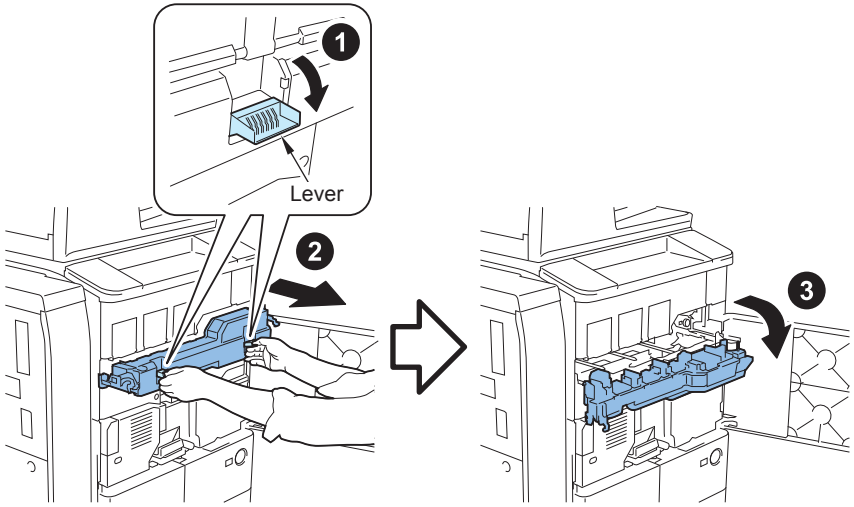
- 2 Screws
- 4 Protrusions

NOTE:
The 2 screws will not come off from the cover.



F-9-70

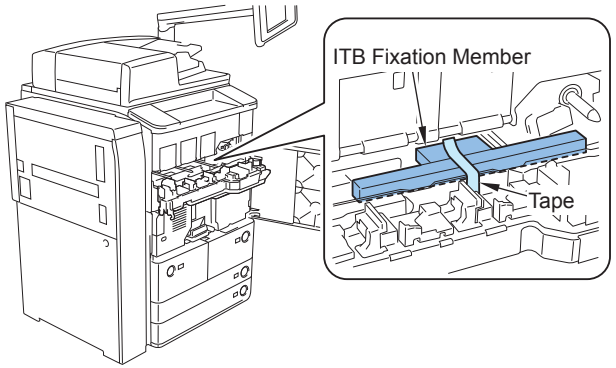
☐
2) Bring down the 2 Levers of the Process Unit Inner Cover to pull out to the front and open the Process Unit Inner Cover.



F-9-71

☐
3) Remove the tape, and remove the ITB Fixation Member.

NOTE:
It is desirable to keep the Fixation Member because they may be used when moving the host machine.



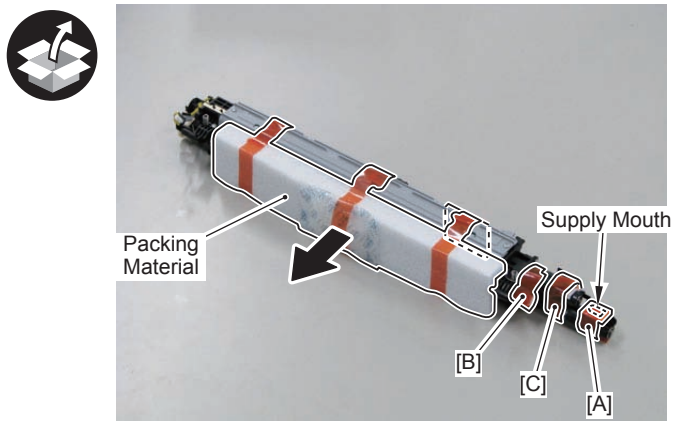
F-9-72

☐
4) Take out the Developing Assembly (Yellow) from the attached container box.

CAUTION:
- The color is specified for the Color Developing Assembly.
- Do not tilt or shake the Color Developing Assembly strongly when taking it out; otherwise, the toner can be scattered.

☐
5) Unpack the Developing Assembly (Yellow) to remove the packing material.

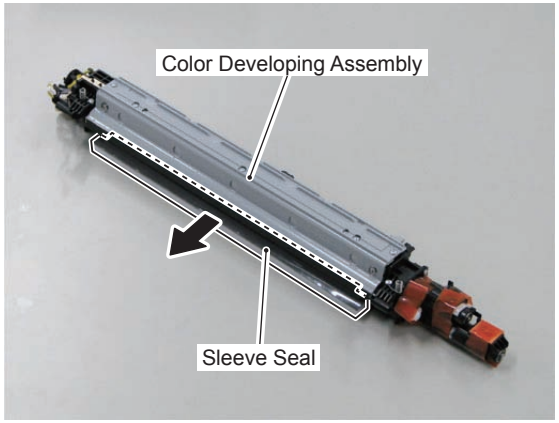
CAUTION:
- Be sure not to remove the tape [A] on the Supply Mouth until right before installing to the host machine.
- Be sure not to remove the tape [B] and [C].
- Be sure not to remove the tape [B] and [C] because they are fixing the roller in place to prevent it moving when removing the Sleeve Seal.
- When touching the Developing Assembly (Yellow), check that no foreign particle (especially metal chip) is attached on your hands before starting the work. (If foreign particle is attached on the Sleeve, it can cause image failure).
- After the unpacking work, do not put the Supply Mouth facing down because it can cause toner leak.



F-9-73

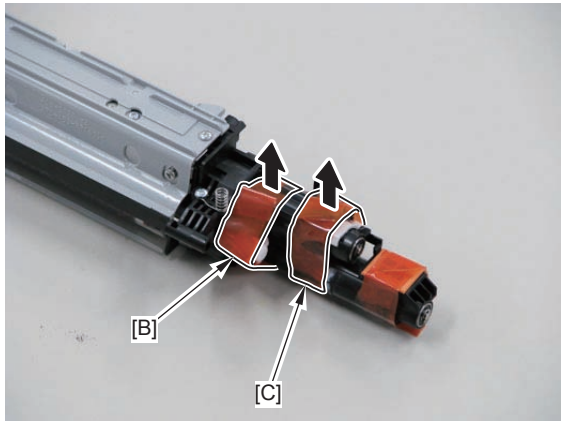
☐
6) Remove the Sleeve Seal from the Developing Assembly (Yellow).

CAUTION:
When removing the Sleeve Seal, be careful not to make any crease in the seal.
Otherwise, the Toner Blocking Sheet may be caught and damaged by the crease.



F-9-74

☐
7) Remove the tapes [B] and [C] fixing the Roller.

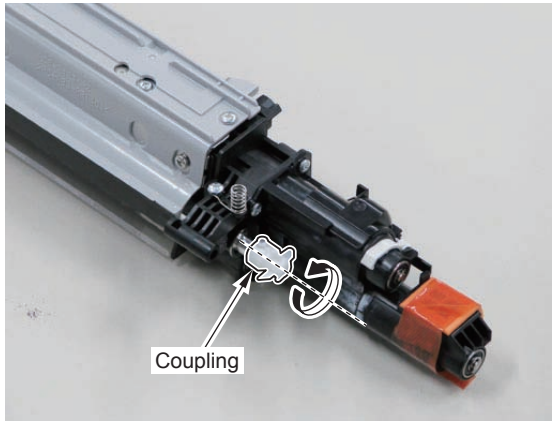


F-9-75

☐
8) Make the coupling of the Sleeve rotate a full turn or 1.5 turns in the direction of the arrow (counter clockwise).

CAUTION:
Do not turn the Developing Sleeve in the reverse direction.
By rotating it in the reverse direction, toner clots on the Sleeve may damage the Toner Blocking Sheet on the cylinder.

NOTE:
Toner clots are removed by rotating the Sleeve in the direction of the arrow (counter clockwise).



F-9-76

☐
9) Take out the Drum Unit (Yellow) from the attached packing box.

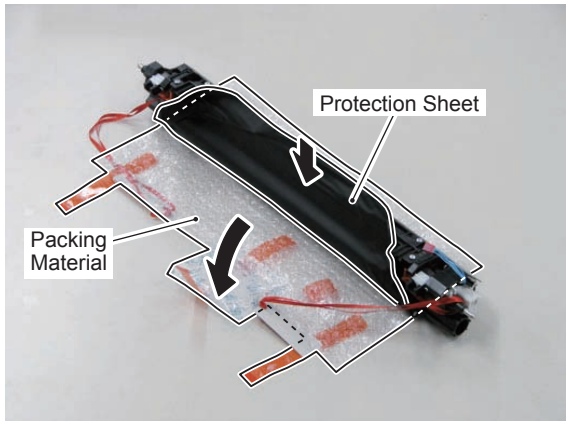
CAUTION:
The color is specified for the Color Drum Unit.

☐

10) Unpack the Drum Unit (Yellow), and remove the packing materials.

CAUTION:

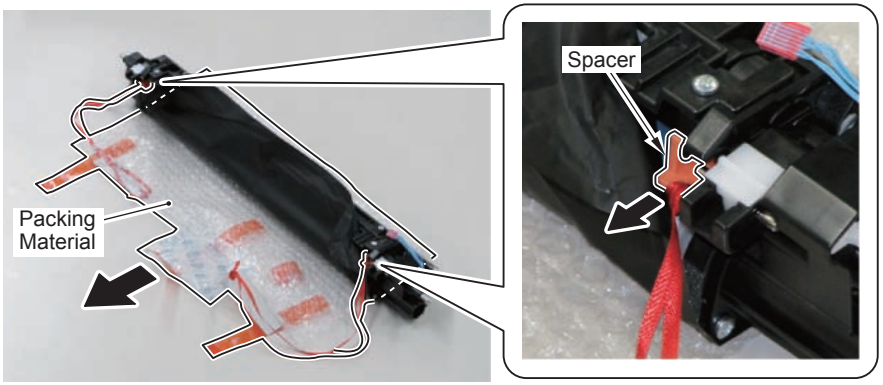
- Do not touch the Photosensitive Drum.
- Be sure not to remove the Protection Sheet during work.



F-9-77

☐

11) Pull the 2 Spacers in the direction of the arrow from the Drum Unit (Yellow) to remove.



F-9-78

☐

12) Release the lock of the Fixing Levers of the Color Drum Unit (Yellow) and lift the Fixing Levers up.

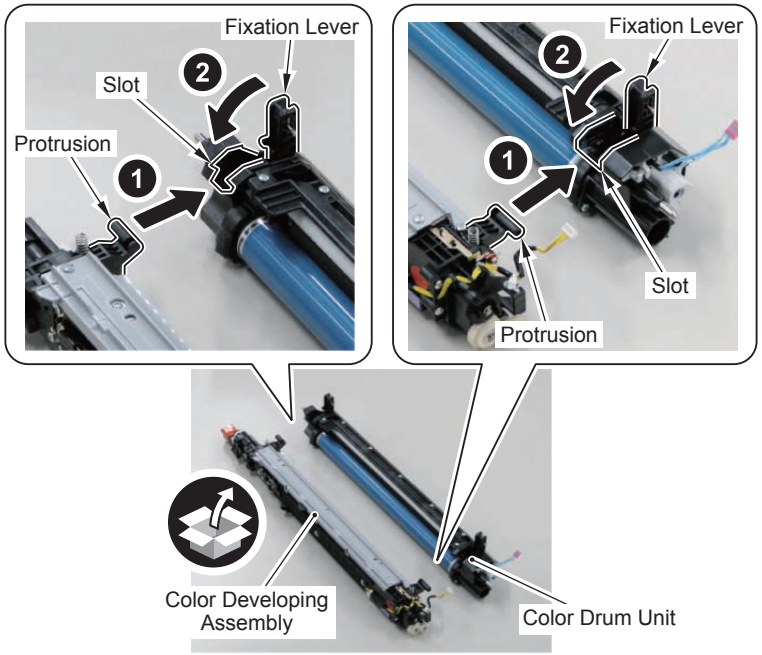
F-9-79

☐

13) Fit the 2 protrusions on the Developing Assembly (Yellow) into the Drum Unit (Yellow), and combine the Developing Assembly (Yellow) and the Drum Unit (Yellow). Then, turn the Fixation Lever in the direction of the arrow and assemble the Process Unit.

CAUTION:

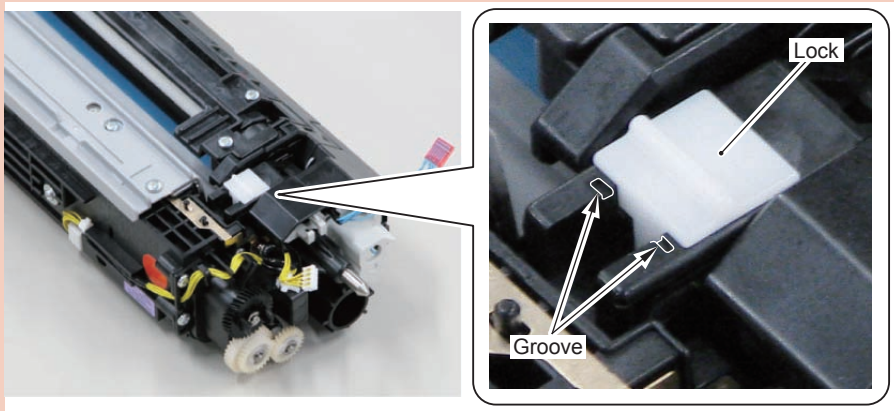
Be sure to use the correct color when assembling.



F-9-80

CAUTION:

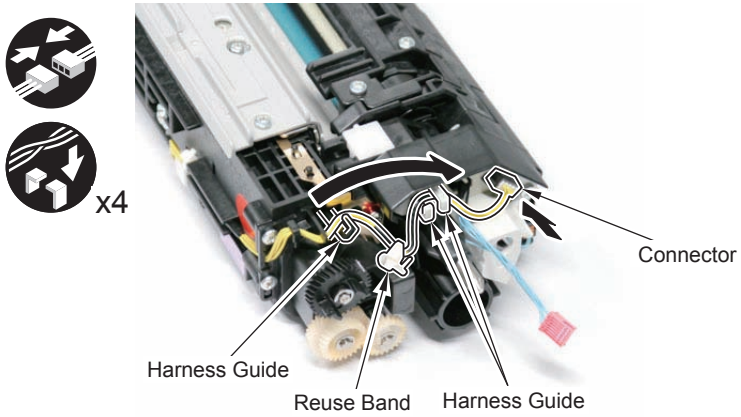
Check that the lock is engaged and also check that the groove is visible as shown in the figure. (If installing the Process Unit while the Fixation Lever is not properly locked, the unit may not be able to be removed from the host machine.)



F-9-81

☐

14) Secure the harness using the Harness Guide and the Reuse Band, and connect the connector.



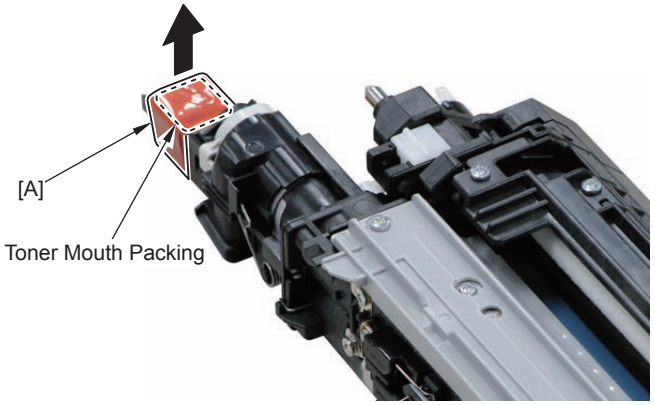
F-9-82

☐

15) Remove the tape [A] on the Supply Mouth and Toner Mouth Packing.

CAUTION:

Be sure to remove the Toner Mouth Packing certainly.



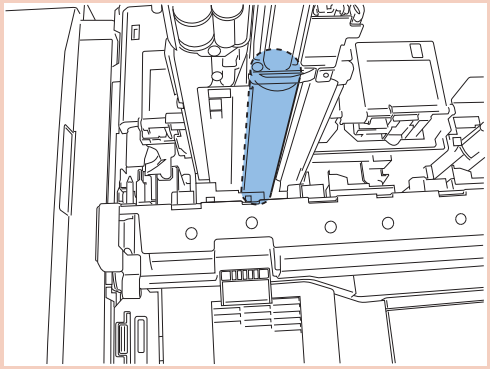
F-9-83

☐

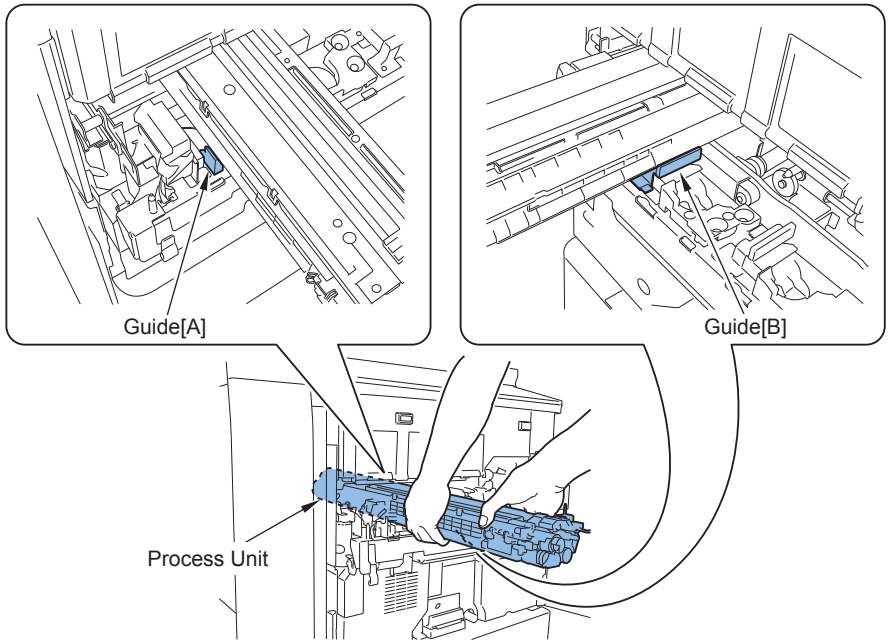
16) Hold the upper front area and the left side of the Process Unit as shown in the figure and place the rib at the right side of the Process Unit to the guide [A] of the Process Unit Inner Cover, and then fit the lower left side of the Process Unit to the guide [B] of the Process Unit Inner Cover to push in horizontally.

CAUTION:

Do not touch the Photosensitive Drum at the lower side with your hand when putting in the Process Unit.

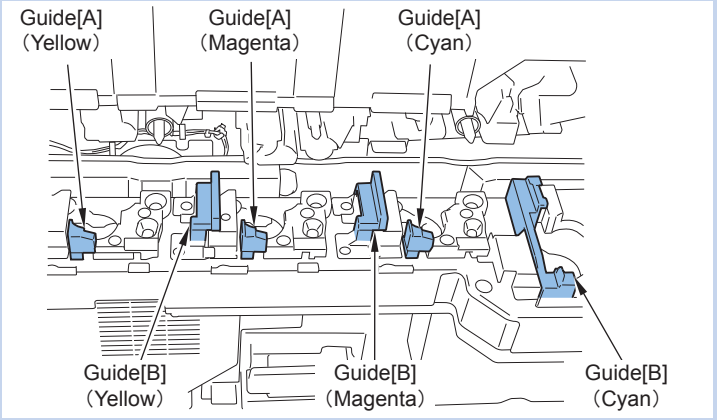


F-9-84



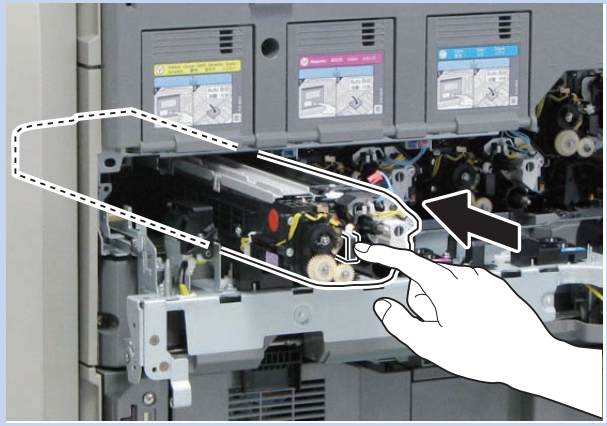
F-9-85

NOTE:
The guides positions [A] and [B] of the Process Unit Inner Cover differ between the Process Cartridge (Y) (M) and the Process Cartridge (C).
The positions of guide [A] and [B] are shown in the figure below.



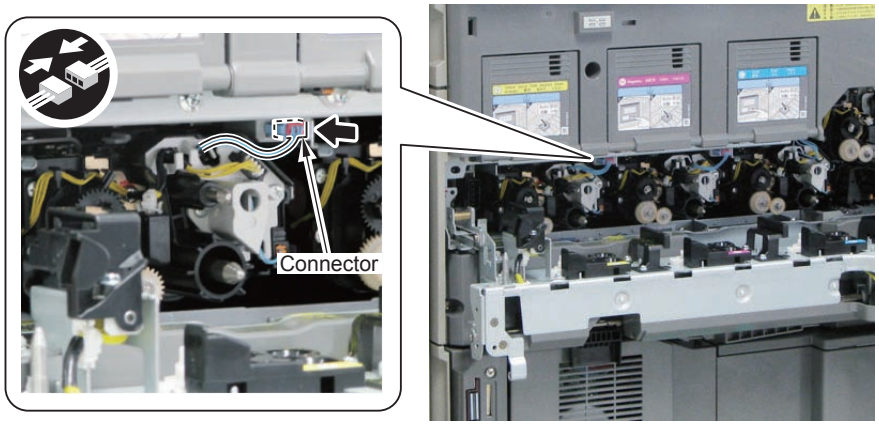
F-9-86

NOTE:
While holding the Process Unit with both hands, insert about 2/3 of it, and then push the handle of the Process Unit with your finger as shown in the figure to insert all the way until it stops.



F-9-87

☐
17) Connect the Connector.



F-9-88

☐
18) Repeat the step 4) through 17) and install the Magenta and Cyan Process Units in the same way.

CAUTION:
Be sure to use the correct color to install.

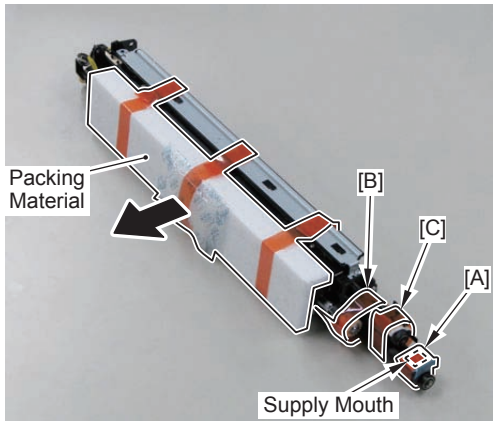
Installation of the Black Developing Assembly

☐
1) Take out the Black Developing Assembly from the attached packing box.

CAUTION:
Do not tilt or shake the Black Developing Assembly strongly when taking it out; otherwise, the toner can be scattered.

☐
2) Unpack the Black Developing Assembly and remove the packing material.

CAUTION:
- Be sure not to remove the tape [A] on the Supply Mouth until right before installing to the host machine.
- Be sure not to remove the tape [B] and [C].
- Be sure not to remove the tape [B] and [C] because they are fixing the roller in place to prevent it moving when removing the Sleeve Seal.
- When touching the Black Developing Assembly, check that no foreign particle (especially metal chip) is attached on your hands before starting the work. (If foreign particle is attached on the Sleeve, it can cause image failure)
- After the unpacking work, do not put the Supply Mouth facing down because it can cause toner leak.



F-9-89

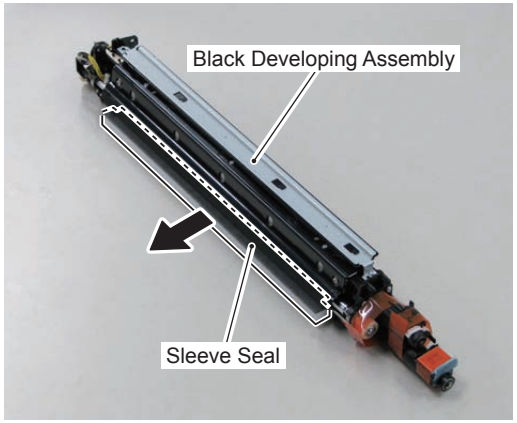
☐

3) Remove the Sleeve Seal from the Developing Assembly (Black).

CAUTION:

When removing the Sleeve Seal, be careful not to make any crease in the seal.

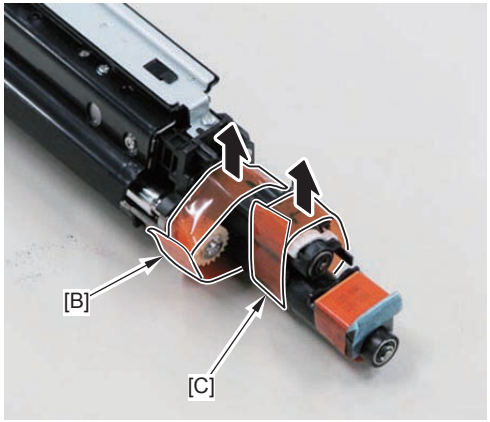
Otherwise, the Toner Blocking Sheet may be caught and damaged by the crease.



F-9-90

☐

4) Be sure to remove the tape [B] and [C] after removing the Sleeve Seal.



F-9-91

☐

5) Make the Gear of the Sleeve rotate a full turn or 1.5 turns in the direction of the arrow (counter clockwise).

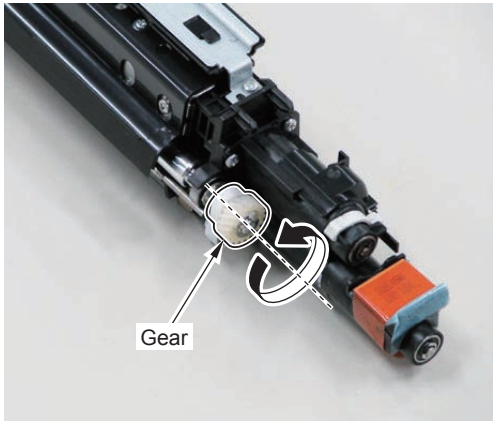
CAUTION:

Do not turn the Developing Sleeve in the reverse direction.

By rotating it in the reverse direction, toner clots on the Sleeve may damage the Toner Blocking Sheet on the cylinder.

NOTE:

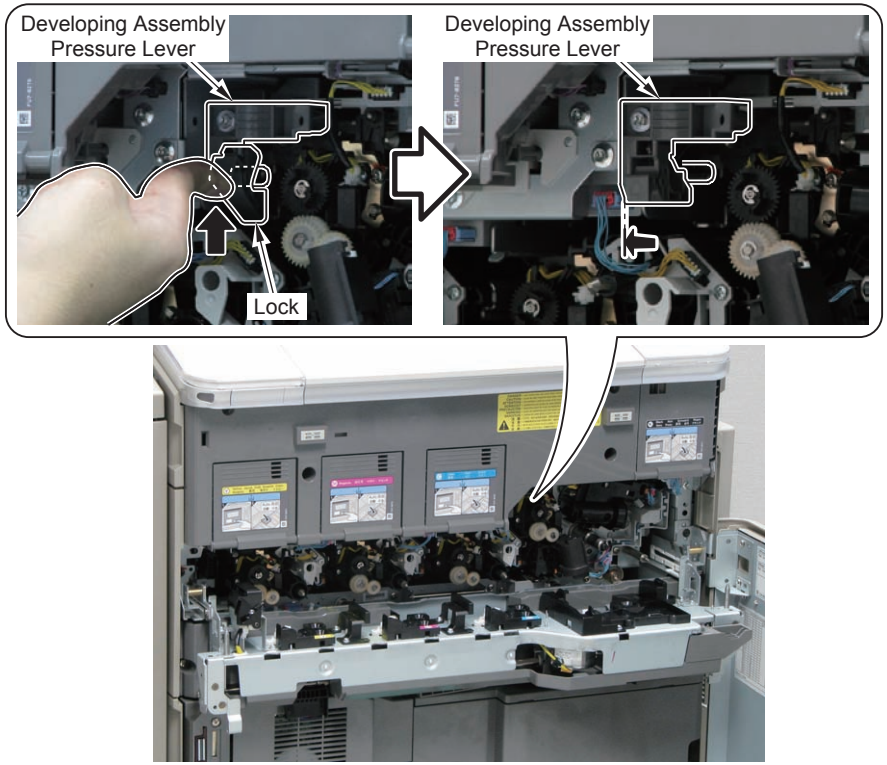
Toner clots are removed by rotating the cylinder in the direction of the arrow (counter clockwise).



F-9-92

☐

6) Move the lock of the Developing Assembly Pressure Lever in the direction of the arrow to release the fixation.

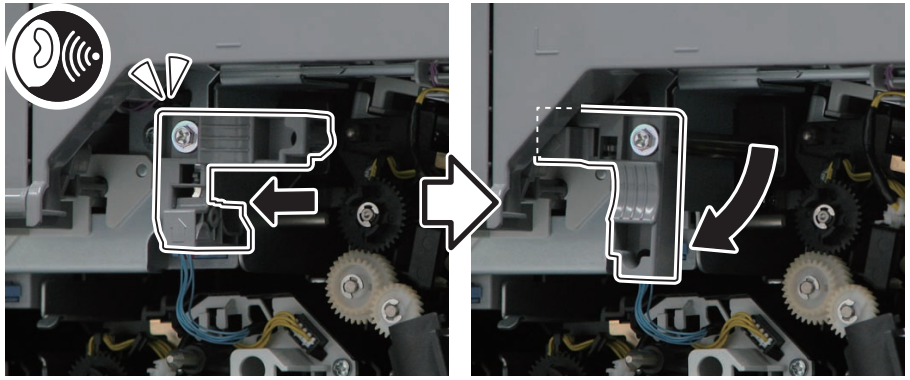


F-9-93

☐

7) Pull out the Developing Assembly Pressure Lever until it stops to release the pressure.

8) Turn the Developing Assembly Pressure Lever in the direction of the arrow.



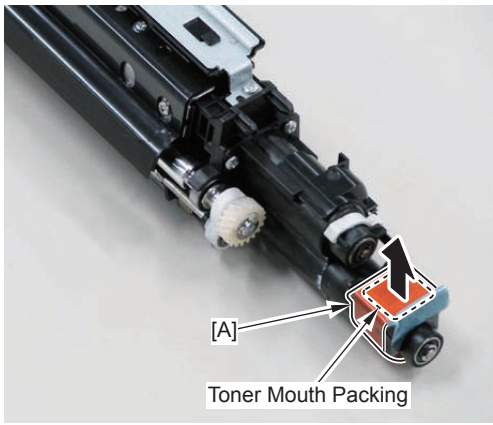
F-9-94

☐

9) Remove the tape [A] on the Supply Mouth and Toner Mouth Packing.

CAUTION:

Be sure to remove the Toner Mouth Packing certainly.



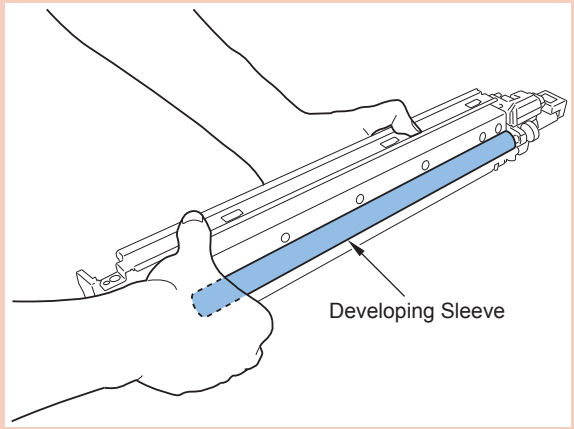
F-9-95

☐

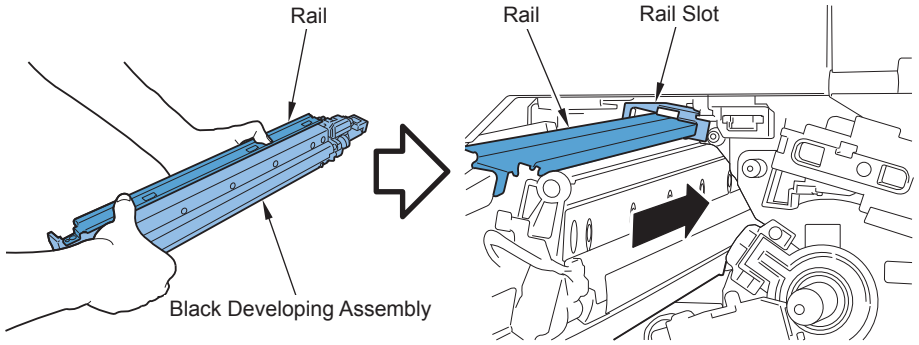
10) Hold the front right side and the left side of the Black Developing Assembly and fit the rail of the Black Developing Assembly to the rail slot to push in horizontally.

CAUTION:

Do not touch the Developing Sleeve with your hand when inserting the Black Developing Assembly.



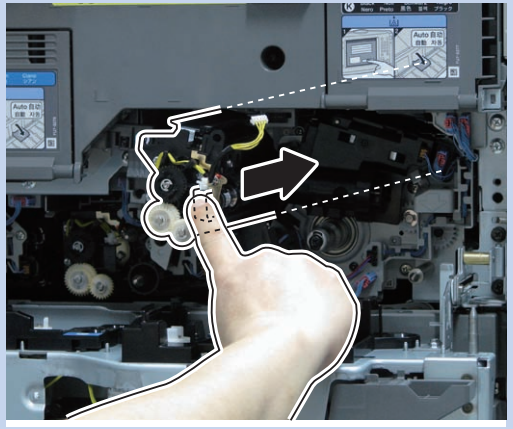
F-9-96



F-9-97

NOTE:

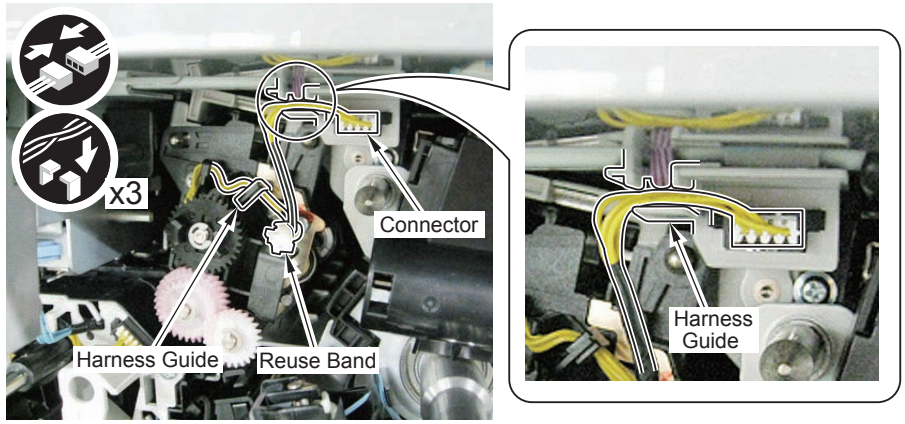
While holding the Black Developing Assembly with both hands, insert about 2/3 of it, and then push the handle of the Black Developing Assembly with your finger as shown in the figure to insert all the way until it stops.



F-9-98

☐

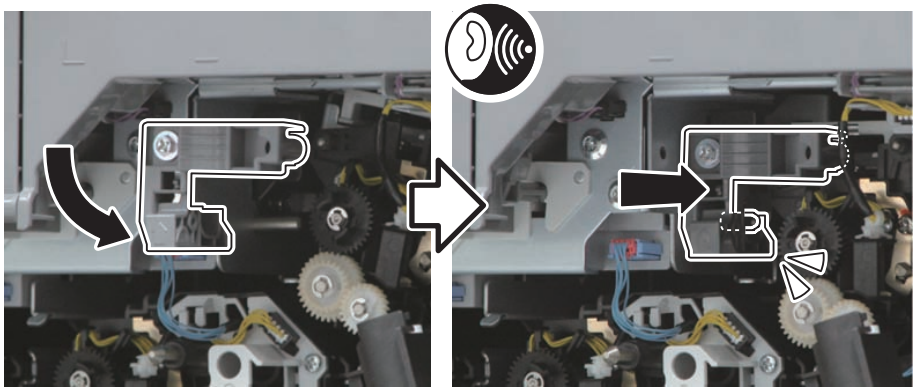
11) Secure the harness using the Harness Guide and the Reuse Band, and connect the connector.



F-9-99

☐

12) Turn the Developing Assembly Pressure Lever in the direction of the arrow, and push it in to apply pressure.



F-9-100

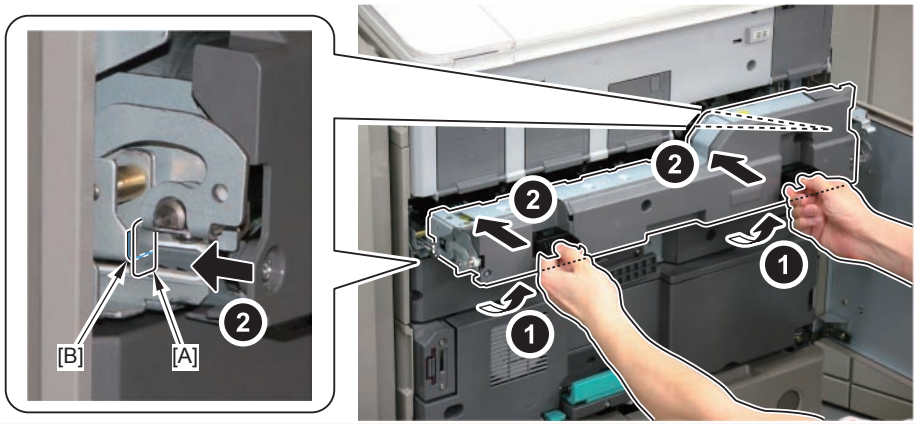
☐

13) Close the Process Unit Inner Cover.

CAUTION: How to Close the Process Unit Inner Cover

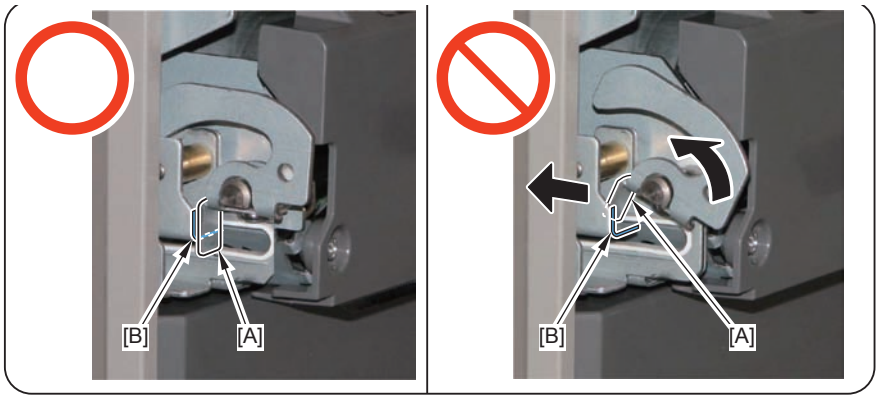
When closing the Process Unit Inner Cover, go through the following steps 1 through 3.

1. Hold the 2 levers and lift up the levers and Process Unit Inner Cover to the horizontal level.
2. While keeping the levers horizontally, push the Process Unit Inner Cover to the rear side. Then, push on the 2 Stopper Plates [A] of the right and left hooks of the Process Unit Inner Cover to the end faces [B] of the Hinge Shaft Holder at the right and left sides of the host machine.



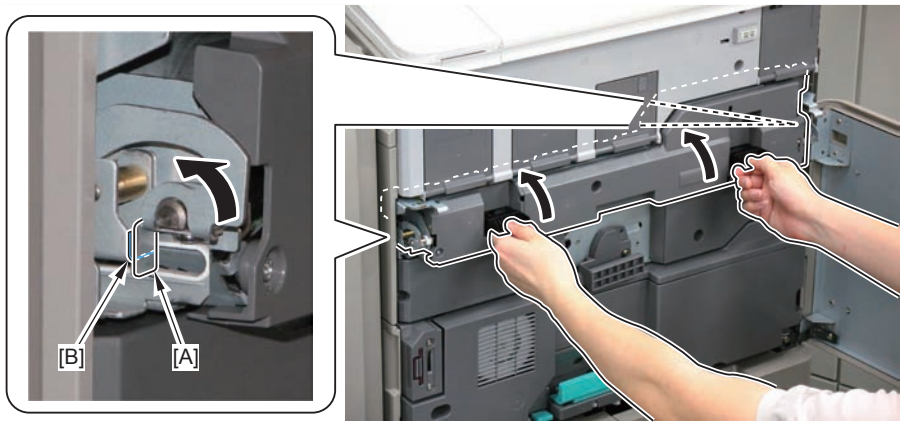
F-9-101

- If the Process Unit Inner Cover is pushed to the rear side without keeping the levers horizontally, the 2 Stopper Plates [A] of the hooks run over the inside of the Hinge Shaft Holder at the right and left sides of the host machine.
  Furthermore, if the Process Unit Inner Cover is pushed to the rear side with this condition, or if the levers are raised at a 90-degree angle and the Process Unit Inner Cover is closed, the Release Arm inside the Process Unit Inner Cover may get damage.



F-9-102

3. Raise the levers at a 90-degree angle further and close the Process Unit Inner Cover. The 2 hooks (right and left) of the Process Unit Inner Cover are hooked to the Hinge Shaft at the right and left sides of the host machine to lock.

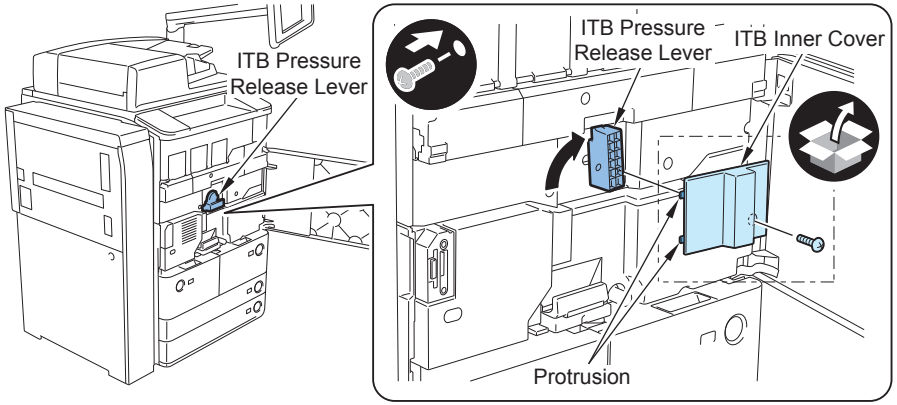


F-9-103

☐
14) Install the Left Small Cover and the Right Small Cover of the Process Unit Inner Cover. (Tighten the 2 screws.)

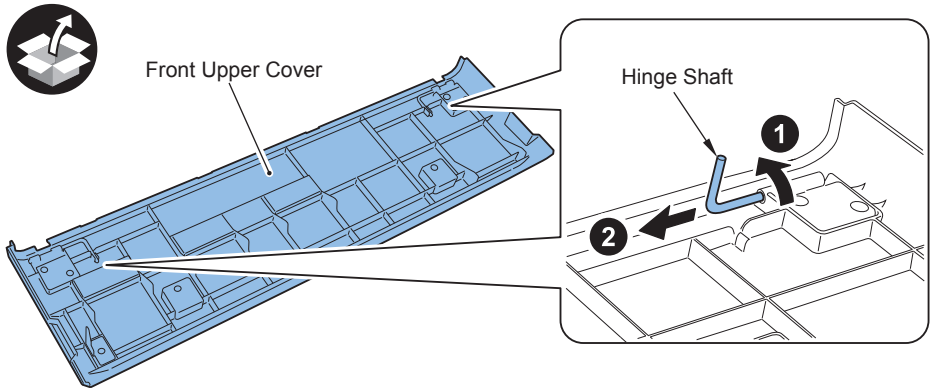
☐
15) Turn the ITB Pressure Release Lever in the direction of the arrow to make it engaged, and then install the ITB Inner Cover.

- 2 Protrusions
- 1 Screw (Binding; M4 x 10)



F-9-104

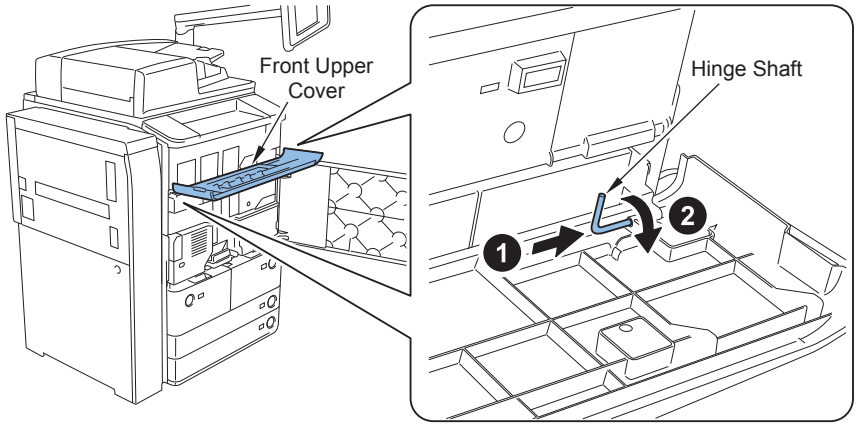
☐
16) Turn the 2 Hinge Shafts in the direction of the arrow to remove from the Front Upper Cover.



F-9-105

☐

17) Fit the Left and Right Hinge holes of the Front Upper Cover with the host machine and put the Hinge Shaft in the direction of the arrow to turn, and then install the Front Upper Cover.



F-9-106

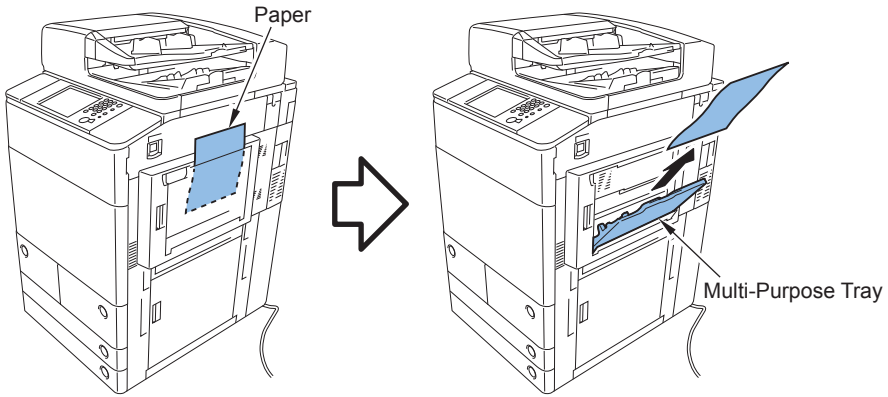
☐

18) Close the Front Upper Cover.

19) Close the Front Cover.

☐

20) Open the Multi-purpose Tray, and remove the papers.



F-9-107

Installing the USB Device Port (only with the products designed for Europe)

CAUTION:

Use the Card Reader prepared by each sales company.

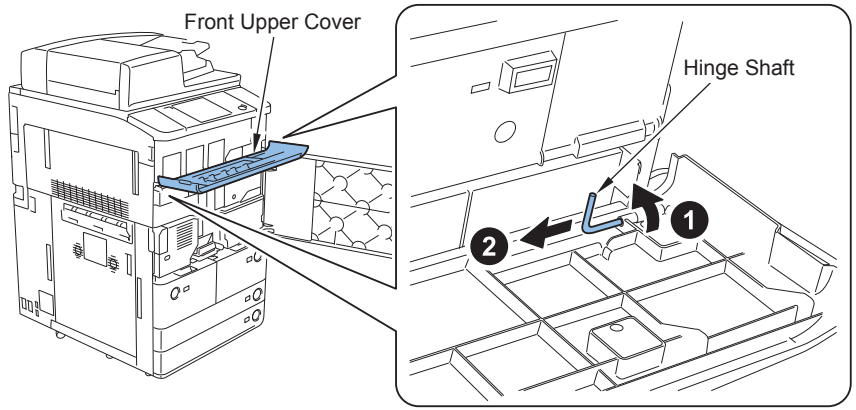
☐

1) Open the Front Cover.

☐

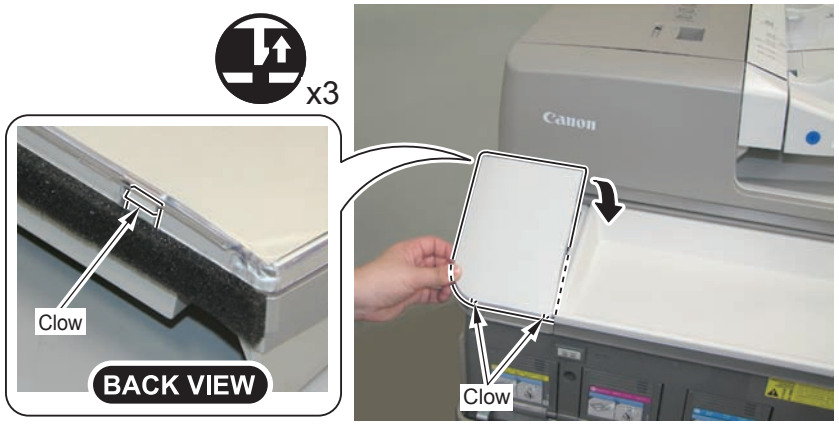
2) Remove the Front Upper Cover.

- 2 Hinge Shafts



F-9-108

☐
3) Remove the Clear Cover.
- 3 Claws



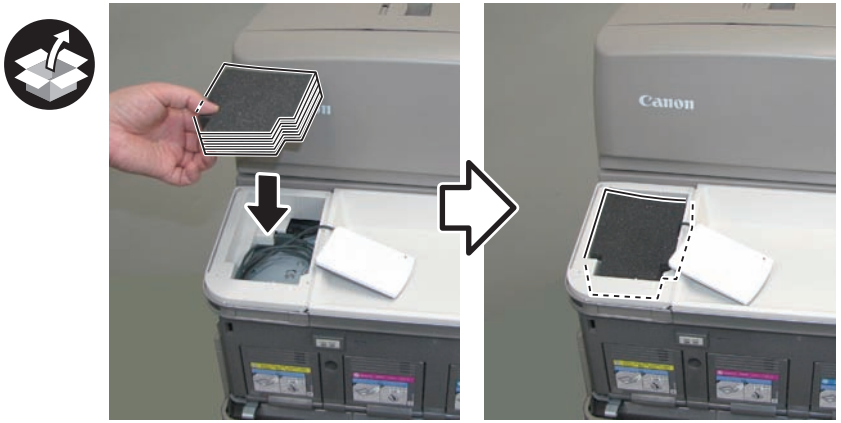
F-9-109

☐
4) After connecting the Card Reader to the DUH-V3 Board, place the cable inside the cover.

F-9-110

☐
5) Place the Cushions inside the Upper Left Cover.

NOTE:
Adjust the number of cushions to match the thickness of the Card Reader.



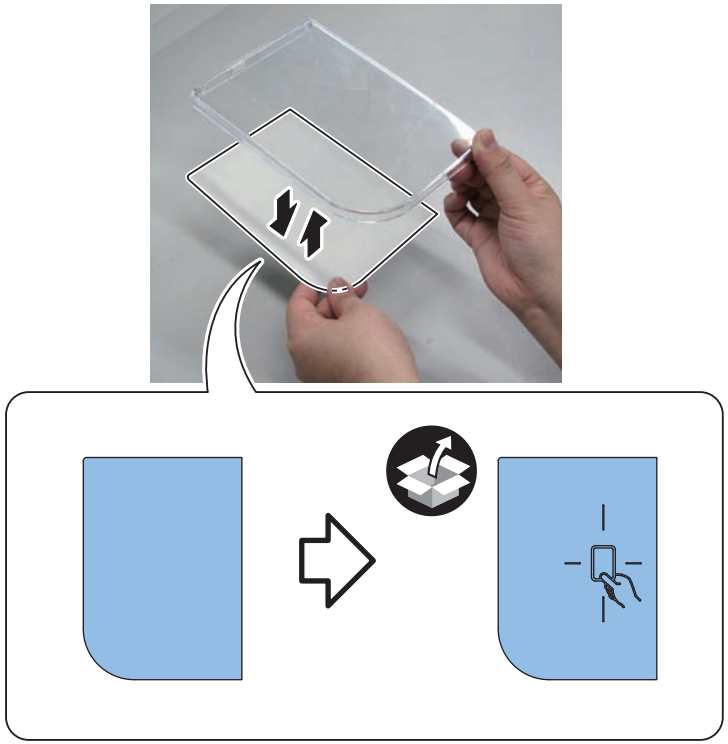
F-9-111

☐
6) Place the Card Reader on the Cushion.

F-9-112

☐

7) Remove the Device Port Sheet and replace with the Case Sheet. (The removed Device Port Sheet will not be used.)

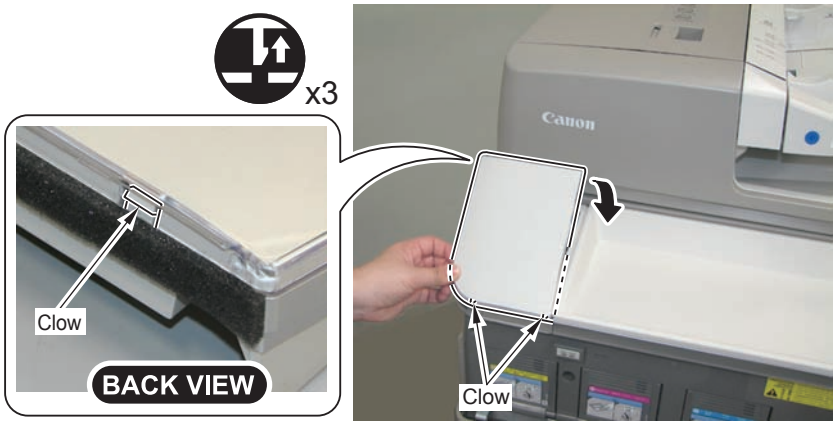


F-9-113

☐

8) Return the Clear Cover.

- 3 Claws



F-9-114

☐

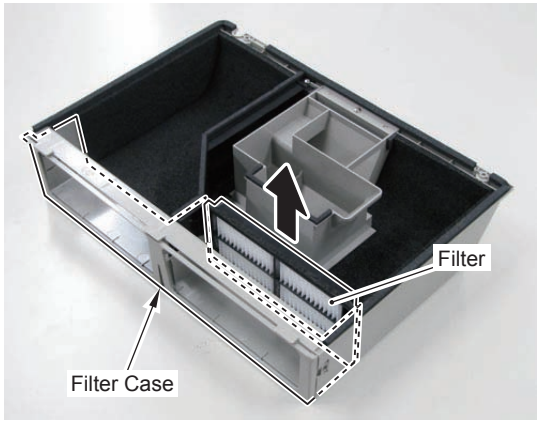
9) Install the Front Upper Cover. (2 Hinge Shafts)

10) Close the Front Cover.

Installation of the Noise Reduction Cover

☐

1) Remove the Filter from the Filter Case.

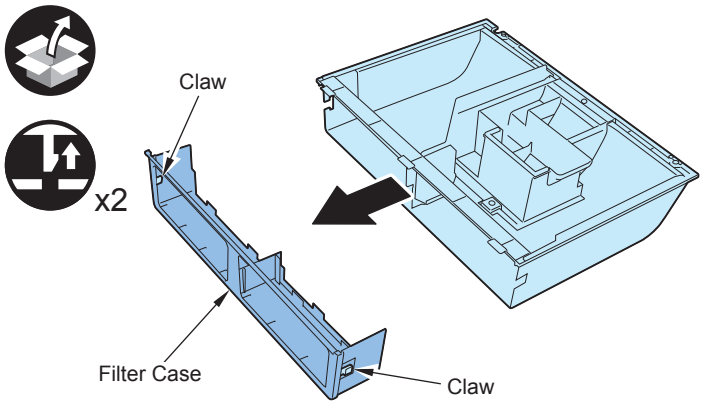


F-9-115

☐

2) Remove the Filter Case from the Noise Reduction Cover.

- 2 Claws



F-9-116

☐

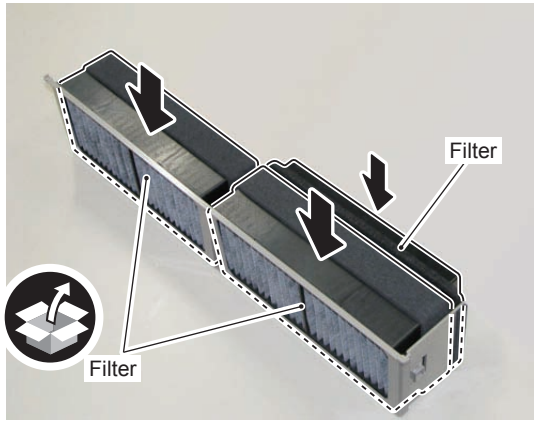
3) Open the 2 Filters included in the package.

CAUTION:

Do not unpack the Filter until just before installing the Filter.

☐

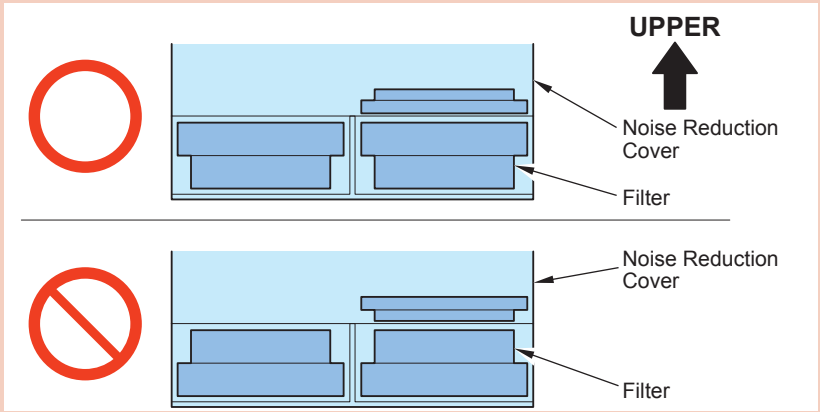
4) Install the 3 Filters to the Filter Case.



F-9-117

CAUTION:

Be sure to install the Filters in the correct direction.



F-9-118

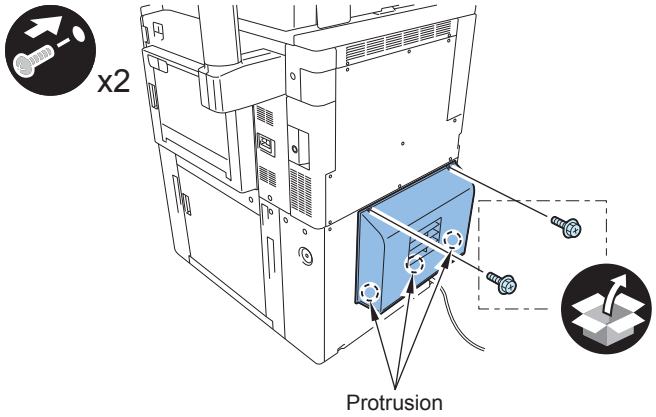
☐

5) Install the Filter Case to the Noise Reduction Cover.

☐

6) Install the Noise Reduction Cover.

- 3 Protrusions
- 2 Screws (RS tightening Black; M4 x 12)



F-9-119

Securing the Host Machine

☐

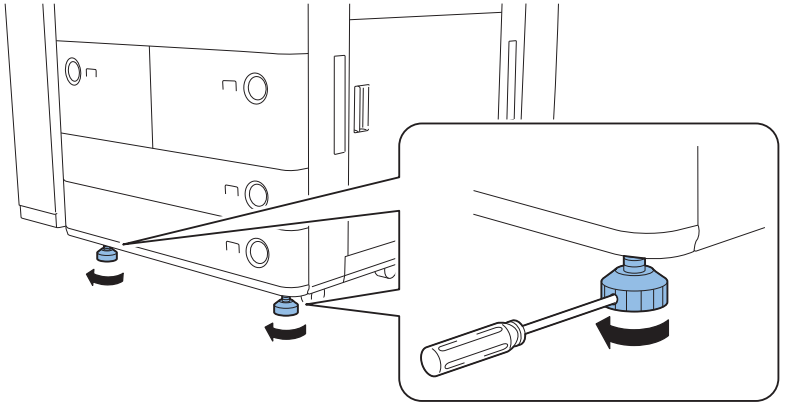
1) Confirm the position to install the host machine and turn the 2 adjusters with your hand until they closely contact the floor.

NOTE:
If you failed to turn the adjusters with your hand, use a screwdriver so that they can be turned by your hand.

☐

2) Use a screwdriver to turn the adjusters in the direction of the arrow to make them secured.

NOTE:
Securing of the adjuster is not earthquake resistant.



F-9-120

Other Installation Work

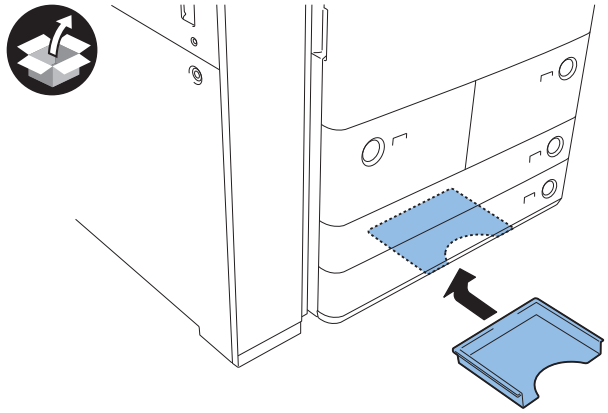
□

1) Open the cap of the Control Panel Right Cover, and store the Touch Pen. (Flat Control Panel Model)

NOTE:
For the Upright Control Panel Model, the Touch Pen is stored in the lower right of the Upright Control Panel.

□

2) Remove the release paper from the back side of the Service Book Holder, and affix the holder on the Base Plate of the host machine.



F-9-121

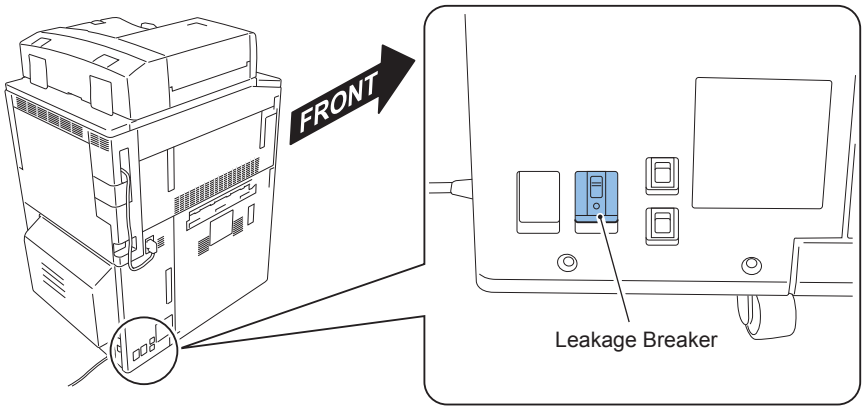
Preparation for the Main Power Connection

□

1) Insert the power plug into the outlet.

□

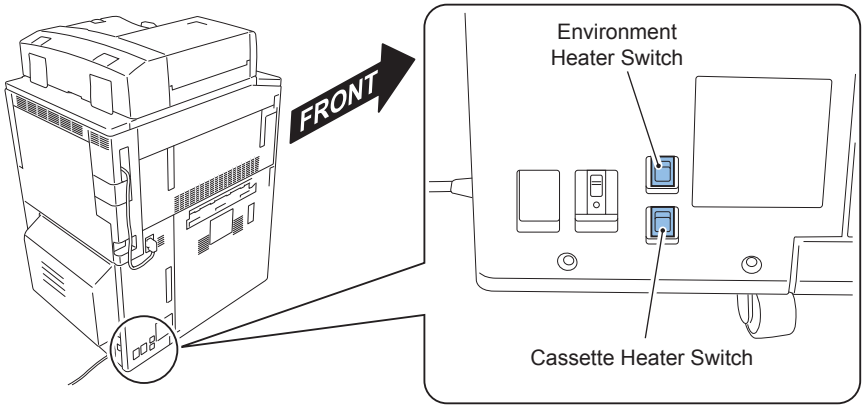
2) Check that the Leakage Breakers are turned ON.



F-9-122

□

3) Turn ON the Environment Heater Switch and the Cassette Heater Switch in accordance with the installation environment.
Set the environment switches in accordance with the installation environment.
In the case of high humidity environment, turn ON the Environment Switch.
(The Drum Heater is turned ON regardless of the main switch status.)



F-9-123

Turning ON the Main Power

NOTE:
If the Reader Unit or the Printer Cover is installed, be sure to refer to "Operation Check" in the Installation Procedure for the Reader Unit or the Printer Cover.

□

1) Remove the Protection Sheet on the Control Panel.
2) Open the Switch Cover and turn ON the main power.
3) When the message appears to prompt a shutdown, turn OFF the main power switch.

NOTE: Turning OFF the Main Power
1) Open the Switch Cover and turn OFF the main power switch.
2) Check that the control panel display and the main power lamp are OFF, and then disconnect the power plug.

Installation of the Toner Container

Follow the instruction on the UI to install the Toner Container.

□

1) Confirm the instruction for toner replacement and press the button.
2) Open the Front Upper Cover.
3) Select all colors from the “Replacement Required List” and press “Remove Toner Container” button.

NOTE:
The Toner Container is not installed when installing the Host Machine.

4) The Replacement Cover is automatically open.

NOTE:
Although a message telling “Remove Toner Container” is displayed on the UI, ignore the message because the Toner Container is not installed when installing the Host Machine.

5) Hold the Toner Container as shown in the figure and shake it for about 10 times.
6) Turn the safety cap of the Toner Container to remove.
7) Set a new Toner Container and close the Replacement Cover.
8) Repeat the procedure from step 5) to 7) to install the Toner Containers in other colors as well.

CAUTION:
Be sure to use the correct color to install.

9) Close the Front Upper Cover.
10) After supplying the toner, execute the following Service Mode (level 1).
COPIER > FUNCTION > INSTALL > SPLY-H-4

Settings at Installation

CAUTION:
Be sure to execute ITB neutral position adjustment.

□

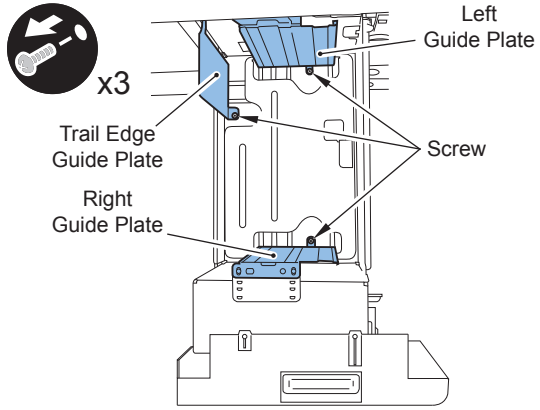
1) Execute the ITB neutral position adjustment.
Service Mode (level 1) > COPIER > FUNCTION > INSTALL > INIT-ITB
2) Execute the color displacement correction.
[Settings/Registration] > [Adjustment /Maintenance] > [Adjust Image Quality] > [Auto Correct Color Mismatch] > [Start]
3) Set the value of the following Service Mode (level 2) to "1". (only for the models in which the Upright Control Panel is equipped as standard)
COPIER > OPTION > FNC-SW > STND-PNL

NOTE:
By executing the above service mode, the animation of machine on the Control Panel screen can be switched from Flat Control Panel to Upright Control Panel.

Setting the Deck

□

1) Open the Front Cover.
2) Push the Deck Release Button to pull out the Left and the Right Decks to the front.
3) Remove the 3 screws fixing the Trailing Edge Guide Plate, Left Guide Plate, and Right Guide Plate in place, and fix each of the guide plates at user's desired size.



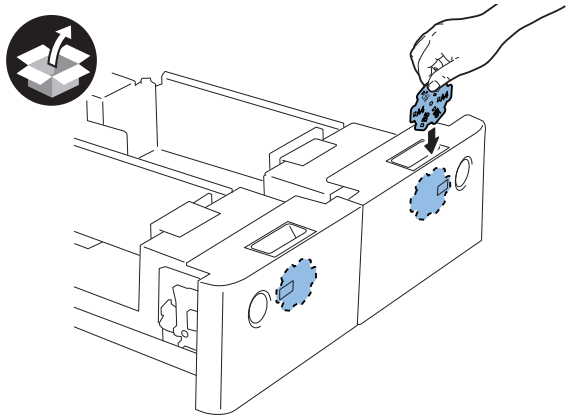
F-9-124

□

4) Put the specified size of papers in the Left/Right Deck.

□

5) Put the Size Plate L for the paper size in the Right Deck and the Left Deck through the opening at the handle area.



F-9-125

□

6) Close the Front Cover.
7) Push the Left/Right Deck in.
8) When the size is switched, register paper size for the Front Deck in Service Mode (level 1).
   Right Deck : COPIER > OPTION > CST > P-SZ-C1
   Left Deck : COPIER > OPTION > CST > P-SZ-C2
   A4 = 0 B5 = 1 LTR = 2
9) Exit from the Service Mode.

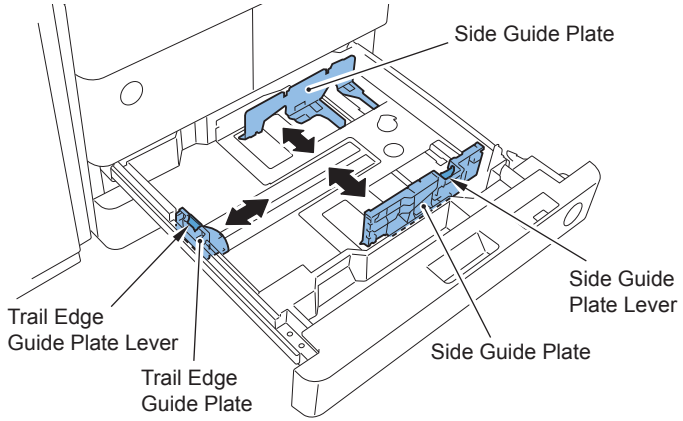
Setting the Paper Cassette

☐

1) Push the Cassette Release Button to pull out the Cassette to the front.

☐

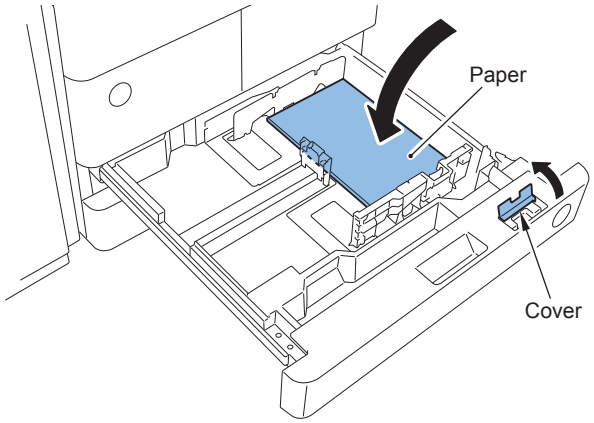
2) Hold the Lever of the Side Guide Plate to set the Side Guide Plate to the specified size.
3) Hold the Lever of the Trail Edge Guide Plate to set the Trail Edge Guide Plate to the specified size.



F-9-126

☐

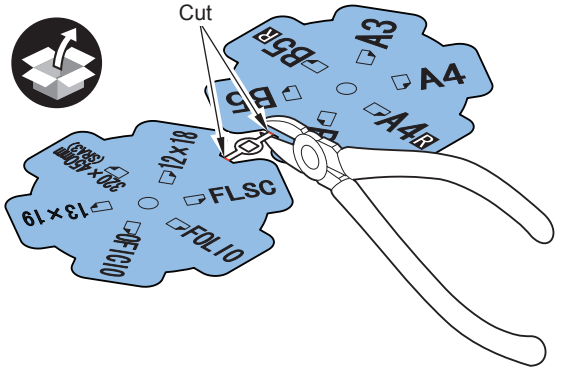
4) Set paper and open the cover at the insertion area of the Size Plate.



F-9-127

☐

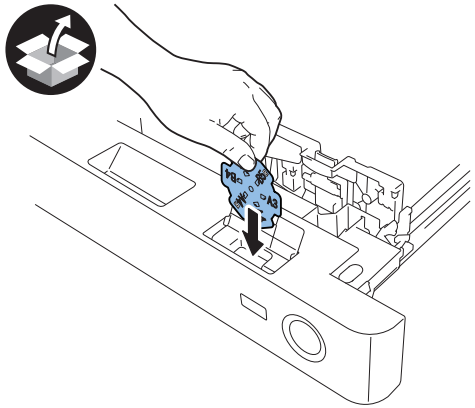
5) Cut the 2 points of the Size Plate R with nippers.



F-9-128

☐

6) Following the paper size, set the Size Plate R (unused size plates should be put together).



F-9-129

☐

7) Close the cover at the insertion area of the Size Plate and push in the Cassette.
8) Set another cassette as well.

NOTE:
Paper size is set to be automatically recognized.

Auto Gradation Adjustment

In the Case of the Machine with the Reader

Execute the Auto Gradation Adjustment to the following 3 modes: [Plain], [Heavy 1/Heavy 2], and [Heavy 3/Heavy 4].
However, when using 2 or more types of paper, it is necessary to execute all the modes corresponding to the types of paper.

CAUTION:
When using paper type to which Auto Gradation Adjustment is not executed, image failure or damage on the host machine may occur.

In the Case of Plain

1) Clean the Copyboard Glass surface of the host machine.
2) Set A3, A4, 11x17, or LTR size papers in a cassette. (Refer to the cassette settings.)
3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Plain] > [Full Adjustment].
4) Select the source of paper for test print, and press [OK].
5) From this point on, follow the instruction on UI.

In the Case of Heavy 1/Heavy 2

1) Clean the Copyboard Glass surface of the host machine.
2) Set heavy papers in a cassette, and select the heavy paper Settings screen.
3) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy 1/Heavy 2] > [Full Adjustment].
4) Select the source of paper for test print, and press [OK].
5) From this point on, follow the instruction on UI.

In the Case of Heavy 3/Heavy 4

1) Set heavy papers in a Multi Tray , and select the heavy paper Settings screen.
2) Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation] > [Heavy 3/Heavy 4] > [Full Adjustment].
3) Select the source of paper for test print, and press [OK].
4) From this point on, follow the instruction on UI.

In the Case of the Machine without the Reader

Select [Settings/Registration] > [Adjustment/Maintenance] > [Adjust Image Quality] > [Auto Adjust Gradation], and execute the item.

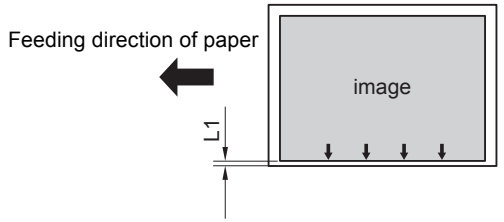
Image Position Adjustment

Left Edge Margin Adjustment (1st side)

CAUTION:
When performing adjustment of cassettes/decks, do not perform adjustment in service mode.

Adjustment of Cassette/Deck

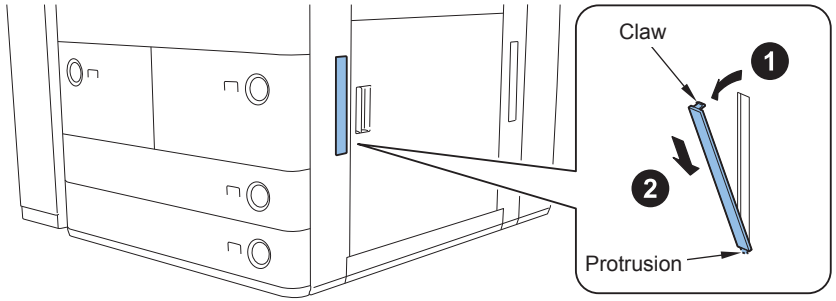
☐
Print from each cassette/deck, and check that the left edge margin of the image (L1) is within 2.5 +/- 1.5 mm.
If it is not within the range, execute adjustment by following the procedure below.



F-9-130

< In the Case of Right Deck >

☐
1) Remove the Handle Cover.
- 1 Claw
- 1 Protrusion

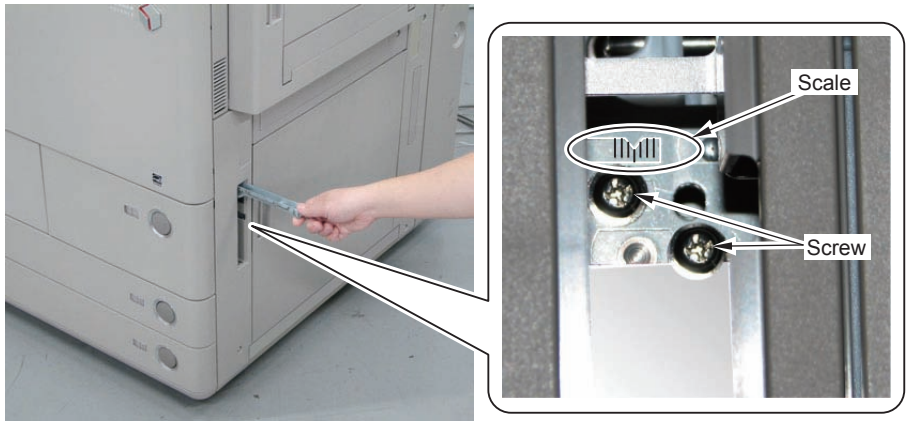


F-9-131

☐

2) Raise the handle, and check the position of the scale marked above the screws.

3) Loosen the 2 screws of the Hook Support Plate.

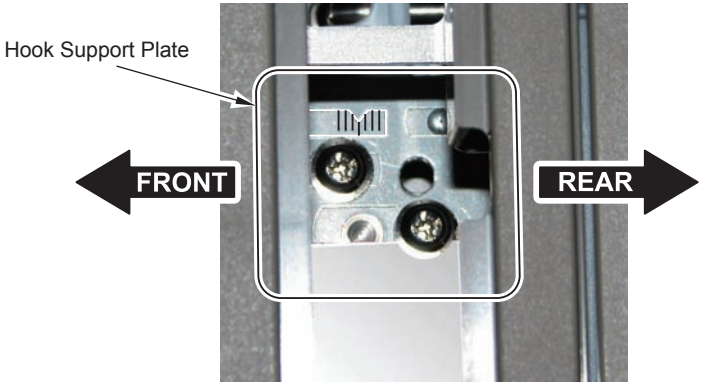


F-9-132

☐

4) According to the scale in which the position was checked in step 2, adjust the position of the Hook Support Plate.

- If the left edge margin is large, move the Hook Support Plate to the rear.
- If the left edge margin is small, move the Hook Support Plate to the front.



F-9-133

☐

5) Tighten the 2 screws loosened in step 3.

6) Print from the Right Deck, and check that the left edge margin is within 2.5 +/- 1.5 mm.

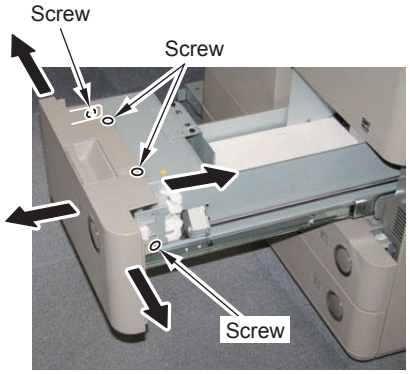
7) Install the Handle Cover.

NOTE:
If you are concerned with alignment of the Right Deck Cover, adjust the position of the Right Deck Cover as necessary.

☐

8) Loosen the 4 screws and adjust the position of the Right Deck Cover by referring to the scale.

9) Tighten the 4 screws that were loosened.

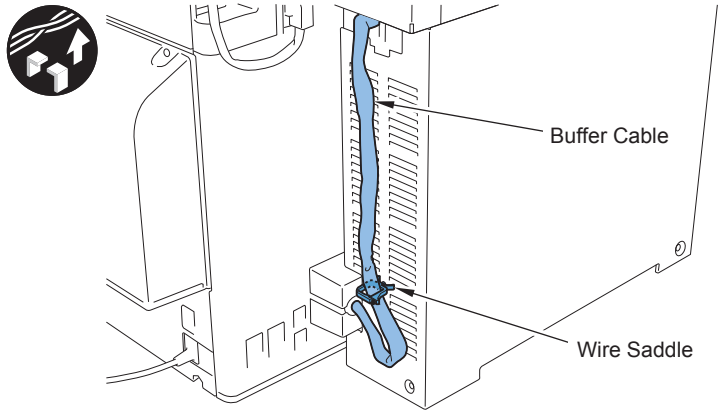


F-9-134

< In the Case of Left Deck >

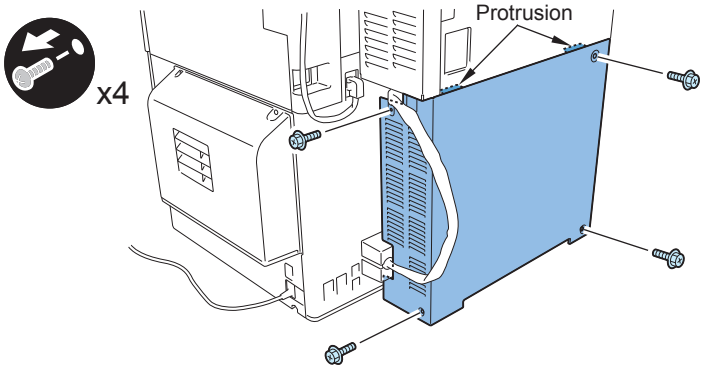
NOTE:
Only when the Buffer Path Unit is installed, perform steps 1-1) and 1-2).

☐
1-1) Free the Buffer Cable from the Wire Saddle.



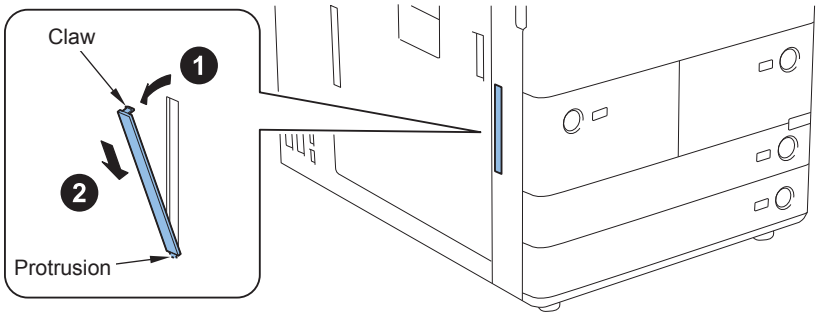
F-9-135

☐
1-2) Remove the Buffer Left Lower Cover.
- 4 Screws
- 2 Protrusions



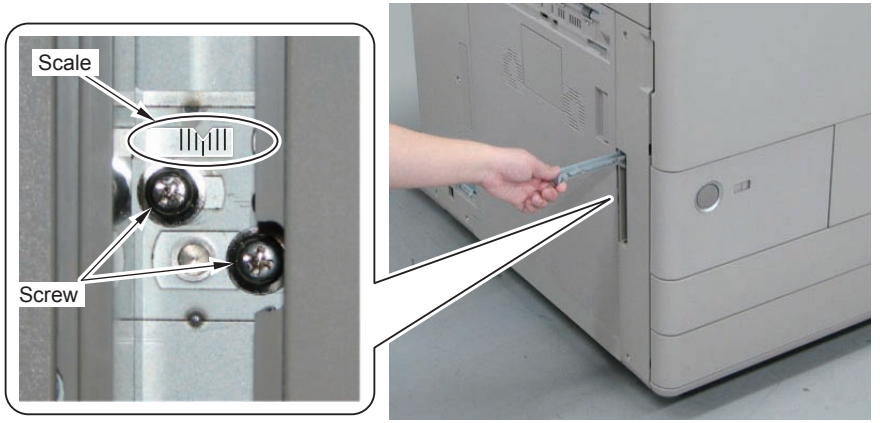
F-9-136

☐
2) Remove the Handle Cover.
- 1 Claw
- 1 Protrusion



F-9-137

☐
3) Raise the handle, and check the position of the scale marked above the screw.
4) Loosen the 2 screws of the Hook Support Plate.

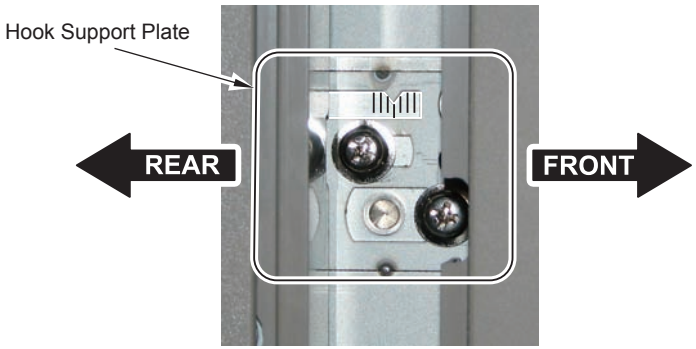


F-9-138

☐

5) According to the scale in which the position was checked in step 3, adjust the position of the Hook Support Plate.

- If the left edge margin is large, move the Hook Support Plate to the rear.
- If the left edge margin is small, move the Hook Support Plate to the front.



F-9-139

☐

6) Tighten the 2 screws loosened in step 4.

7) Print from the Left Deck, and check that the left edge margin is within 2.5 +/- 1.5 mm.

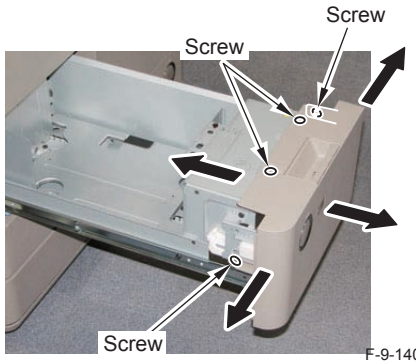
8) Install the Handle Cover.

NOTE:
If you are concerned with alignment of the Left Deck Cover, adjust the position of the Left Deck Cover as necessary.

☐

9) Loosen the 4 screws and adjust the position of the Left Deck Cover by referring to the scale.

10) Tighten the 4 screws that were loosened.



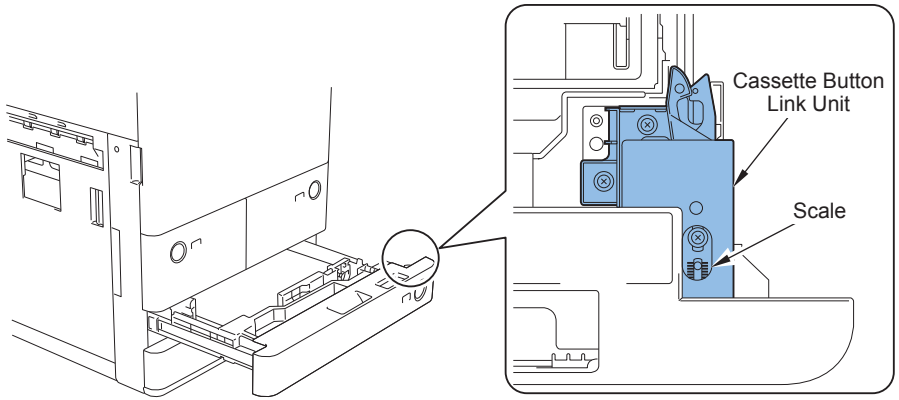
F-9-140

< In the Case of Cassette 3, 4 >

☐

1) Pull out the Cassette.

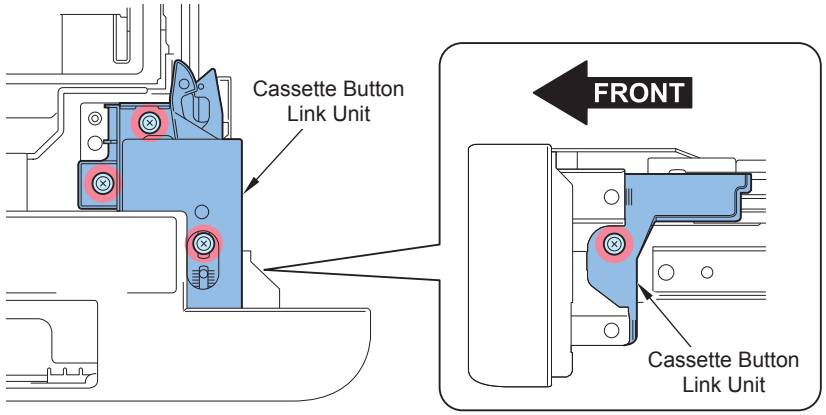
2) Check the position by the scale of the Cassette Button Link Unit.



F-9-141

☐

3) Loosen the 4 screws of the Cassette Button Link Unit.

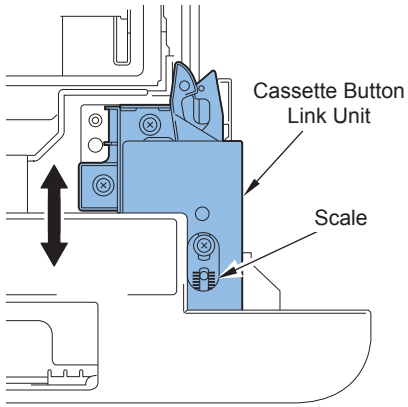


F-9-142

☐

4) According to the scale in which the position was checked in step 2, adjust the position of the Cassette Button Link Unit.

- If the left edge margin is large, move the Cassette Button Link Unit to the front.
- If the left edge margin is small, move the Cassette Button Link Unit to the rear.



F-9-143

☐

5) Tighten the 4 screws loosened in step 3.

6) Print from the Cassette 3 and 4, and check that the left edge margin of the picked up paper is within 2.5 +/- 1.5 mm.

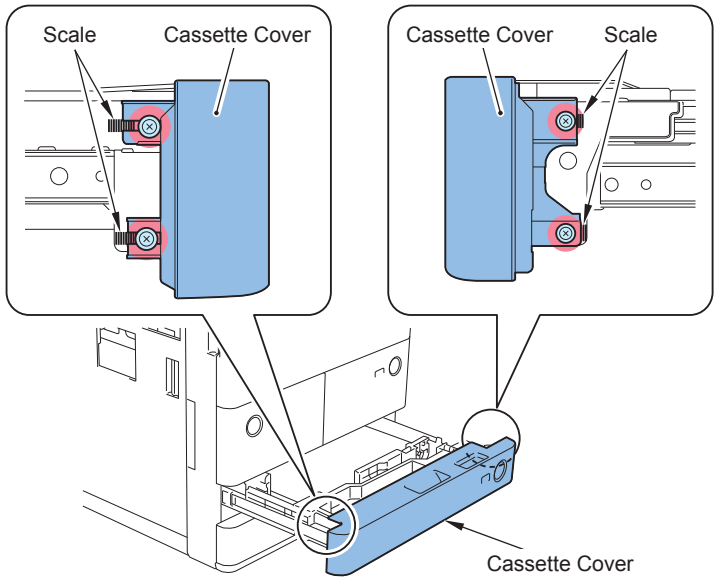
NOTE:
If you are concerned with alignment of the Cassette Cover, adjust the right and left sides of the cover as necessary.

☐

7) Loosen the 4 screws and adjust the position of the Cassette Cover by referring to the scale.

8) When moving the Cassette Button Link Unit, adjust the left side of the Cassette Cover by shifting it with the same shifting amount of the unit.

9) Tighten the 4 screws that were loosened.



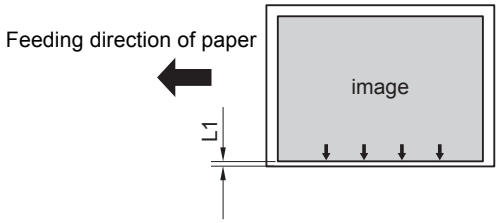
F-9-144

Adjusting margin of Multi-purpose Pickup Tray

☐

Print from the Multi-purpose Pickup Tray, and check that the left edge margin of the image (L1) is within 2.5 +/- 1.5 mm.

If it is not within the range, execute adjustment by following the procedure below.

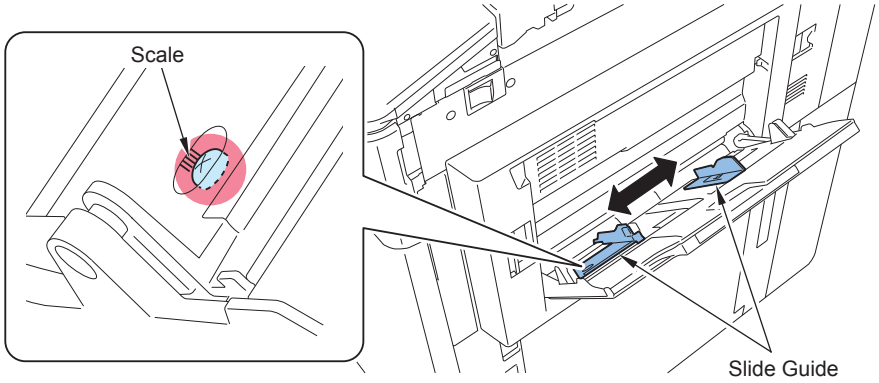


F-9-145

☐

1) Open the Multi-purpose Pickup Tray.
2) Loosen the screw and adjust the position of the Slide Guide by referring to the scale.

- If the left edge margin is small, move the Slide Guide to the front.
- If the left edge margin is large, move the Slide Guide to the rear.



F-9-146

☐

3) Tighten the screw loosened in step 2.
4) Print from the Multi-purpose Pickup Tray, and check that the left edge margin of the image is within 2.5 +/- 1.5 mm.

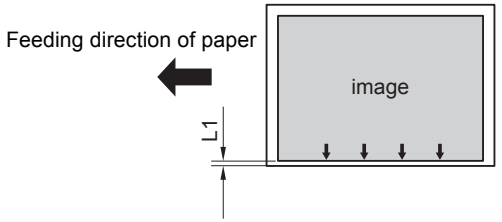
Left Edge Margin Adjustment (2nd side)

NOTE:
By executing the margin adjustment (2nd side) for the Cassette 3, the adjustment is applied to all source of paper.

☐

Execute duplex printing from the Cassette 3, and check that the left edge margin (L1) is within 2.5 +/- 2.0 mm.

If it is not within the range, execute adjustment by following the procedure below.



F-9-147

☐

1) Change the left edge margin adjustment value for the 2nd side in service mode (level 1).
   COPIER > ADJUST > FEED-ADJ > ADJ-REFE
   As the value is incremented by "1", the left edge margin is increased by 0.1 mm.
2) Execute duplex printing from the Cassette 3, and check that the left edge margin is within 2.5 +/- 2.0 mm.
3) Write the new adjustment value in the service label.
   ADJ-REFE
4) Get out from service mode.

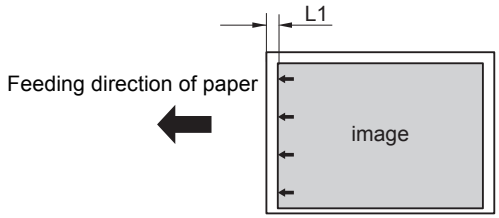
■ Leading Edge Margin Adjustment (1st side)

NOTE:
By executing the leading edge margin adjustment for the Cassette 3, the adjustment is applied to all source of paper.

□

Execute printing from the Cassette 3, and check that the leading edge margin (L1) is within 4.0 +1.5/-1.0 mm.

If it is not within the range, execute adjustment by following the procedure below.



F-9-148

□

1) Change the leading edge margin adjustment value in service mode (level 1).
   COPIER > ADJUST > FEED-ADJ > REGIST
   As the value is incremented by "1", the leading edge margin is decreased by 0.1 mm.
2) Print from the Cassette 3, and check that the leading edge margin is within 4.0 + 1.5/ -1.0 mm.
3) Write the new adjustment value in the service label.
   REGIST
4) Get out from service mode.

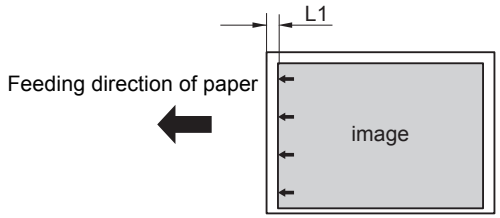
■ Leading Edge Margin Adjustment (2nd side)

NOTE:
By executing the leading edge margin adjustment for the Cassette 3, the adjustment is applied to all source of paper.

□

Execute duplex printing from the Cassette 3, and check that the leading edge margin (L1) on the 2nd side is within 4.0 +1.5/-1.0 mm.

If it is not within the range, execute adjustment by following the procedure below.



F-9-149

□

1) Change the leading edge margin adjustment value for the 2nd side in service mode (level 1).
   COPIER > ADJUST > FEED-ADJ > REG-DUP1
   As the value is incremented by "1", the leading edge margin is decreased by 0.1 mm.
2) Perform 2-sided printing from the Cassette 3, and check that the leading edge margin is within 4.0 + 1.5/ -1.0 mm.
3) Write the new adjustment value in the service label.
   REG-DUP1
4) Get out from service mode.

Checking the Network Connection

Overview

If the user's network environment is TCP/IP, use the Ping function to check that the network setting is properly performed.
If the user's network environment is IPX/SPX or Apple Talk, there is no need to check the network environment.

Checking the Network Connection

CAUTION:

Be sure to use the network cable with Category 5e or higher. In addition, a sealed type (STP cable) is recommended.

Using the non-shield type can affect the peripheral electrical equipment through the network cable.

1) Turn OFF the main power switch
2) Connect the network cable to the host machine and turn ON the main power switch.
3) Inform the system administrator at the installation site that installation of the host machine is complete, and then, ask for the network setting.

NOTE:
Network setting cannot be executed unless logging in as an administrator.
Factory default password is as follows.
- System administration division ID: 7654321
- System administration password: 7654321

CAUTION:

To perform the network setting, the following Additional Functions items must be set "ON".

- [Additional Functions] > [Configuration] > [Network] > [Change network settings/ check connection]
- [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Use IPv4]

4) Turn OFF and then ON the main power.

Operation Procedure Using Ping

CAUTION:

To execute Ping command with the Windows installed PC, set OFF the firewall, or execute Ping command from the Windows installed PC to the host machine.

1) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP setting] > [IPv4 setting] > [PING command]
2) Enter the IP address with the numeric keypad on the Control Panel and press "Execute" key. "Response from the host" is displayed if Ping command is succeeded while "no response from the host" is displayed if failed.

Checking by the Remote Host Address

Using the remote host address to execute Ping can check whether connection to the network is enabled or not.
Remote host address: IP address of PC terminal connected/running on TCP/IP network environment that connects to this equipment.
1) Inform the system administrator about checking of the network connection using Ping.
2) Confirm the remote host address with the system administrator.
3) Enter the remote host address to Ping.
   - The network is properly connected if the message say "Response from the host".
   - The network is not properly connected if the message say "No response from the host", therefore, execute the following troubleshooting.

Network Troubleshooting

Checking Connection of the Network Cable

To check whether the network cable is properly connected to the Ethernet Port.

Operation Procedure Using Ping

1) Ask the network administrator at the user's site to write down the IP address of the PC that is connected to the network.
2) [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Ping Command]; and enter the IP address of the PC with the numeric keypad and press Execute key.
   - The network is properly connected if the message say "Response from the host".
   - If the message say "No response from the host", check the following.

NOTE:
The IP address of the PC can be checked by the following procedure:
Select the following on a Windows PC: Start > Program > Accessory > Command Prompt; and enter "ipconfig" and press Enter key to display information of the IP address.

Checking the Network Setting of the Host Machine

Check if the IP address specified in the host machine is correct.

1) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [IP address setting]; and write down the address in the IP address field.
2) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Ping Command]; and enter the IP address.
   - The IP address specified in the host machine is correct if the message say "Response from the host".
   - If the message say "No response from the host", check the following.

NOTE:
When setting the address by manually input, set the Subnet Mask by following the instruction of the administrator.

Checking Network Function on the Main Controller

Perform checking by the loopback address.

1) Select the following: [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Ping Command]; and enter the IP address, "127.0.0.1" with the numeric keypad and enter Execute key.
   - The network function of the Main Controller is working properly if the message say "Response from the host".
   - If the message say "No response from the host", the network function of the Main Controller is faulty.
2) Replace with a Main Controller that works properly, and then check connection.

Settings to enable "Access Management System" (North/Middle/South America and Europe only)

Be sure to make this setting upon user's request.
The following conditions need to be satisfied to enable Access Management System.

- Login application supporting AMS (such as SSO-H) has been started.
- Set [Use ACCESS MANAGEMENT SYSTEM] to [ON] or set AMSOFFSW in service mode to "0".

CAUTION:
Be sure that the SSO-H of the login service is already started. If not, "ACCESS MANAGEMENT SYSTEM" will not be displayed on [Check Device Configuration] screen even if the setting is changed.

< Checking method >

1) Press Counter Check key, and check the controller version displayed on [Check Device Configuration] screen.

- The version is "1413.XXXX.XXX *" or earlier: Go to "Setting method in service mode"
- The version is "1414.XXXX.XXX*" or later: Go to "Setting method from Settings/ Registration"
  * "XXXX" differs according to the environment.

< Setting method in service mode >

1) Enter service mode (Level 1), and set the setting value to "0".

- COPIER > OPTION > FNC-SW > AMSOFFSW

2) Turn OFF and then ON the main power.
3) Press Counter Check key, and then check that "ACCESS MANAGEMENT SYSTEM" is displayed on [Check Device Configuration] screen.

< Setting method from Settings/Registration >

1) Log in as an administrator.
2) Select Settings/Registration > [Management Settings] > [License/Other] > [Use ACCESS MANAGEMENT SYSTEM].
3) Select [ON], and then press [OK].
4) Turn OFF and then ON the main power.
5) Press Counter Check key, and then check that "ACCESS MANAGEMENT SYSTEM" is displayed on [Check Device Configuration] screen.

When moving the host machine to another place after installation, execute the operation shown below.

NOTE:
If packing materials such as fixing material which were removed on the installation are not available, it is recommended to use cushioning materials that matches to them.

When moving the machine to another floor

If you need to relocate the machine (move to another floor, etc) after installation, be sure to perform the following work in advance.

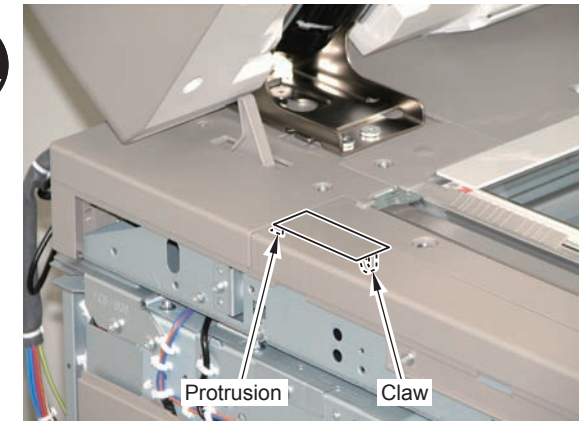
☐
1) Move the Scanner Unit to the position where it is going to be secured.
- Service Mode (Level 2) > COPIER > FUNCTION > MISC-R > RD-SHPOS

☐
2) With all the covers of the host machine closed, execute the service mode for putting the Fixing Roller into a semi-engaged state.
- Service Mode (Level 2) > COPIER > FUNCTION > MISC-P > FX-HPRS

CAUTION:
After execution of this service mode, do not open the covers until the Main Power Switch is turned OFF.

☐
3) Turn OFF the main power switch.
4) Check that the control panel display and the main power lamp are OFF, and then disconnect the power plug.

☐
5) Open the DADF, and remove the Left Upper Small Cover.
- 1 Protrusion
- 1 Claw



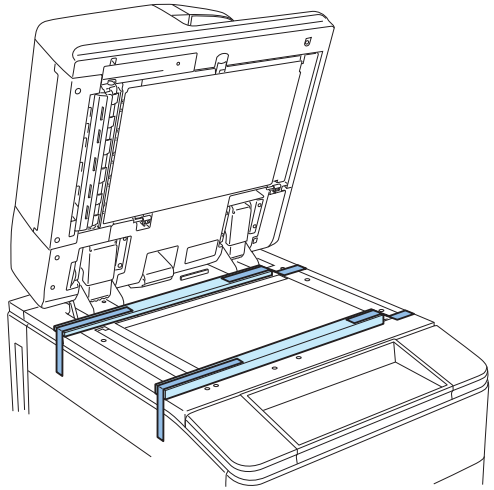
F-9-150

☐
6) Secure the Scanner Unit with the Scanner Fixation Tool that have been kept in a safe place since image Reader Unit installation.

NOTE:
Be sure to push it in until it clicks.

F-9-151

☐
7) Install the Packing Materials that were removed during installation.

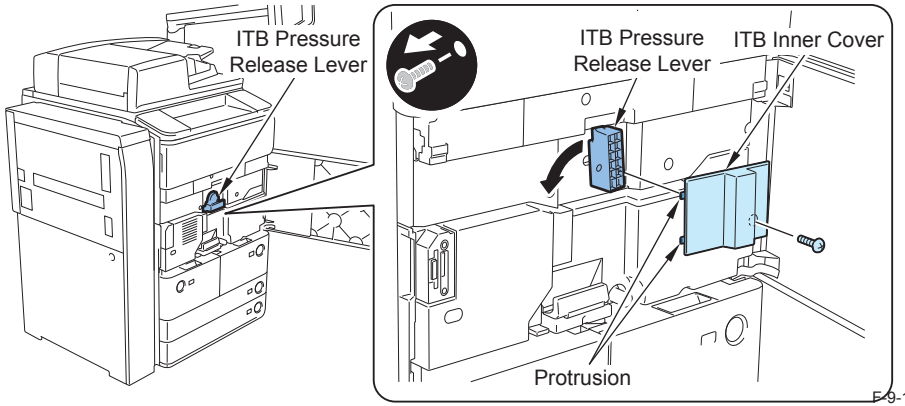


F-9-152

☐
8) Open the Front Cover.

☐
9) Remove the ITB Inner Cover.
- 1 Screw
- 2 Protrusions

10) Turn the ITB Pressure Release Lever in the direction of the arrow to release the pressure.



F-9-153

☐
11) Close the Front Cover.

☐
12) Lower lifters inside the Pickup Decks and cassettes.
12-1) Pull out all Pickup Decks and cassettes.
12-1) Confirm that lifters are lowered and close all Pickup Decks and cassettes.

CAUTION:
- Make sure to turn the Main Power OFF and then perform these procedures. If the Main Power is ON, lifters may rise again after closing Pickup Decks and cassettes.
- If the machine is moved with lifters raised, the Lifter Drive Gear may be damaged due to the shaking.

☐
13) Lift the host machine off the floor by turning the 2 adjusters with a screwdriver.
14) When moving the machine, grasp the Handles and move the host machine.

NOTE:
When moving the machine, be careful not to bump into the arm of the Upright Control Panel.

☐
15) At reinstallation after moving the machine, remove the installed packaging material.
16) Remove the Scanner Fixation Tool, and install the Left Upper Small Cover.
17) Put the ITB Pressure Release Lever back to the original position to apply pressure and install the ITB Inner Cover. (1 Screw)

☐
18) After turning ON the power, execute ITB neutral position adjustment.
- Service Mode (Level1) > COPIER > FUNCTION > INSTALL > INIT-ITB

19) The paper feed direction may tilt because of the change in floor surface condition; thus, be sure to execute the image position adjustment.
Refer to the Service Manual > Installation > Image Position Adjustment

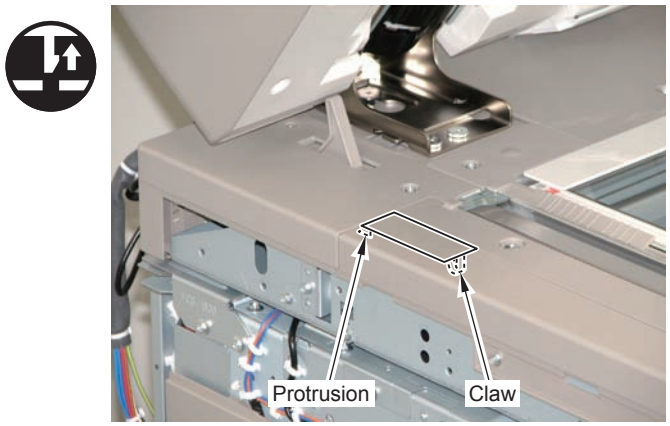
When moving the machine by truck

If you need to relocate the machine after installation by truck or other means of transportation, be sure to perform the following work in advance.

☐
1) Move the Scanner Unit to the position where it is going to be secured.
- Service Mode (Level 2) > COPIER > FUNCTION > MISC-R > RD-SHPOS

☐
2) Turn OFF the main power switch.
3) Check that the control panel display and the main power lamp are OFF, and then disconnect the power plug.

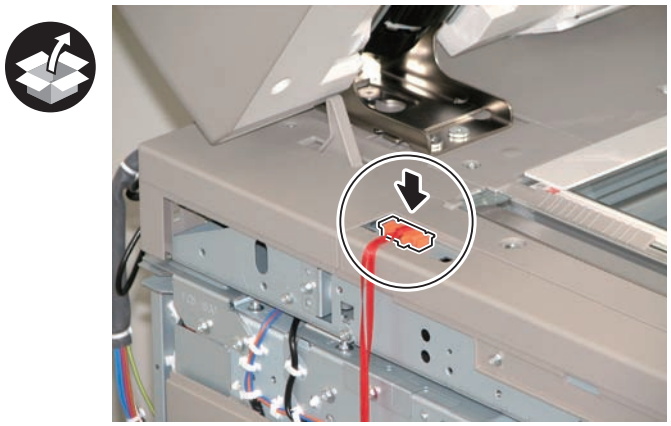
☐
4) Open the DADF, and remove the Left Upper Small Cover.
- 1 Protrusion
- 1 Claw



F-9-154

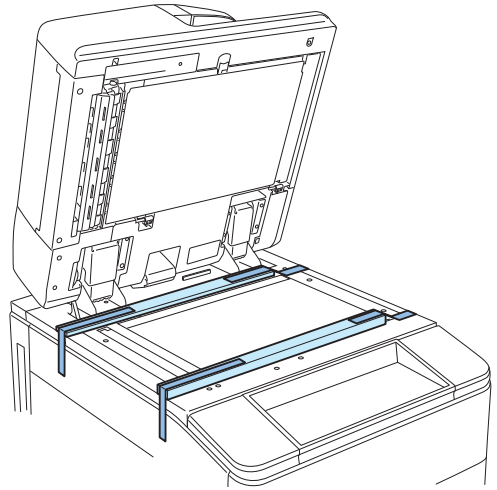
☐
5) Secure the Scanner Unit with the Scanner Fixation Tool that have been kept in a safe place since image Reader Unit installation.

NOTE:
Be sure to push it in until it clicks.



F-9-155

☐
6) Install the Packing Materials that were removed during installation.

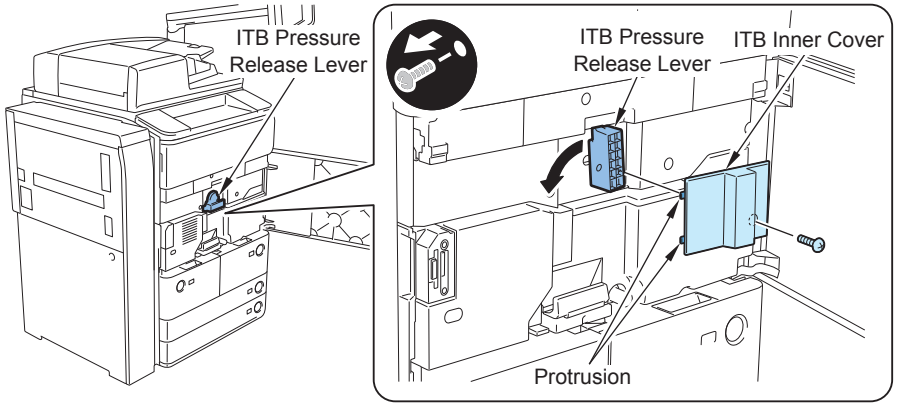


F-9-156

☐
7) Open the Front Cover.

☐
8) Remove the ITB Inner Cover.
- 1 Screw
- 2 Protrusions

9) Turn the ITB Pressure Release Lever in the direction of the arrow to release the pressure.



F-9-157

CAUTION:

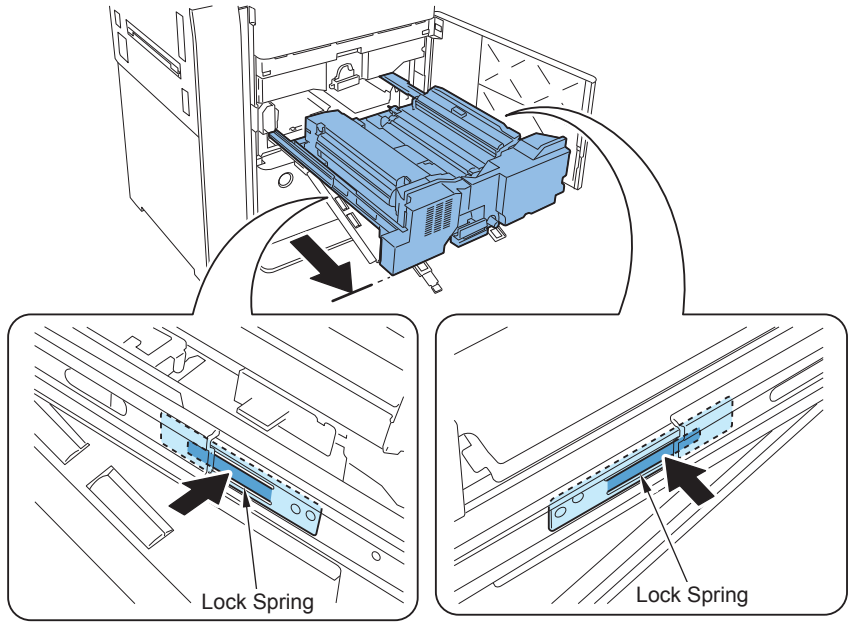
If this equipment will be moved in simplified packaging using a truck, it is desirable to perform the following steps 10 to 20.

It is recommended to attach the Fixation Members that were removed during installation.

☐
10) Push the 2 Lock Springs of the Rails (both sides) to release the lock and further pull out the Fixing Feed Unit until it stops.

CAUTION:

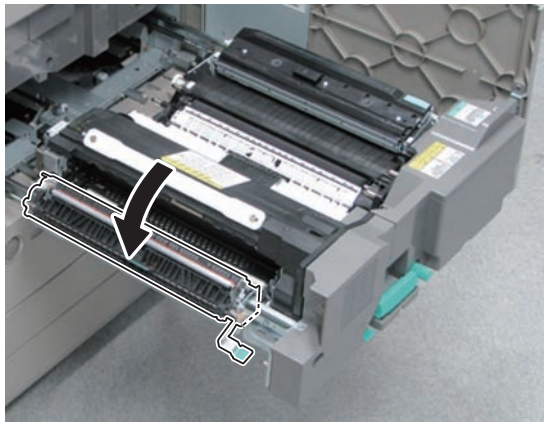
Do not release the Lock Springs at the rear side of the Rails (both sides); otherwise the Frame of the Fixing Feed Unit can be off.



F-9-158

☐

11) Open the Inner Delivery Unit.

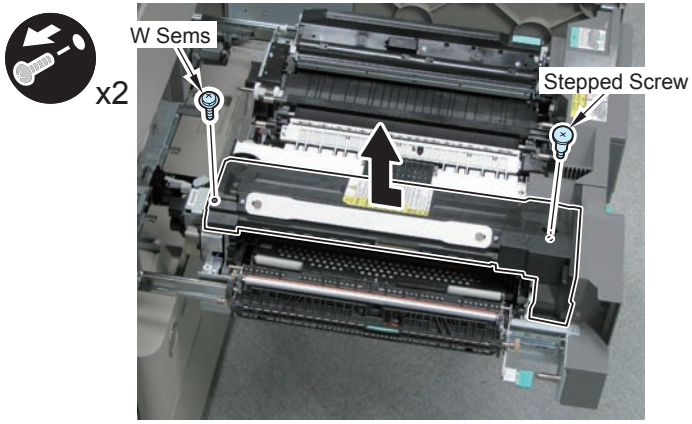


F-9-159

☐

12) Remove the Fixing Upper Cover.

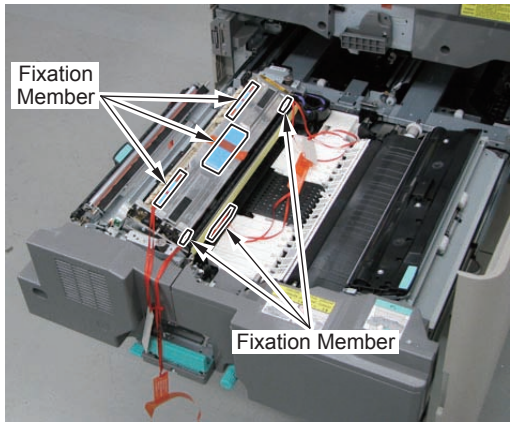
- 1 Stepped Screw
- 1 Screw (W Sems)



F-9-160

☐

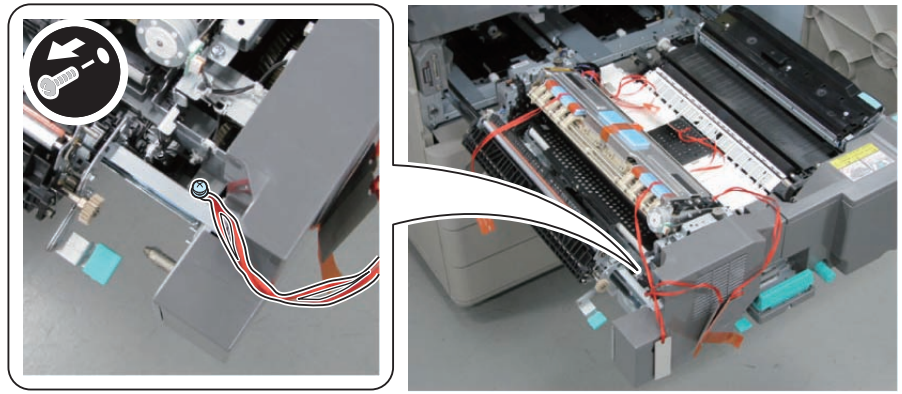
13) Install the 6 Fixing Members that were removed during installation.



F-9-161

☐

14) Install the Stepped Screw (M3x18.5) that was removed during installation.

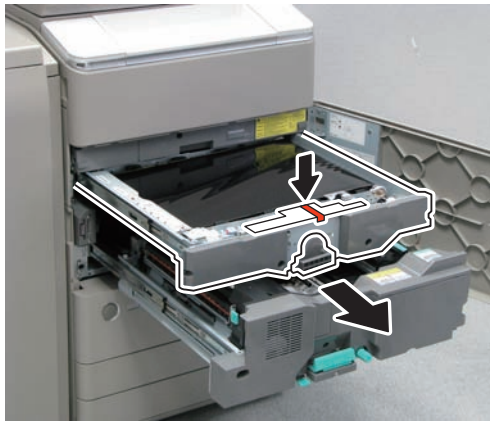


F-9-162

☐

15) Hold the handle to pull out the ITB Unit.

16) Install the Fixing Members that were removed during installation.



F-9-163

☐

17) Close the ITB Unit

18) Install the Fixing Upper Cover. (2 Screws)

19) Close the Inner Delivery Unit.

NOTE:
If any tag is attached to the Fixation Member, move it to outside the cover and secure by tape.

20) Close the Fixing Feed Unit

☐

21) Close the Front Cover.

☐

22) Lower lifters inside the Pickup Decks and cassettes.

22-1) Pull out all Pickup Decks and cassettes.

22-1) Confirm that lifters are lowered and close all Pickup Decks and cassettes.

CAUTION:

- Make sure to turn the Main Power OFF and then perform these procedures. If the Main Power is ON, lifters may rise again after closing Pickup Decks and cassettes.
- If the machine is moved with lifters raised, the Lifter Drive Gear may be damaged due to the shaking.

☐

23) Lift the host machine off the floor by turning the 2 adjusters with a screwdriver.

24) When moving the machine, grasp the Handles and move the host machine.

CAUTION:

- When moving the machine, be careful not to bump into the arm of the Upright Control Panel.
- The Upright Control Panel should be removed and packed when being transported.
- When moving by a truck, it is recommended to tape and secure all movable locations (all doors and Upright Control Panel Arm).

☐

25) At reinstallation after moving the machine, remove the installed Fixing Members and Stepped Screw.

26) Remove the Scanner Fixation Tool, and install the Left Upper Small Cover.

27) Put the ITB Pressure Release Lever back to the original position to apply pressure and install the ITB Inner Cover. (1 Screw)

☐

28) After turning ON the power, execute ITB neutral position adjustment.

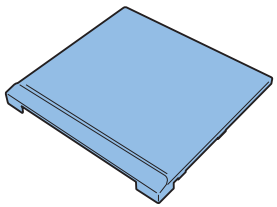
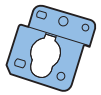
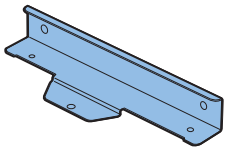
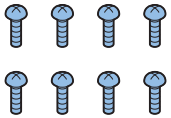
- Service Mode (Level1) > COPIER > FUNCTION > INSTALL > INIT-ITB

29) The paper feed direction may tilt because of the change in floor surface condition; thus, be sure to execute the image position adjustment.
Refer to the Service Manual > Installation > Image Position Adjustment

Printer Cover-B1

Checking the Contents

NOTE:
For parts not included in the package of this equipment, use parts included in the package of the host machine.

☐ [1] Printer Cover X 1 	☐ [2] Reader Fixing Plate L X 1 	☐ [3] Reader Fixing Plate R X 1 
☐ [4] Reader Mount X 1 	☐ [5] Screw (P Tightening; M4x10) X 8 	☐ [6] Screw (RS Tightening; M4x8) X 2 
☐ [7] Screw (TP; M4x8) X 1 		

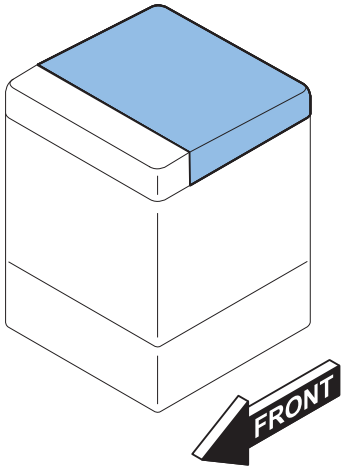
F-9-164

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing



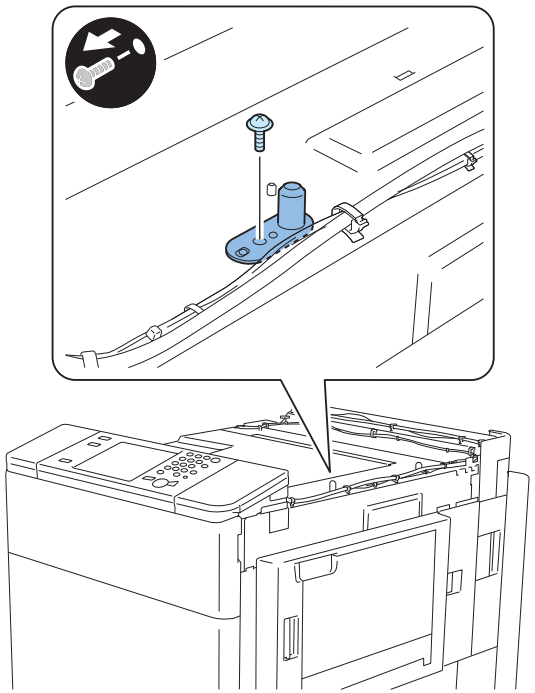
F-9-165

Installation Procedure

☐

1) Remove the Reader Positioning Shaft.

- 1 screw (the removed screw is used in step 6.)



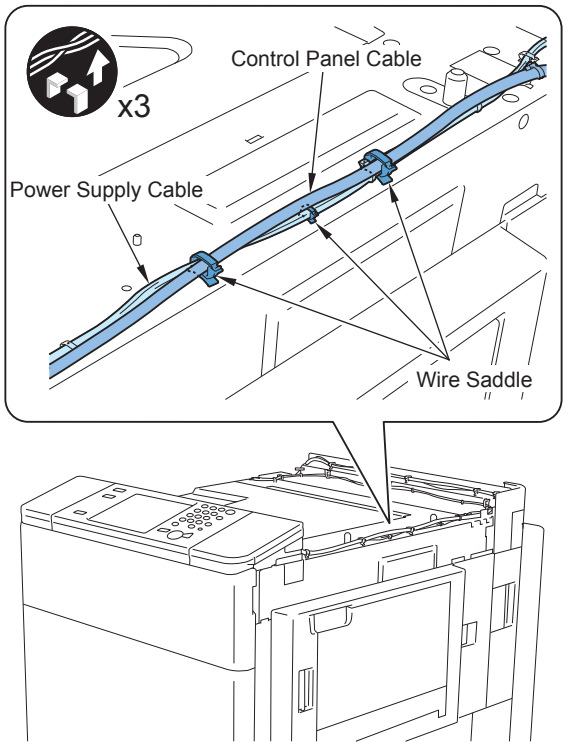
F-9-166

☐

2) Free the Control Panel Cable and the Power Supply Cable. (only for the models with the Flat Control Panel)

- 3 Wire Saddles

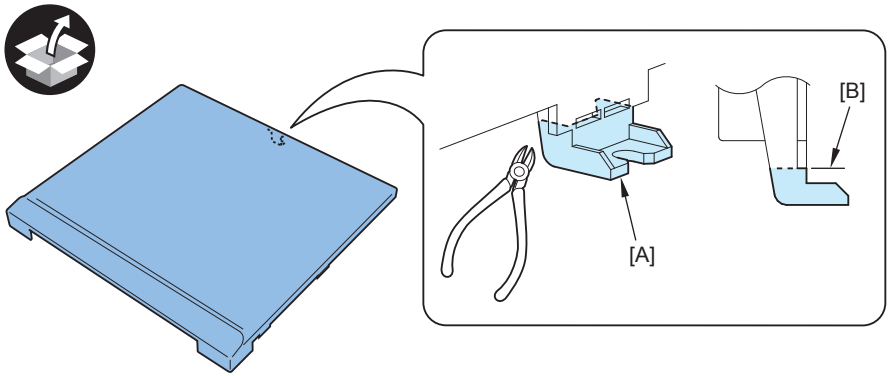
NOTE:
Allow flexibility with the cable so that the Printer Cover can be easily installed.



F-9-167

☐
3) Cut the [A] part of the Printer Cover with nippers using the edge [B] as a reference.

CAUTION:
Be sure to check that there is no burr.

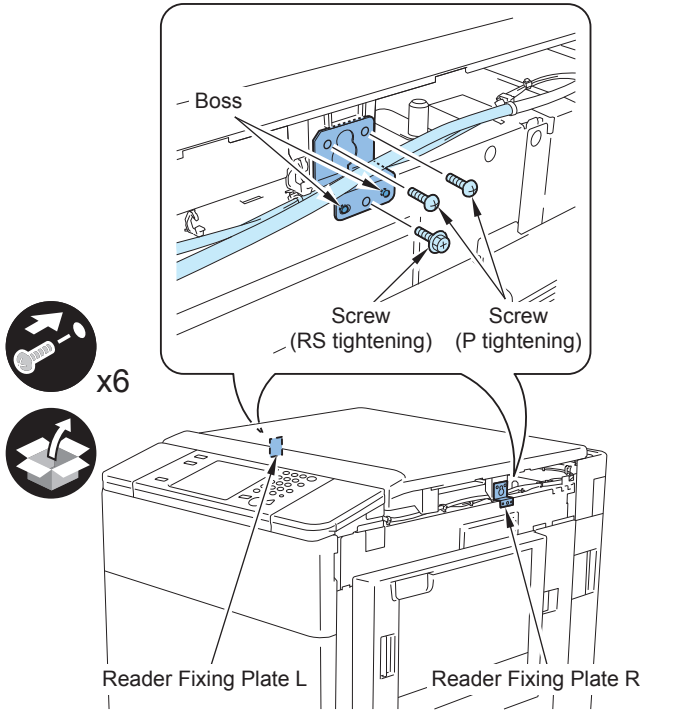


F-9-168

☐
4) Place the Printer Cover, and install the Reader Fixation Plate R and the Rear Fixation Plate L to the installation position at the rear side.

- 2 Bosses each
- 2 Screws (P tightening; M4x10) each
- 1 Screw (RS tightening; M4x8) each

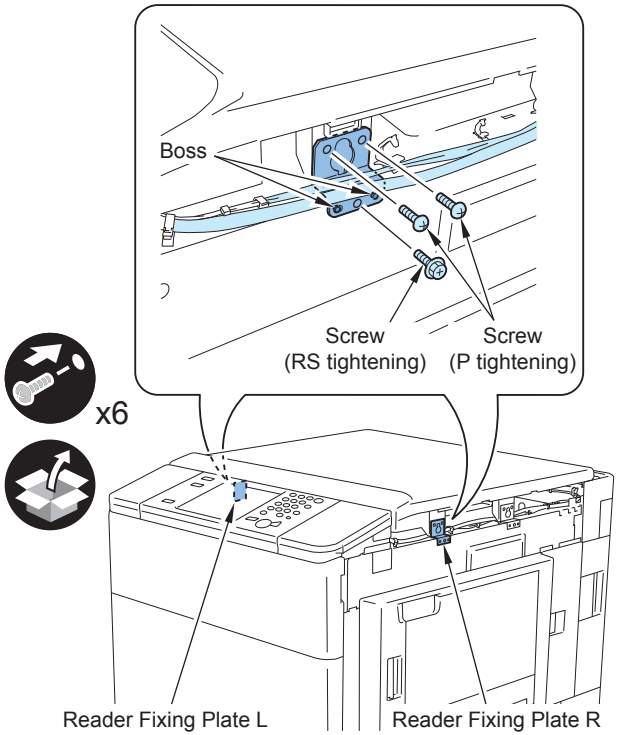
CAUTION:
- When placing the Printer Cover, be careful not to trap cables at rear side of the host machine.
- Be sure not to get the cables at the right side of the host machine caught. (only for the models with the Flat Control Panel)



F-9-169

☐
5) Install the Reader Fixation Plate R (included with the host machine) and the Reader Fixation Plate L (included with the host machine) to the installation position at the front side.
- 2 Bosses each
- 2 Screws (P tightening; M4x10) each
- 1 Screw (RS tightening;: M4x8) each (included with the host machine)

CAUTION:
Be careful not to get the cables at the right side of the host machine caught. (only for the models with the Flat Control Panel)

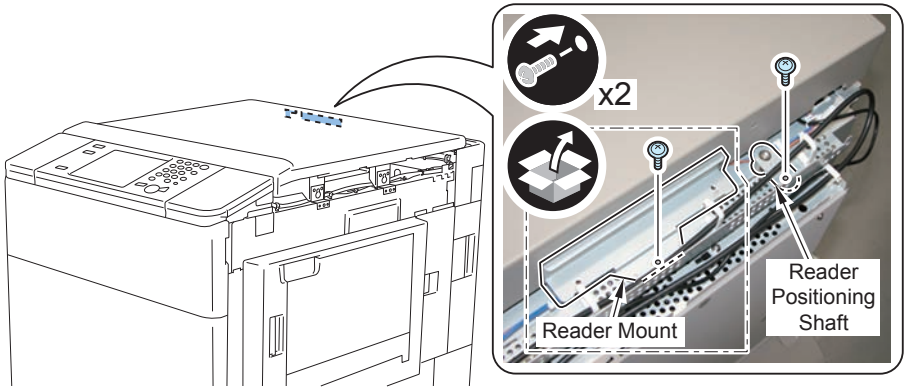


F-9-170

☐
6) Install the Reader Positioning Shaft (removed in step 1) and the Reader Mount.
- 1 screw (the screw removed in step 1)
- 1 screw (TP; M4x8)

CAUTION:
Install the cables on rear side of the host machine while paying attention not to trap them.

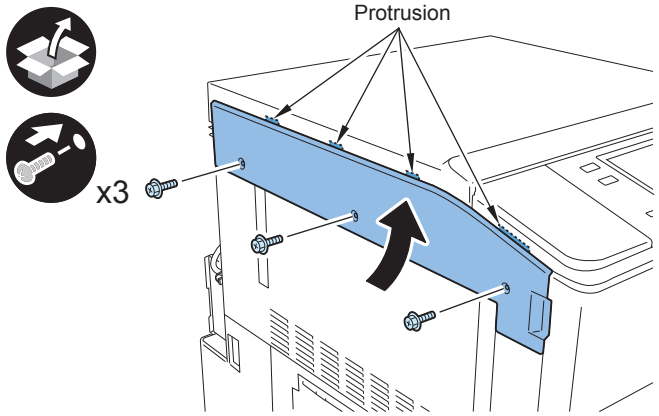
NOTE:
To use the Reader Positioning Shaft, install it to the position where it is removed in step 1 when installing the Reader Unit.



F-9-171

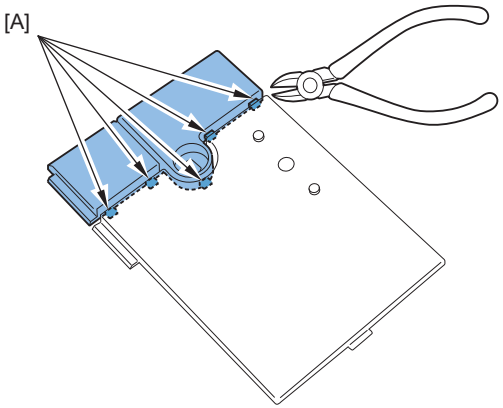
☐
7) Secure the cables (removed in step 2) with the 3 wire saddles again. (only for the models with the Flat Control Panel.)

☐
8) Install the Left Upper Cover (included with the host machine).
- 4 Protrusions
- 3 Screws (RS tightening; M4x8) (included with the host machine)



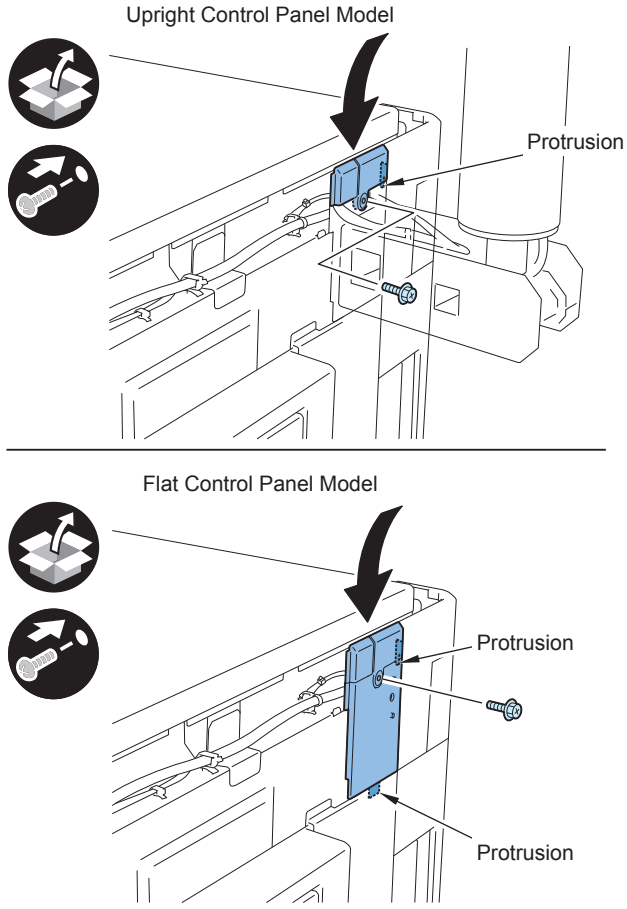
F-9-172

☐
9) Cut [A] part of Right Rear Cover (included with the host machine) with nippers.
(only for the models with the Upright Control Panel.)



F-9-173

☐
10) Install Right Rear Cover (included with the host machine).
- 1 Protrusion (for the models with the Upright Control Panel)
- 2 Protrusions (for the models with the Flat Control Panel)
- 1 Screw (RS tightening; M4x8) (included with the host machine)

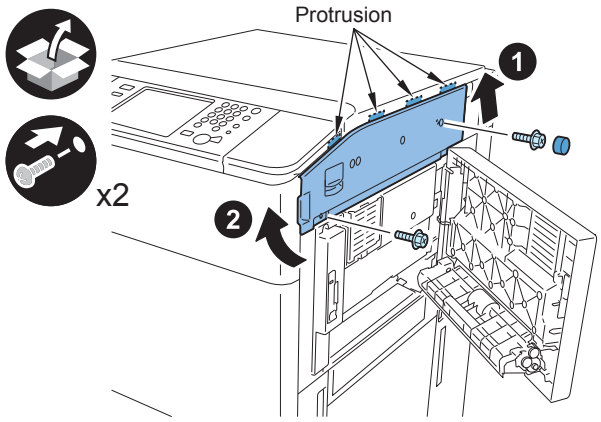


F-9-174

☐
11) Open the Multi-purpose Tray Cover.

☐
12) Install Right Upper Cover 1 (included with the host machine).

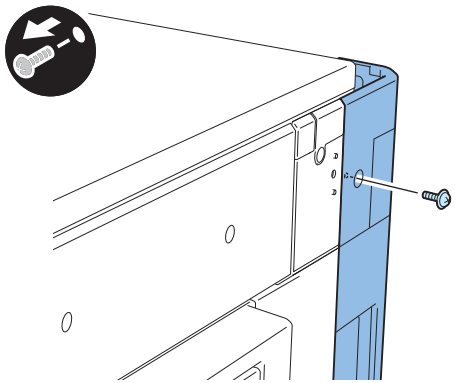
- 4 Protrusions
- 2 Screws (RS tightening; M4x8) (included with the host machine)
- 1 Rubber Cap (included with the host machine)



F-9-175

☐
13) Close the Multi-purpose Tray Cover.

☐
14) Remove the screw of the Main Controller Right Cover Unit.

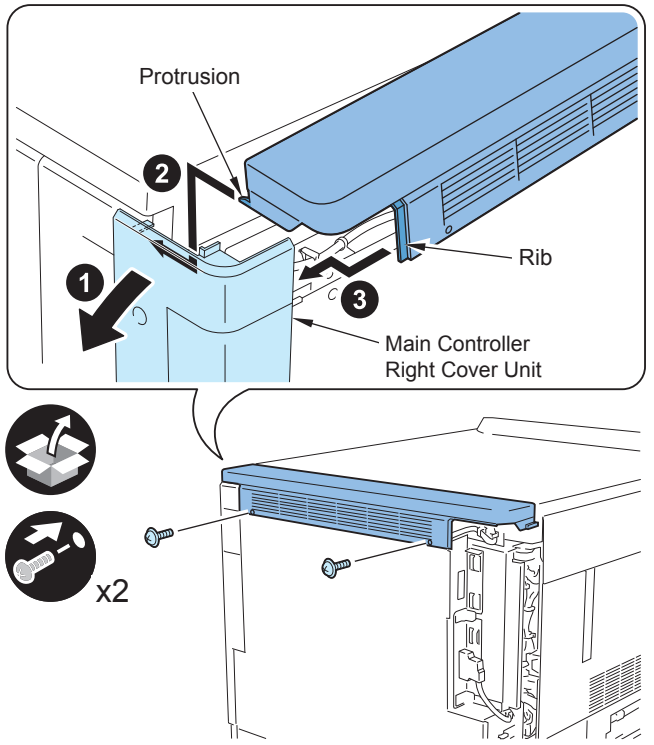


F-9-176

☐
15) Pull the Main Controller Right Cover Unit in the direction of the arrow to install the Box Upper Cover (included with the host machine).

- 1 Protrusion
- 2 Screws (TP; M4x8) (included with the host machine)

NOTE:
Be sure to put the projection and the rib of the Box Upper Cover inside the Main Controller Right Cover Unit.



F-9-177

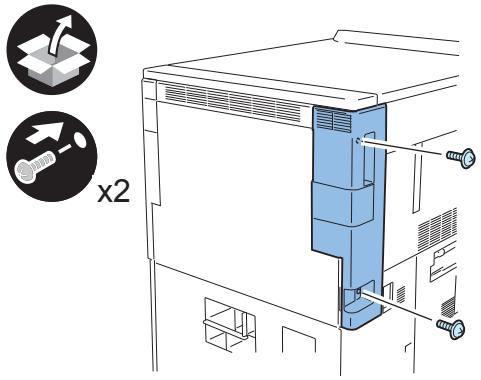
☐
16) Install the screw, which has been removed in step 14.

□

17) Install the Box Left Cover.

- 2 Screws (TP; M4x8) (included with the host machine)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.



F-9-178

NOTE:
After completing step 17, execute from "Installation" procedure in the Service Manual.

Operation Check

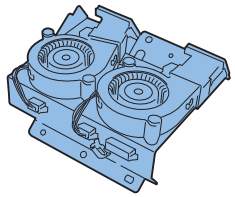
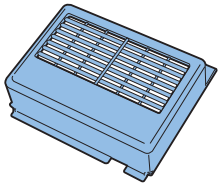
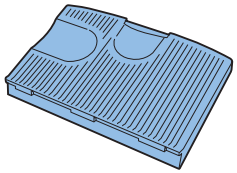
□

1) Connect the power plug of the host machine to the outlet.
2) Turn ON the main power switch.
3) A message is displayed prompting to check that the Reader Unit Cable is connected properly.
4) Select "0" for the following service mode (level 1).
   COPIER > OPTION > FNC-SW > W/SCNR
5) Get out from service mode.
6) Turn OFF and then ON the main power switch.

NOTE:
When installing the host machine and this equipment at the same time, be sure to perform the procedure from "Installing the Toner Container" in the installation chapter in the Service Manual.

Copy Tray-P1

Checking the Contents

☐ [1] Fan Unit X 1 	☐ [2] Fan Cover X 1 	☐ [3] Copy Tray X 1 
☐ [4] Screw (RS Tightening ; M3X8.5) X 3 		

F-9-179

< CD/Guides >

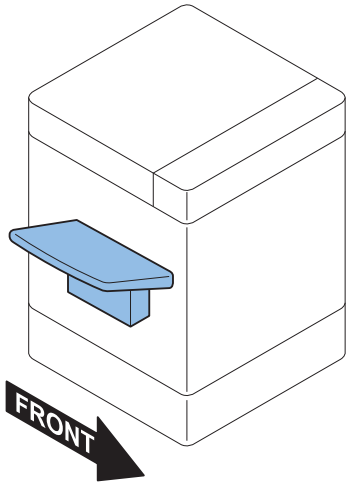
- FCC/IC Sheet

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing



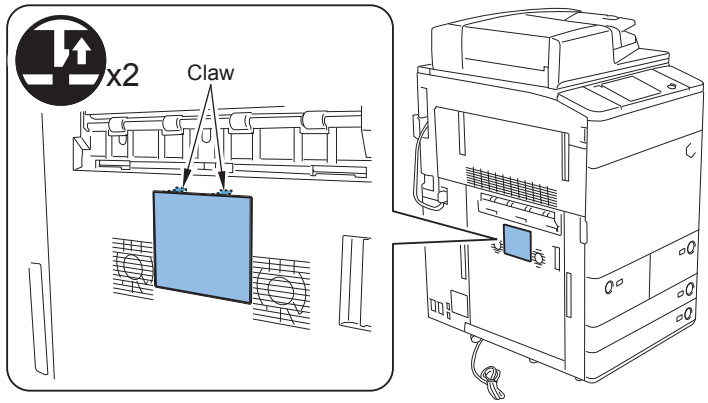
F-9-180

Installation procedure

☐

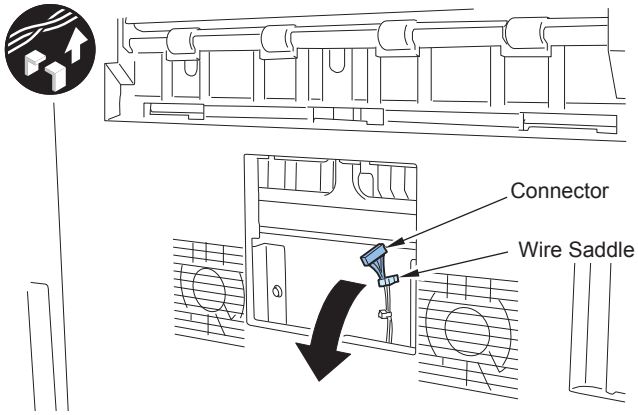
1) Remove the (Small) Reverse Cover(The removed (Small) Reverse Cover is not used).

- 2 Claws



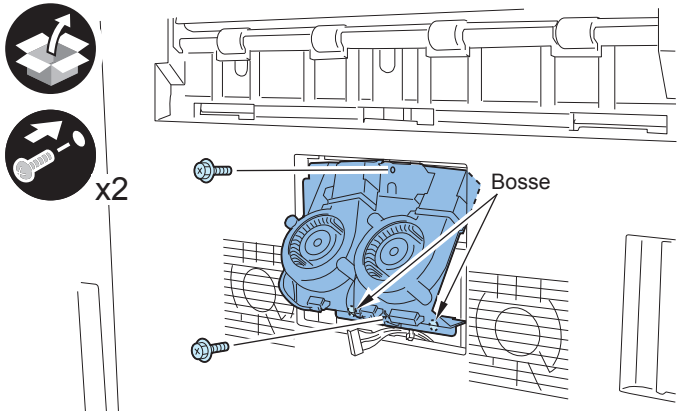
F-9-181

☐
2) Free the Harness from the Wire Saddle so that the Connector is free.



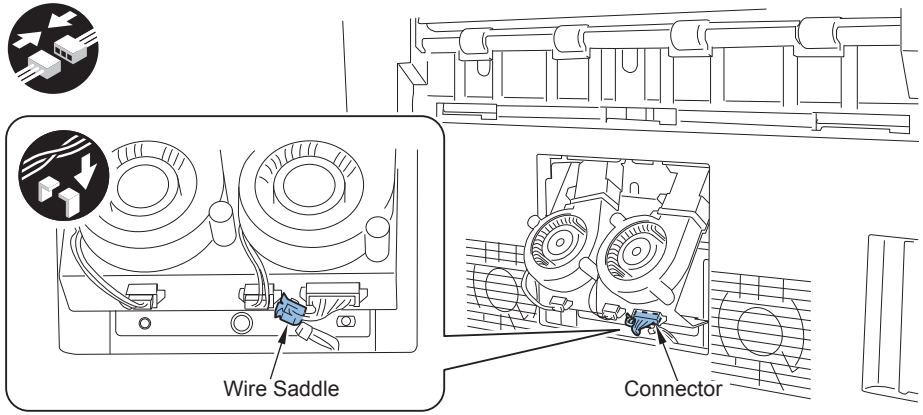
F-9-182

☐
3) Install the Fan Unit.
- 2 Bosses
- 2 Screws (RS tightening; M3 x 8.5)



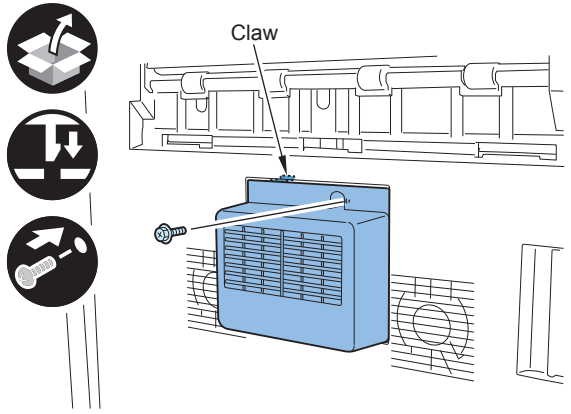
F-9-183

☐
4) Connect the Connector and secure the Harness with the Wire Saddle.



F-9-184

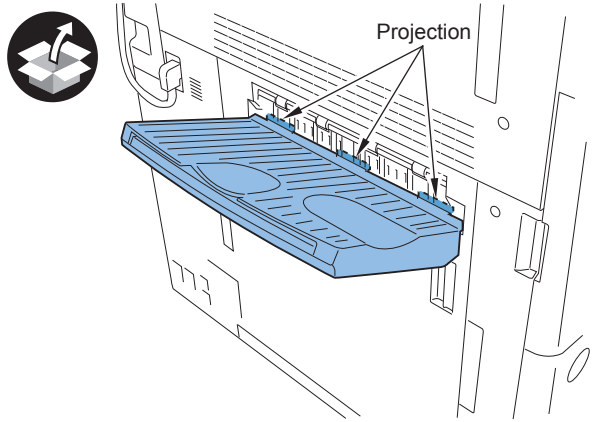
☐
5) Install the Fan Cover.
- 1 Claw
- 1 Screw (RS tightening; M3 x 8.5)



F-9-185

☐

6) Fit the 3 projections into the holes of the Host Machine to install the Copy Tray.



F-9-186

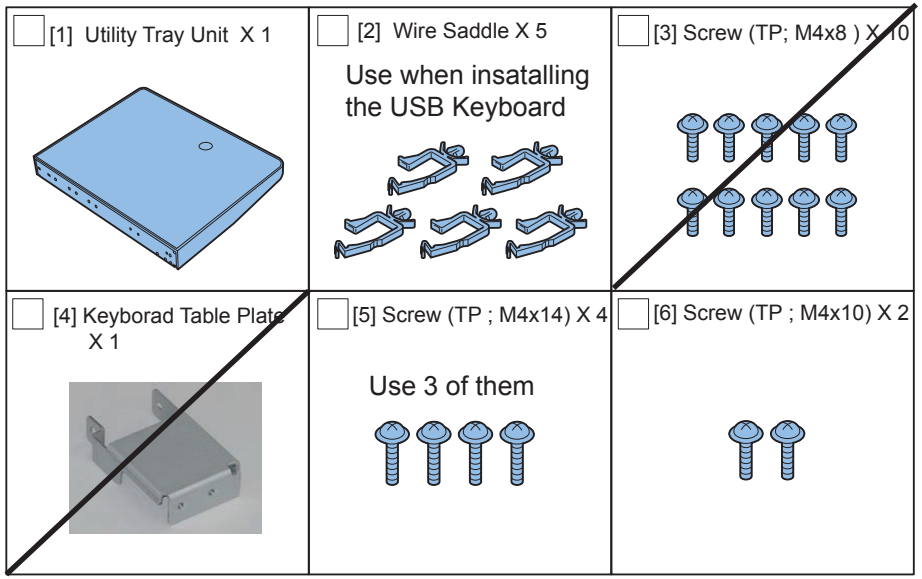
☐

7) Insert the power plug to the outlet.

8) Turn ON the main power switch.

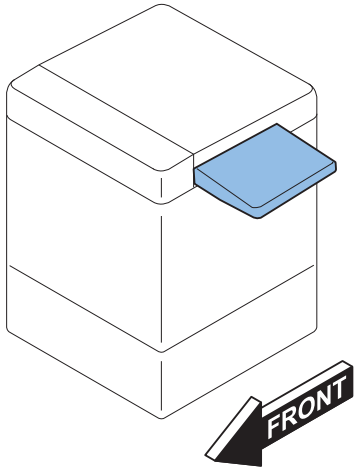
Utility Tray-A2

Checking the Contents



F-9-187

Installation Outline Drawing

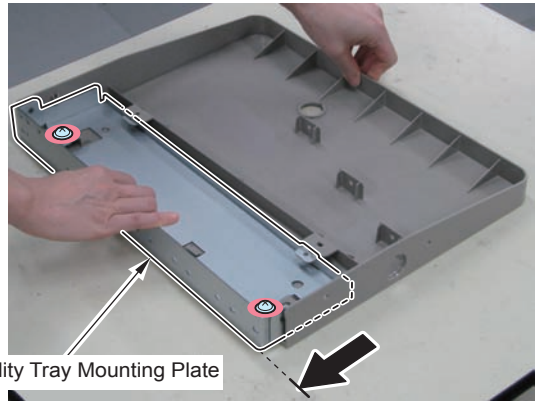


F-9-188

Installation Procedure

☐ 1) Remove the packing tape.

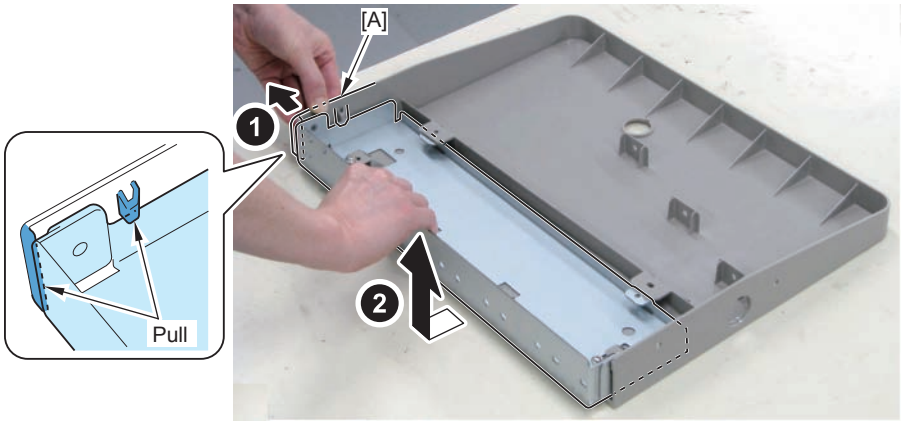
☐ 2) Loosen the 2 screws, and move the Utility Tray Mounting Plate in the direction of the arrow until it stops.



F-9-189

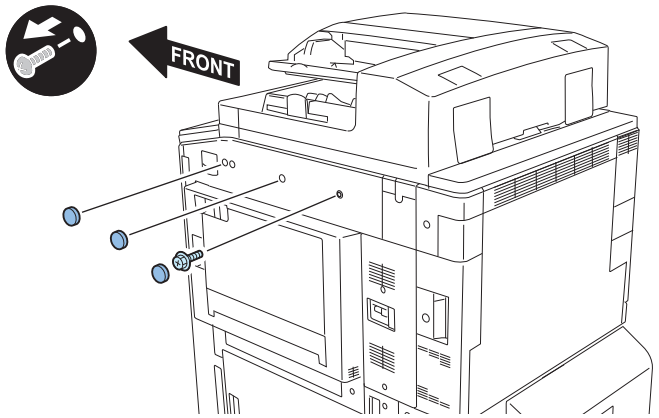
☐
3) While pulling the [A] part of the Utility Tray, remove the Utility Tray Mounting Plate.

CAUTION:
Be sure not to pull the [A] part of the Utility Tray too much.



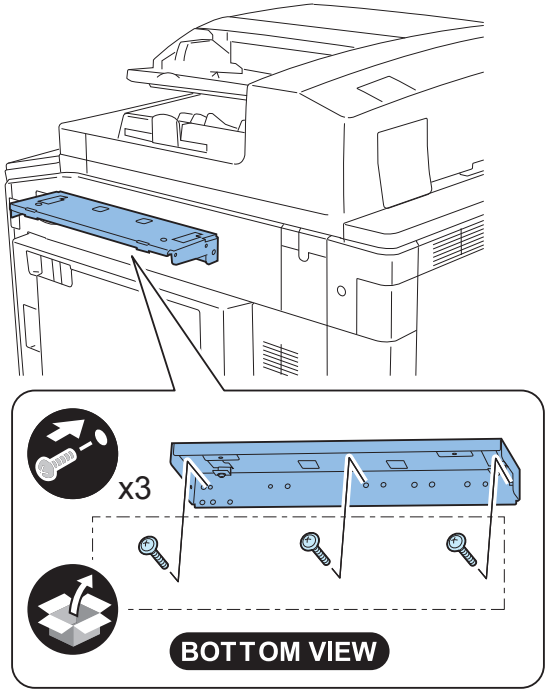
F-9-190

☐
4) Remove the 3 rubber caps and 1 screw from the Right Upper Cover 1.



F-9-191

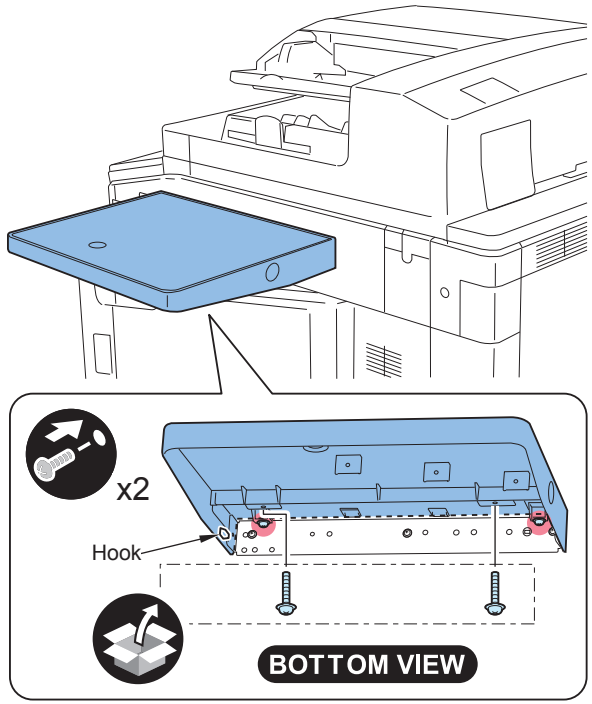
☐
5) Install the Utility Tray Mounting Plate removed in step 2).
- 3 Screws (TP; M4 x 14)



F-9-192

☐
6) Open the Multi-purpose Tray Cover.

☐
7) Install the Utility Tray.
- 2 Screws (Use the screws loosened in step 2).
- 2 Screws (tighten) (TP; M4 x 10)

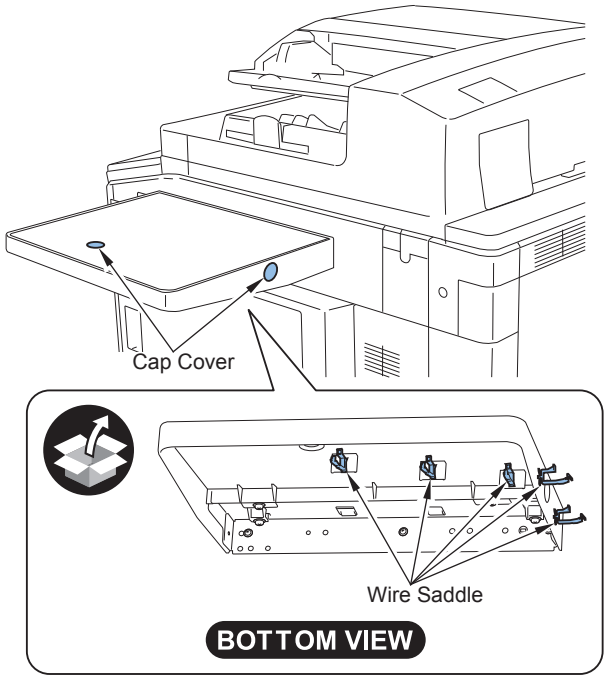


F-9-193

☐
8) Close the Multi-purpose Tray Cover.

When installing the USB Keyboard

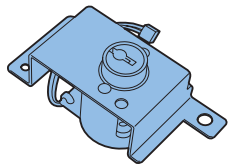
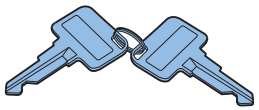
☐
1) Remove the 2 s and install the 5 wire saddles.



F-9-194

Key Switch Unit-B1

Checking the Contents

[1] Key Switch Unit X 1	[2] Management Key X 1set
	

F-9-195

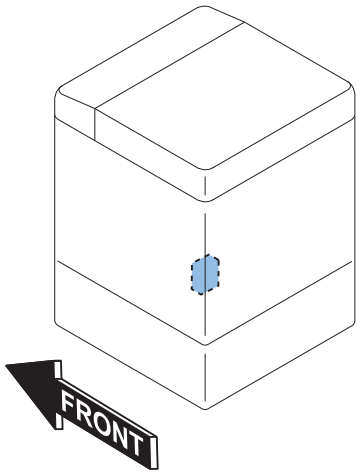
Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.

2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing

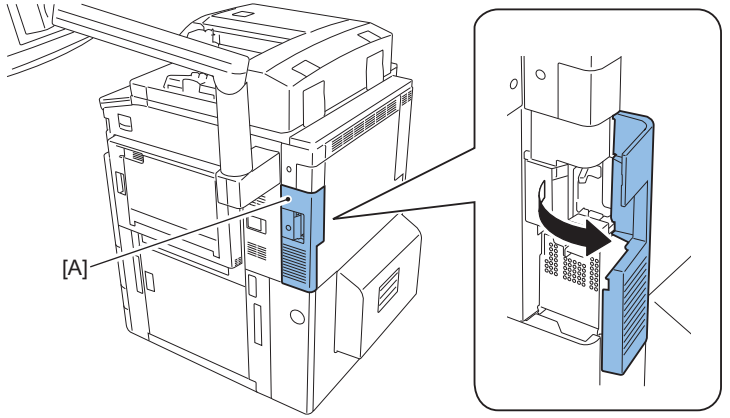


F-9-196

Installation Procedure

☐

1) Push [A] area to open the HDD Cover.

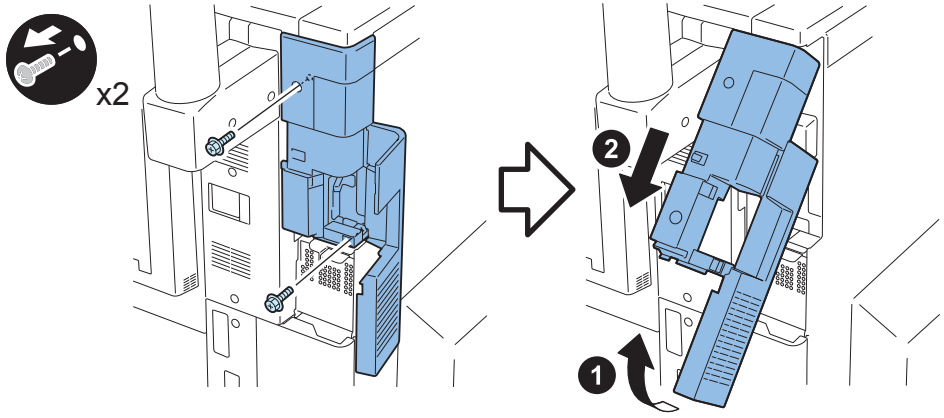


F-9-197

☐

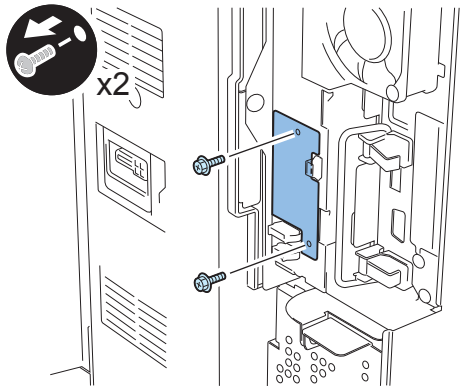
2) Remove the Main Controller Right Cover Unit.

- 2 Screws



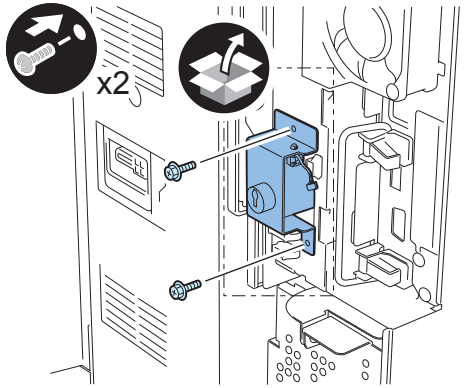
F-9-198

☐
3) Remove the Face Plate. (The removed Face Plate is not used.)
- 2 Screws (Rmoved screws is step 4) to used).



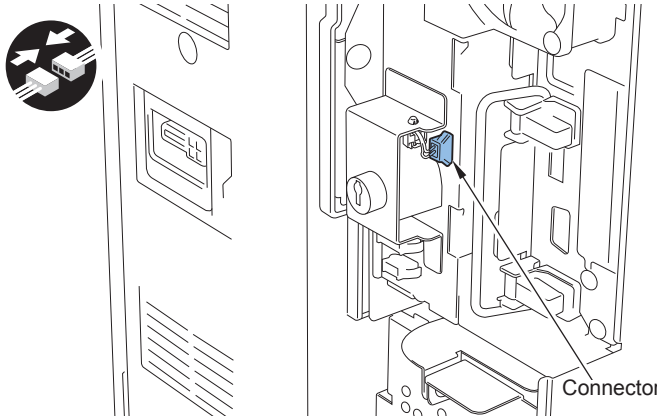
F-9-199

☐
4) Install the Kew Switch Unit.
- 2 Screws (Use the screw removed in step 3).)



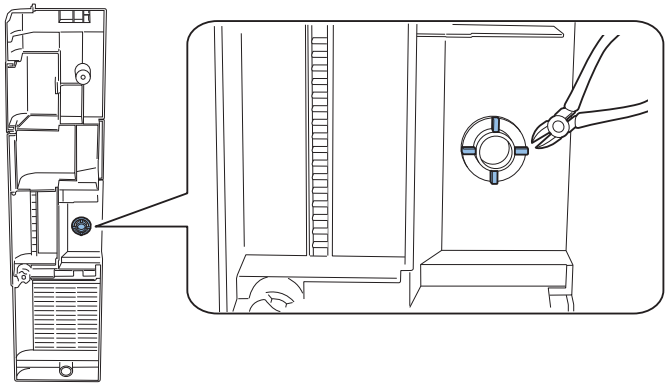
F-9-200

☐
5) Connect the connector of the Key Switch Unit.



F-9-201

☐
6) Cut the face cover area of the Main Controller Right Cover Unit with nippers.



F-9-202

☐
7) Install the Main Controller Right Cover Unit.
8) Insert the power plug to the outlet.
9) Turn ON the main power switch.

Checking After Installation

□

1) Set the following service mode (level 1) value to “1”.
- COPIER > FUNCTION > INSTALL > KEY

2) Turn OFF/ON the main power switch.
3) Make sure that [Set the control key] is displayed.
4) Insert the Control key into the Key Switch Unit and make sure that the machine is ready for copy.

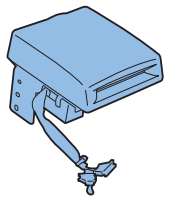
Copy Card Reader-F1

Points to Note Before Installation

The Copy Card Reader Attachment is required for the installation of the equipment.

Checking the Contents

Copy Card Reader-F1

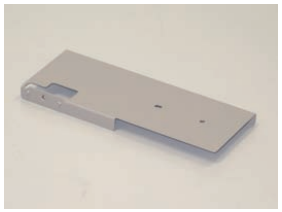
☐ [1] Card Reader x 1 	☐ [2] Screw (RS tight; M4X10) X 1 	☐ [3] Toothed washer x 1 

F-9-203

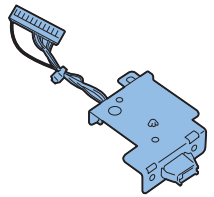
[2] : Not used with the Upright Control Panel.

Copy Card Reader Attachment-A2

☐ [1] Card Reader Mounting Plate x 1



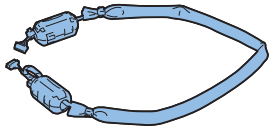
☐ [2] Card Reader Relay Unit x 1



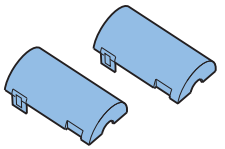
☐ [3] Connector Cover1 x 1

☐ [4] Connector Cover2 X 1

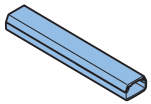
☐ [5] Card Reader External Relay Harness X 1



☐ [6] Connector Case X 2



☐ [7] Cord Guide X 1



☐ [8] PCB Spacer X 1

☐ [9] Screw (TP; M4x12) X 1

☐ [10] Screw (RS tight; M4x8) X 1

☐ [11] Screw (Bindeing; M3x6) X 1

☐ [12] Screw (Bindeing; M4x20) X 1

☐ [13] Screw (TP; M3x6) X 1

F-9-204

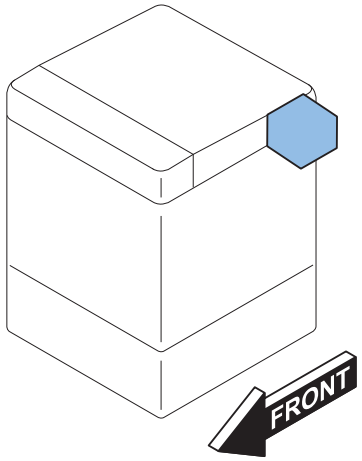
[1], [9], [10] : Not used with the Flat Control Panel.

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing



F-9-205

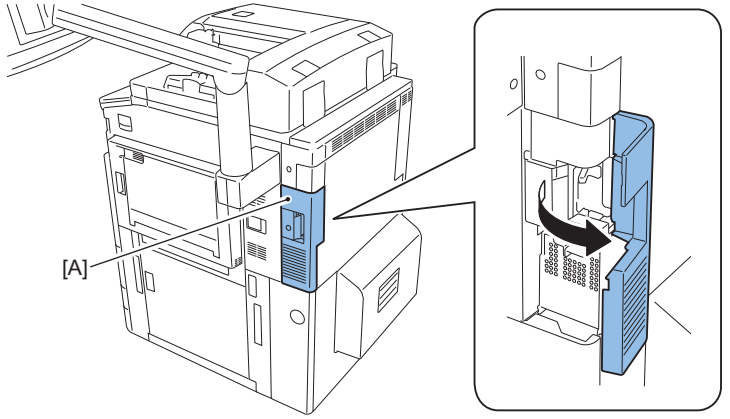
Installation Procedure

CAUTION:

- To install this equipment, refer to the “Table of options combination”
- After Card Reader is installed, get in Service Mode(Level 1) with this equipment: COPIER > FUNCTION > INSTALL > CARD; and then enter the card number to use. If the card number fails to be entered, the card will not be recognized even if the card is inserted.

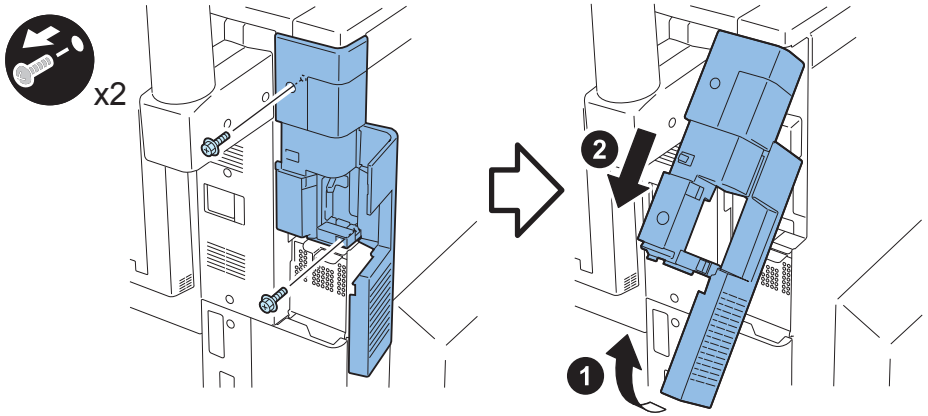
☐

1) Push the [A] part, and open the HDD Cover.



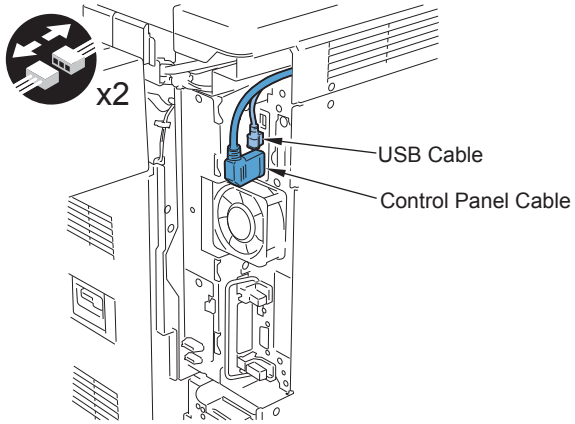
F-9-206

☐
2) Remove the Main Controller Right Cover Unit.
- 2 Screws (Removed screws will be reused at step 16).)



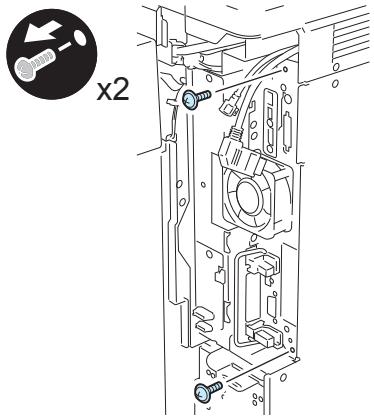
F-9-207

☐
3) Remove the USB Cable and the Control Panel Cable.



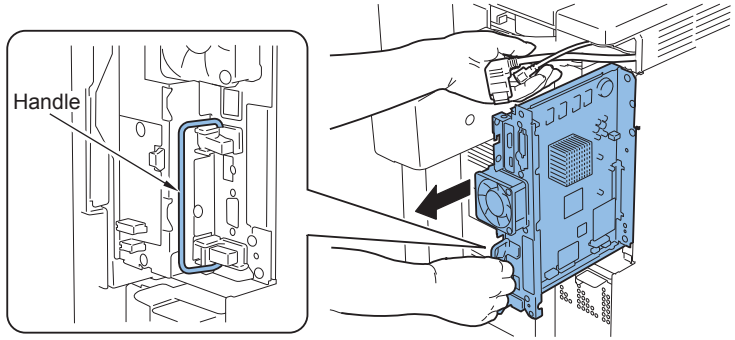
F-9-208

☐
4) Remove 2 Screws. (Removed screws will be reused at, step 10).)



F-9-209

☐
5) Hold the handle, and remove the Main Controller 1.

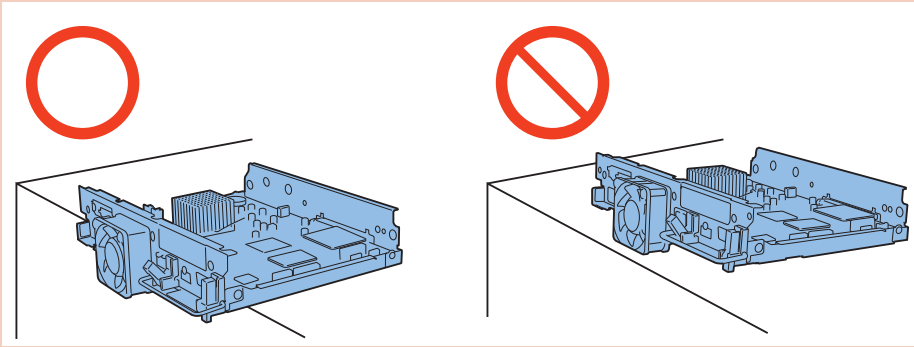


F-9-210

CAUTION:

Place the removed Main Controller 1 so that the protruding fan.

Reason: Because the fan is protruded, it might be damaged when placing it diagonally.

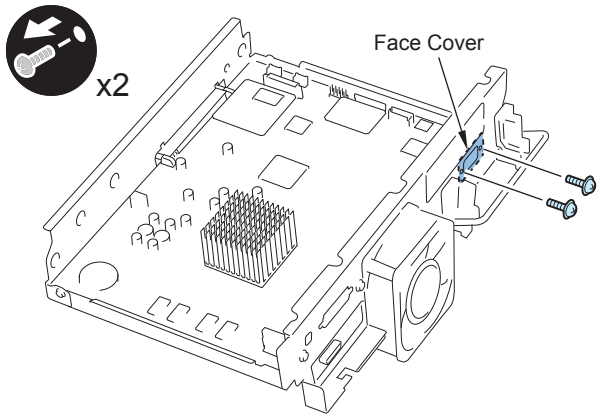


F-9-211

☐

6) Remove the Blindfold Cover. (Never reuse the removed Blindfold Cover.)

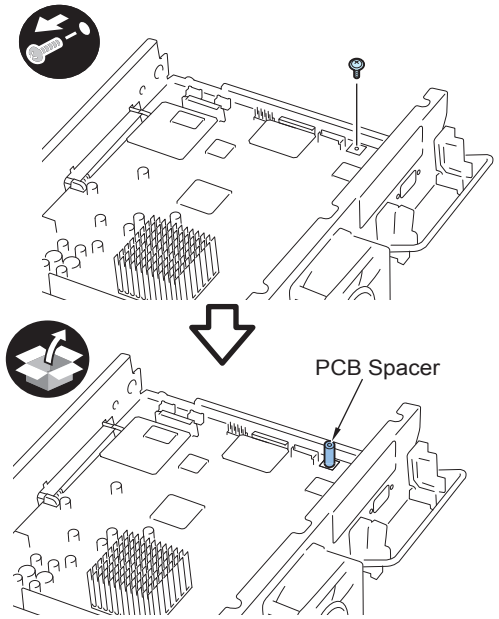
- 2 Screws (Removed screws will be reused at step 8).)



F-9-212

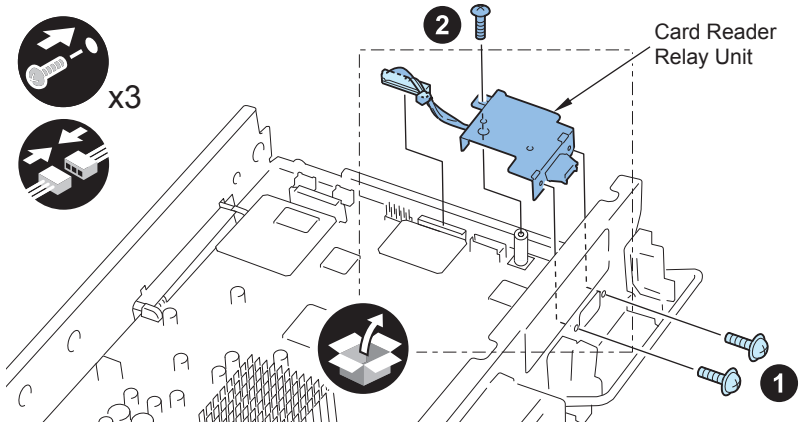
☐

7) Remove 1 screw, and install the PCB Spacer. (Never reuse the removed screw.)



F-9-213

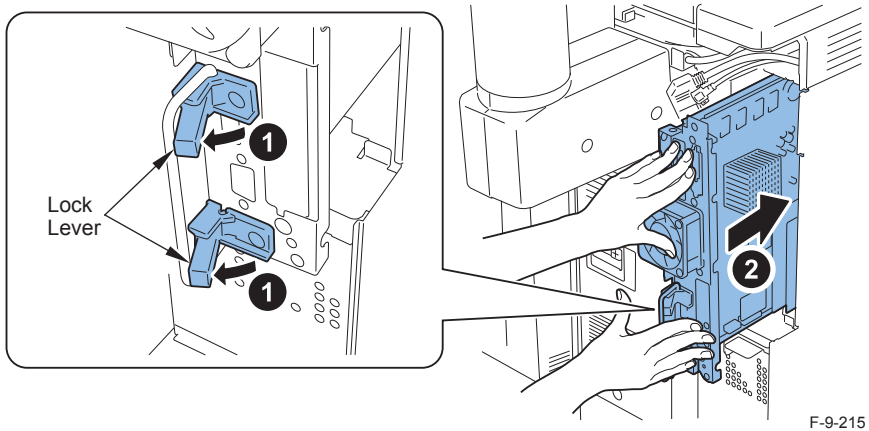
☐
8) Install the Card Reader Relay Unit.
- 2 Screws (Install the screws, which were removed at step 6) in order of 1.)
- 1 Screw (Binding; M3x6)
- 1 Connector



F-9-214

☐
9) Release 2 Lock Levers in the arrow direction, and push the Main Controller 1 all the way in evenly with both hands.

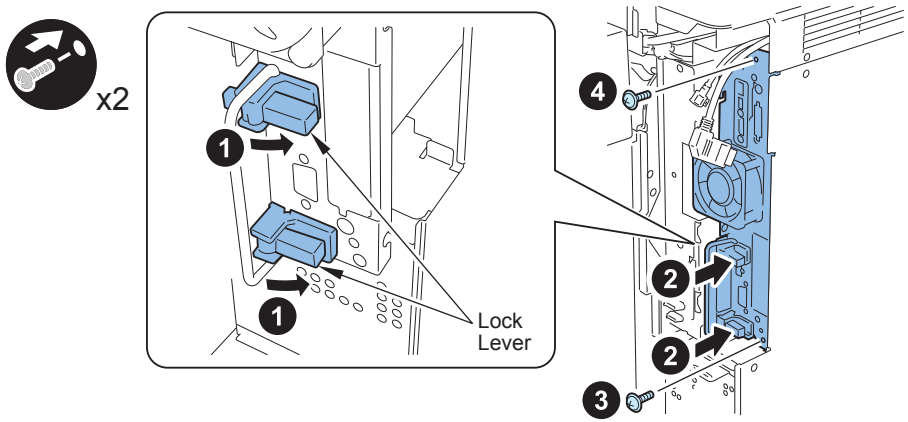
CAUTION:
Install the Main Controller 1 without pinching cables.



F-9-215

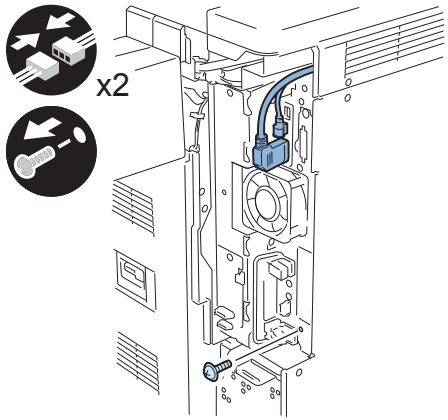
☐
10) Press 2 Lock Levers down to push the Main Controller 1 and secure.
- 2 Screws (Removed screws at step 4): Install in order of bottom and top.)

CAUTION:
Keep the order of steps 1 thru 4 shown in the figure since there is the case that a connector of the Main Controller 1 is not connected.



F-9-216

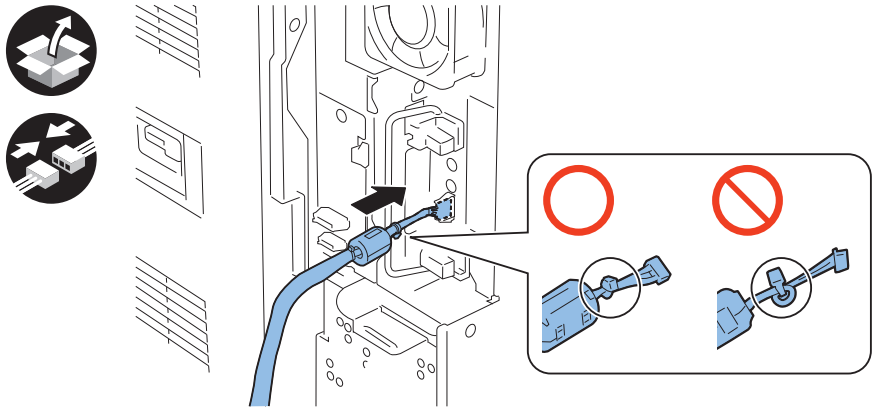
☐
11) Install the USB Cable and the Control Panel Cable.
12) Remove the 1 Screw. (Removed screw will be used at step 15).)



F-9-217

☐ 13) Install the Card Reader External Relay Wire Harness.

- 1 Connector

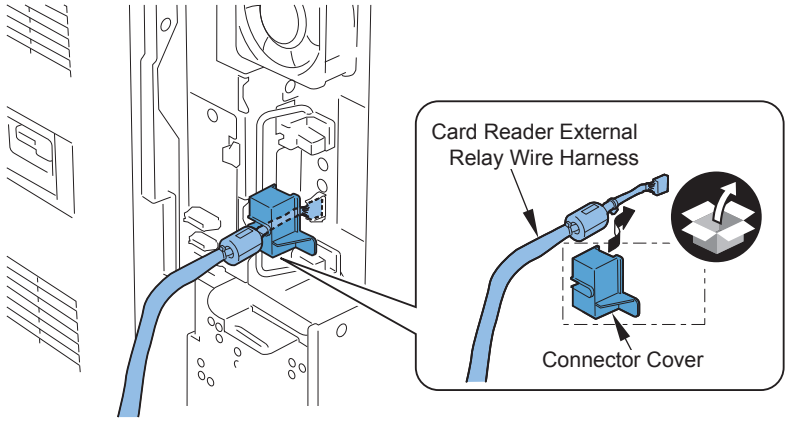


F-9-218

☐ 14) Install the Connector Cover into the Card Reader External Relay Wire Harness.

CAUTION:

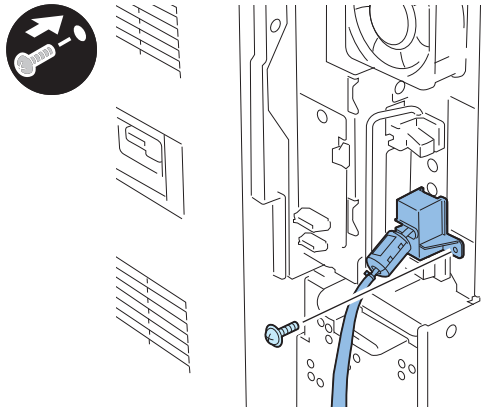
Install it so that the Tie-wrap of the Card Reader External Relay Wire Harness can be inside of the Connector Cover.



F-9-219

☐ 15) Install the Connector Cover.

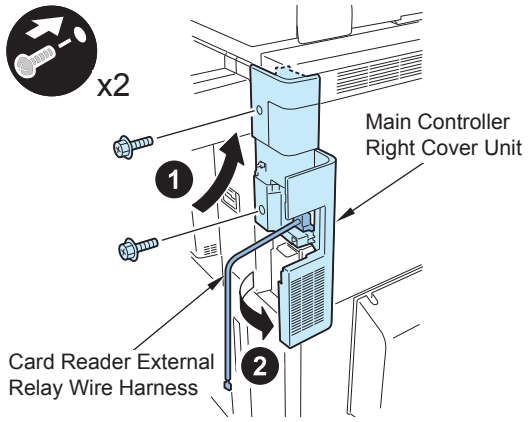
- 1 Screw (reuse the screw removed at step 12).)



F-9-220

☐ 16) Put the Card Reader External Relay Wire Harness into the Main Controller Right Cover Unit, and install.

- 2 Screws (reuse the screws removed at step 2).)



F-9-221

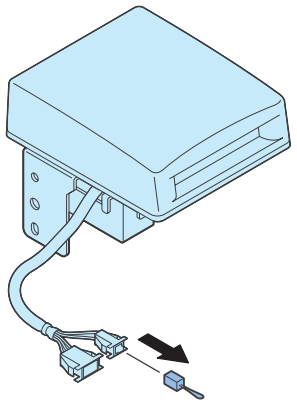
☐ 17) Close the HDD Cover.

☐
18) Remove the Lower Cover of the Card Reader Unit, and change the position of the cable.
- 1 screw

19) Install the Lower Cover of the Card Reader Unit.
- 1 Screw

F-9-222

☐
20) Remove the short connector in the Card Reader. (Never reuse the removed short connector.)

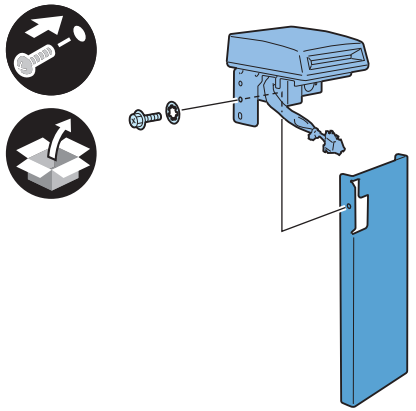


F-9-223

☐
21) Install the Card Reader.

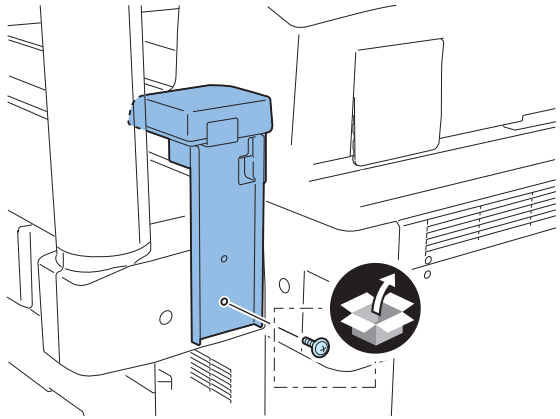
< In the case of the Upright Control Panel model >

☐
21-1) Install the Card Reader Mounting Plate to the Card Reader.
- 1 Toothed washer
- 1 Screw (RS tightening; M4 x 8)



F-9-224

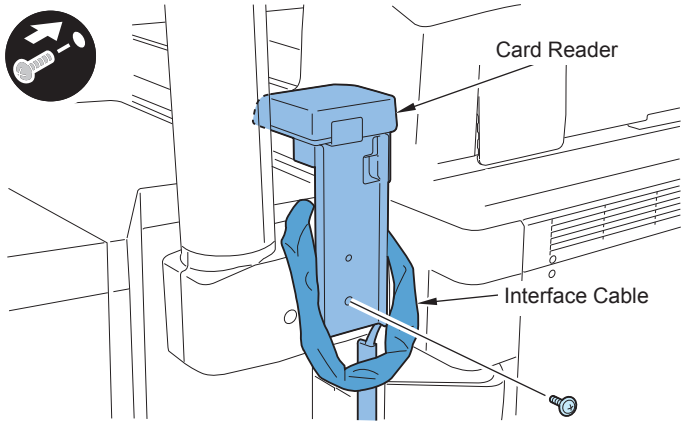
☐
21-2) Install the Card Reader Unit assembled at step 21-1).
- 1 Screw (TP; M4 x 12)



F-9-225

< In the case of the Multi-drawer Paper Deck installed >

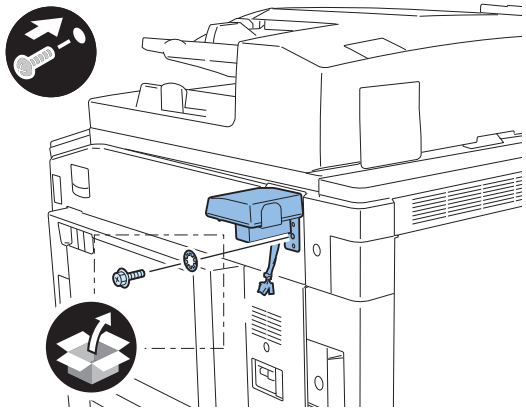
CAUTION:
Install it without pinching the Interface Cable of the Multi-drawer Paper Deck.



F-9-226

< In the case of the Flat Control Panel Model >

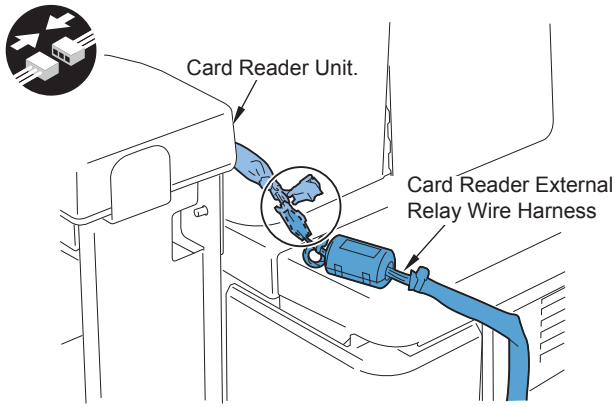
☐
21-1) Install the Card Reader.
- 1 Toothed washer
- 1 Screw (RS tightening; M4 x 10)



F-9-227

NOTE:
Illustrations for steps 22) and 23) use illustrations of the Upright Control Panel model but procedures are same.

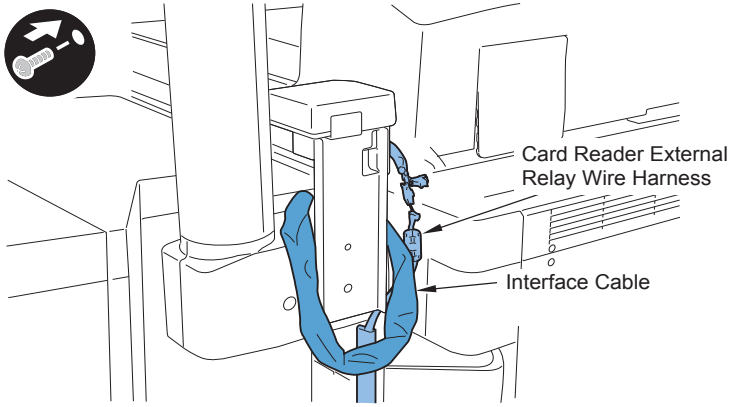
☐
22) Connect the connectors of the Card Reader External Relay Wire Harness and the Card Reader Unit.



F-9-228

< In the case of the Multi-drawer Paper Deck installed >

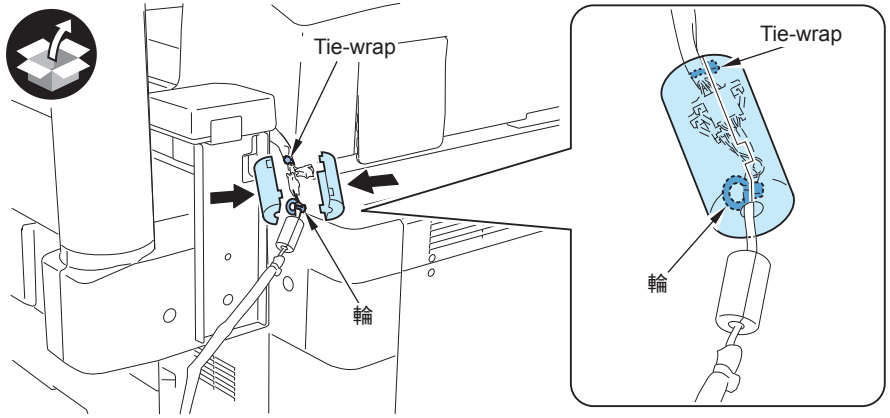
CAUTION:
IInstall it Like a figure the Card Reader External Relay Wire Harness of the Interface Cable of the Multi-drawer Paper Deck.



F-9-229

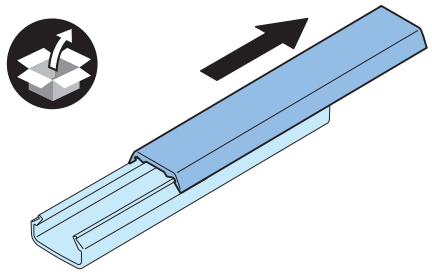
☐
23) Install the Connector Case.

CAUTION:
Install so that the Tie-wrap and the Loop of the Card Reader External Relay Wire Harness can be inside of the Connector Case.



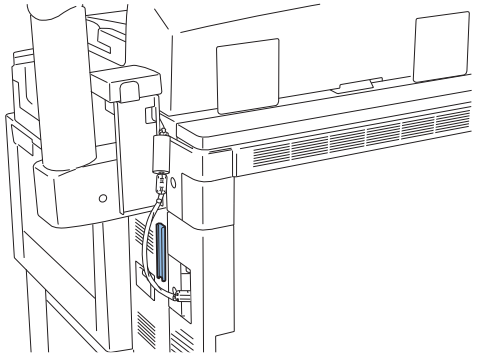
F-9-230

☐
24) Remove the Cord Guide Cover.



F-9-231

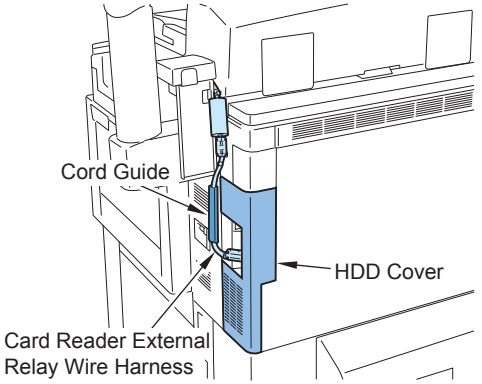
☐
25) Remove the Cord Guide, and put on a host machine.



F-9-232

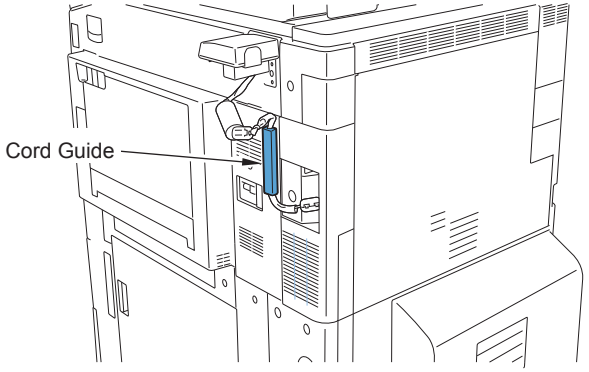
☐
26) Put the Card Reader External Relay Wire Harness into the Cord Guide, and install the cover of the Cord Guide.

< In the case of the Upright Control Panel >



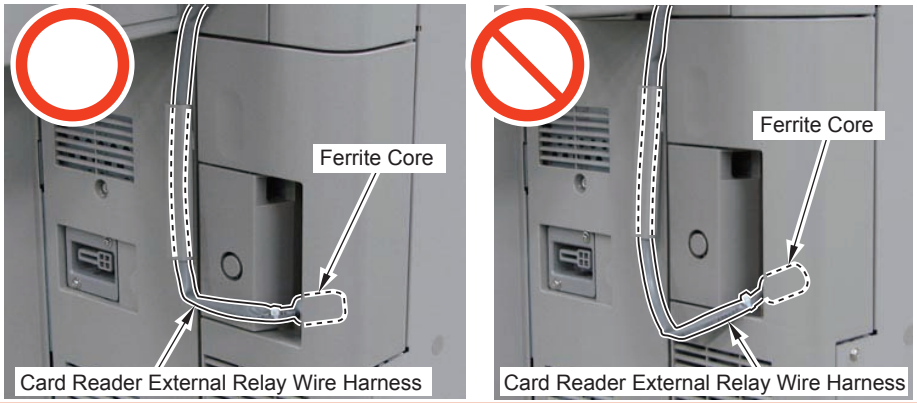
F-9-233

< In the case of the Flat Control Panel >



F-9-234

CAUTION:
Install carefully so that the Ferrite Core of the Card Reader External Relay Wire Harness does not interfere when opening/closing the HDD Cover.



F-9-235

☐
27) Connect the Power Plug into the outlet.
28) Turn ON the main power switch.

Setting After Installation

☐
1) Check that Service Mode (Level 1) > COPIER > OPTION > ACC > CR-TYPE is "0".

NOTE:
The number of card (number of department) can be changed if a request arises from a user. Make this setting before the step 3).
- Change the setting value in Service Mode (Level2) > COPIER > OPTION > FNC-SW > CARD-RNG.
- To enable the setting value, turn OFF/ON the main power switch.
- After that, go through the procedure from step 2).

☐
2) Use Service Mode to enter the minimum card number to be used by a user (1 to 2001).
- Service Mode (Level 1) : COPIER > FUNCTION > INSTALL > CARD

NOTE:
1000 cards from the inputted number can be used.

☐
3) To enable the setting value, turn OFF/ON the main power switch.
4) Insert the card with the registered card No. and make sure that it is in standby.

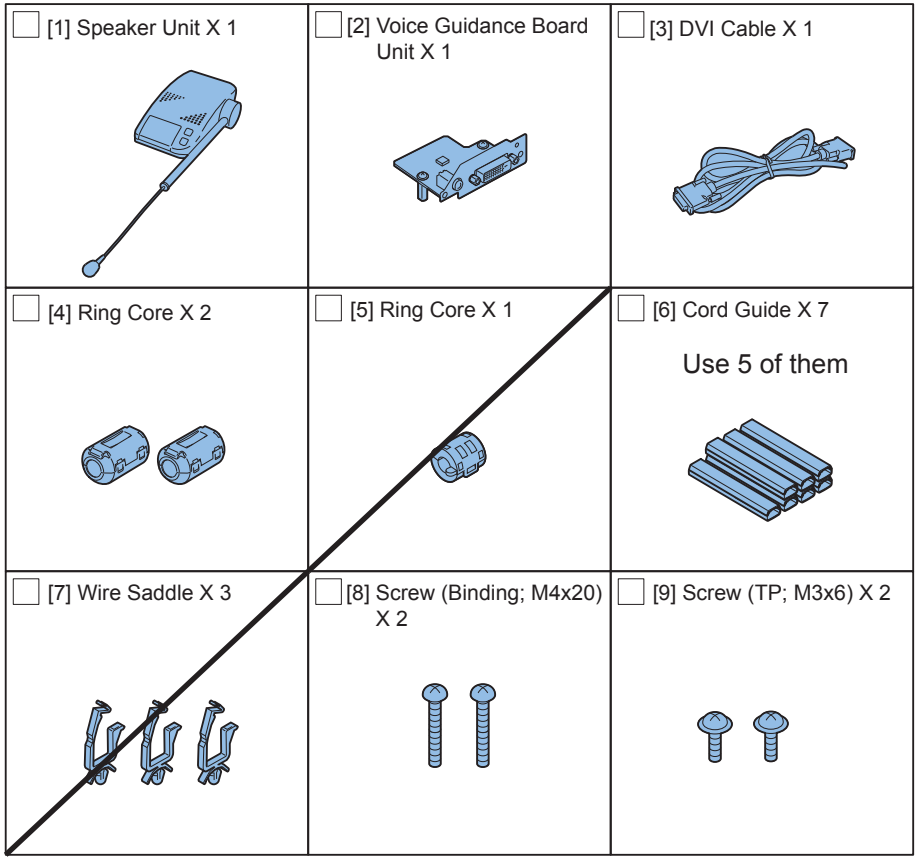
NOTE:
After setting, if a request arises from a user and changing the number of card (number of department), make a following setting. In that case, the current counter information by department will be reset.
- Execute in Service Mode (Level 1) > COPIER > FUNCTION > CLEAR > CARD.
- Specify the value in Service Mode (level 2) > COPIER > OPTION > FNC-SW > CARD-RNG.
- To enable the setting value, turn OFF/ON the main power switch.
- After that, go through the procedure from step 2).

Voice Opearion Kit-C2

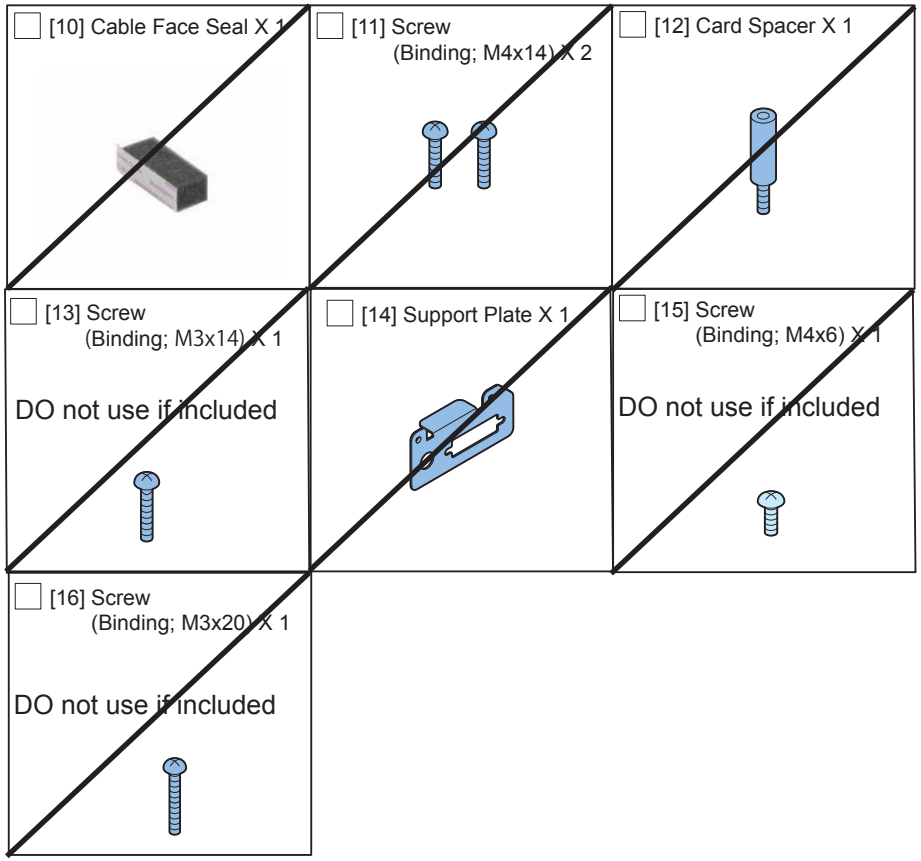
Points to Note Before Installation

- To use the equipment, the Color Image Reader is required.
- Refer to "Table of options combination" when installing this equipment before operation.

Checking the Contents



F-9-236



F-9-237

< CD/Guides >

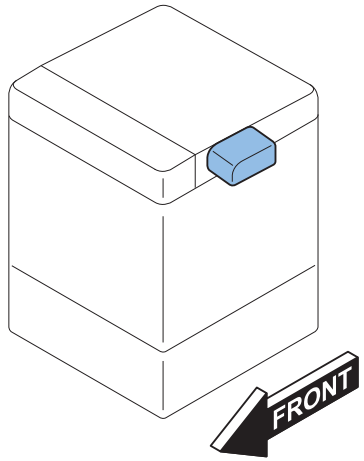
- Voice Guidance Kit User Guide
- Voice Operation Kit User Guide
- Voice Operation Quick Reference Guide
- Voice Guidance Guide CD
- Voice Operation Kit Manual CD
- FCC/IC Sheet

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing

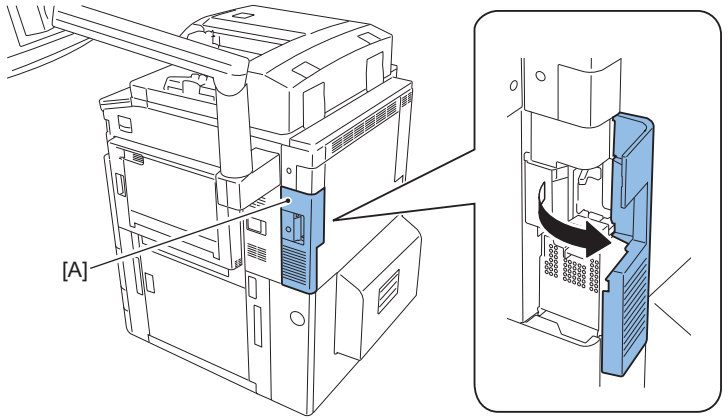


F-9-238

Installation Procedure

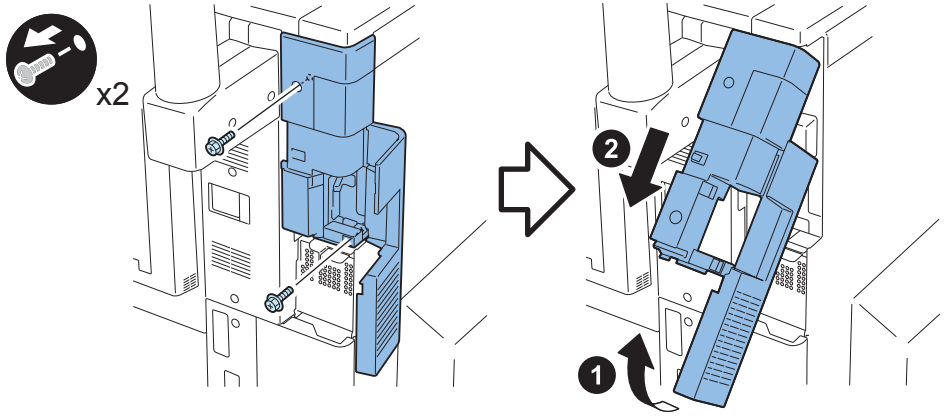
NOTE:
Explained is the installation method for Upright Control Panel; however, procedure is the same for Flat Control Panel.

☐ 1) Press the [A] area and open the HDD Cover.



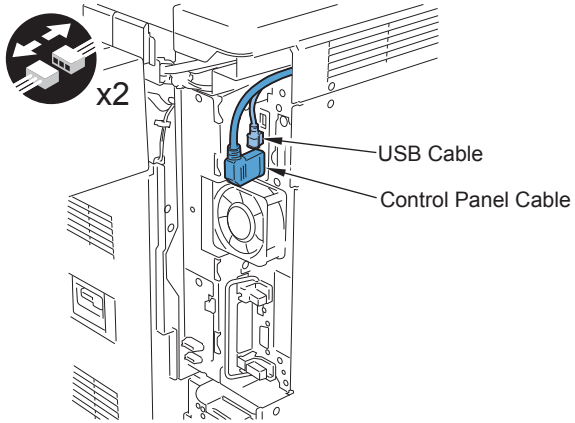
F-9-239

☐ 2) Remove the Main Controller Right Cover Unit.



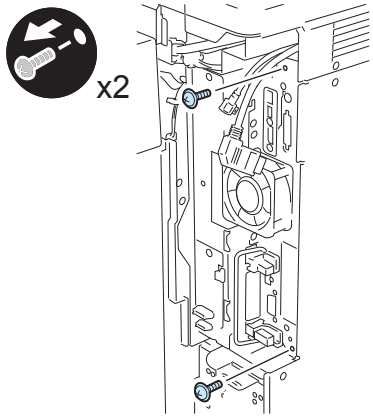
F-9-240

☐
3) Disconnect the USB Cable and the Control Panel Cable.



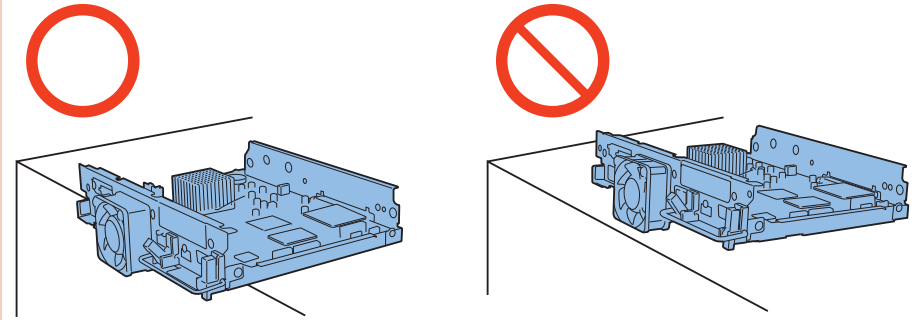
F-9-241

☐
4) Remove the 2 Screws. (Removed screw will be used in step 9).)



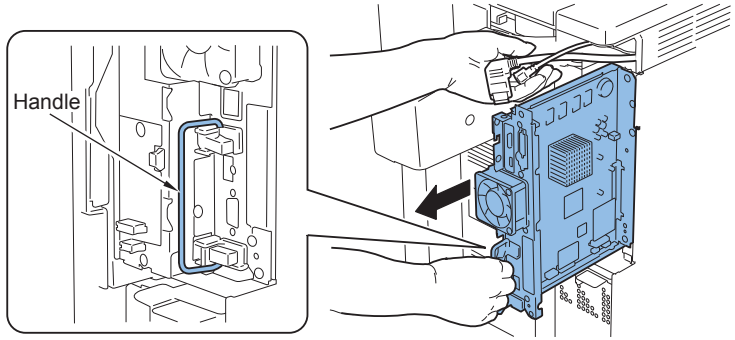
F-9-242

CAUTION:
Be sure to place the removed Main Controller PCB on flat surface.
Reason: Since the fan protrudes, if it is placed at a tilt, it may be damaged.



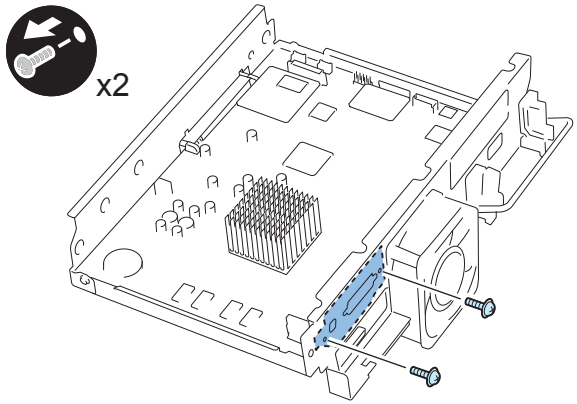
F-9-243

☐
5) Hold the handle and remove the Main Controller PCB 1.



F-9-244

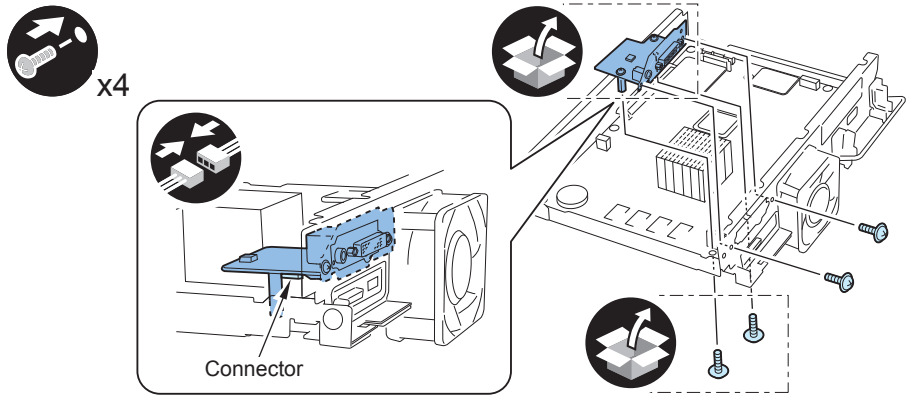
☐
6) Remove the Voice Operation Board Support Plate from the Main Controller PCB 1.
- 2 Screws (The removed 2 screws will be used in step 7).)



F-9-245

☐
7) Install the Voice Operation Board Unit to the Main Controller PCB 1.
- 1 Connector
- 4 Screws (2 screws removed in step 6)
- 2 Screws (TP; M3x6)

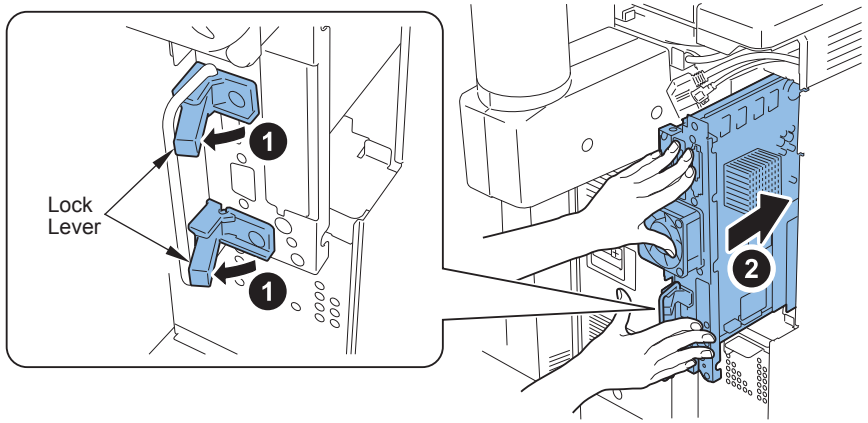
NOTE:
Check that the connector is firmly connected.



F-9-246

CAUTION:
Be careful not to make the cables stuck and install the Main Controller PCB 1.

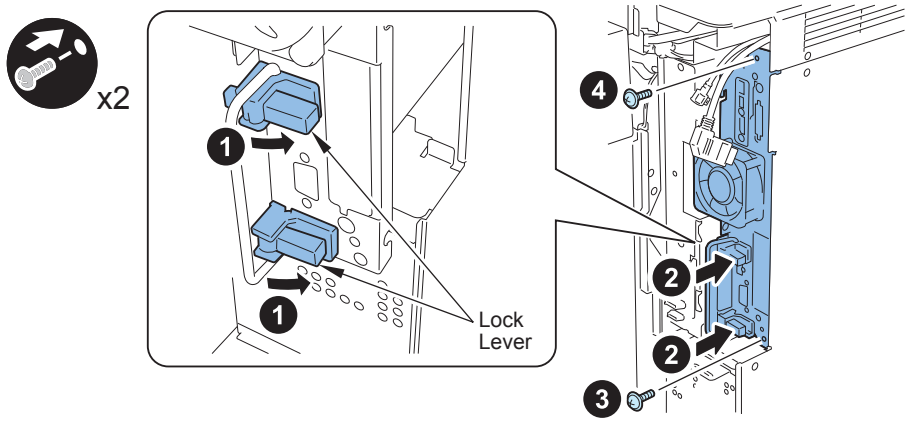
☐
8) Release the 2 Lock Levers in the direction of the arrow and push Main Controller PCB 1 evenly until it stops with both hands.



F-9-247

☐
9) Tilt the 2 Lock Levers and push the Main Controller PCB 1 further to secure it.
- 2 Screws (screw removed in step 4): install the bottom one first and the upper one.)

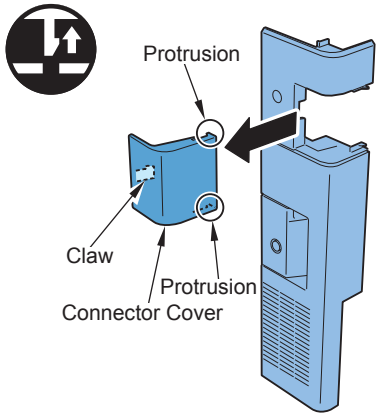
CAUTION:
Keep the order of steps 1 thru 4 shown in the figure since there is the case that a connector of the Main Controller 1 is not connected.



F-9-248

☐
10) Connect the USB Cable and the Control Panel Cable.

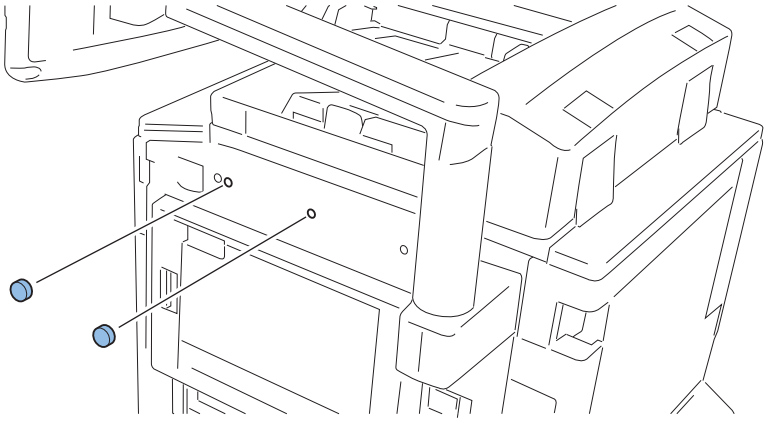
☐
11) Remove the Connector Cover from the Main Controller Right Cover Unit.
- Claw in 1 place
- Protrusions in 2 places



F-9-249

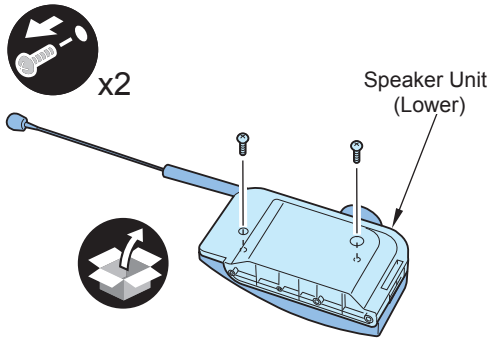
☐
12) Install the Main Controller Right Cover Unit. (2 screws)

☐
13) Remove the 2 rubber caps from the Right Upper Cover 1.



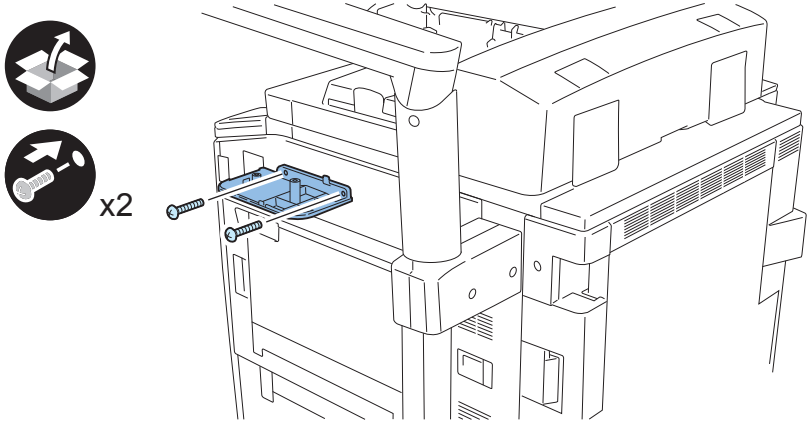
F-9-250

☐
14) Remove the Speaker Unit (Lower) from the Speaker Unit.
- 2 Screws (The removed screws will be used in step 16).)



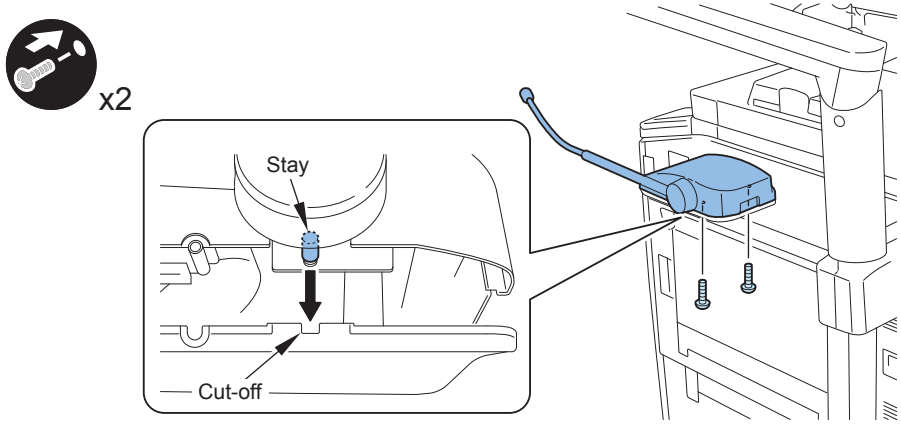
F-9-251

☐
15) Install the Speaker Unit (Lower).
- 2 Screws (Binding; M4x20)



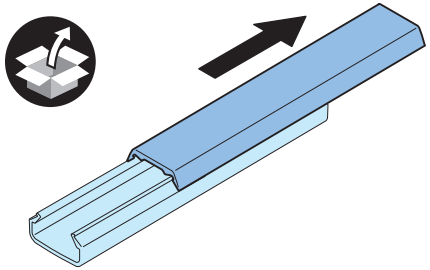
F-9-252

☐
16) Align the cut-off with the stay and install the Speaker Unit (upper).
- 2 Screws (The screw removed in step 14).)



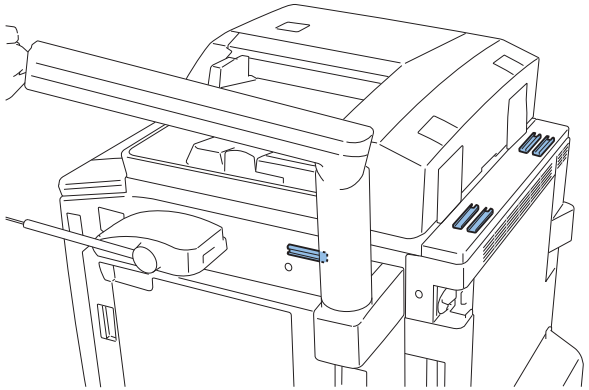
F-9-253

☐
17) Remove the cover of the 5 Cord Guides.



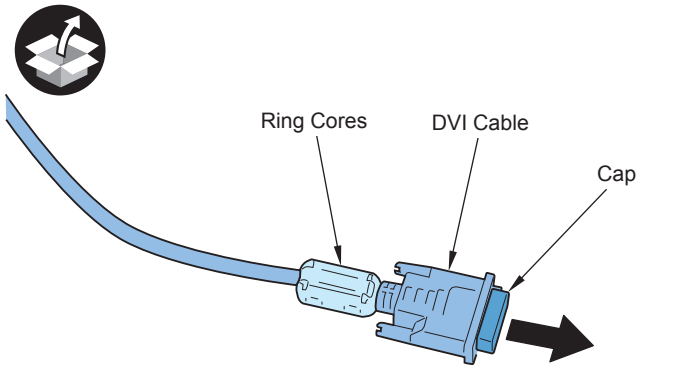
F-9-254

☐
18) Remove the backing paper and install the cord guides in the indicated 5 positions.



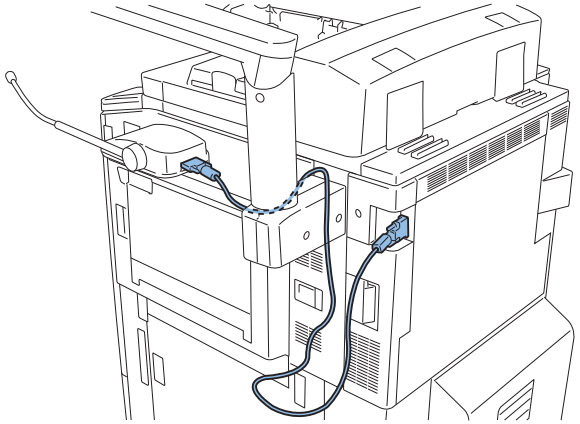
F-9-255

☐
19) Attach the Ring Cores to the both ends of the DVI Cable, and remove the cap.



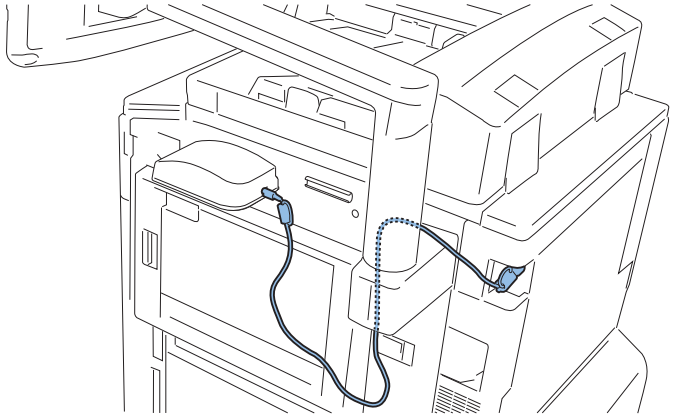
F-9-256

☐
20) Connect the DVI Cable to the Voice Operation Board Unit and the Speaker Unit.



F-9-257

☐
21) Put the DVI Cable through the Cord Guides, and attach the Cord Guide Covers.



F-9-258

☐
22) Connect the Power Plug into the outlet.
23) Turn ON the Main Power Switch.

Checking After Installation

☐

1) Make the following selection: [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > [Use Voice Navigation], and check that [ON] is set.
2) Make the following selection; [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > [Voice Navigation at Startup], and check that [Select Mode at Startup] is set.
3) Check that [Tune Microphone] is displayed by making the following selection; [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > [Tune Microphone].

Operation Check

< When Starting to Use >

☐

1) Hold down the Reset Key or Voice Recognition button for more than 3 seconds.
2) With [Voice Navigation] on the Control Panel Screen, select one of [Manual + Vocal Mode / Vocal Mode / Manual Mode], and press the OK key.
3) When the display on the Panel Screen is framed in red, the Voice Operation Kit becomes available.

NOTE:
In case [Manual Mode] is selected in <Voice Navigation>, nothing will happen by pressing the Voice Recognition button.

In case the Voice Operation Kit fails to operate, check the following.

- Make the following selection; Service Mode(Level 1) > COPIER > DISPLAY > VERSION, and check that TTS-JA/TTS-EN and ASR-JA/ASR-EN are installed correctly.

< When Disusing >

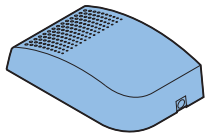
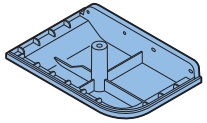
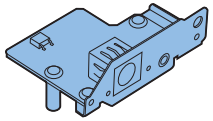
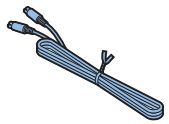
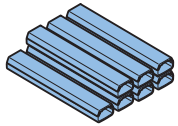
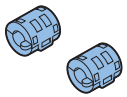
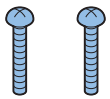
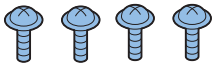
1) Hold down the Reset Key or Voice Recognition button for more than 3 seconds.

Voice Guidance Kit-F2

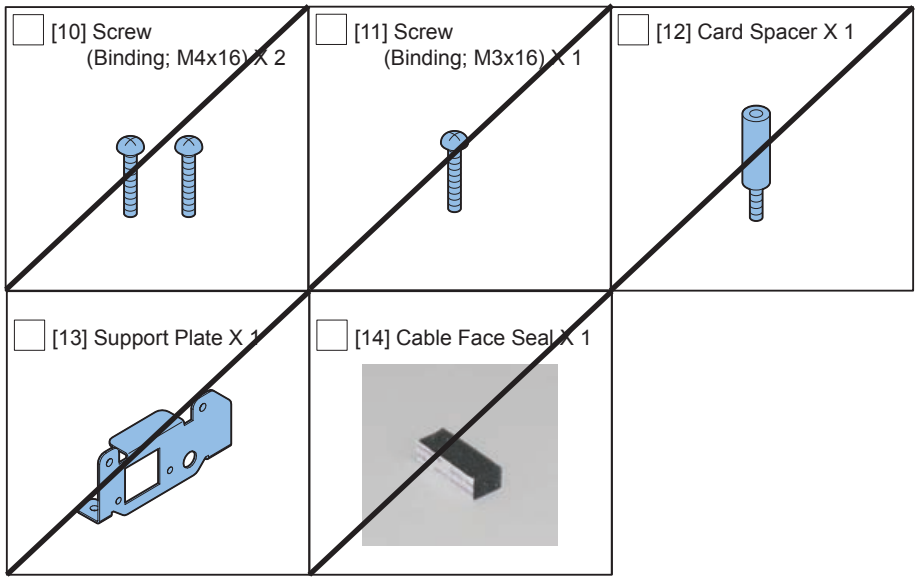
Points to Note Before Installation

- Color Image Reader is necessary to operate this equipment.
- Refer to "Table of options combination" when installing this equipment before operation.

Checking the Contents

☐ [1] Speaker Unit (Upper) X 1 	☐ [2] Speaker Unit (Lower) X 1 	☐ [3] Voice Guidance Board Unit X 1 
☐ [4] Speaker Cable X 1 	☐ [5] Cord Guide X 7 Use 4 of them 	☐ [6] Ring Core X 2 
☐ [7] Screw (Binding; M4x6) X 1 	☐ [8] Screw (Binding; M4x20) X 2 	☐ [9] Screw (TP; M3x6) X 4 Use 2 of them 

F-9-259



F-9-260

< CD/Guides >

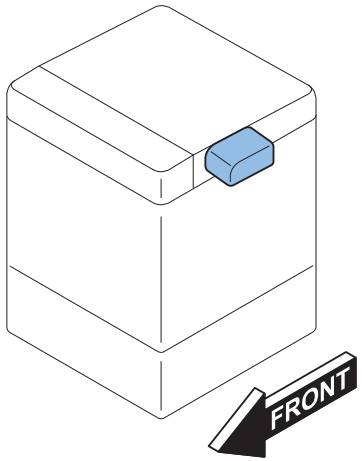
- Voice Guidance Kit User's Guide
- Voice Guidance User's Guid CD
- FCC/IC sheet

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing

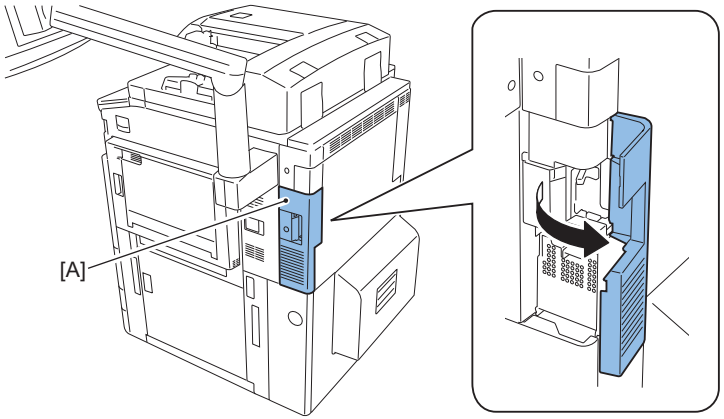


F-9-261

Installation Procedure

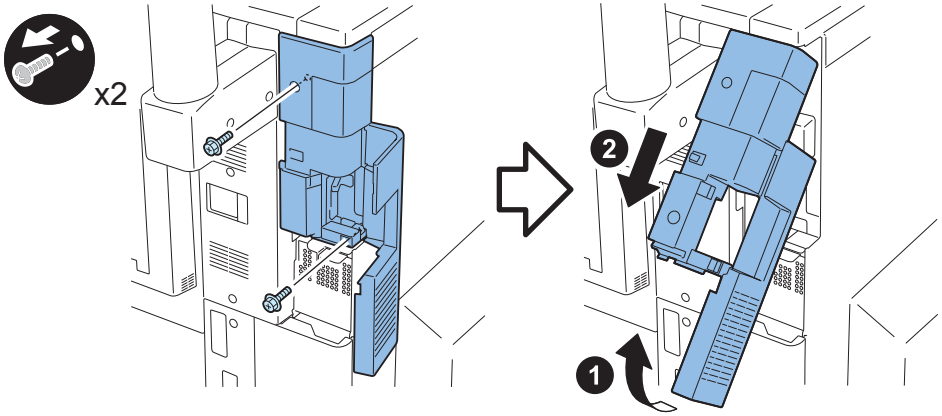
NOTE:
Explained is the installation method for Upright Control Panel; however, procedure is the same for Flat Control Panel.

☐
1) Push [A] area to open the HDD Cover.



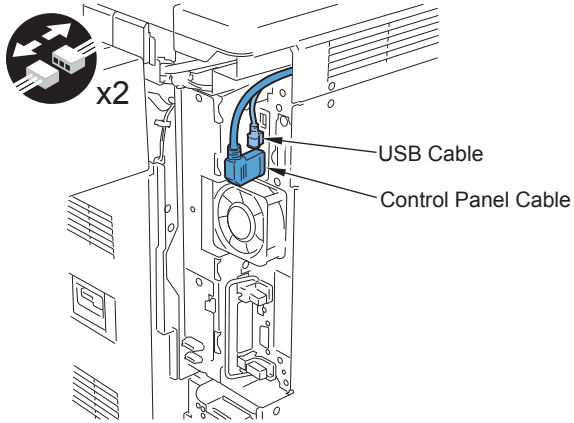
F-9-262

☐
2) Remove the Main Controller Right Cover Unit.



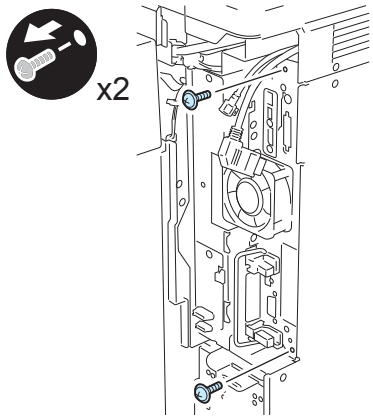
F-9-263

☐
3) Disconnect the USB Cable and the Control Panel Cable.



F-9-264

☐
4) Remove the 2 screws (Removed screws will be reused at, step 12).)

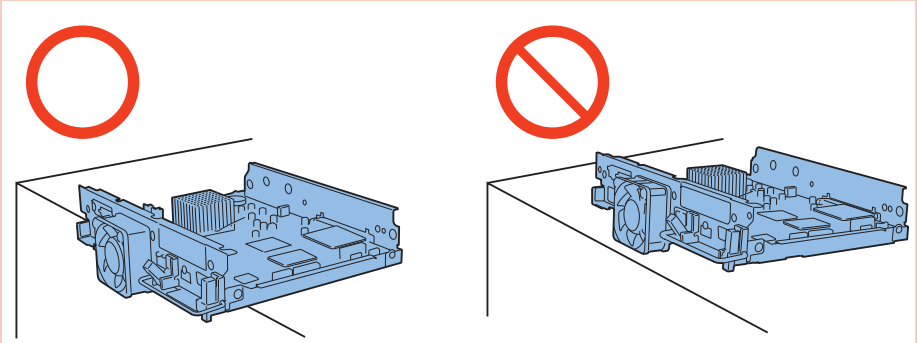


F-9-265

CAUTION:

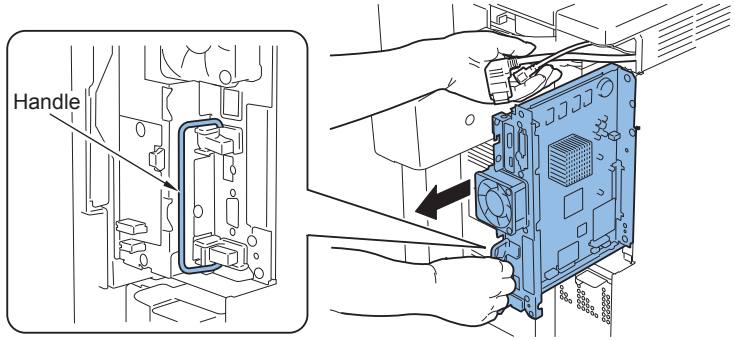
Be sure to place the removed Main Controller PCB on flat surface.

Reason: Since the fan protrudes, if it is placed at a tilt, it may be damaged.



F-9-266

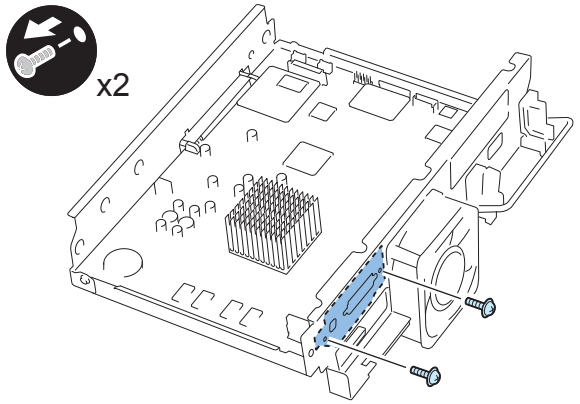
☐
5) Hold the handle and remove the Main Controller PCB 1.



F-9-267

☐
6) Remove the Voice Operation Board Support Plate from Main Controller PCB 1.

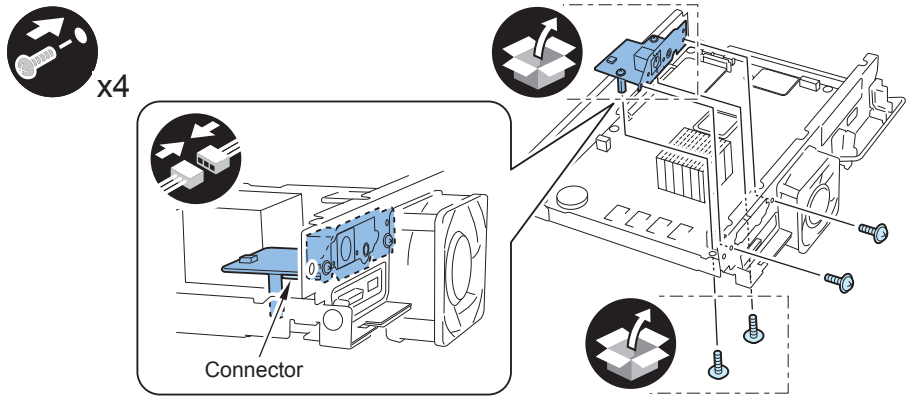
- 2 Screws (the removed screws are used in step 7).)



F-9-268

☐
7) Install the Voice Guidance Board.
- 1 Connector
- 4 Screws (the 2 screws removed in step 6) and the 2 screws (TP; M3x6) included in the package.)

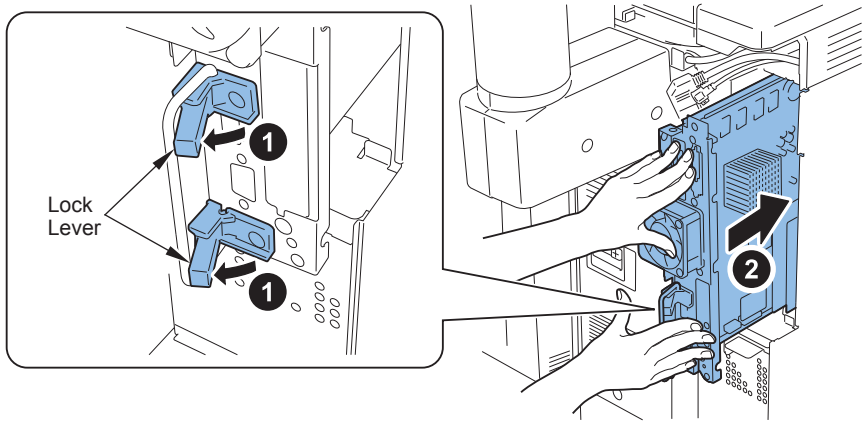
NOTE:
Check that the connector is in contact with the base.



F-9-269

CAUTION:
Be careful not to make the cables stuck and install the Main Controller PCB 1.

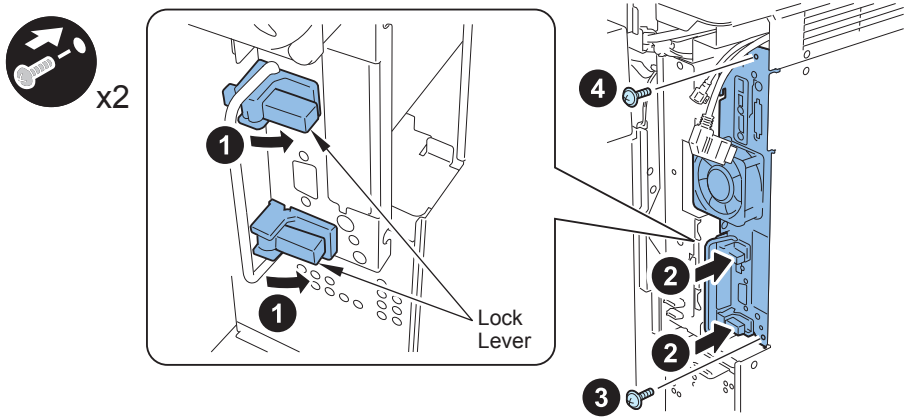
☐
8) Release 2 Lock Levers in the arrow direction, and push the Main Controller 1 all the way in evenly with both hands.



F-9-270

☐
9) Press 2 Lock Levers down to push the Main Controller 1 and secure.
- 2 Screws (Removed screws at step 4): Install in order of bottom and top.)

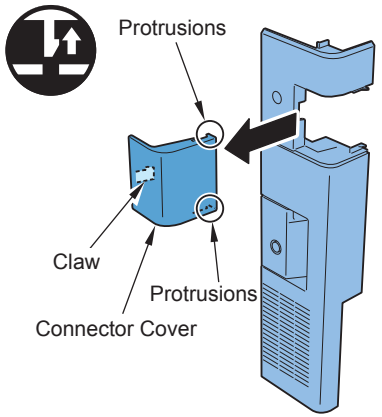
CAUTION:
Keep the order of steps 1 thru 4 shown in the figure since there is the case that a connector of the Main Controller 1 is not connected.



F-9-271

☐
10) Connect the USB Cable and the Control Panel Cable.

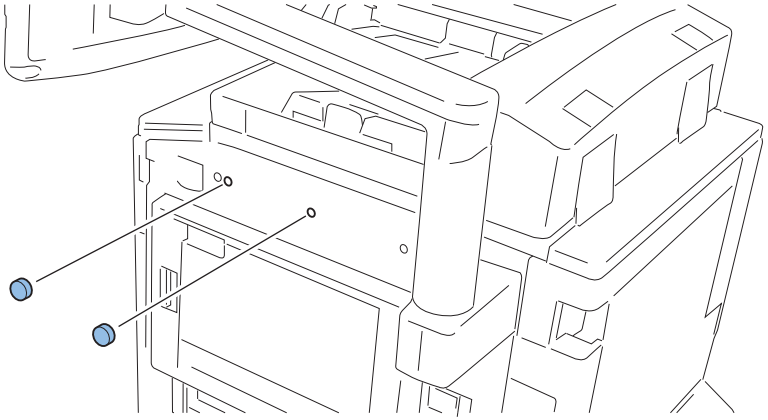
☐
11) Remove the Connector Cover from the Main Controller Right Cover Unit.
- 1 Claw
- 2 Protrusions



F-9-272

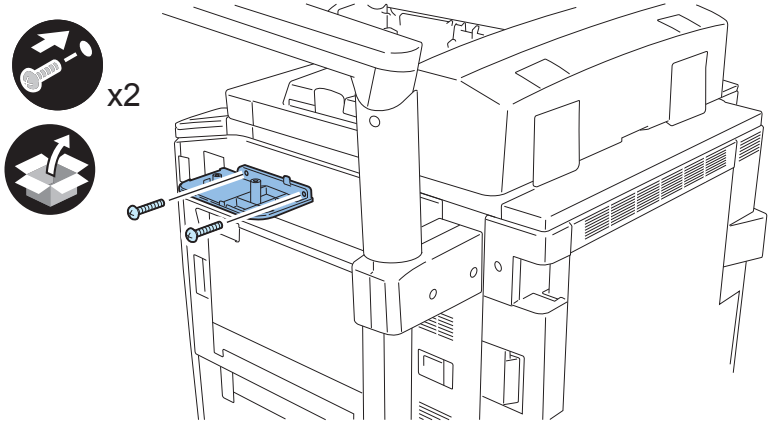
☐
12) Install the Main Controller Right Cover Unit. (2 screws)

☐
13) Remove the 2 Rubber Caps from Right Upper Cover 1.



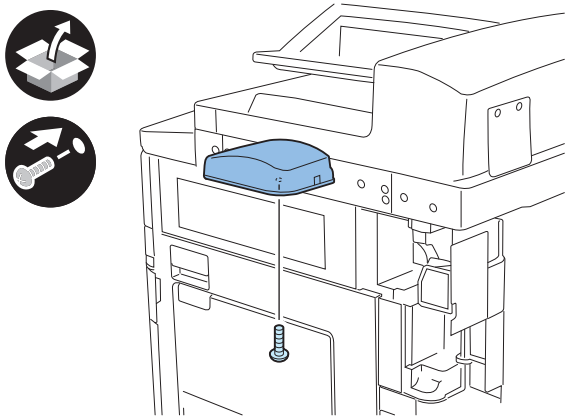
F-9-273

☐
14) Install the (Lower) Speaker Unit.
- 2 Screws (Binding; M4x20)



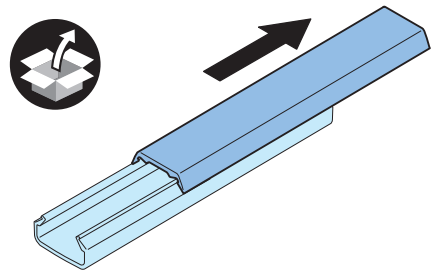
F-9-274

☐
15) Install the (Upper) Speaker Unit.
- 1 Screw (Binding; M4x6)



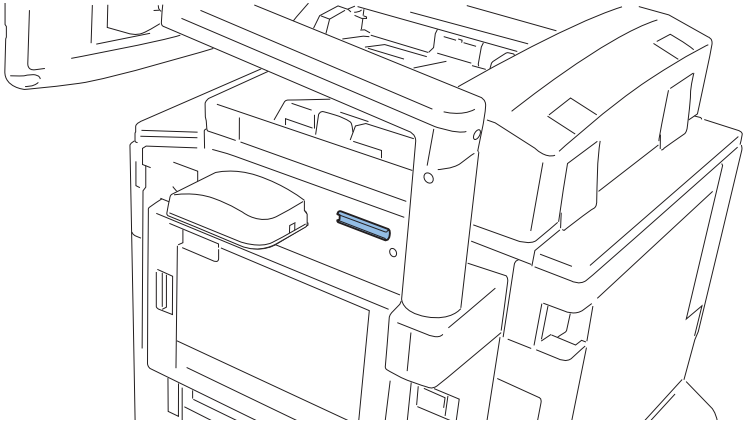
F-9-275

☐
16) Remove the Cord Guide Cover.



F-9-276

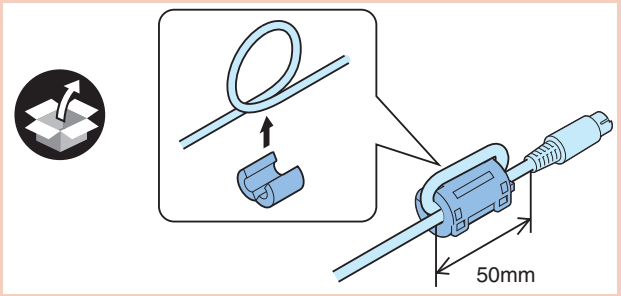
☐
17) Remove the Peel-Off Sheet to attach the Cord Guide to the position as shown in the figure.



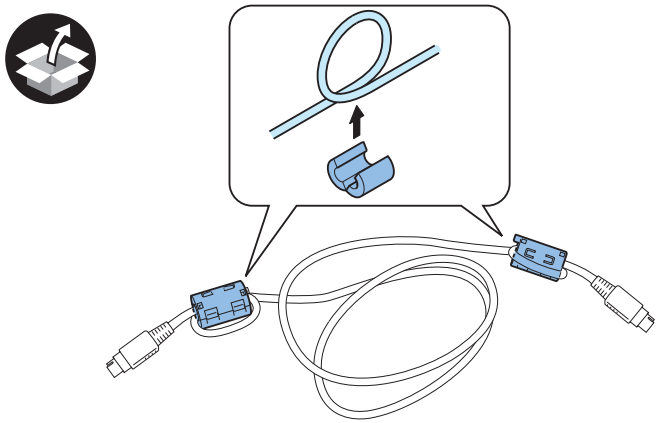
F-9-277

☐
18) Install the 2 Ferrite Cores to both edges of the Speaker Cable.

CAUTION:
Be sure to install the Ferrite Core within 50mm from the edge of the Speaker Cable.

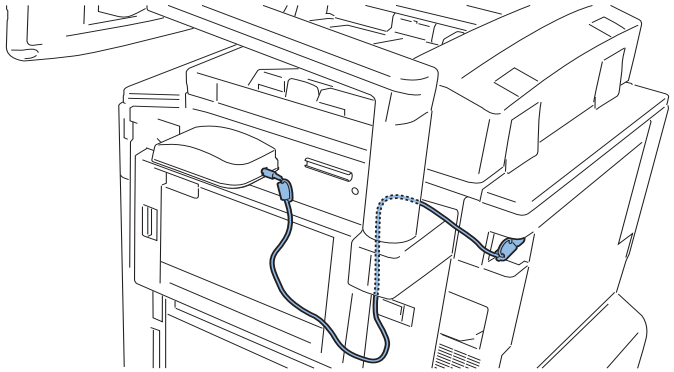


F-9-278



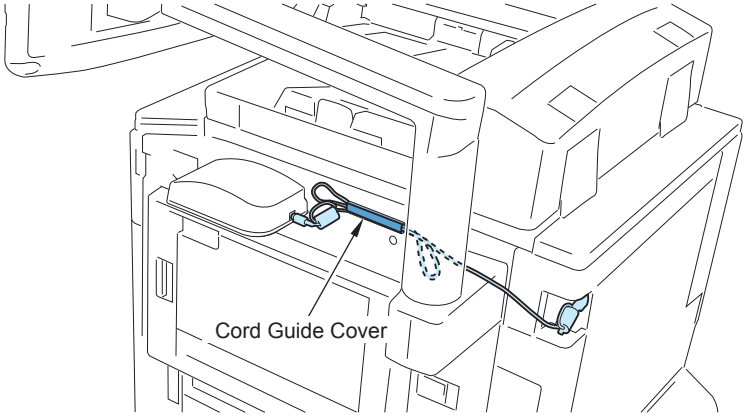
F-9-279

☐
19) Insert the Speaker Cable to the Voice Guidance Board Unit and the (Upper) Speaker Unit.



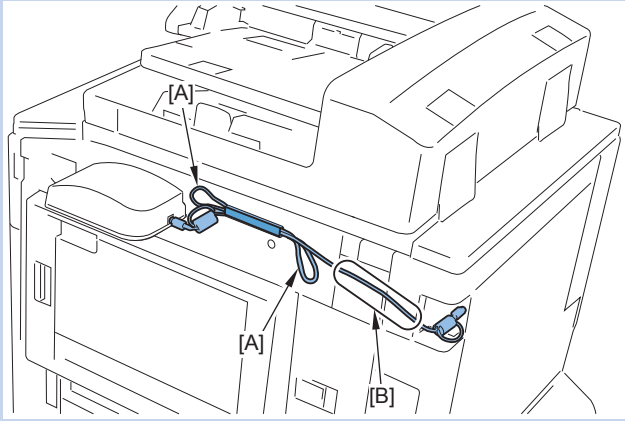
F-9-280

☐
20) Put the Speaker Cable through the Cord Guide and install the Cord Guide Cover.



F-9-281

NOTE:
If the Upright control Panel is not installed, be sure to take up slack of the Speaker Cabel at [B] area by adjusting its lenght at [A] area.



☐
21) Connect the Power Plug into the outlet.
22) Turn ON the Main Power Switch.

Checking After Installation

□

1) [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > and make sure that [Use Voice Navigation] is [ON].
2) [Settings/Registration] > [Preferences] > [Accessibility] > [Voice Navigation Settings] > and make sure that [Voice Guide from Speakers] is displayed.

Operation Check

< When Starting to Use >

1) Press reset key 3 secs or more.
2) Press [Main Menu] in Control Panel.
3) If the display in panel screen is boxed with red frame, “Voice Guidance Kit” is available.

If “Voice Guidance Kit” doesn’t properly operate, check the below.

- Make the following selection; Service Mode (Level 1) > COPIER > DISPLAY > VERSION, and check that TTS-JA/TTS-EN and ASR-JA/ASR-EN are installed correctly.

< When Disusing >

1) Hold down the Reset Key or Voice Recognition button for more than 3 seconds

Additional Memory Type D (512MB)

Checking the Contents

☐ [1] Expansion RAM x 1

F-9-282

Points to Note Before Installation

☐

1) Check the memory capacity.
- Service Mode(Level 1) > COPIER > DISAPLAY > ACC-STS > RAM

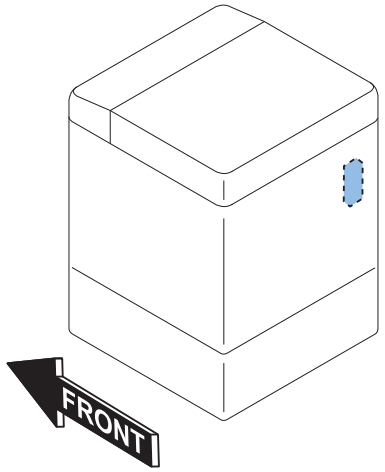
2) Exit the Service Mode.

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing

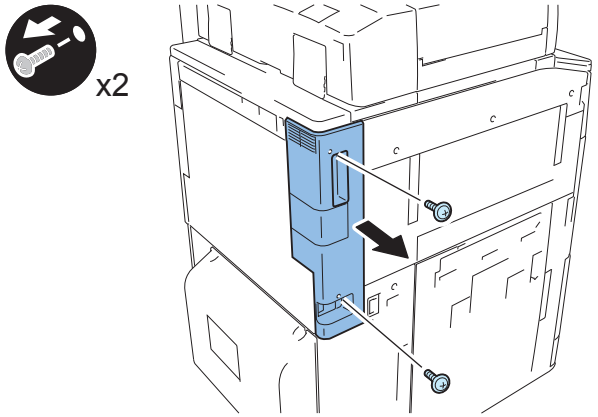


F-9-283

Installation Procedure

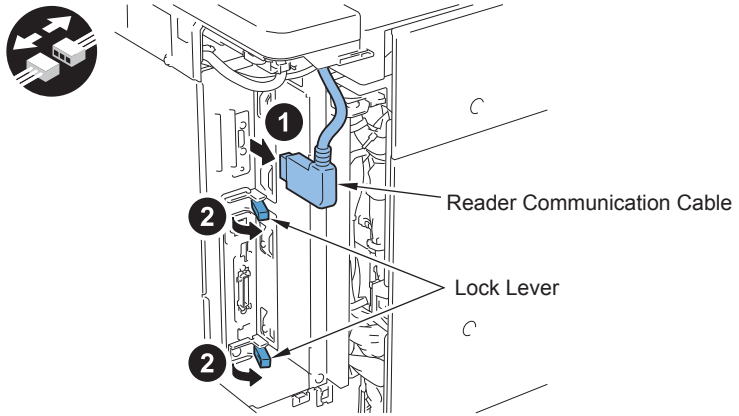
☐

1) Remove the Box Left Cover.
- 2 Screws (Rmoved screws is step 8) to used.)



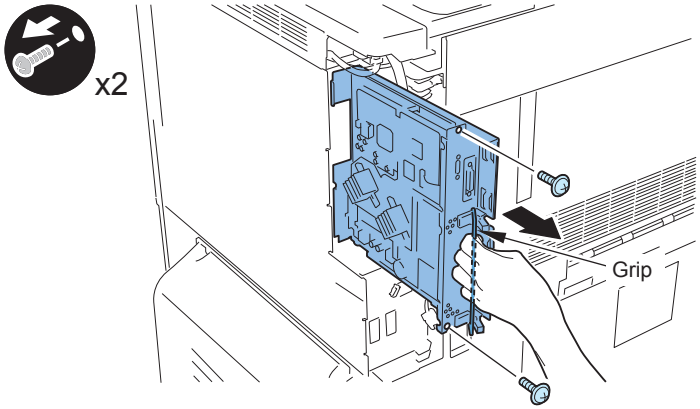
F-9-284

☐
2) Disconnect the Reader Communication Cable, and release the 2 Lock Levers.



F-9-285

☐
3) Remove the Main Controller PCB 2 while holding the grip.
- 2 Screws (Removed screws will be reused at step 6).)



F-9-286

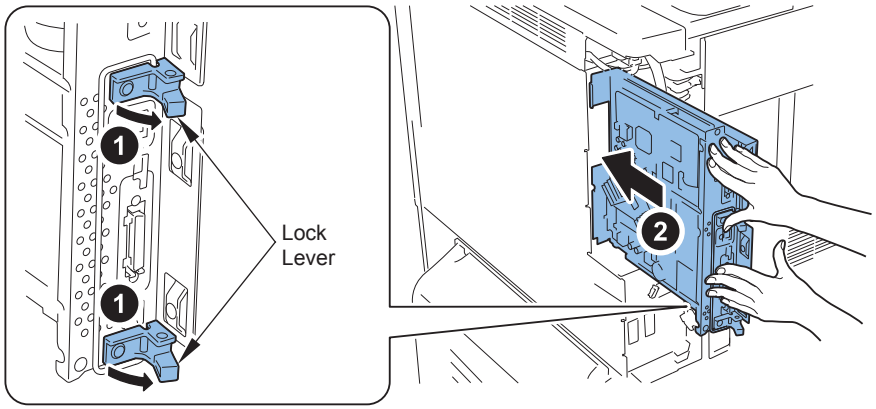
☐
4) Install the Expansion RAM on Main Controller PCB 2.

CAUTION:
When installing the Expansion RAM, be careful not to touch the plate..

F-9-287

☐
5) Turn over the 2 Lock Levers, and push in and secure the Main Controller PCB 2.

CAUTION:
Install it without pinching the Cables of the Main Controller PCB 2.



F-9-288

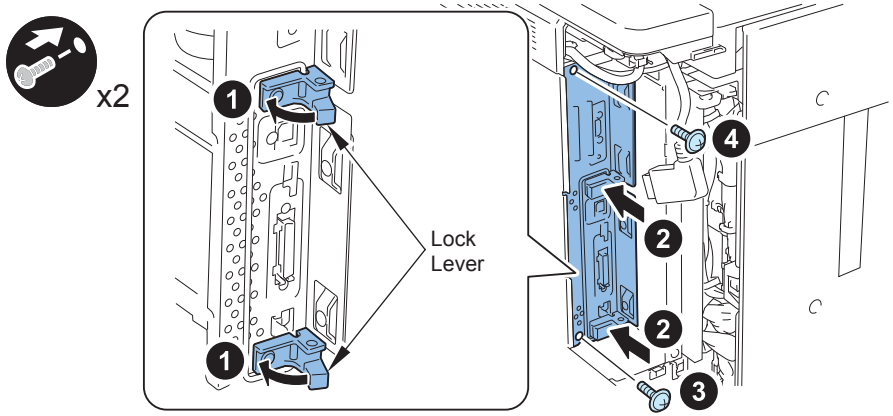
☐

6) Turn over the 2 Lock Levers, push the Main Controller 2 in and fix it.

- 2 Screws (Removed screws at step 3): Install in order of bottom and top.)

CAUTION:

Reliable work in order from Figure 1 to 4 should be done in case of no connection regarding Main Controller PCB 2.



F-9-289

☐

7) Connect the Reader Communication Cable.

8) Install the Box Left Cover(2 screws).

9) Connect the Power Plug into the outlet.

10) Turn ON the main power switch.

Checking After Installation

☐

1) After the Expansion RAM is installed, check that the memory capacity is added.

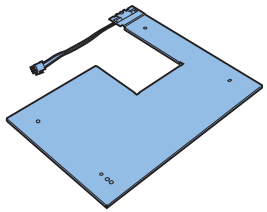
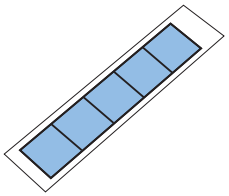
- Service Mode(Level 1) > COPIER > DISAPLAY > ACC-STS > RAM

2) Exit the Service Mode.

Reader Heater Unit

Checking the Contents (Asia only)

Reader Heater Unit-G1

☐ [1] Reader Heater X 1	☐ [2] Flat Screw (M4x4) X 4	☐ [3] Heater Sheet X 1sheet
	 * Binding screw can also be used.	Use 3 of them 

F-9-290

Checking the Parts to be Installed (Except for Asia)

Each parts of the Reader Heater Unit are provided as service parts, order as necessary to prepare parts below.

NO.	Parts name	Parts Number.	Q'ty
[1]	Reader Heater (200V)	FK2-7164-000	1 pc
[2]	Flat Screw (M4 x4)	XA9-1956-000	4 pc
[3]	Heater Sheet	FC8-6060-000	1 sheet

T-9-4

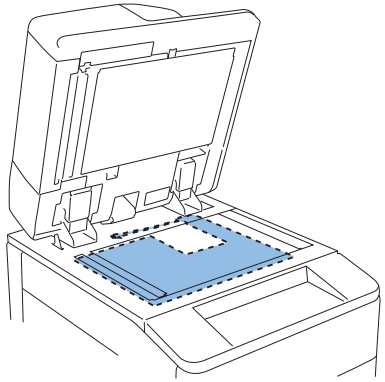
Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.

2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing

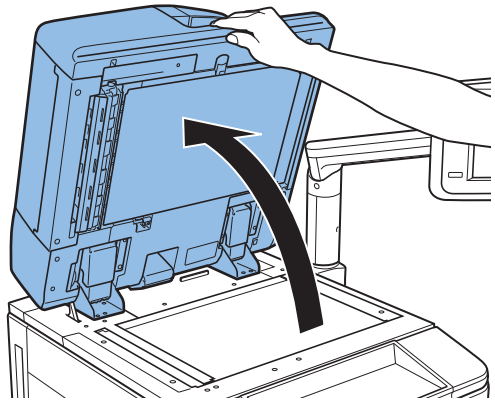


F-9-291

Installation Procedule

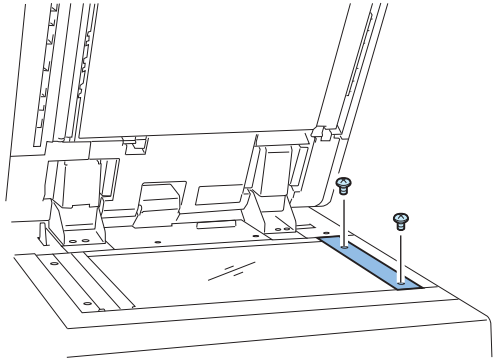
☐

1) Open the DADF.



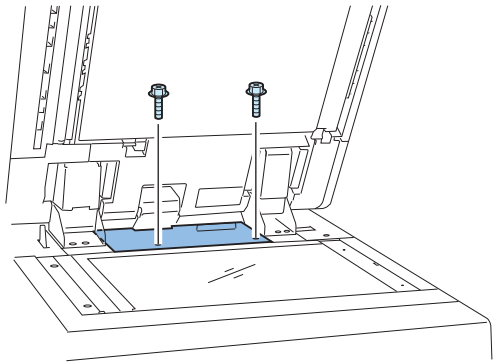
F-9-292

☐
2) Remove the right retainer cover.
- 2 Screws



F-9-293

☐
3) Remove the DF cable cover.
- 2 Screws



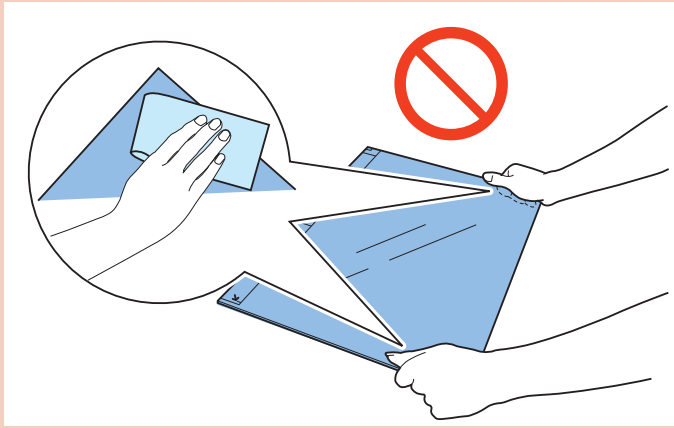
F-9-294

☐
4) Remove the copy board glass.

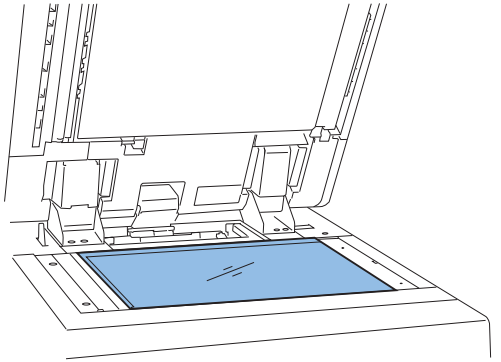
CAUTION:

When removing the copyboard glass, be sure not to get your fingers touched with the glass surface or the backside of the white plate.

In case the glass is soiled, clean it with lint-free paper.

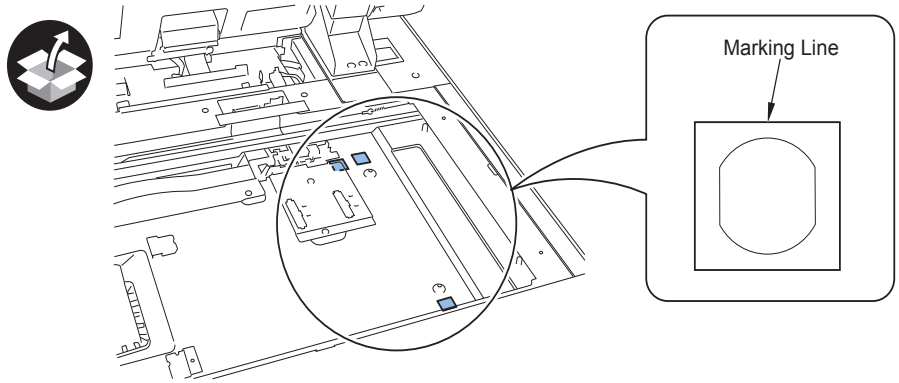


F-9-295



F-9-296

☐
5) Align the 5 heater sheets in the marking line and put them on.

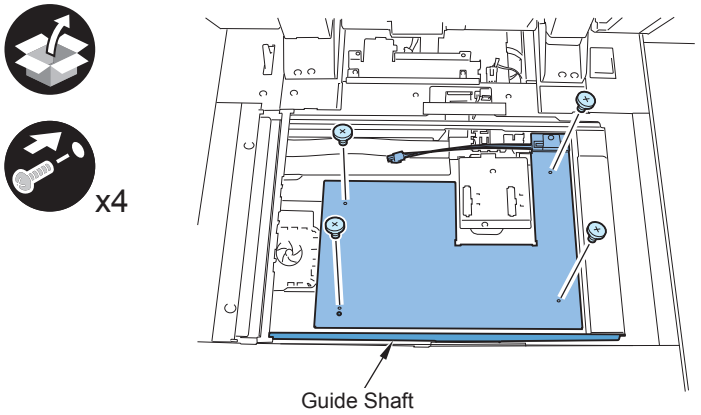


F-9-297

☐
6) Install the reader heater.

- 4 Screws (Flat-head; M4 x 4)
  (*Binding screw can also be used.)

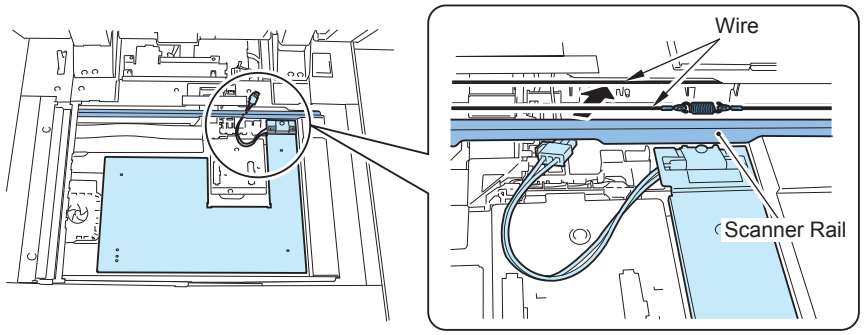
CAUTION:
Do not scratch the surface of the Guide Shaft.



F-9-298

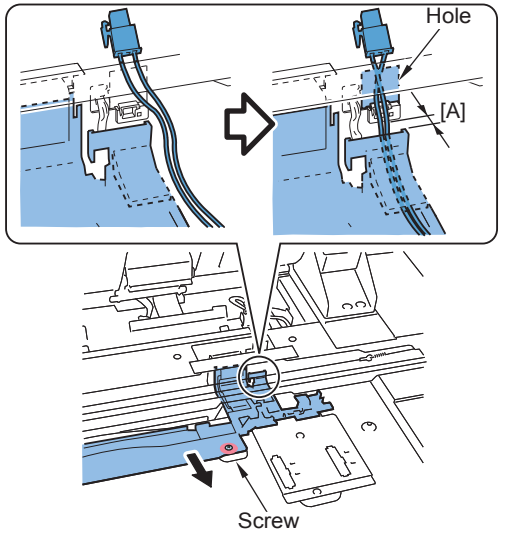
☐
7) Pass the connector under the scanner rail.

CAUTION:
Do not scratch surface of the wire and the Scanner Rail.



F-9-299

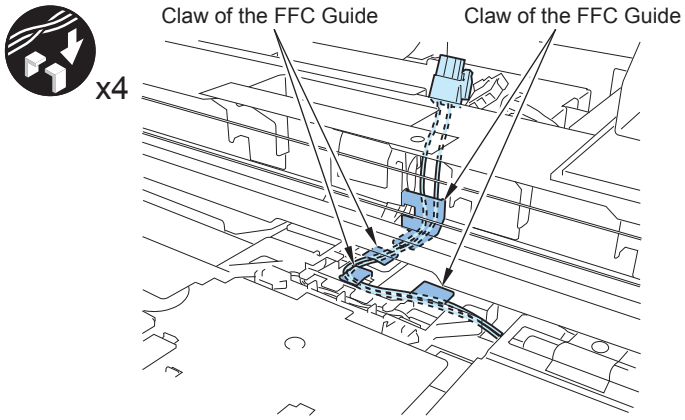
☐
8) Loosen the screw and shift the harness guide in the direction of the arrow to make a space [A] to pass the harness.



F-9-300

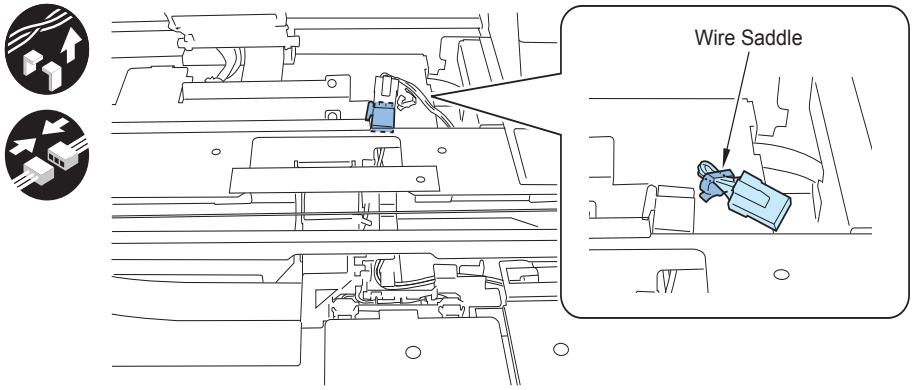
☐
9) Put the harness along the claws of FFC guide in the 4 places.

NOTE:
Make sure to keep the harness tightly put.



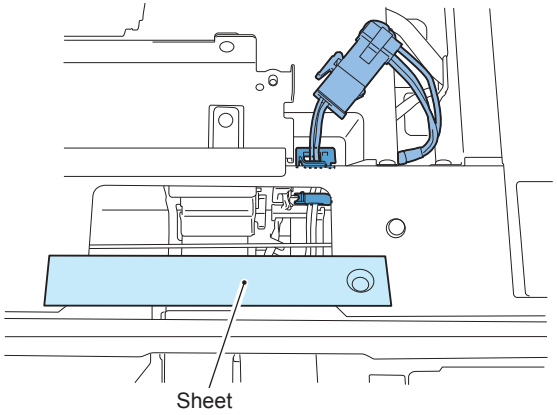
F-9-301

☐
10) Release the wire saddle and connect the connector.



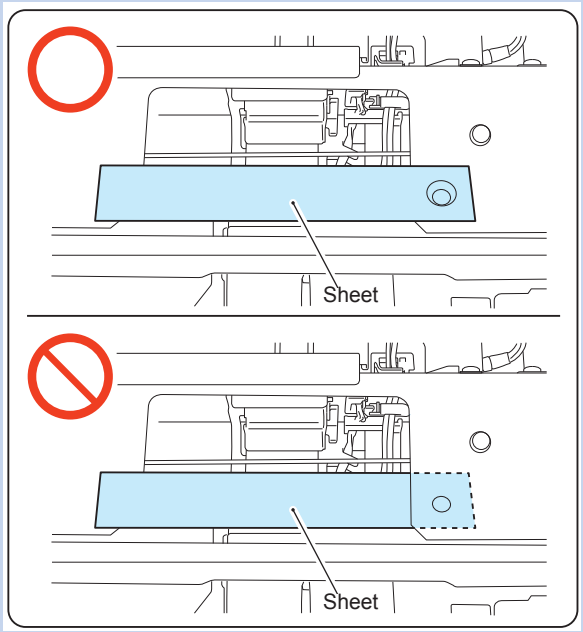
F-9-302

☐
11) Fix the harness with 2 edge saddles.



F-9-303

NOTE:
Check the sheet position.



F-9-304

☐
12) Aligning with the boss, tighten the screw that has been loosened in step 8). (2 Screws)

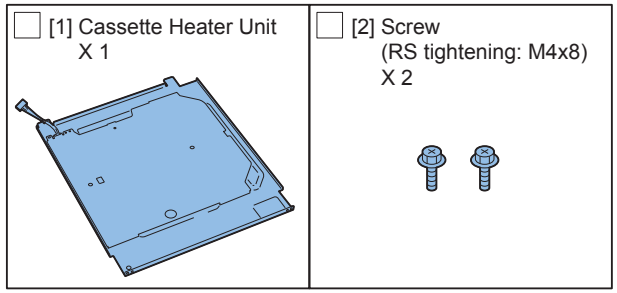
☐
13) Install the removed cover.
- Copy board glass
- DF cable cover (2 Screws)
- Right retainer cover (2 Screws)

☐
14) Clouse the DADF.
15) Turn ON the environment switch.
16) Insert the power plug to the outlet.
17) Turn ON the main power switch.

Cassette Heater Unit

Checking the Contents (EUR only)

Cassette Heater Unit-38



F-9-305

Checking the Parts to be Installed (AUS only)

Prepare the following parts because each part of the Cassette Heater Unit is assigned as service part.

NO	Parts name	Parts Nanumber	Q'ty
[1]	Cassette Heater Unit	FM3-4855-000	1pc
[2]	Screw (RS tightening; M4x8)	XB3-6400-805	2pc

T-9-5

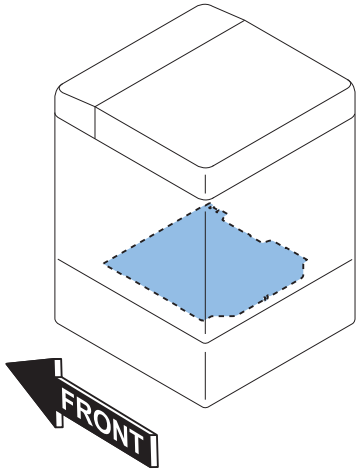
Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.

2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing



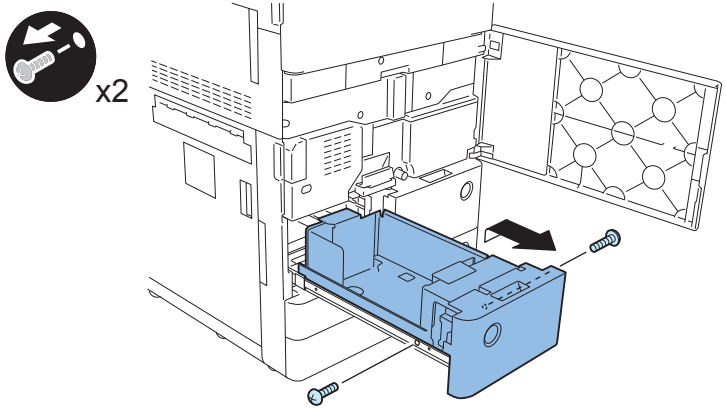
F-9-306

Installation Procedule

☐ 1) Open the Front Cover.

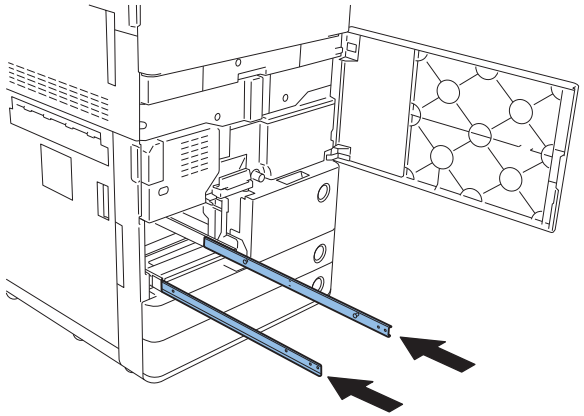
☐ 2) Pull out the Left Deck to remove.

- 2 Screws



F-9-307

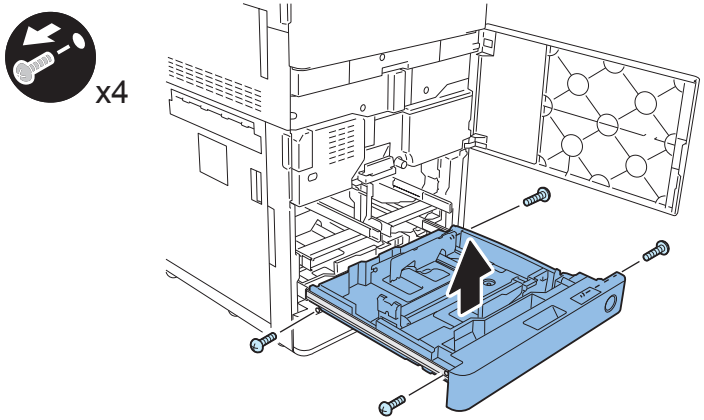
☐
3) Put the 2 Rails in.



F-9-308

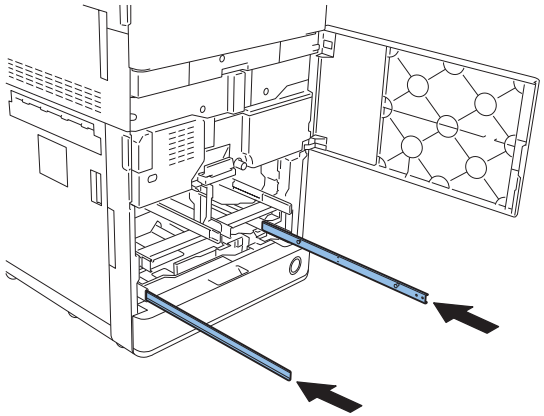
☐
4) Pull out the Right Deck to remove the Left Deck in the same way.
5) Put the 2 Rails in.

☐
6) Pull out Cassette 3 to remove.
- 4 Screws



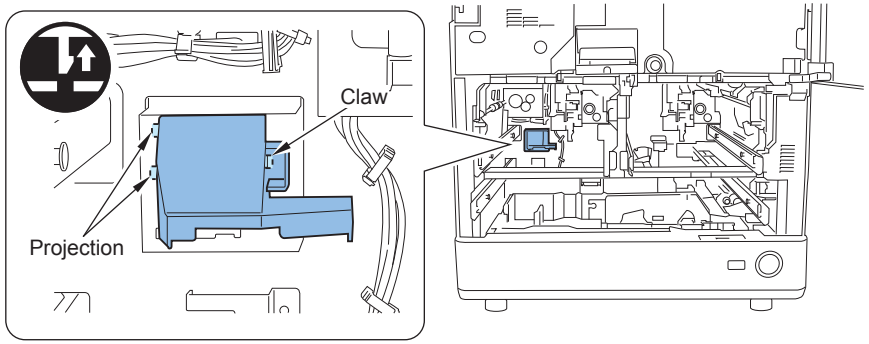
F-9-309

☐
7) Put the 2 Rails in.



F-9-310

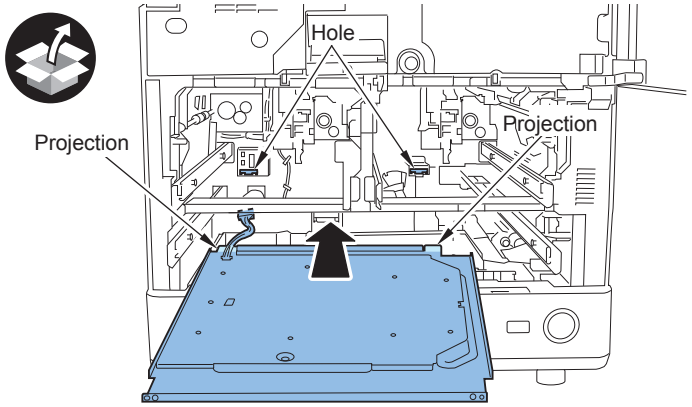
☐
8) Remove the Connector Cover.
- 1 Claw
- 2 Projections



F-9-311

☐
9) Remove tapes on the Cassette Heater Unit.

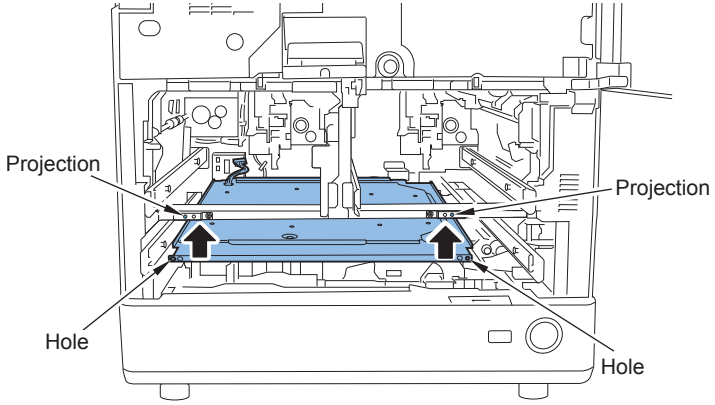
☐
10) Fit the projections of the Cassette Heater Unit into the holes of the Host Machine.



F-9-312

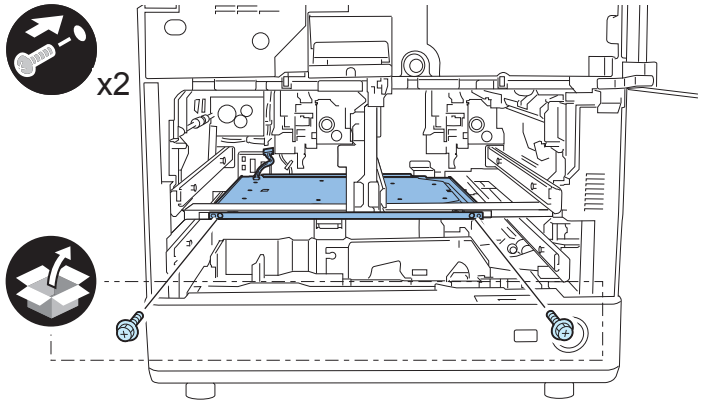
☐
11) Fit the holes of the Cassette Heater Unit with the bosses of the Host Machine.

CAUTION:
When fitting the Cassette Heater Unit with the bosses, be sure to support the bottom side with your hand; otherwise, the Unit can fall because the Unit goes off from the projections.



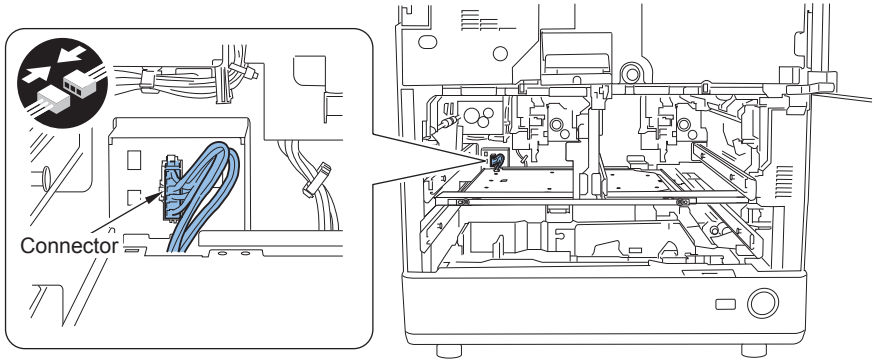
F-9-313

☐
12) Install the Cassette Heater Unit.
- 2 Screws (RS tightening; M4x8)



F-9-314

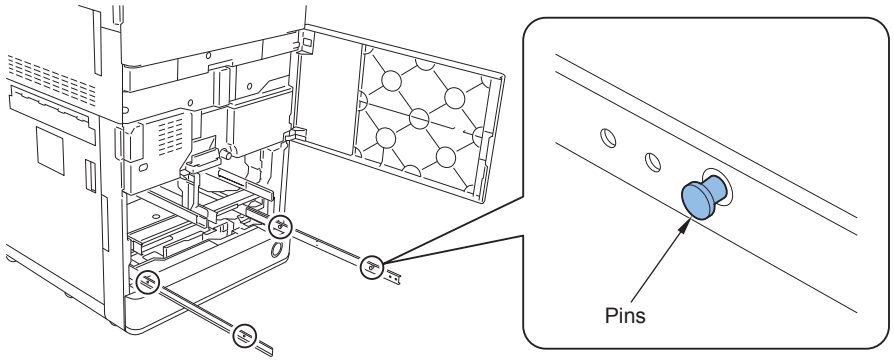
☐
13) Installt the Connector.



F-9-315

☐
14) Install the Connector Cover.

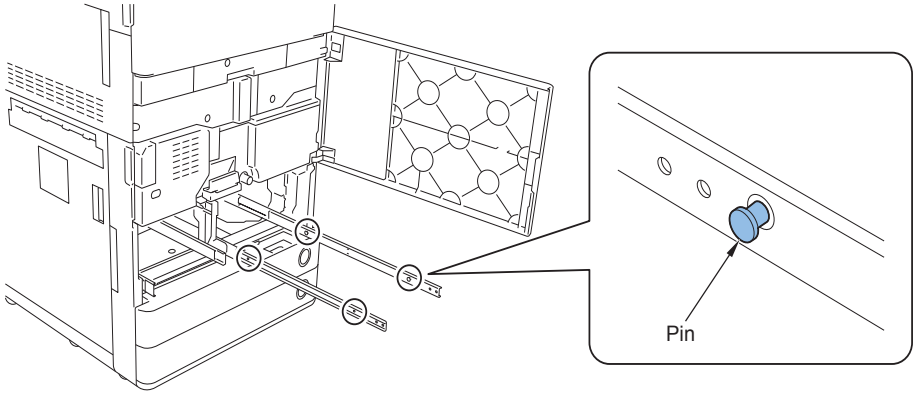
☐
15) Pull out the Rails at the installation area of Cassette 3.
16) Fit the 4 pins on the Rails with the grooves of Cassette 3 to place Cassette 3 over the Rails.



F-9-316

☐
17) After having installed Cassette 3 with 4 screws,close Cassette 3.

☐
18) Pull out the Rails at the installation area of the Right Deck.
19) Fit the 4 pins on the Rails with the grooves of the Right Deck to place the Right Deck over the Rails.



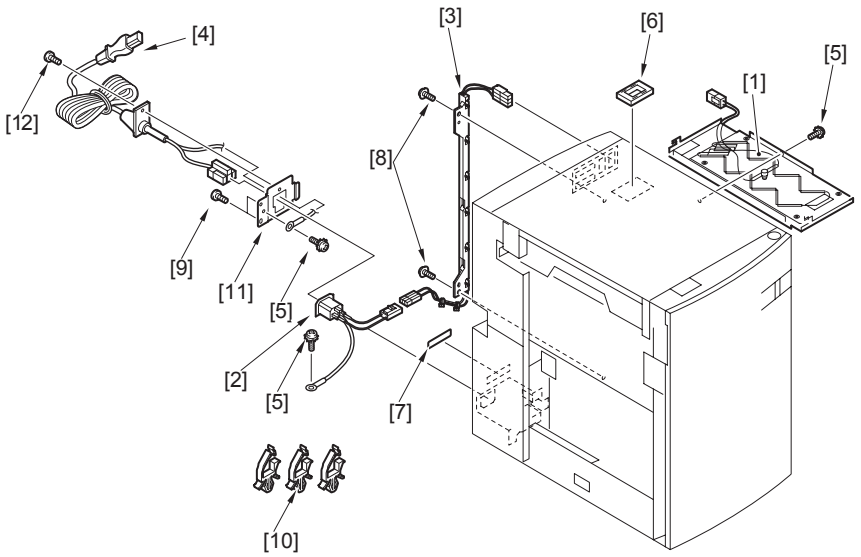
F-9-317

☐
20) After having installed Right Deck with 2 screws,close the Right Deck.
21) After having installed Left Deck with 2 screws,close the Left Deck.
22) Close the Front Cover.
23) Turn on the environment switch.
24) Insert the power plug to the outlet.
25) Turn ON the main power switch.

Paper Deck Heater Unit-A1

Checking Bundled Components

NOTE:
Every components of the paper deck heater unit (paper deck heater unit-A1) are supplied as service parts, so have the following parts on hand.



F-9-318

	NO.	Parts name	Parts Number.	Q'ty
☐	[1]	Heater Unit (100V)	FG6-9650-000	1pc.
		Heater Unit (230V)	FG6-9651-000	1pc.
☐	[2]	AC input connector (100V)	FG6-1116-000	1pc.
		AC input connector (230V)	FG6-1117-000	1pc.
☐	[3]	Relay harness unit	FG6-2957-000	1pc.
☐	[4]	AC cord (100V)	FK3-0630-000	1pc.
		AC cord (230V)	FK3-0631-000	1pc.
☐	[5]	Screw with toothed washer	XB2-7400-607	3pcs.
☐	[6]	Cable protection bushing	WT2-5098-000	1pc.
☐	[7]	Power supply label (100V)	FS6-8478-000	1pc.
		Power supply label (230V)	FS6-8725-000	1pc.
☐	[8]	RS-tight screw (M4x8)	XB1-2400-409	2pcs.
☐	[9]	Binding screw (M4x4)	XB1-2400-409	1pc.
☐	[10]	Wire saddle	WT2-5730-000	3pcs.
☐	[11]	Cord mount	FC7-5473-000	1pc.
☐	[12]	Screw with flat spring	XB2-8401-007	1pc.

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Open the Switch Cover and turn OFF the main power switch.
2) Check that both the Control Panel display and the main power lamp are turned off, and then disconnect the power plug.

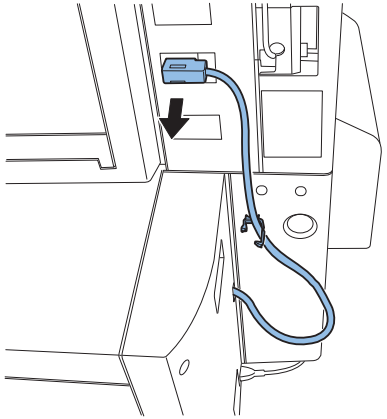
CAUTION:

When installing the heater to the paper deck, take the following precautions.

a. The AC power plug of the host machine must have been removed from the outlet.
b. Install the heater after installing the host machine and paper deck.
c. Use correct screws (length and diameters) at correct positions.

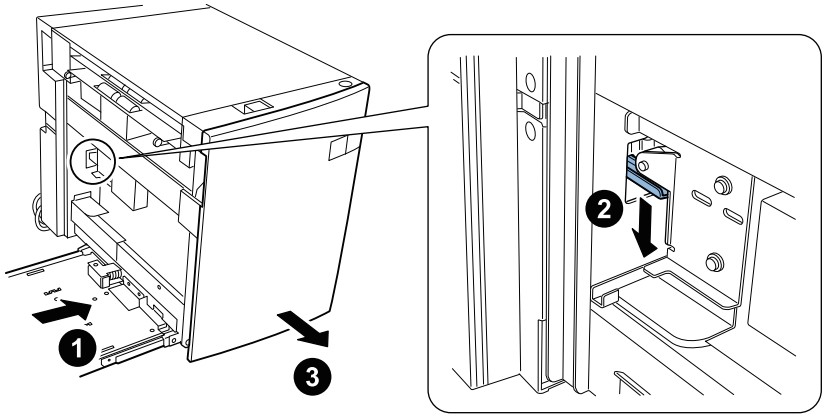
Installation Procedure

☐
1) Disconnect the connector of the paper deck from the host machine.



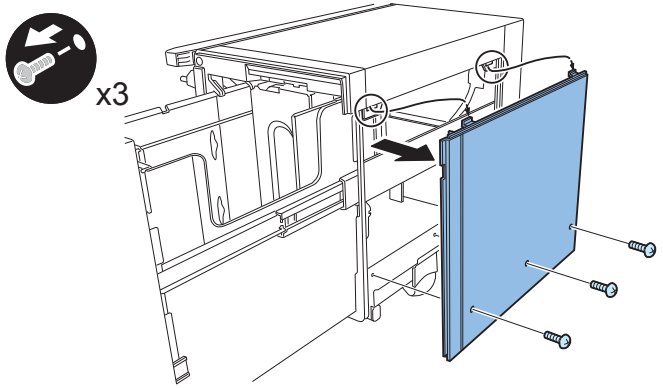
F-9-319

☐
2) Release the paper deck from the host machine, and then press down the latch plate of the paper deck housing with your finger to open the housing.



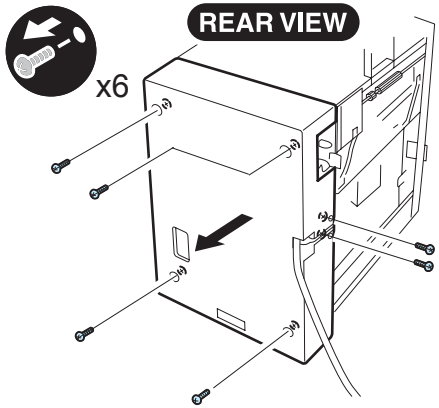
F-9-320

☐
3) Remove three screws, and then detach the right cover of the paper deck to the direction of the arrow shown.



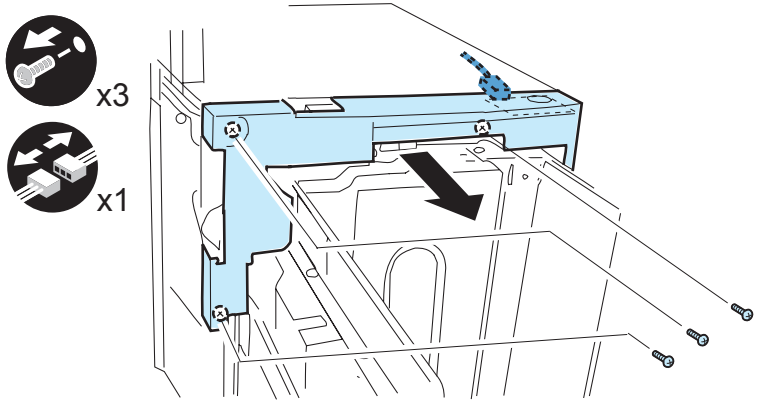
F-9-321

☐
4) Remove six screws(M3x8: 2pcs, M4x8: 4pcs.), and then detech the rear cover of the paper deck.



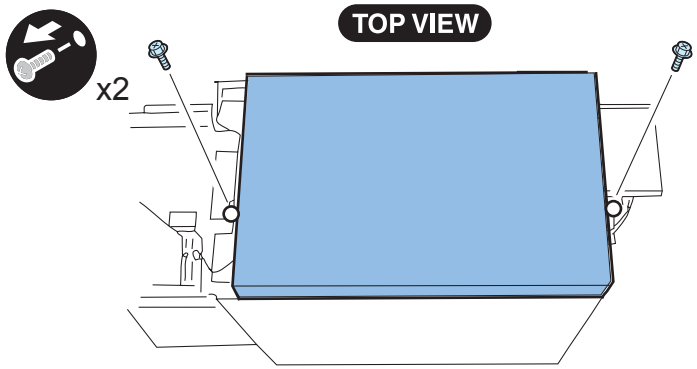
F-9-322

☐
5) Remove three screws and a connector, and then detach the front-upper cover.



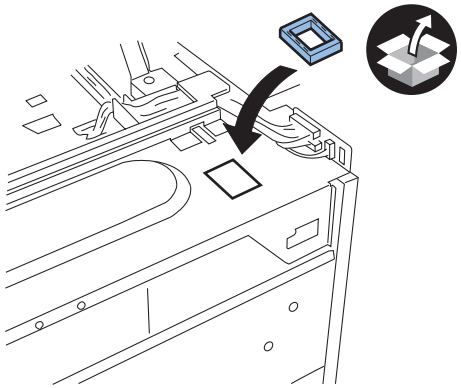
F-9-323

☐
6) Remove two screws, and then detach the top cover.



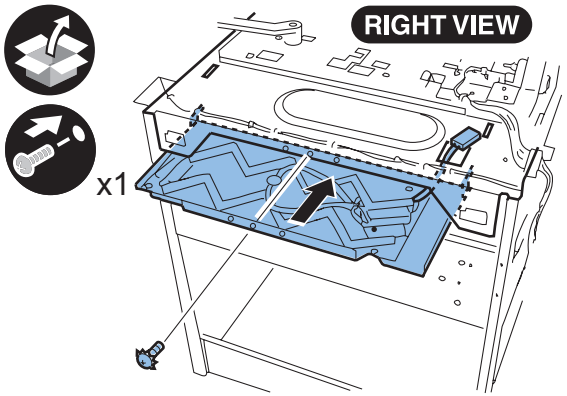
F-9-324

☐
7) Atach the supplied cable protection bushing into the hole on the top panel of the paper deck.



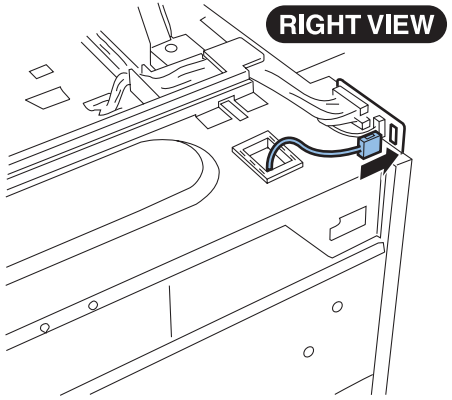
F-9-325

☐
8) Place the heater unit under the top panel of the paper deck, and then take the connector out from the hole on the top plate.
9) Insert two hooks of the heater unit into the holes on the top plate of the paper deck, and then secure the heater unit to the main body of the paper deck using a screw with toothed washer.



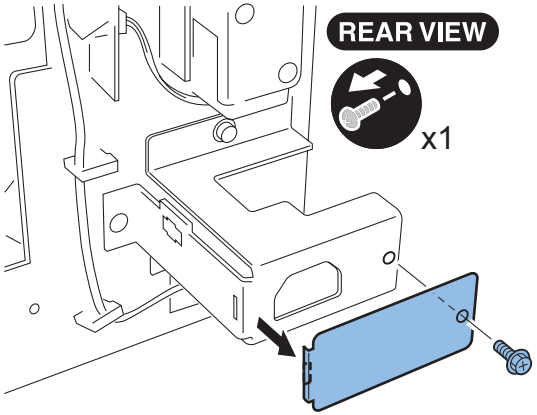
F-9-326

☐
10) Attach the heater connector to the panel mount.



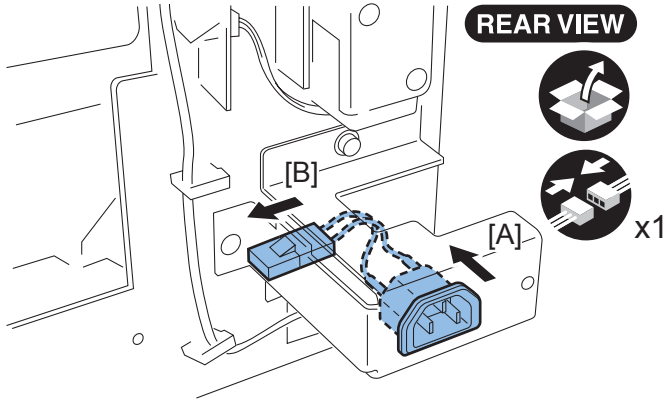
F-9-327

☐
11) Remove screw to remove the blind plate from the power core mount of the papar deck. (Removed blindfold plate and screw are no longer reused.)



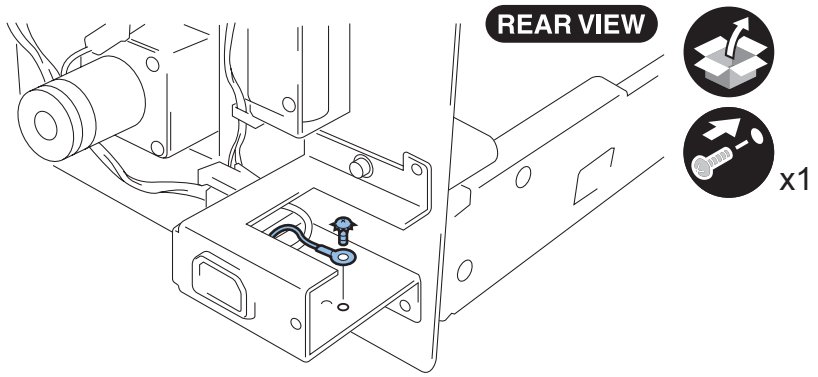
F-9-328

☐
12) Install the supplied AC input connector in two steps ([A] > [B]).



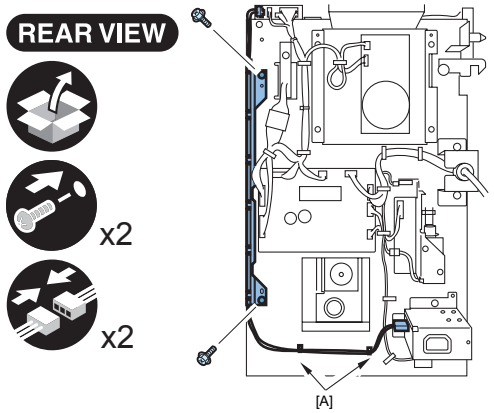
F-9-329

☐
13) Secure the ground cable using the screw with toothed washer.



F-9-330

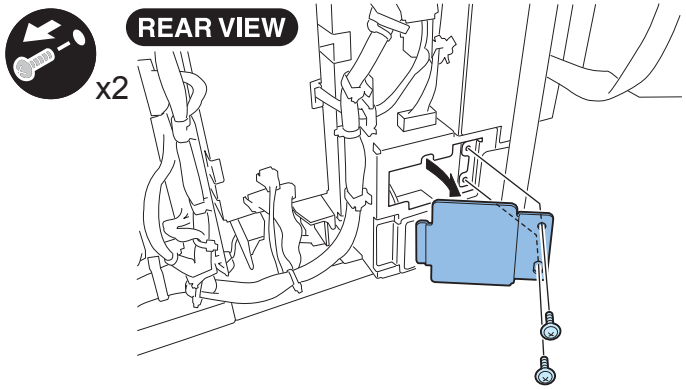
☐
14) Using two RS-tight screws (M4X8), install the relay hareness unit to the rear side panel of the paper deck.
15) Insert the bind locks of the cable ties in the holes (at [A] shown below) in the rear side panel to secure the relay harness.
16) Connect the connector at both ends of the relay harness unit to the heater connector and AC power connector respectively.



F-9-331

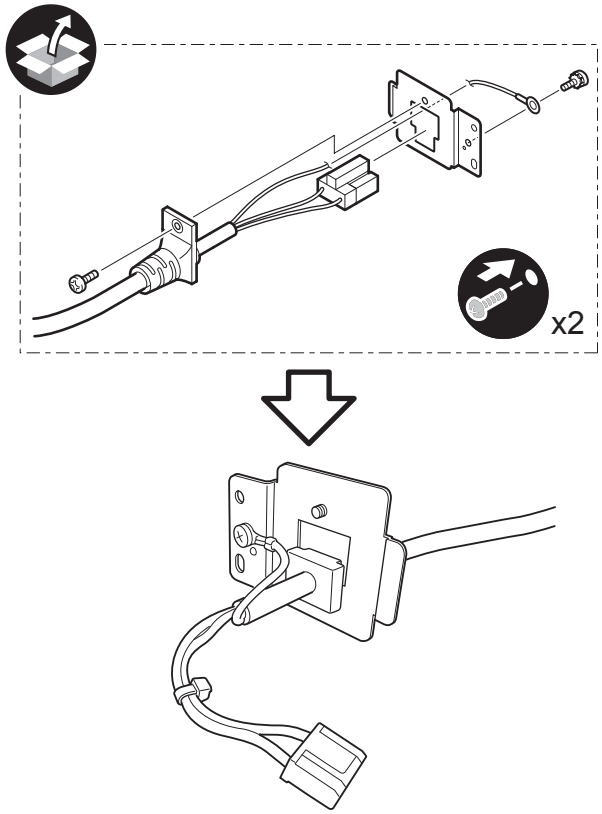
☐
17) Connect the connector at one end of the AC cord to the power cord mount of the heater.

☐
18) Remove two screws at the lower right of the back of the host machine to remove the blind plate. (Removed blindfold plate and screw are no longer reused.)



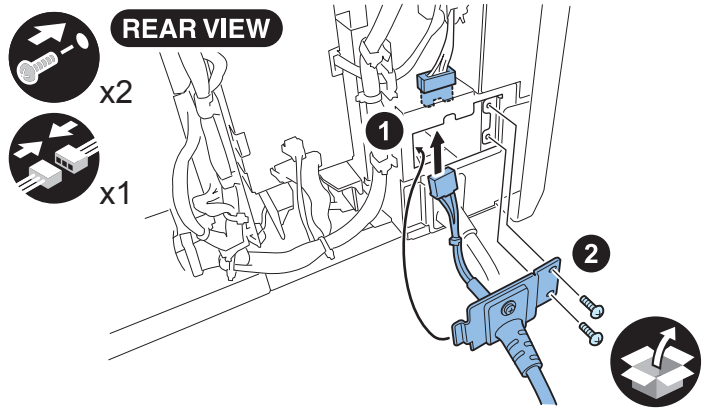
F-9-332

☐
19) Insert the AC cord into the hole of the cord mount, and then secure the ground cable to the cord mount using a screw with toothed washer. Secure the AC cord to the cord mount using a screw with flat spring.



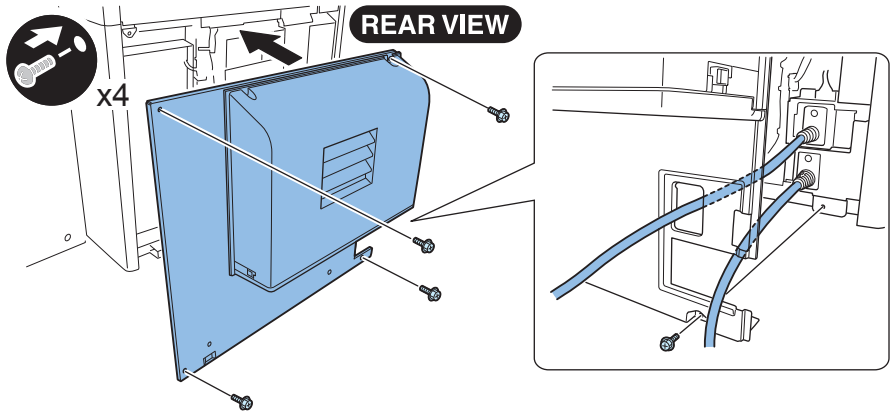
F-9-333

☐
20) Connect the connector of the AC cord to the connector on the host machine.
21) Hang the left-hand hook, and then secure the cord mount to the host machine using two binding screws (M4X4).



F-9-334

☐
22) Install the rear-cover of the host machine using four screws.

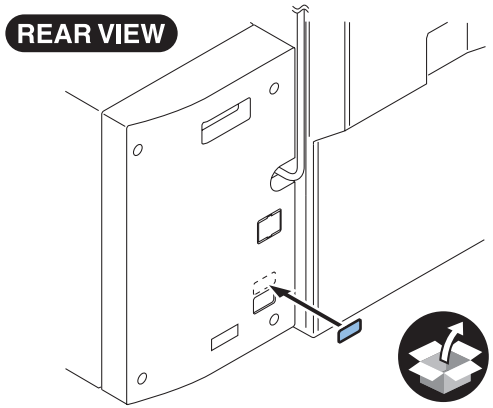


F-9-335

☐
23) Reatach the exterior covers of the paper deck in the following sequence;
[1] Top cover (take care not to have the cables caught) [M4x8: 2pcs.]
[2] Front-upper cover (insert the connector) [M4x8: 3pcs]
[3] Rear cover [M3x8: 2pcs, M4x8: 4pcs.]
[4] Right cover [M4x8: 3pcs.]

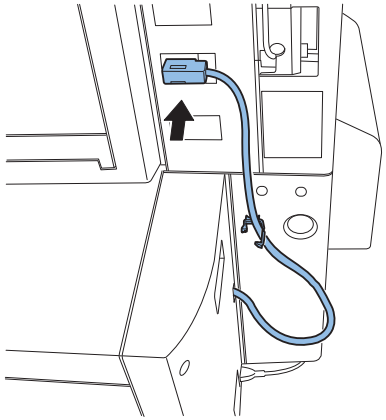
☐
24) Close the deck compartment. Manually slide the paper deck to the left place in aside of the host machine.

☐
25) Stick the power supply label on the rear panel of the paper deck.



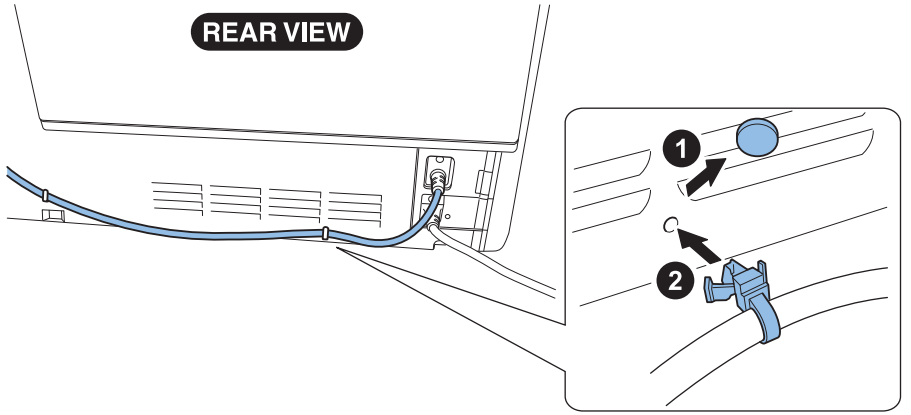
F-9-336

☐
26) Fix the paper deck cable in the wire saddle and joint the connector to the host machine.



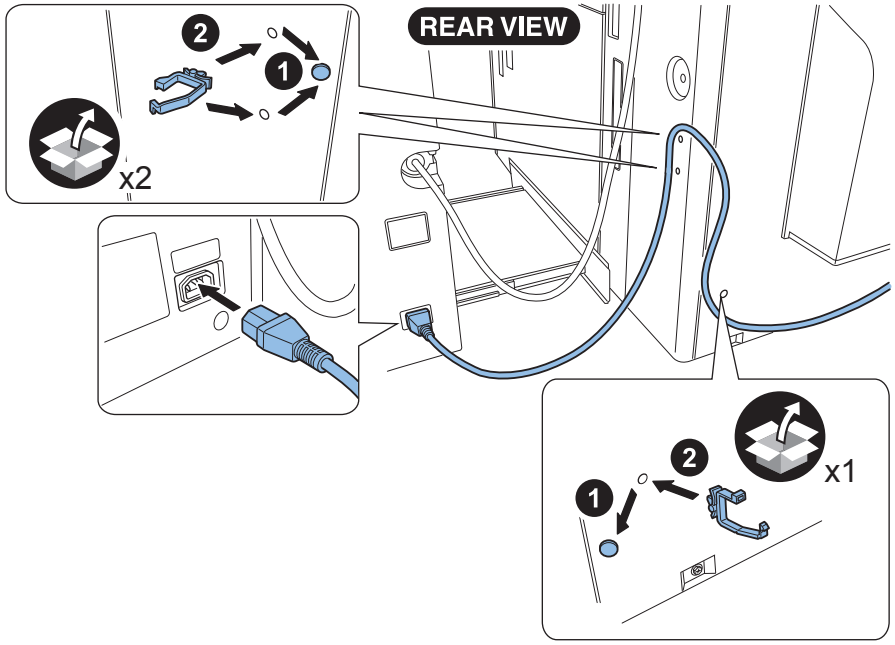
F-9-337

☐
27) Peel off the blindfold seal at the rear side of the host machine and fit the reuse band of the AC cable as shown.



F-9-338

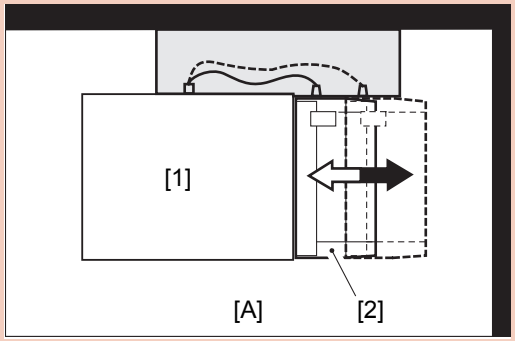
☐
28) Peel off the 3 blindfold seal at the rear side and right side of the host machine, then fit the 3 wire saddles as shown.
Wire the AC cable as shown in the figure and joint the AC connector to the power cord mount of the heater.



F-9-339

CAUTION:
To ensure smooth connection of the heater power connectors, explain to the user that any obstacle that can prevent the paper deck from opening should not be placed in the hatched area.

- [1]: Host machine
- [2]: Paper deck
- [A]: Front

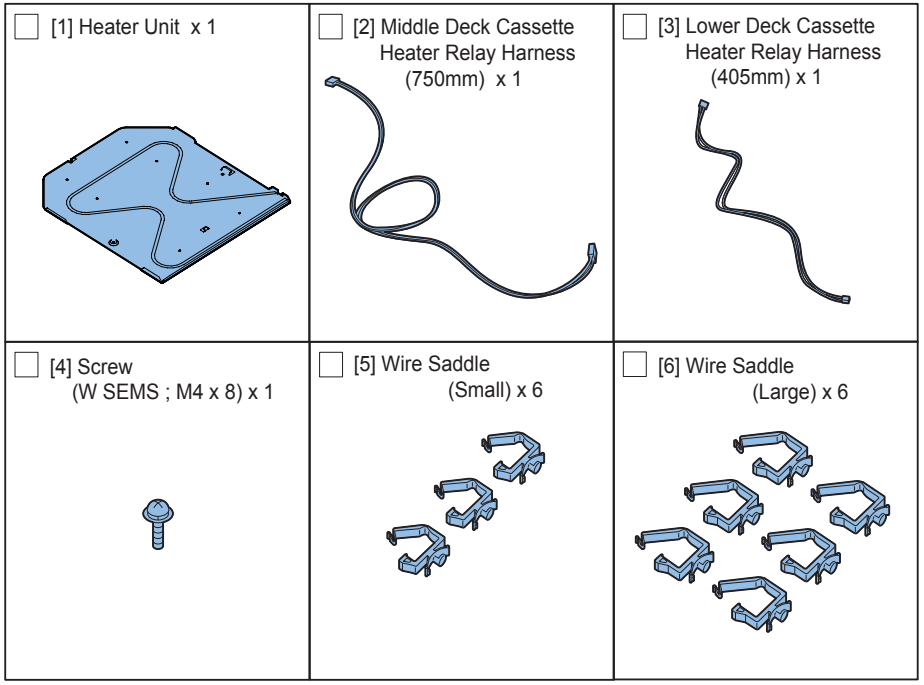


F-9-340

Paper Deck Heater Unit

Checking the Parts to be Installed

Each part of the Paper Deck Heater Unit for the Paper Deck is supplied as a service part, so prepare the following parts.
Also, use the appropriate Paper Deck Heater Unit for each country.



F-9-341

NO.	Parts name	Parts Number.	Q'ty
[1]	Heater Unit (100V)	FM3-3770-000	1 pc
	Heater Unit (120V)	FM3-3771-000	1 pc
	Heater Unit (230V)	FM3-3772-000	1 pc
[2]	Middle Deck Cassette Heater Relay Harness	FG3-4325-000	1 pc
[3]	Lower Deck Cassette Heater Relay Harness	FG3-4326-000	1 pc
[4]	Wire Saddle (Large)	WT2-5974-000	6 pc
[5]	Wire Saddle (Small)	WT2-5973-000	3 pc
[6]	Screw (W Sems; M4 x8)	FC7-7646-000	1 pc.

T-9-6

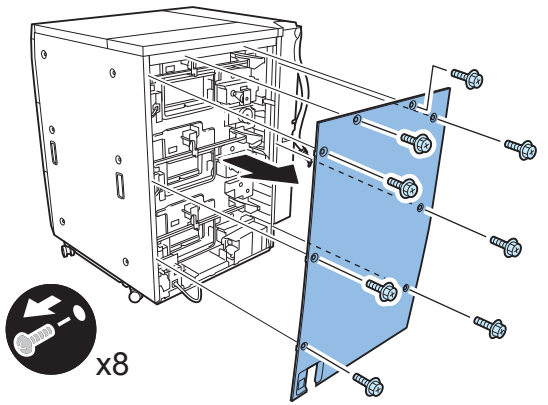
Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.
1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Procedule

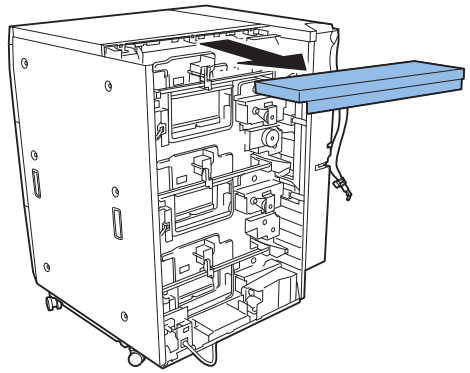
NOTE:
Following explains installation of the Cassette Heater Unit to the Middle Deck. Same procedure applies to installation of the Cassette Heater Unit to the Lower Deck.

☐
1) Remove the Deck Rear Right Cover.
- 8 Screws



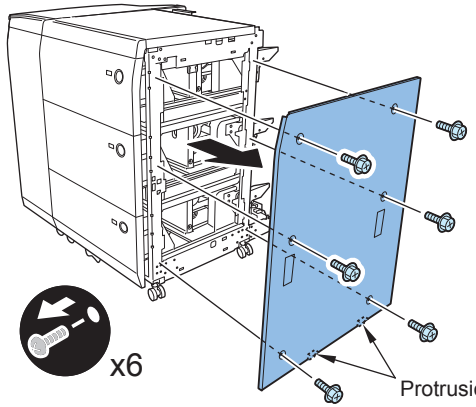
F-9-342

☐
2) Remove the Deck Upper Rear Cover.



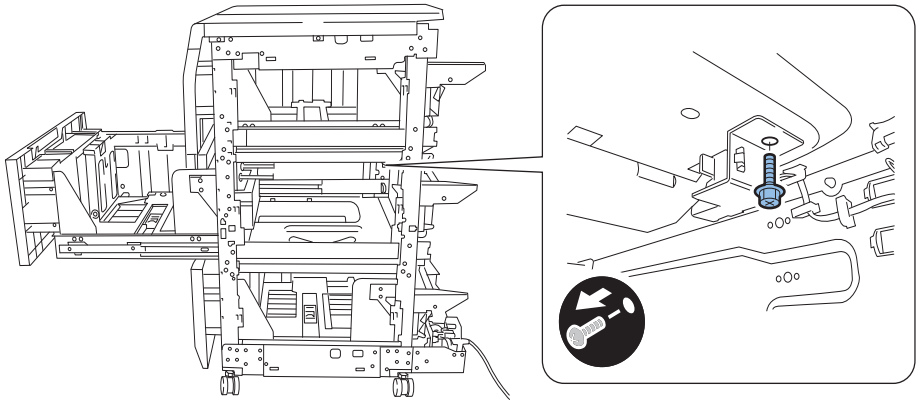
F-9-343

☐
3) Remove the Deck Right Cover.
- 6 Screws
- 2 Protrusions



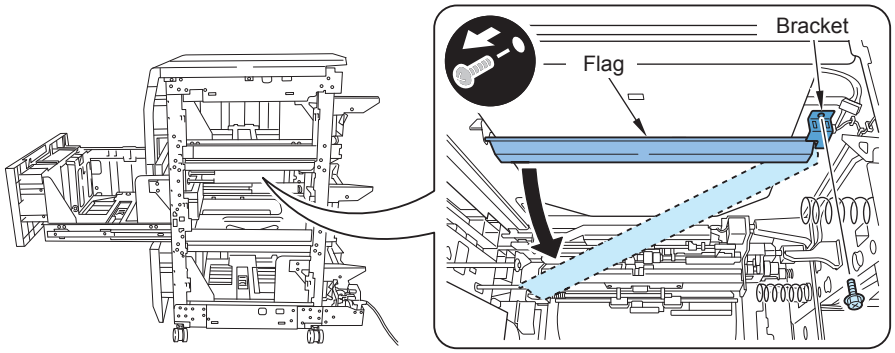
F-9-344

☐
4) Open the Middle Deck manually and remove the screw securing the Foreign Matter Sensor Bracket.



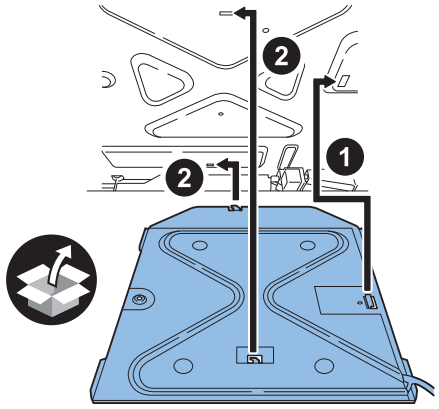
F-9-345

☐
5) While the Sensor Harness is connected, remove the Foreign Matter Sensor Bracket and the Foreign Matter Sensor Flag.



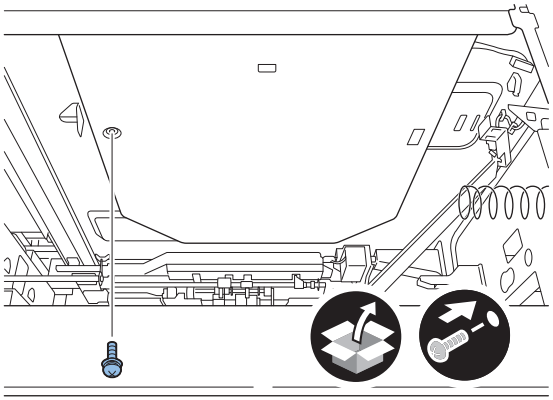
F-9-346

☐
6) Fit the 3 claws of the Cassette Heater Unit to the 3 installation holes to install.



F-9-347

☐
7) Secure the Cassette Heater Unit with the screw (W SEMS; M4x8).



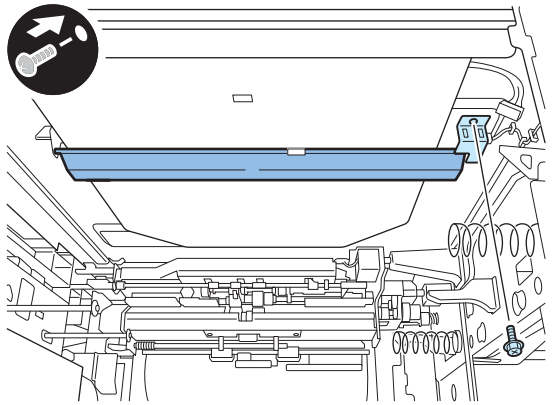
F-9-348

☐
8) Put the Foreign Matter Sensor Flag and the Foreign Matter Sensor Bracket back to the original position to install.

- 1 Screw

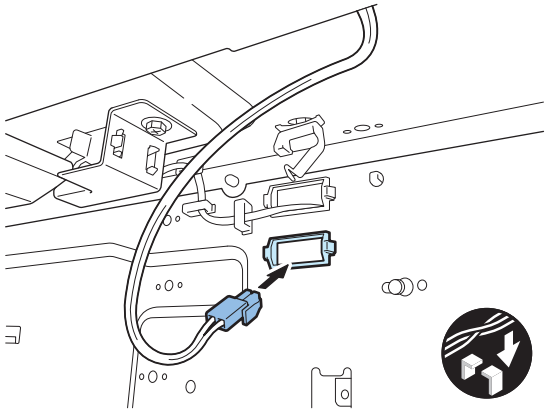
CAUTION:

Check that the sensor and the connector are securely connected and attached to the base (check that they are not free).



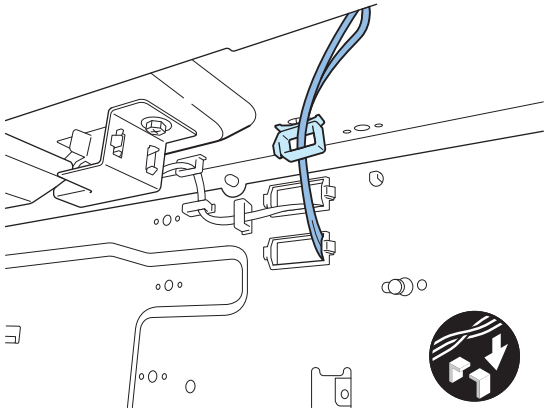
F-9-349

☐
9) Put the Cassette Heater Harness through the Square Bush at the lower side.



F-9-350

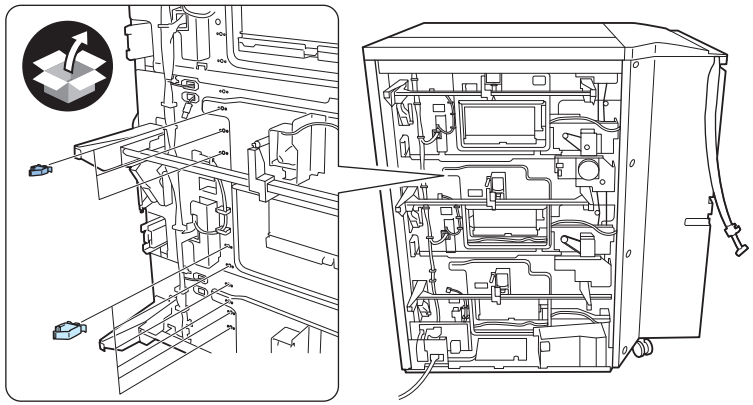
☐
10) Secure the Cassette Heater Harness to the Wire Saddle and close the Middle Deck.



F-9-351

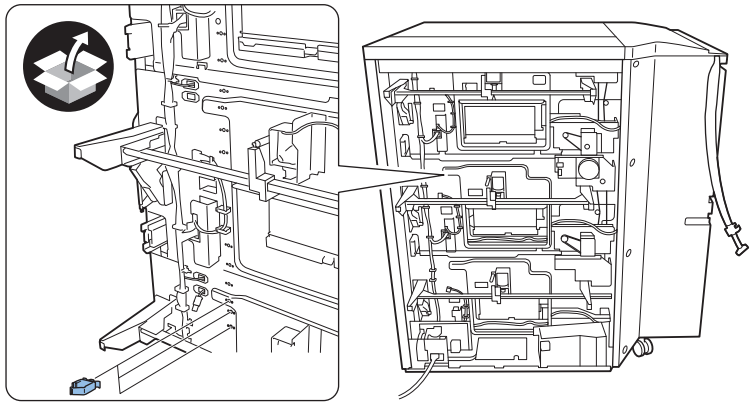
☐
11) Install the 3 (small) Wire Saddles and the 6 (large) Wire Saddles.

NOTE:
When installing an Option Warm Breeze Heater Unit at the same time or in the case that the Warm Breeze Heater Unit has been already installed, replace the upper 3 Wire Saddles with the (large) Wire Saddles.



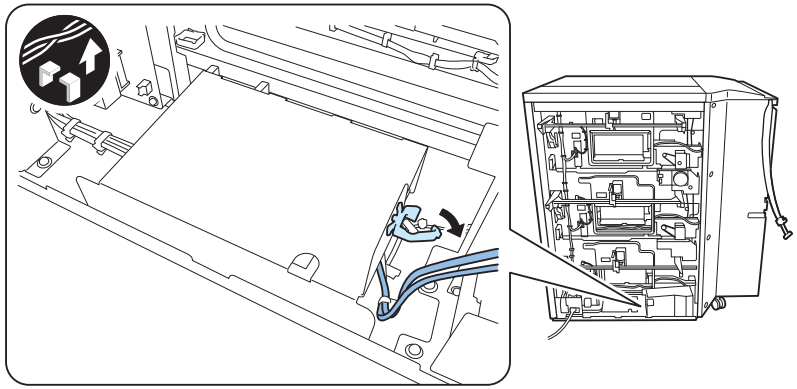
F-9-352

NOTE:
When installing the Paper Deck Heater Unit to the Lower Deck, install the 3 (large) Wire Saddles.
Do not install the (large) Wire Saddles when installing an Option Warm Breeze Heater Unit at the same time or in the case that the Heater Unit has been already installed.



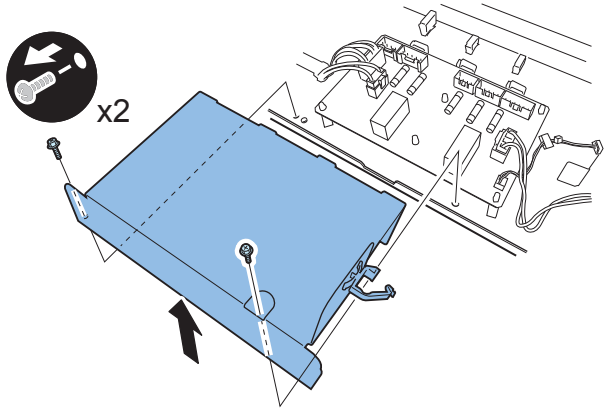
F-9-353

☐
12) Open the Wire Saddle to take the AC Distribution PCB Harness out.



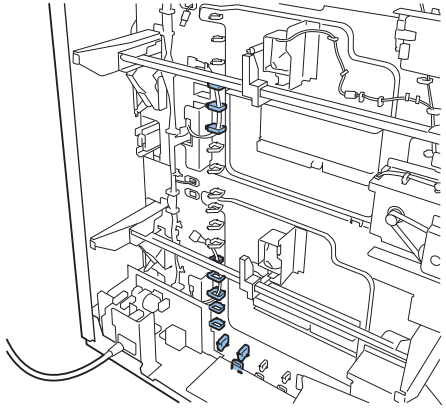
F-9-354

☐
13) Remove the AC Distribution PCB Cover.
- 2 Screws



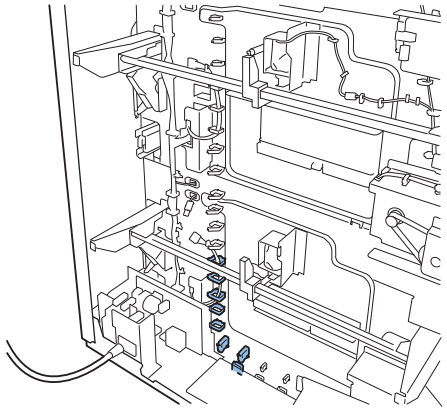
F-9-355

☐
14) Open the 11 Wire Saddles.



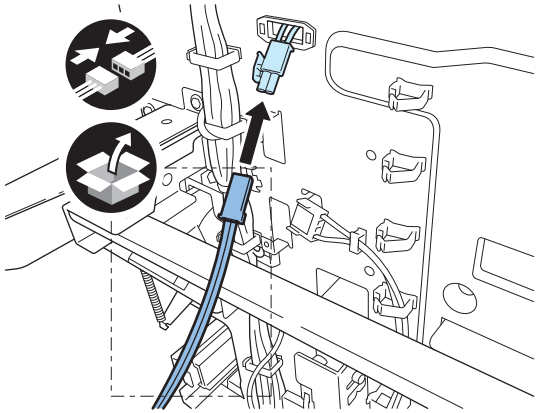
F-9-356

NOTE:
When installing the Paper Deck Heater Unit to the Lower Deck, open the 8 Wire Saddles.



F-9-357

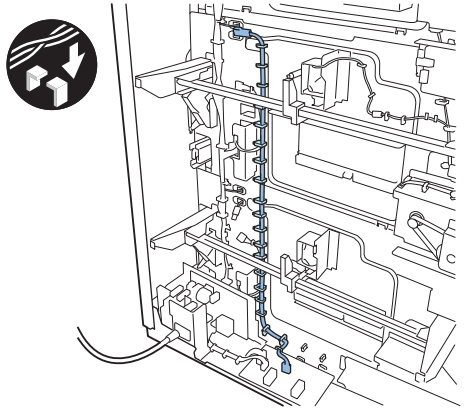
☐
15) Connect the 2-pin connector side of the Middle Deck Cassette Heater Relay Harness to the Cassette Heater Harness.



F-9-358

☐
16) Secure the Middle Deck Cassette Heater Relay Harness with the 20 Clamps.

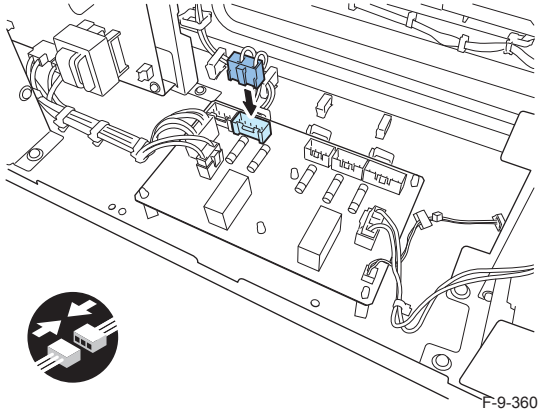
NOTE:
When installing the Paper Deck Heater Unit to the Lower Deck, secure the Lower Deck Cassette Heater Relay Harness with the 11 Wire Saddles.



F-9-359

☐
17) Install the 5-pin connector side of the Middle Deck Cassette Heater Relay Harness to CN4 on the AC Distribution PCB.

NOTE:
When installing the Paper Deck Heater Unit to the Lower Deck, install the 4-pin connector side of the Lower Deck Cassette Heater Relay Harness to CN3 on the SC Distribution PCB.



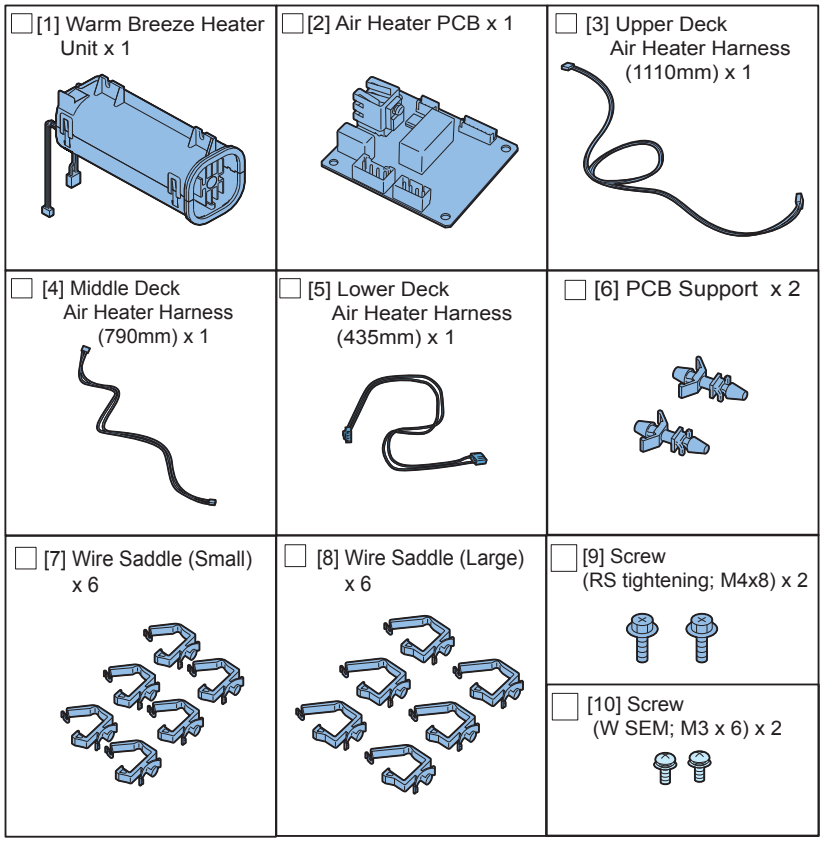
F-9-360

☐
18) Install the AC Distribution PCB Cover(2 Screws).
19) Secure the AC Distribution PCB Harness with the Wire Saddle.
20) Install the Deck Right Cover(6 Screws, 2 Protrusions).
21) Install the Deck Upper Rear Cover.
22) Install the Deck Rear Right Cover(8 Screws).
23) Turn on the Environment switch.
24) Insert the power plug to the outlet.
25) Turn ON the main power switch.

Paper Deck Warm Breeze Heater Unit

Checking the Parts to be Installed

Each part of the Paper Deck Warm Breeze Heater Unit for the Paper Deck is supplied as a service part, so prepare the following parts. Also, use the appropriate Paper Deck Warm Breeze Heater Unit for each country.



F-9-361

NO.	Parts name	Parts Number (100/120V)	Parts Number (200/230V)	Q'ty
[1]	Warm Breeze Heater Unit	FM4-1832-000	FM4-1850-000	1 pc.
[2]	Air Heater PCB	FC3-4279-000	FC3-4279-000	1 pc.
[3]	Upper Deck Air Heater Harness (110mm)	FC3-4327-000	FC3-4327-000	1 pc.
[4]	Middle Deck Air Heater Harness (790mm)	FC3-4328-000	FC3-4328-000	1 pc.
[5]	Lower Deck Air Heater Harness (435mm)	FC3-4329-000	FC3-4329-000	1 pc.
[6]	PCB Support	VT2-0006-006	VT2-0006-006	2 pc.
[7]	Wire Saddle	WT2-5974-000	WT2-5974-000	6 pc.
[8]	Wire Saddle	WT2-5973-000	WT2-5973-000	6 pc.
[9]	Screw (RS tightening; M4x8)	4A3-3259-000	4A3-3259-000	2 pc.
[10]	Screw (W SEMS; M3x6)	XB2-4300-605	XB2-4300-605	2 pc.

T-9-7

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

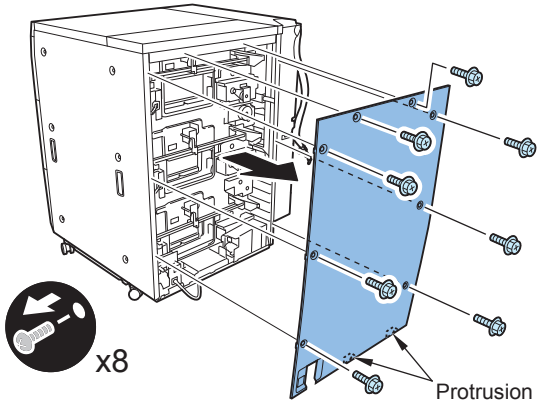
1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installing the Warm Breeze Heater Unit

NOTE:
Following explains installation of the Heater Unit to the Upper Deck. Same procedure applies to installation of the Heater Unit to the Middle Deck and the Lower Deck except some steps.

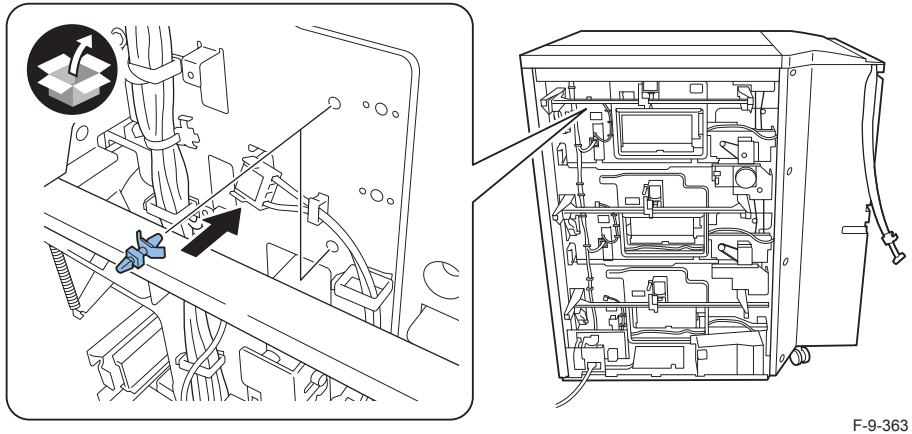
☐ 1) Remove the Deck Rear Right Cover of the Paper Deck.

- 8 Screws
- 2 Protrusions



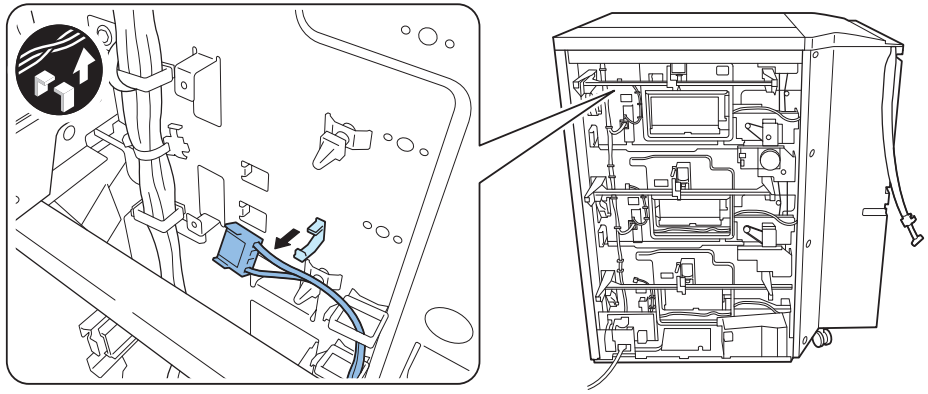
F-9-362

☐ 2) Install the 2 PCB Supports.



F-9-363

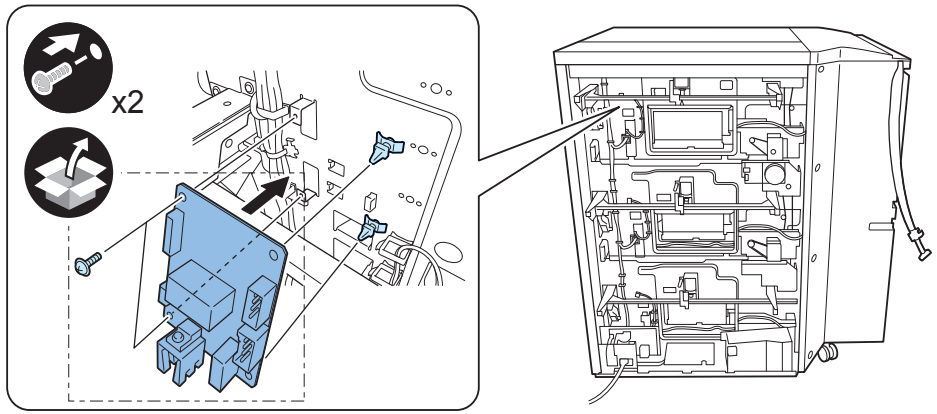
☐ 3) Open the Wire Saddle and take the Air Heater AC Harness out, and then close the Wire Saddle. (Air Heater AC Harness is used in step 5).)



F-9-364

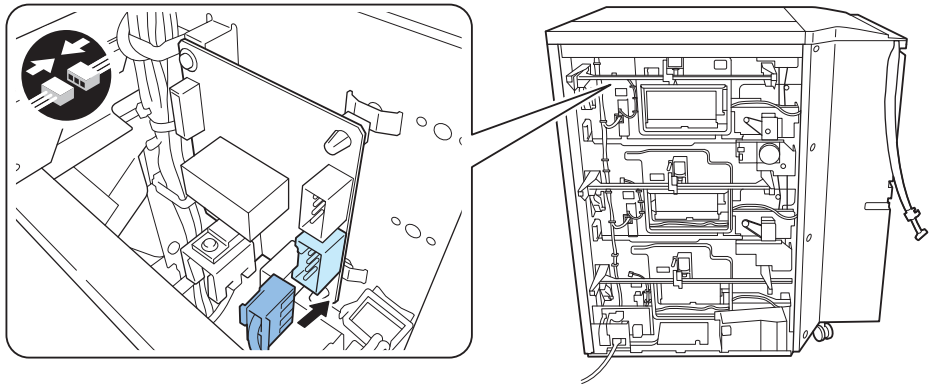
☐ 4) Install the Air Heater PCB.

- 2 Screws (W SEMS; M3x6)



F-9-365

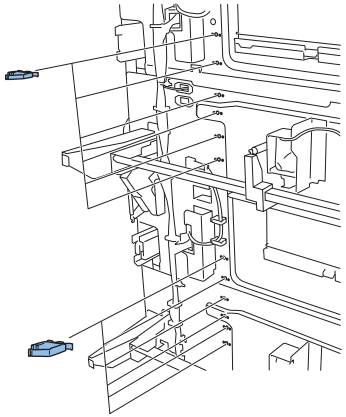
☐
5) Install the Air Heater AC Harness (removed in step 3)) to CN4 on the Air Heater PCB.



F-9-366

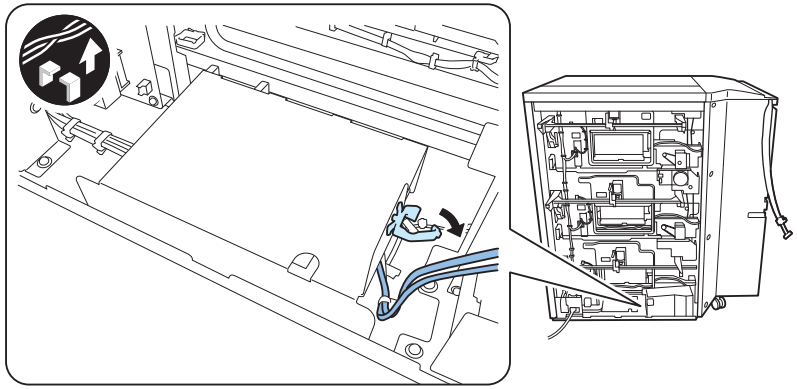
☐
6) Install the 6 (small) Wire Saddles and the 6 (large) Wire Saddles.

NOTE:
- When installing the Warm Breeze Heater Unit to the Middle Deck, use the 6 (large) Wire Saddles only. The 6 (small) Wire Saddles are not used.
- When installing the Warm Breeze Heater Unit to the Lowe Deck, use the 6 (small) Wire Saddles and the 6 (large) Wire Saddles.



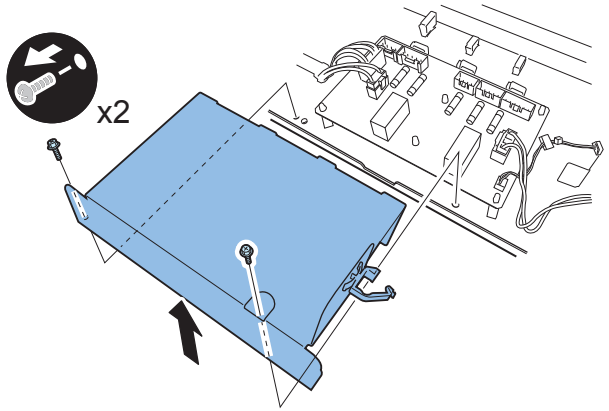
F-9-367

☐
7) Take the AC Distribution PCB out.
- 1 Wire saddle



F-9-368

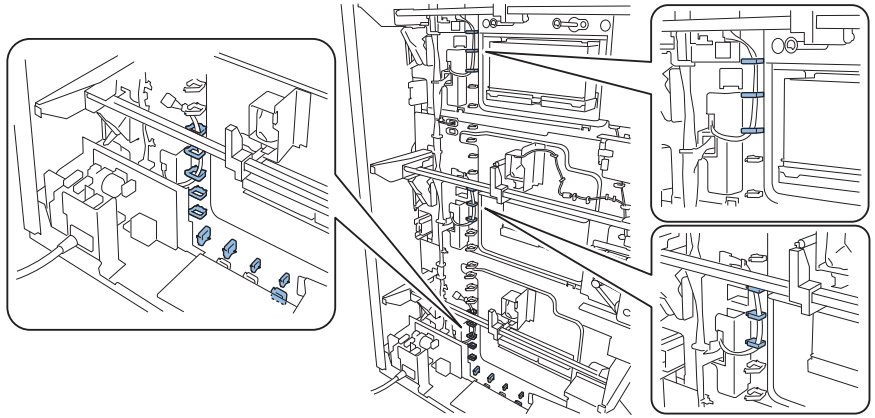
☐
8) Remove the AC Distribution PCB Cover.
- 2 Screws



F-9-369

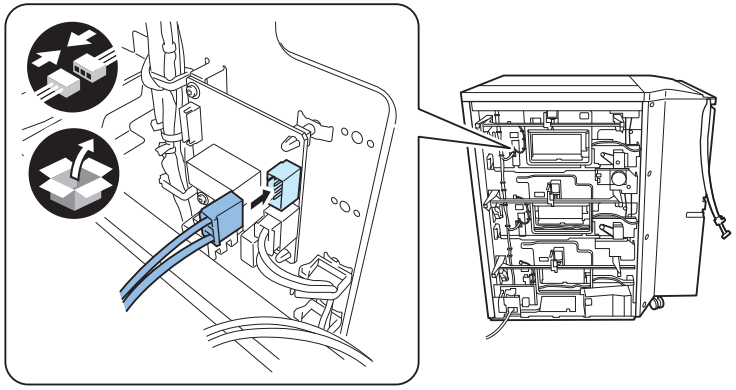
☐
9) Open the 16 Wire Saddles.

NOTE:
- When installing the Warm Breeze Heater Unit to the Middle Deck, open the 13 Wire Saddles.
- When installing the Warm Breeze Heater Unit to the Lower Deck, open the 9 Wire Saddles.



F-9-370

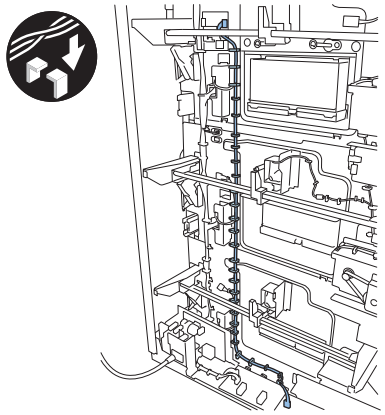
☐
10) Install the 4-pin connector side of the Upper Deck Air Heater Harness to CN3 on the Air Heater PCB.



F-9-371

☐
11) Secure the Upper Deck Air Heater Harness with the 28 Wire Saddles.

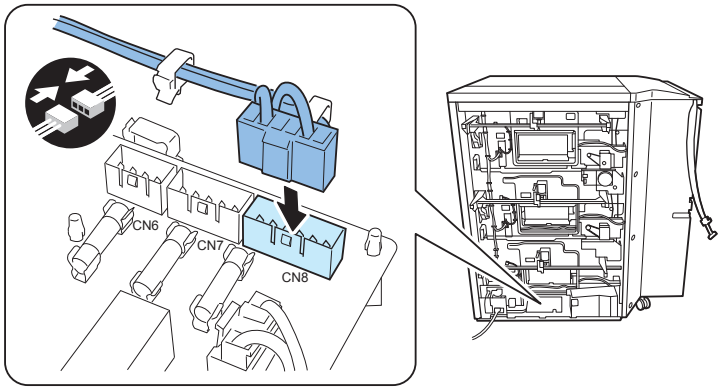
NOTE:
- When installing the Warm Breeze Heater Unit to the Middle Deck, secure the Middle Deck Air Heater Harness with the19 Wire Saddles.
- When installing the Warm Breeze Heater Unit to the Lowe Deck, secure the Lower Deck Air Heater Harness with the 9 Wire Saddles.



F-9-372

☐
12) Install the 6-pin connector side of the Upper Deck Air Heater Harness to CN8 on the AC Distribution PCB.

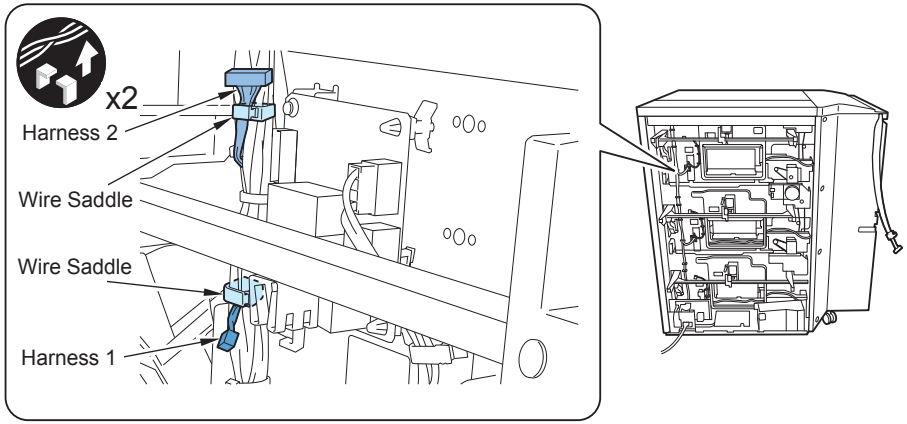
NOTE:
- When installing the Warm Breeze Heater Unit to the Middle Deck, install the 5-pin connector side of the Middle Deck Air Heater Harness to CN7 on the AC Distribution PCB.
- When installing the Warm Breeze Heater Unit to the Lowe Deck, install the 4-pin connector side of the Lower Deck Air Heater Harness to CN6 on the AC Distribution PCB.



F-9-373

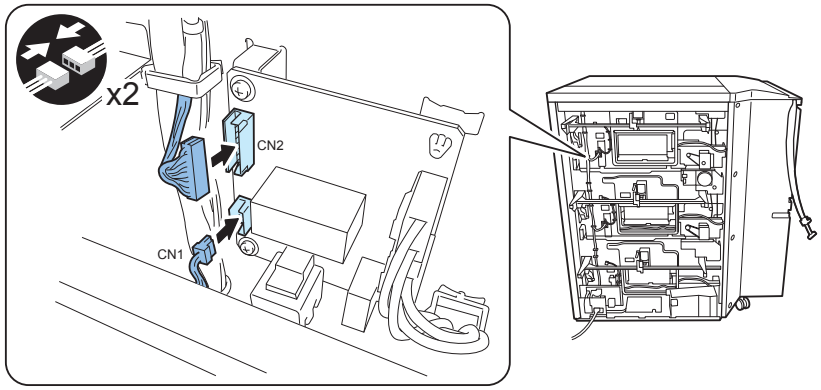
☐
13) Install the AC Distribution PCB Cover.
14) Secure the AC Distribution PCB Harness with the Wire Saddle.

☐
15) Open the Wire Saddle and take Harness 1 (4-pin connector) and Harness 2 (8-pin connector) out, and then close the Wire Saddle.



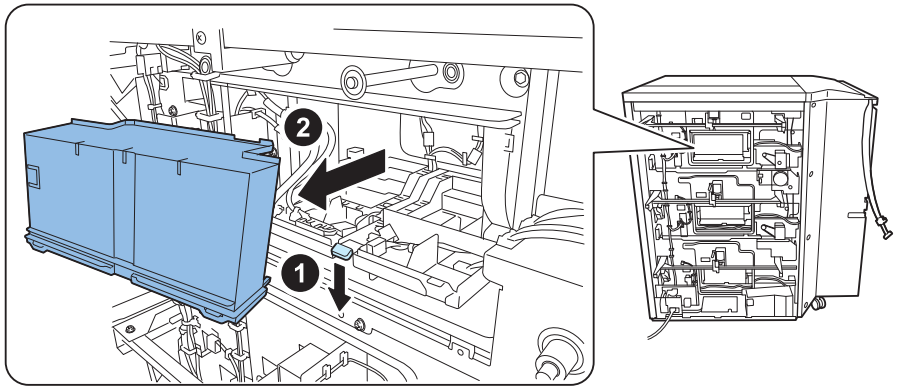
F-9-374

☐
16) Install Harness 1 (4-pin connector) to CN1 and Harness 2 (8-pin connector) to CN2 on the Air Heater PCB.



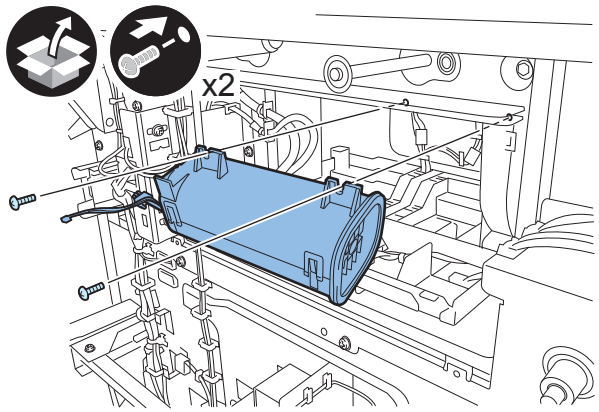
F-9-375

☐
17) Bring down the Lock Lever of the Air Heater Cover to remove the Air Heater Cover.



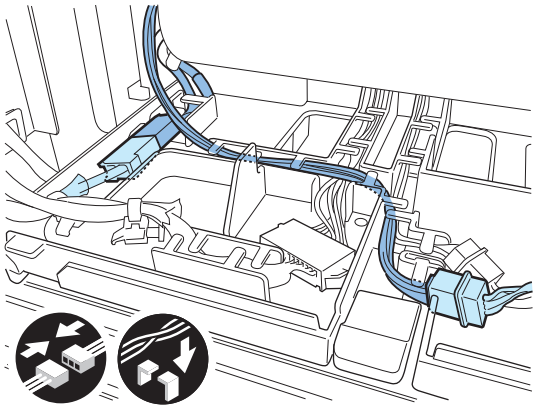
F-9-376

☐
18) Install the Warm Breeze Heater Unit to the Upper Deck.
- 2 Screws (RS tightening; M4x8)



F-9-377

☐
19) Connect the Connector of the Warm Breeze Heater Unit to the Connector of the Upper Deck.
- 2 Connectors
- 8 Claws



F-9-378

☐
20) Install the Air Heater Cover.
21) Install the Deck Rear Right Cover(8 Screws, 2 Protrusions).
22) Turn on the environment switch.
23) Insert the power plug to the outlet.
24) Turn ON the main power switch.

Document Scan Lock Kit-B1

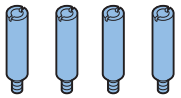
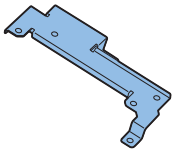
Checking the Parts to be Installed

- To enable the function of "Image Data Analyzer Board", it is necessary to install the license which comes with the product.
- Be sure to ask users to install the license after the installation.

CAUTION:

Be sure to install the license after installing the Image Data Analyzer Board because installing the license before installing the Image Data Analyzer Board causes an error.

Checking the Contents

☐ [1] Image Data Analyzer Board x 1 	☐ [[2] PCB Spacer x 4 Use 2 of them 	☐ [3] Image Data Analyzer Board Support Plate x 1 
☐ [4] Screw (TP; M3x6) x 4 	☐ [5] Screw (Binding; M3x4) x 1 	

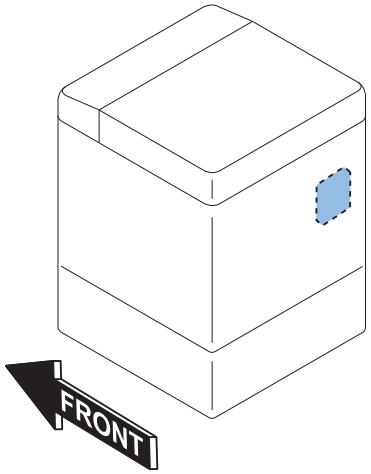
F-9-379

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

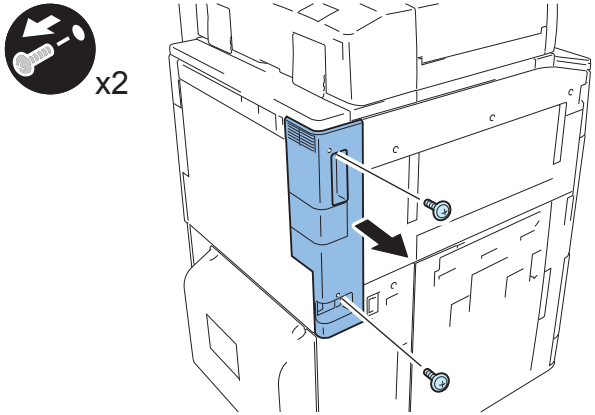
Installation Outline Drawing



F-9-380

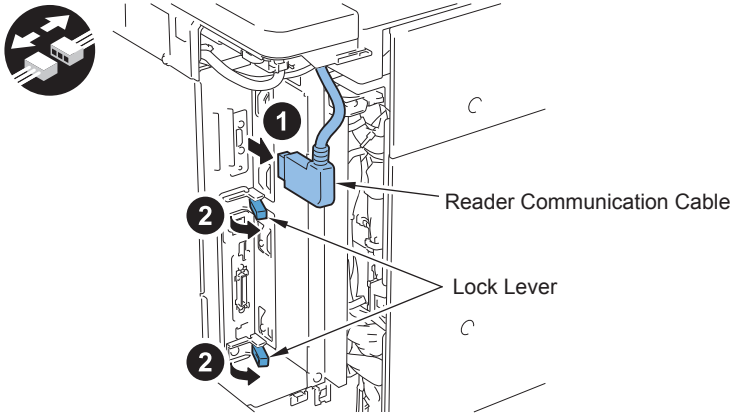
Installation Procedure

☐
1) Remove the Box Left Cover.
- 2 Screws



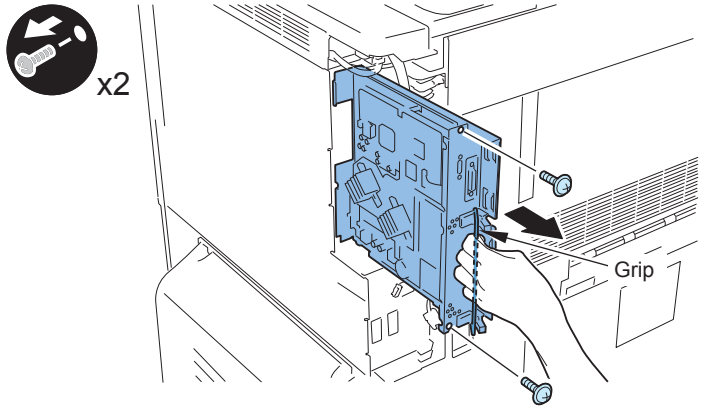
F-9-381

☐
2) Disconnect the Reader Communication Cable, and release the 2 Lock Levers.



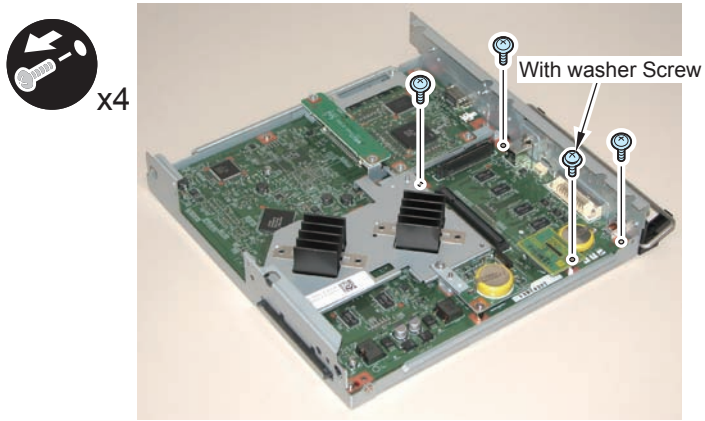
F-9-382

☐
3) Remove the Main Controller PCB 2 while holding the grip.
- 2 Screws



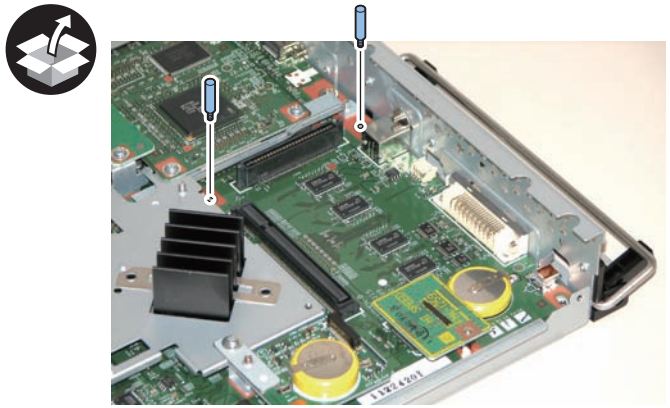
F-9-383

☐
4) Remove the 4 screws.
- 3 Screws (TP; M3) (The 2 of the removed screws will be used in step 6, while the remaining screw will not be used.)
- 1 Screw (with Washer) (The removed screw will not be used.)



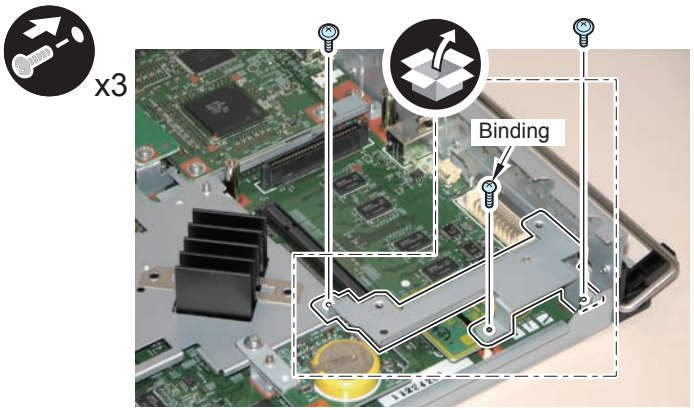
F-9-384

☐
5) Install the 2 PCB Spacers.



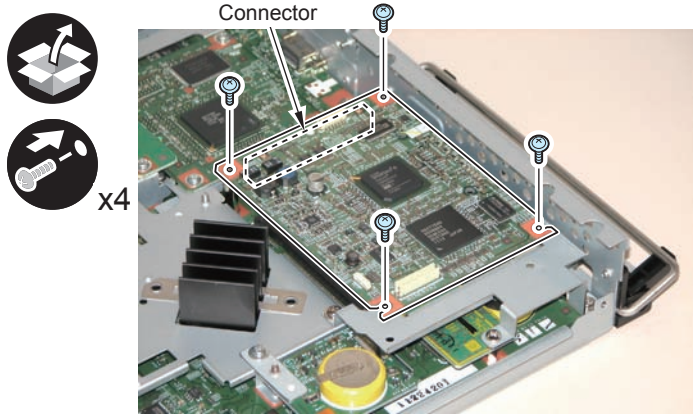
F-9-385

☐
6) Install the Image Analysis Board Support Plate.
- 2 Screws (TP; M3) (The screws removed in step 4).)
- 1 Screw (Binding; M3x4)



F-9-386

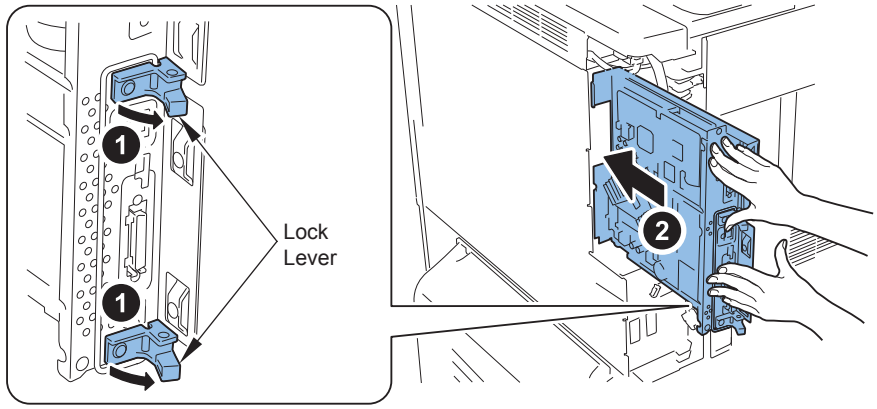
☐
7) Install the Image Analysis Board.
- 4 Screws (TP; M3x6)
- 1 Connector



F-9-387

☐
8) Release the 2 Lock Levers in the direction of the arrows, and uniformly push in the Main Controller PCB 2 with both hands until it stops.

CAUTION:
Install the Main Controller PCB 2 while paying attention not to trap cables.



F-9-388

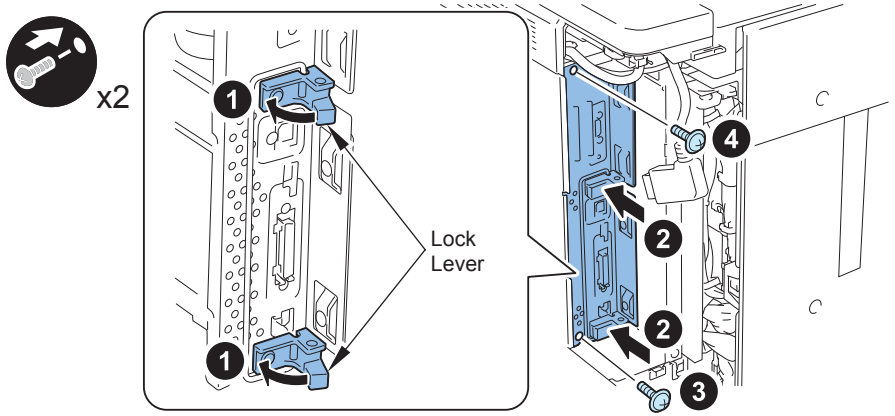
☐

9) Turn over the 2 Lock Levers, and push in and secure the Main Controller PCB 2.

- 2 Screws (Install them in the order from (3) to (4).)

CAUTION:

Be sure to perform the work in the order from (1) to (4) in the figure because the connector of the Main Controller 2 may not be connected.



F-9-389

☐

10) Connect the Reader Communication Cable.

11) Install the Box Left Cover. (2 screws)

Checking after Installation

☐

1) Connect the power plug of the host machine to the outlet.

2)Turn ON the main power switch.

3) Ask users to install license.

4) Turn OFF and then ON the main power switch.

5) Press the counter check key on the Control Panel.

6) Press [Check Device Configuration] key.

7) Check that [Image Data Analyzer Board] is displayed in the options column.

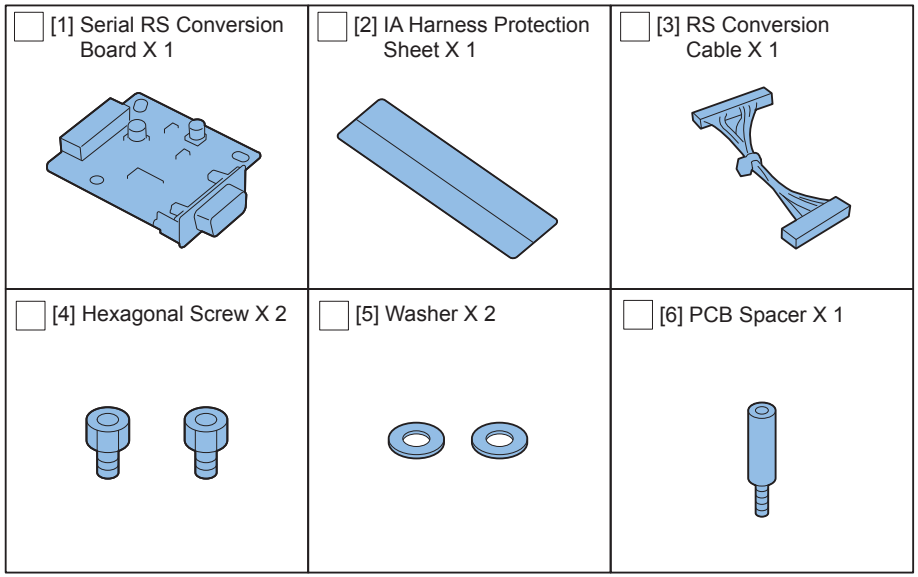
Serial Interface Kit-K1/Copy Control Interface Kit-A1

Checking the Parts to be Installed

Serial Interface Kit-K1 and Control Interface Kit-A1 cannot be used concurrently.

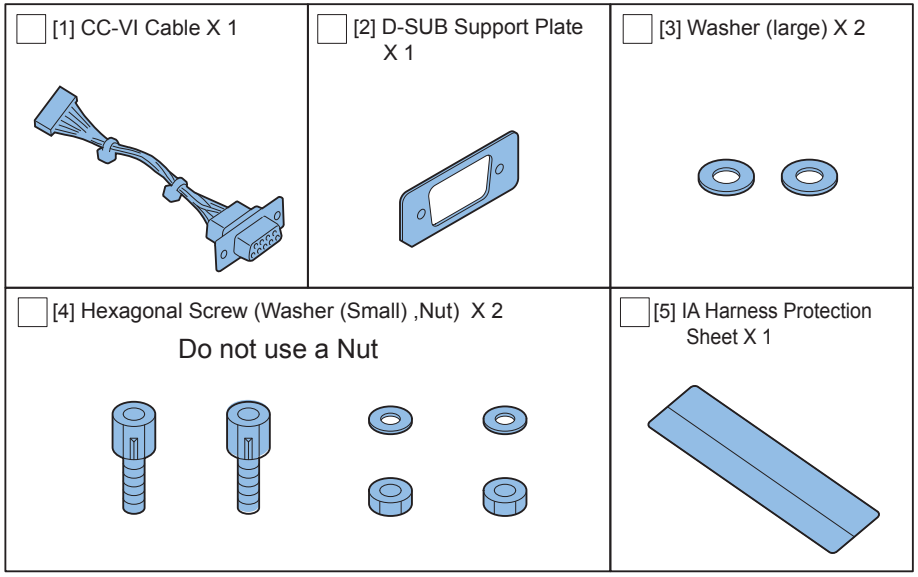
Checking the Contents

Serial Intreface KIT-K1



F-9-390

Copy Control Interface KIT-A1



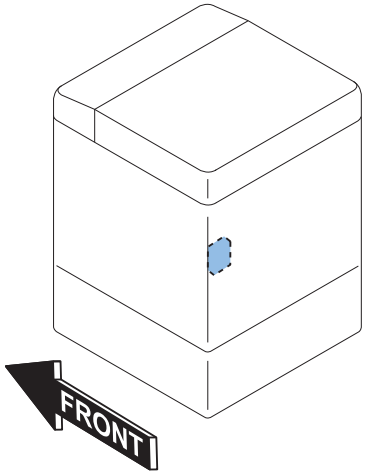
F-9-391

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

1) Turn OFF the main power switch of the host machine.
2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing

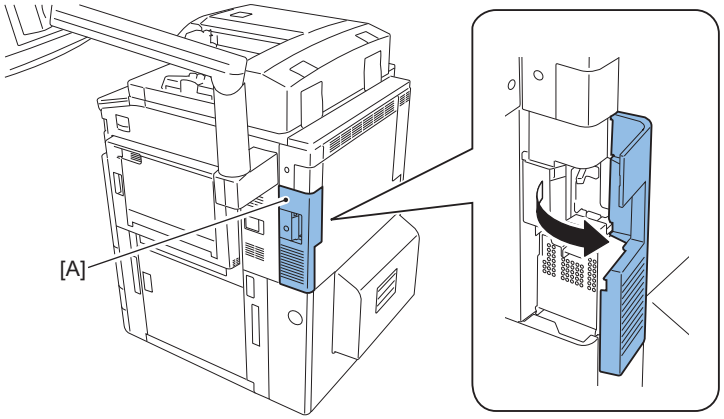


F-9-392

Installation Procedule

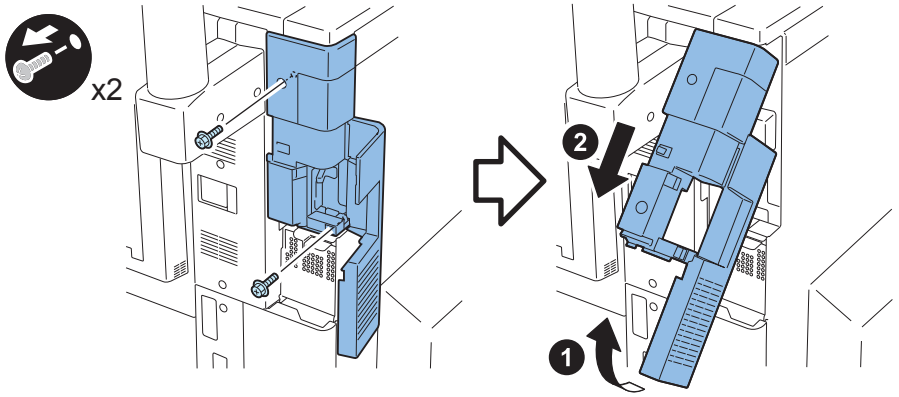
Removing the Main Controller PCB 1

☐
1) Push [A] area to open the HDD Cover.



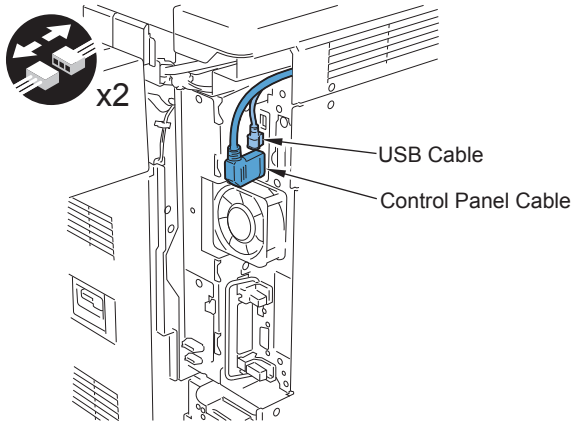
F-9-393

☐
2) Remove the Main Controller Right Cover Unit.
- 2 Screws



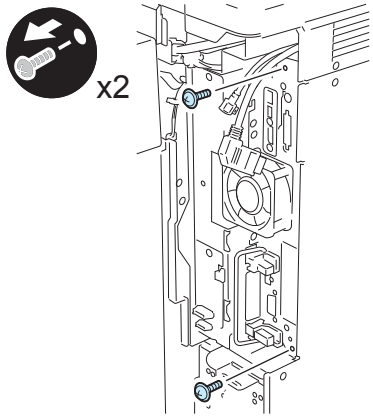
F-9-394

☐
3) Disconnect the USB Cable and the Control Panel Cable.



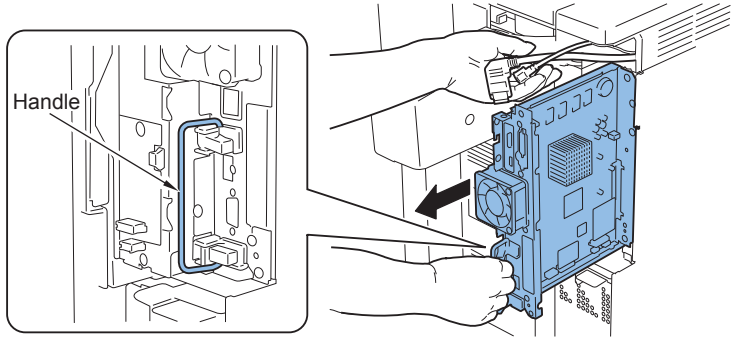
F-9-395

☐
4) Remove the 2 screws.
(The removed screw will be used in step 2 of <Installing Main Controller PCB 1>.)



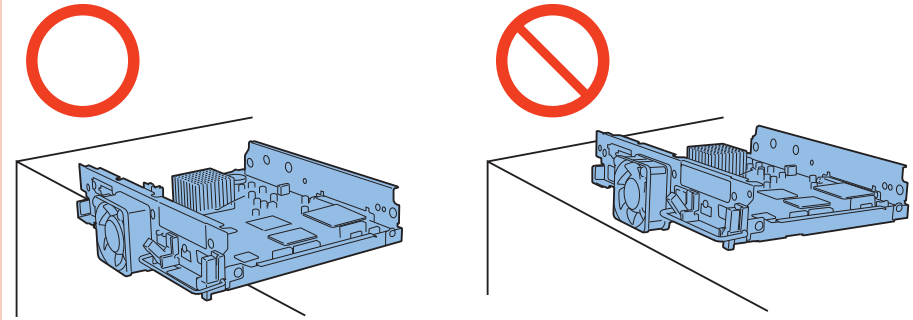
F-9-396

☐
5) Hold the handle and remove the Main Controller PCB 1.



F-9-397

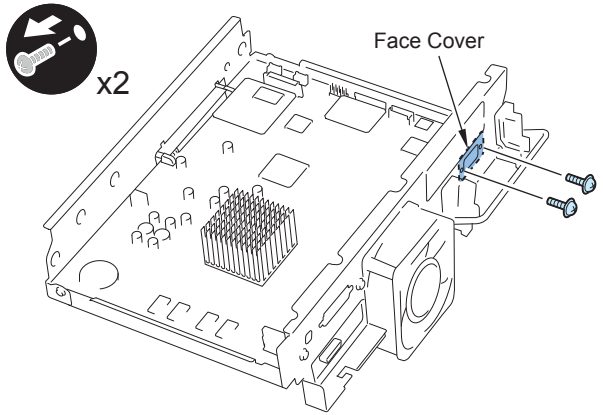
CAUTION:
Be sure to place the removed Main Controller PCB on flat surface.
Reason: Since the fan protrudes, if it is placed at a tilt, it may be damaged.



F-9-398

■ Installing the Serial Interface KIT

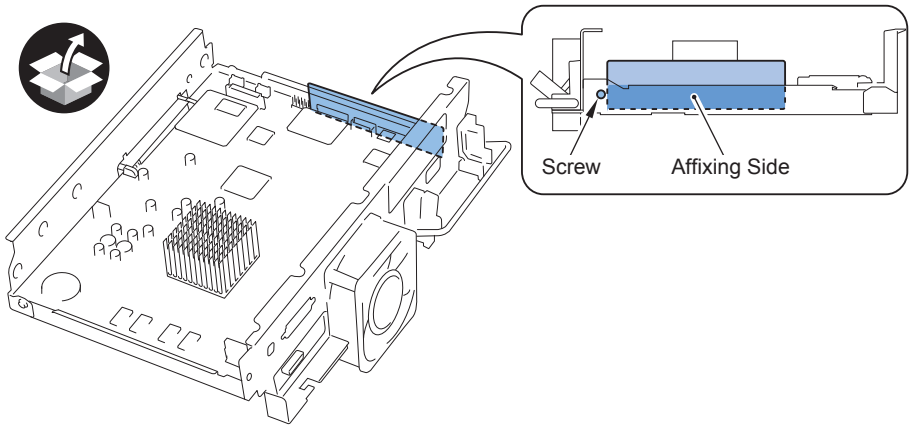
☐
1) Remove the Face Cover from the Main Controller PCB 1. (Removed Face Cover is not used.)
- 2 Screws (Removed screws are not used.)



F-9-399

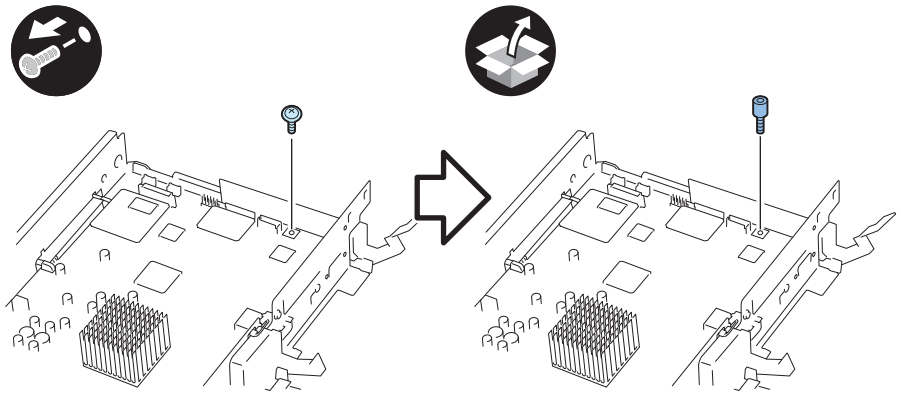
☐
2) Clean the affixing side (Controller Box Frame) of the IA Harness Protection Sheet with lint-free paper moistened with alcohol.
3) Affix the IA Harness Protection Sheet to the Main Controller PCB 1.

NOTE:
- Because the working space is limited, use scale, etc. for cleaning.
- After affixing the IA Harness Protection Sheet, be sure to press it with scale, etc. to prevent coming off.



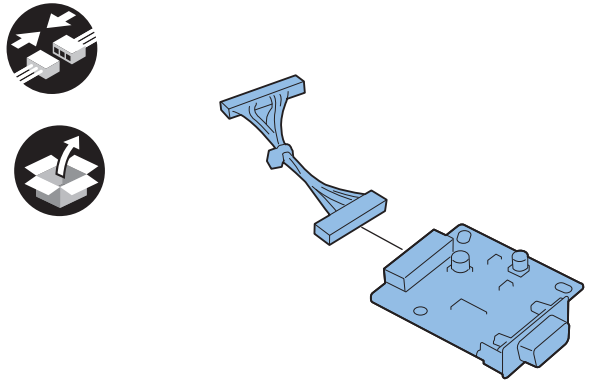
F-9-400

☐
4) Remove the 1 screw and install the PCB Spacer. (Removed screw is used in the procedure 6).)



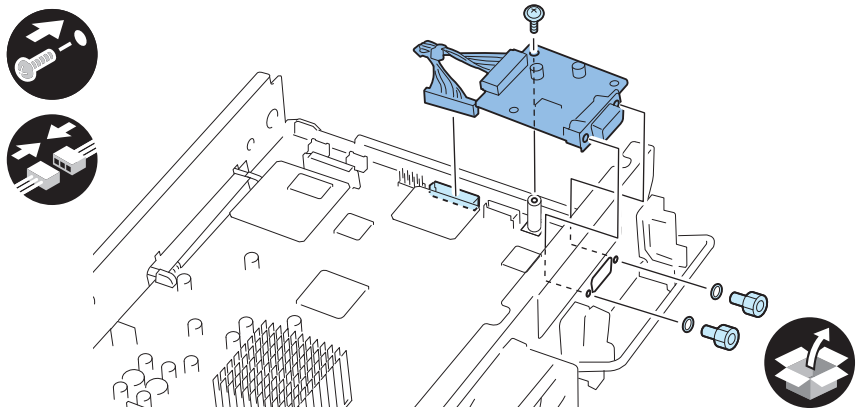
F-9-401

☐
5) Connect the RS Conversion Cable to the Serial RS Conversion Board.



F-9-402

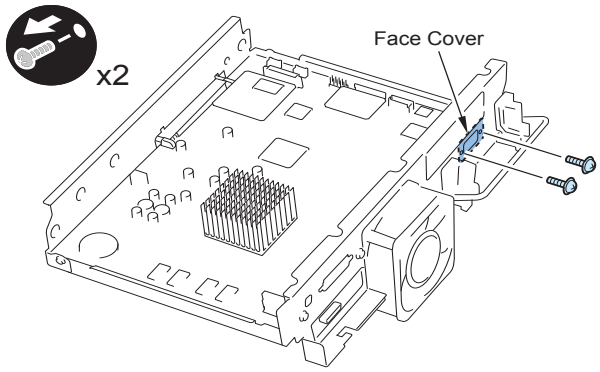
☐
6) Install the Serial RS Conversion Board.
- 1 Screw (which was removed in the procedure 4).)
- 2 Washers
- 2 Hexagonal Screws
- 1 Connector



F-9-403

Installing the Copy Control Interface KIT

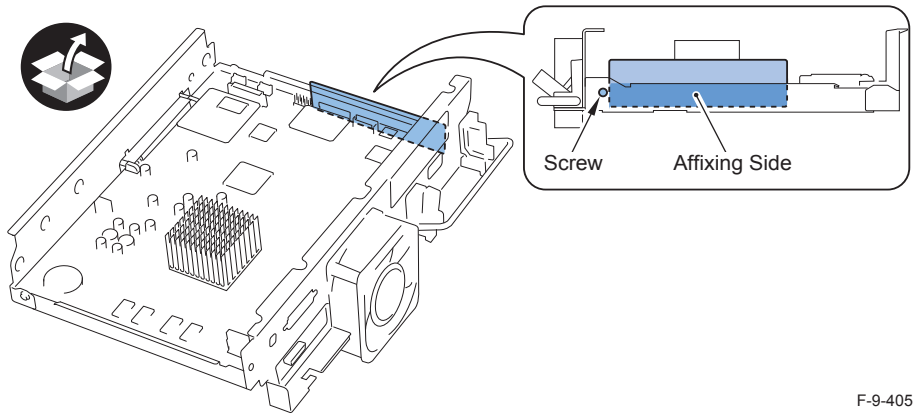
☐
1) Remove the Face Cover from the Main Controller PCB 1. (Removed Face Cover is not used.)
- 2 Screws (Removed screws are not used.)



F-9-404

☐
2) Clean the affixing side (Controller Box Frame) of the IA Harness Protection Sheet with lint-free paper moistened with alcohol.
3) Affix the IA Harness Protection Sheet to the Main Controller PCB 1.

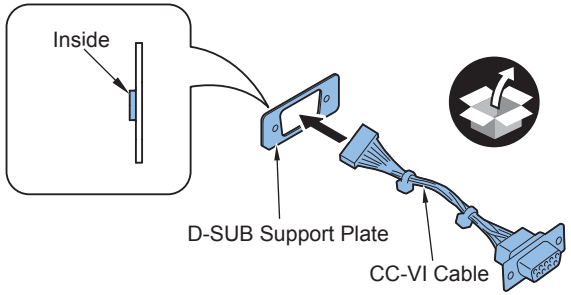
NOTE:
- Because the working space is limited, use scale, etc. for cleaning.
- After affixing the IA Harness Protection Sheet, be sure to press it with scale, etc. to prevent coming off.



F-9-405

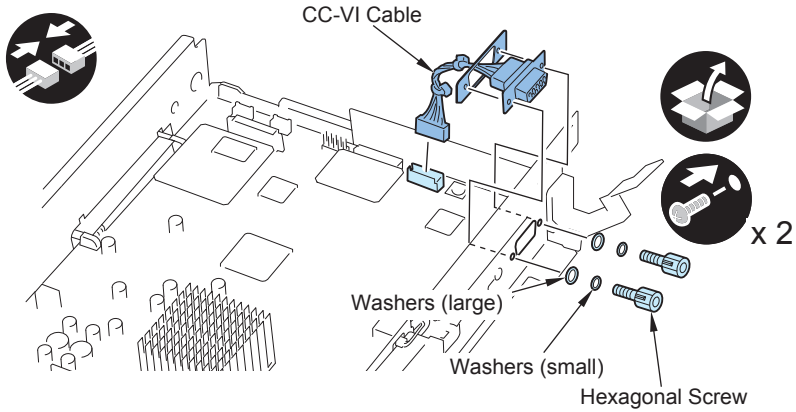
☐
4) Put the CC-VI cable through the D-SUB Support Plate.

CAUTION:
Be sure to install the extruded side of the D-SUB Support Plate to be inside.



F-9-406

☐
5) Secure the CC-VI cable to the Main Controller PCB 1.
- 2 Hexagonal Screws
- 2 Washers (small)
- 2 Washers (large)
- 1 Connector

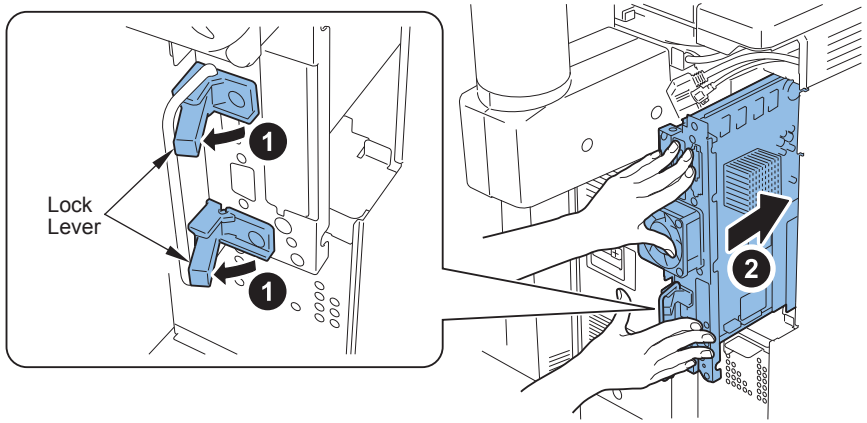


F-9-407

■ Installing the Main Controller PCB 1

CAUTION:
Install the Main Controller 1 without pinching cables.

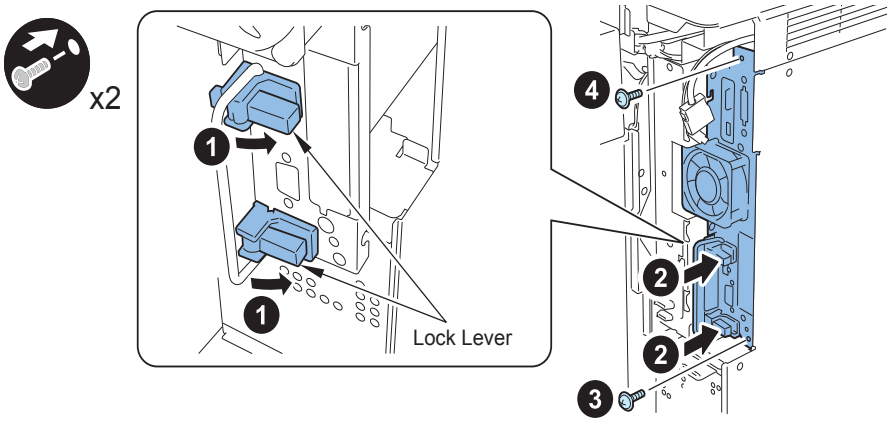
□
1) Release 2 Lock Levers in the arrow direction, and push the Main Controller 1 all the way in evenly with both hands.



F-9-408

□
2) Press 2 Lock Levers down to push the Main Controller 1 and secure.
- 2 Screws (The screws removed in step 4 of Removing Main Controller PCB 1 : install in order from bottom to top.)

CAUTION:
Keep the order of steps 1 thru 4 shown in the figure since there is the case that a connector of the Main Controller 1 is not connected.



F-9-409

□
3) Connect the USB Cable and the Control Panel Cable.
4) Main Controller Right Cover Unit (2 Screw).
5) Close the HDD Cover.
6) Connect the power plug to the outlet.
7) Turn ON the main power switch.

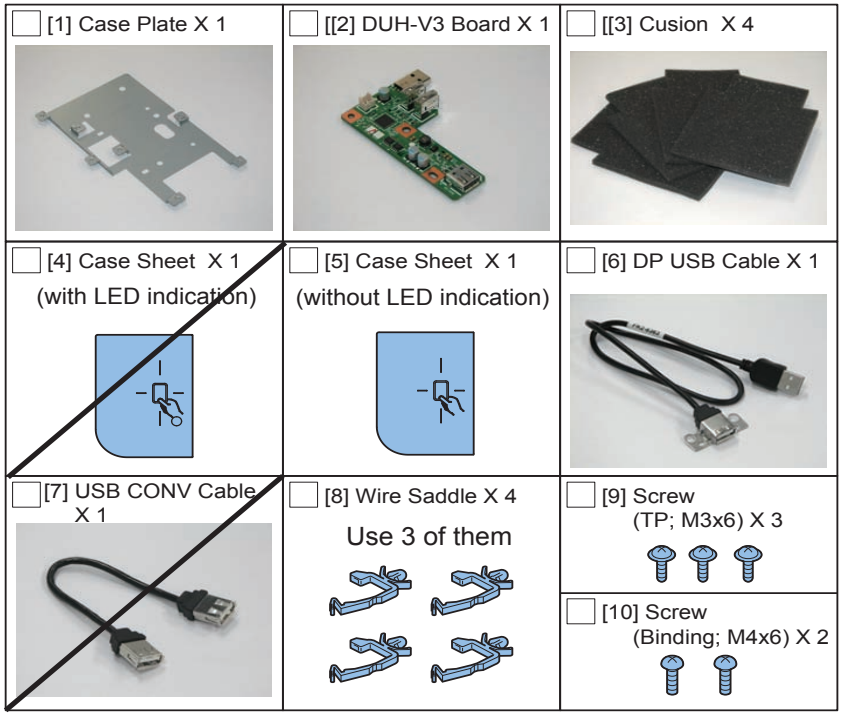
USB Device Port-A2/Multimedia Reader/Writer-A2

Points to Note at Installation

- When installing the Multimedia Reader/Writer, the USB Device Port must be installed beforehand."
- The Multimedia Reader/Writer cannot be used in combination with the Card Reader.

Checking the Contents

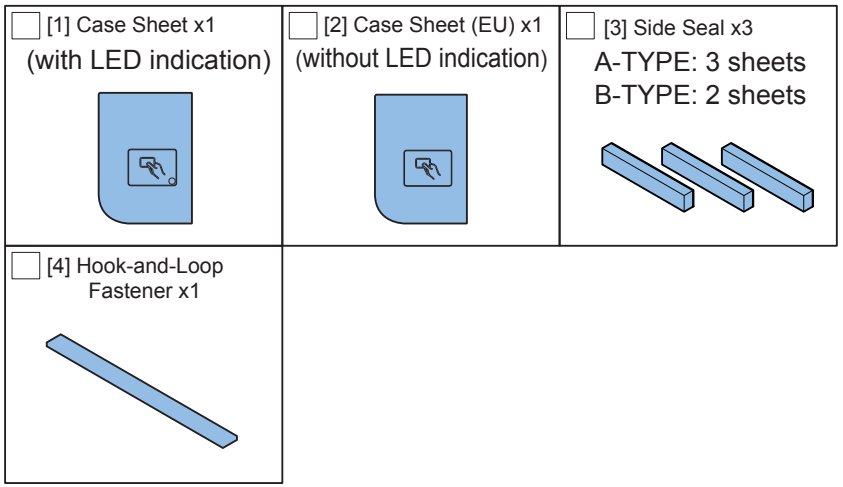
■ USB Device Port-A2



F-9-410

[3], [5]: Use these when installing the Card Reader (sales company's option).

Do not use following parts with the machine if they are included.

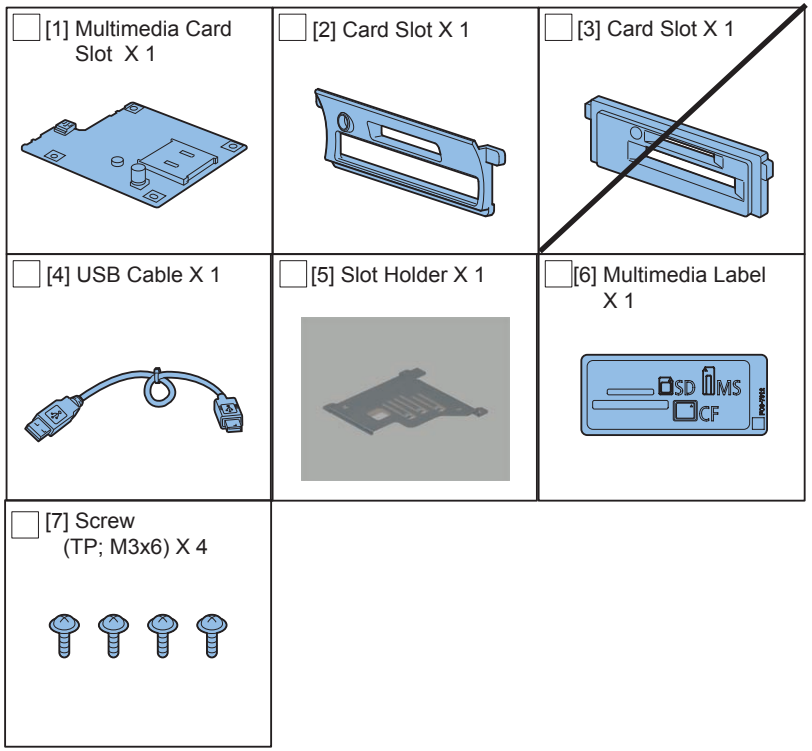


F-9-411

< CD/Guides >

- FCC/IC Instruction Sheet
- China RoHS Instruction Sheet

Multimedia Reader/Writer-A2



F-9-412

< CD/Guides >

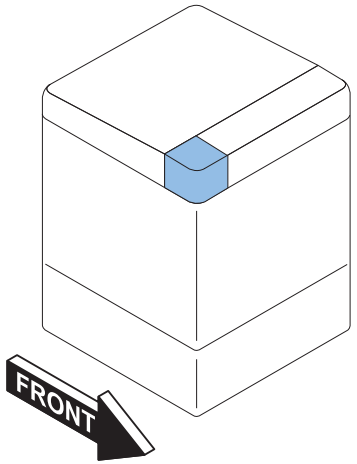
- FCC/IC Instruction Sheet

Check Items when Turning OFF the Power

Check that the main power is OFF.

1) Turn OFF the main power switch.
2) Check that display in the Control Panel and the lamp of the main power are turned off.

Installation Outline Drawing



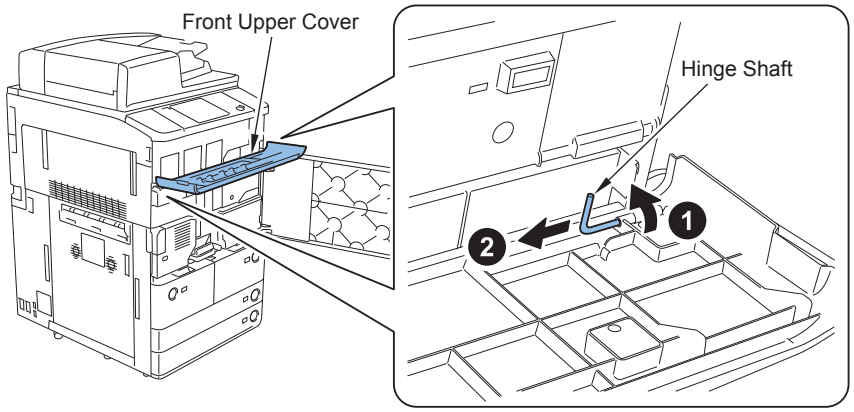
F-9-413

Installing the USB Device Port

Removing the Covers

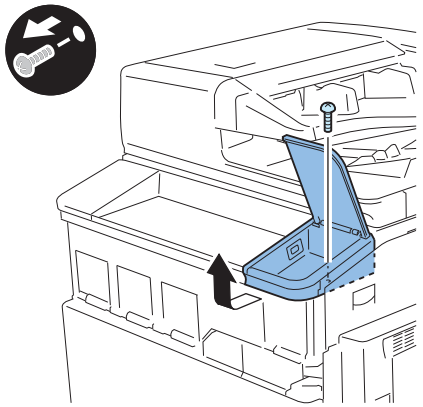
☐
1) Open the Front Cover.

☐
2) Remove the Front Upper Cover.
- 2 Hinge Shafts



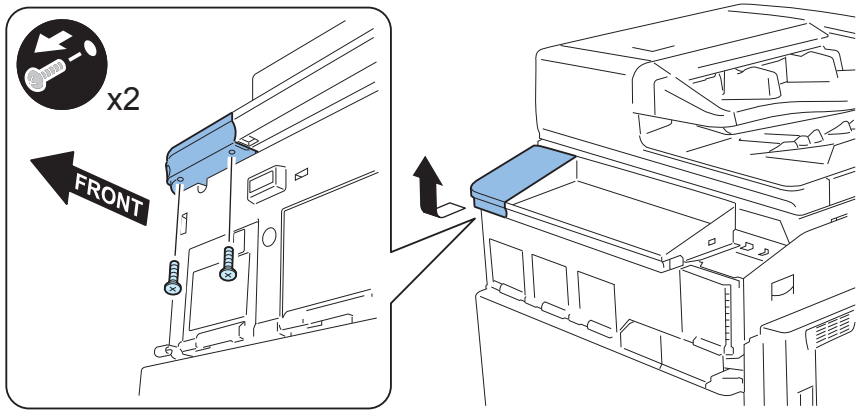
F-9-414

☐
3) Remove the Upper Right Cover.
- 1 Screw



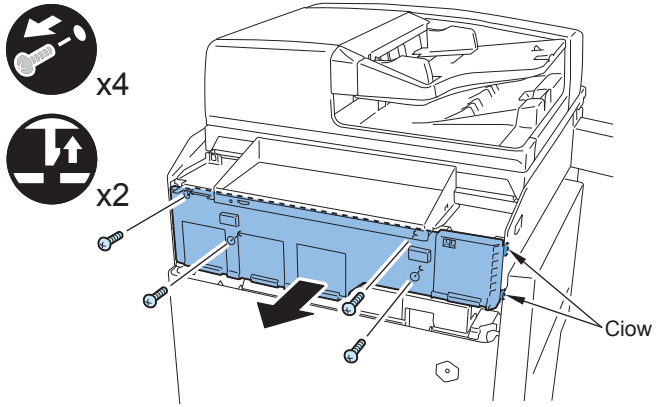
F-9-415

☐
4) Remove the Upper Left Cover.
- 2 Screws



F-9-416

☐
5) Remove the Toner Container Replacement Unit Inner Cover.
- 4 Screws
- 2 Claws

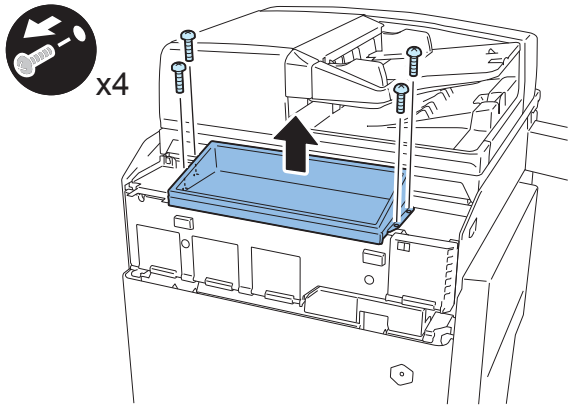


F-9-417

In case of Upright Control Panel model

☐ 1) Remove the Upper Middle Cover.

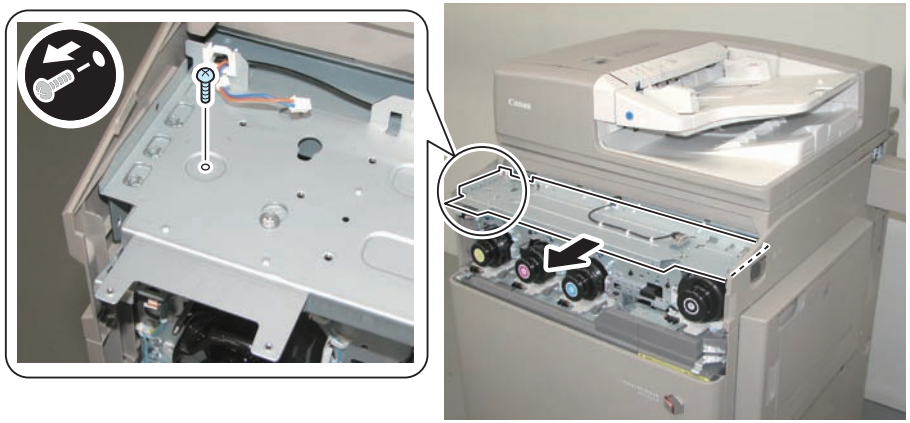
- 4 Screws



F-9-418

☐ 2) Remove the screw of the Control Panel Plate, and pull out the Control Panel Plate in the direction of the arrow. (The removed screw will be used in step 11.)

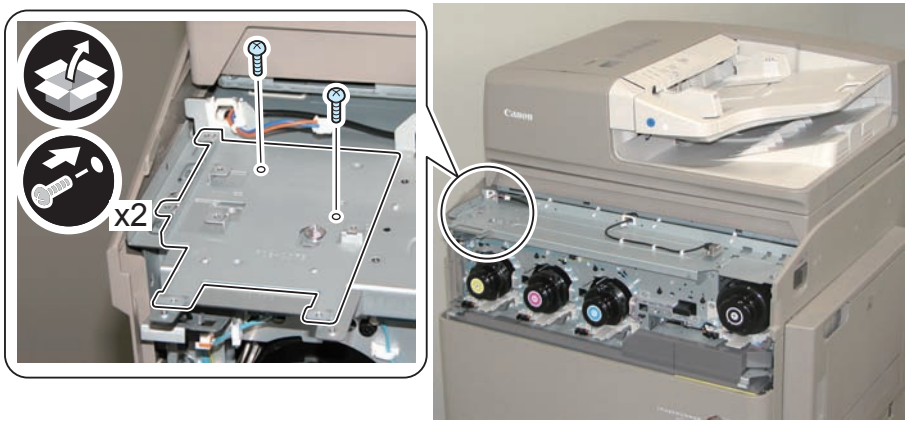
CAUTION:
Be sure not to pull out the Control Panel Plate toward the front too much. Wire Saddles may fall.



F-9-419

☐ 3) Install the Case Plate.

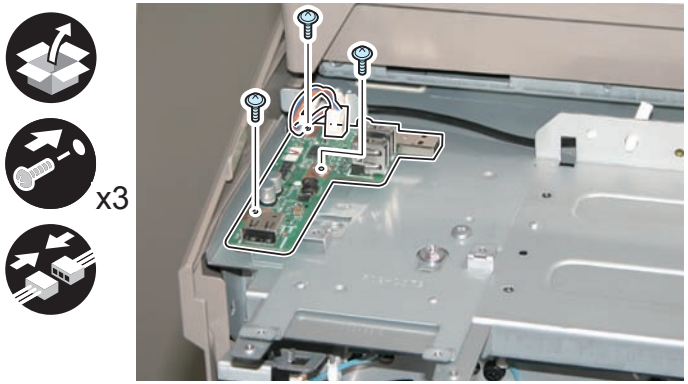
- 2 Screws (Binding; M4x6)



F-9-420

☐ 4) Install the DUH-V3 Board.

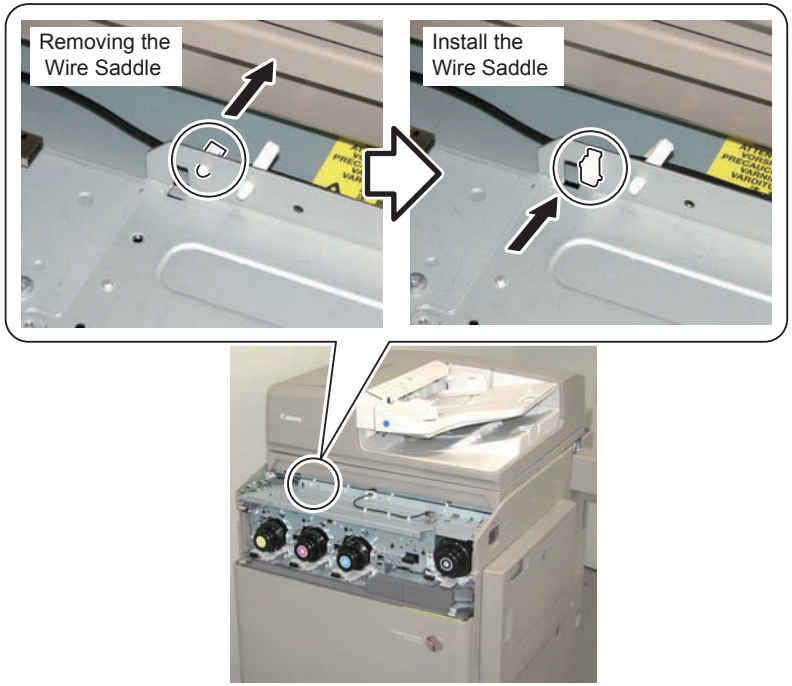
- 3 Screws (TP; M3x6)
- 1 Connector



F-9-421

☐
5) Remove the Wire Saddle installed to the rear side of the Control Panel Plate, and install it to the front side of the plate.

NOTE:
If it is difficult to remove the Wire Saddle, use a pair of needlenose pliers.

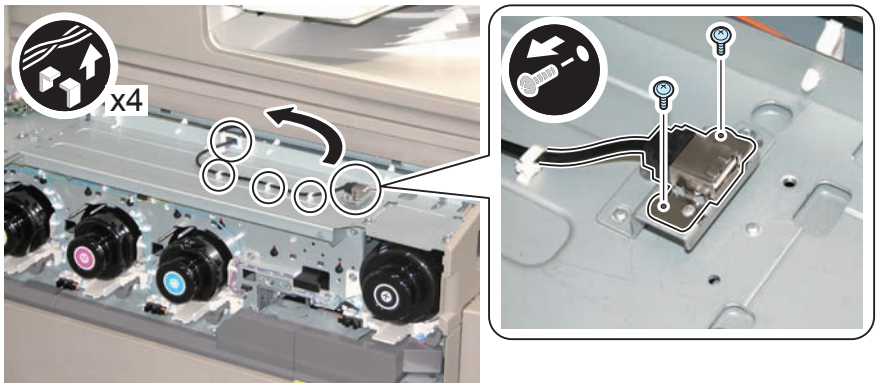


F-9-422

☐
6) Install the 3 Wire Saddles to the Control Panel Plate.

F-9-423

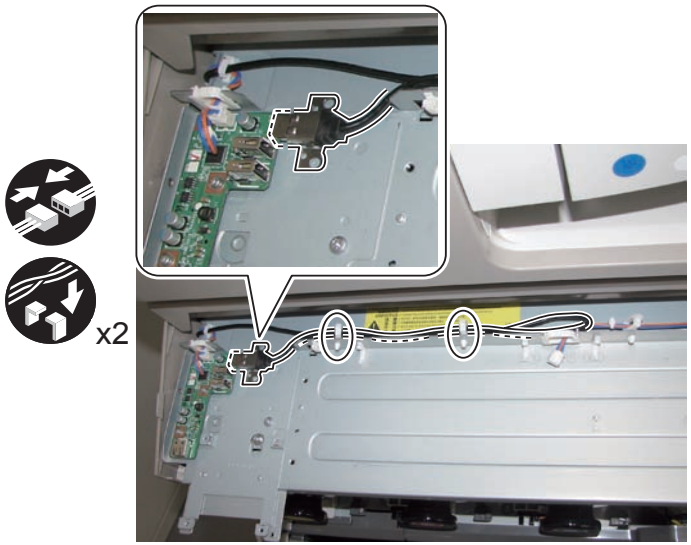
☐
7) Disconnect the USB Cable.
- 2 Screws (The removed screws will be used in step 10.)
- 3 Wire Saddles
- 1 Edge Saddle



F-9-424

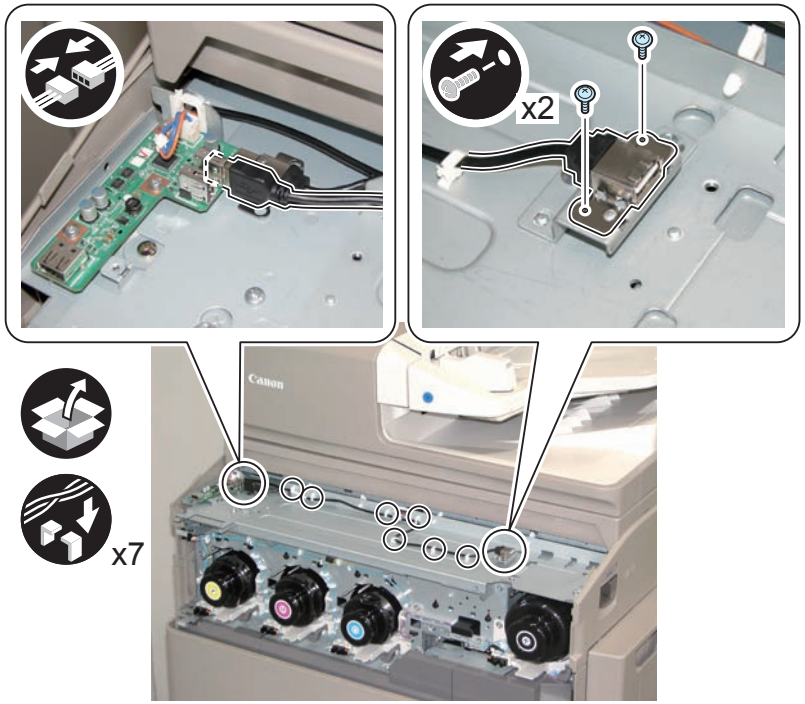
☐
8) Close the Edge Saddle opened in step 7.

☐
9) Put the disconnected USB Cable through the Wire Saddle on the rear side, and connect it to the DUH-V3 Board.
- 2 Wire Saddles



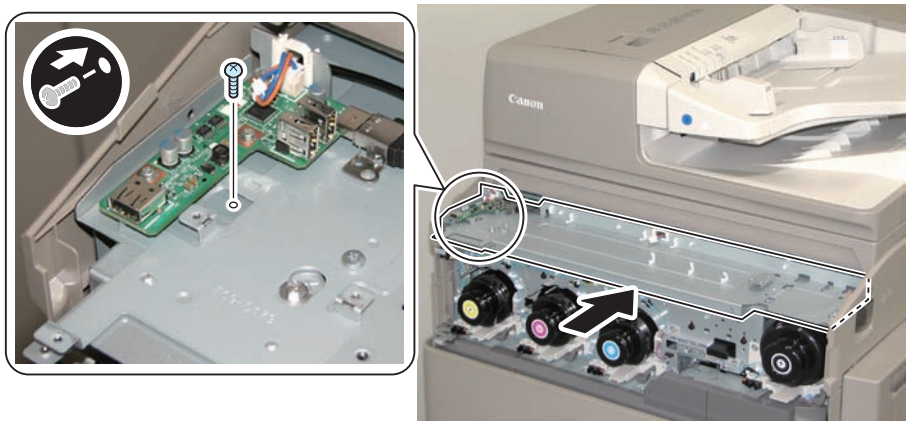
F-9-425

☐
10) Connect the DP USB Cable included in the package, and connect it to the DUH-V3 Board.
- 2 Screws (Use the screws removed in step 7.)
- 7 Wire Saddles



F-9-426

☐
11) Return the Control Panel Plate to its original position.
- 1 Screw (Use the screw removed in step 2.)

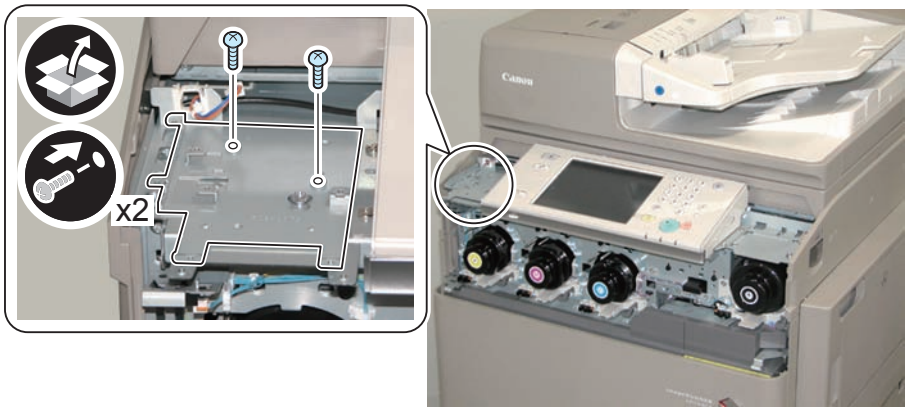


F-9-427

☐
12) Install the Upper Middle Cover. (4 screws)

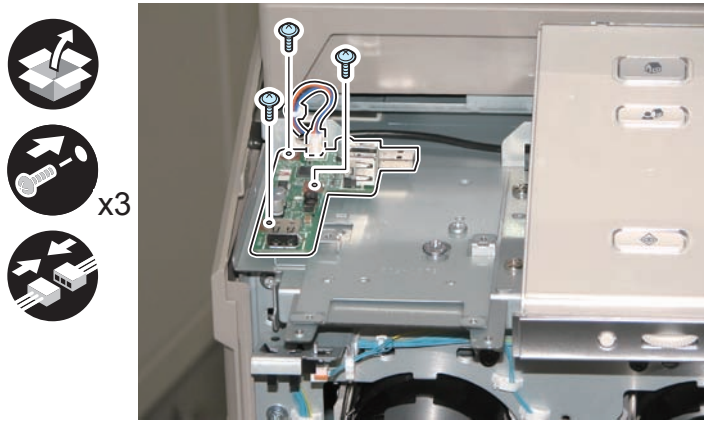
In case of Flat Control Panel model

☐
1) Install the Case Plate.
- 2 Screws (Binding; M4x6)



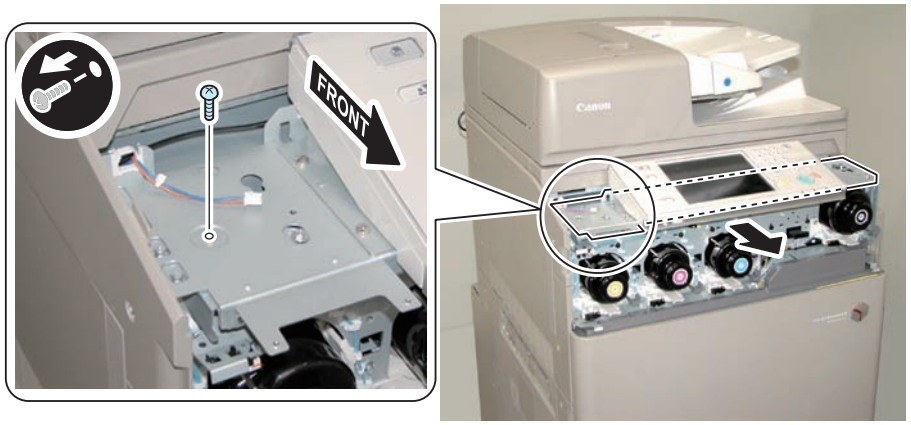
F-9-428

☐
2) Install the DUH-V3 Board.
- 3 Screws (TP; M3x6)
- 1 Connector



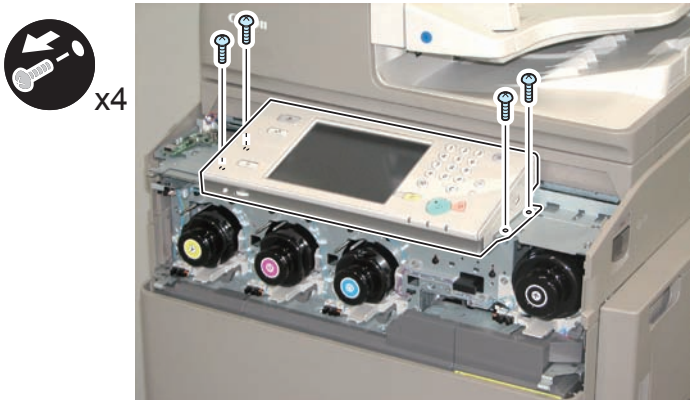
F-9-429

☐
3) Move the Control Panel Plate in the direction of the arrow.
- 1 Screw



F-9-430

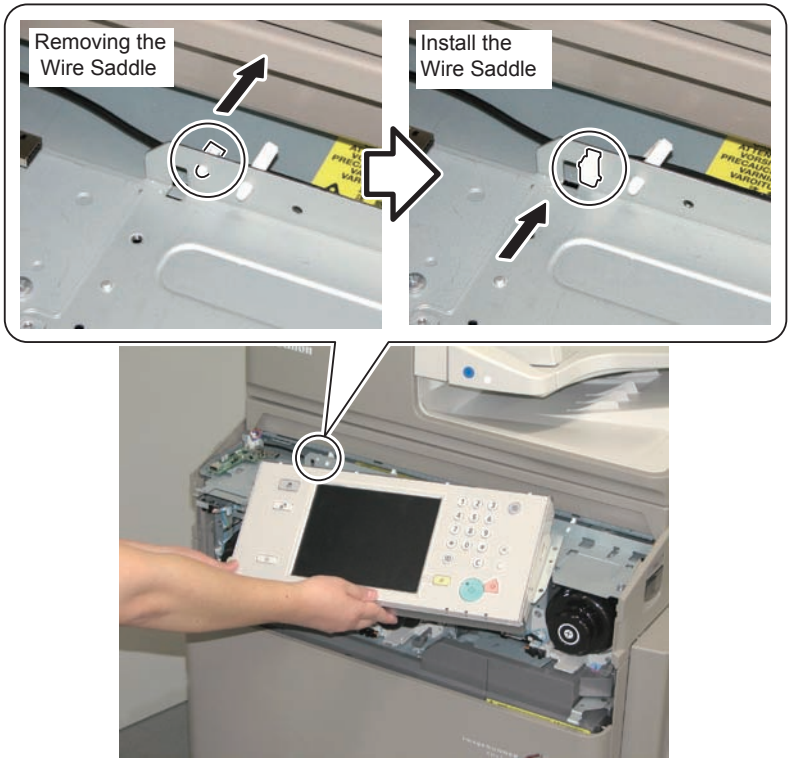
☐
4) Remove the Flat Control Panel.
- 4 Screws



F-9-431

☐
5) Remove the Wire Saddle installed to the rear side of the Control Panel Plate, and install it to the front side of the plate.

NOTE:
If it is difficult to remove the Wire Saddle, use a pair of needlenose pliers..

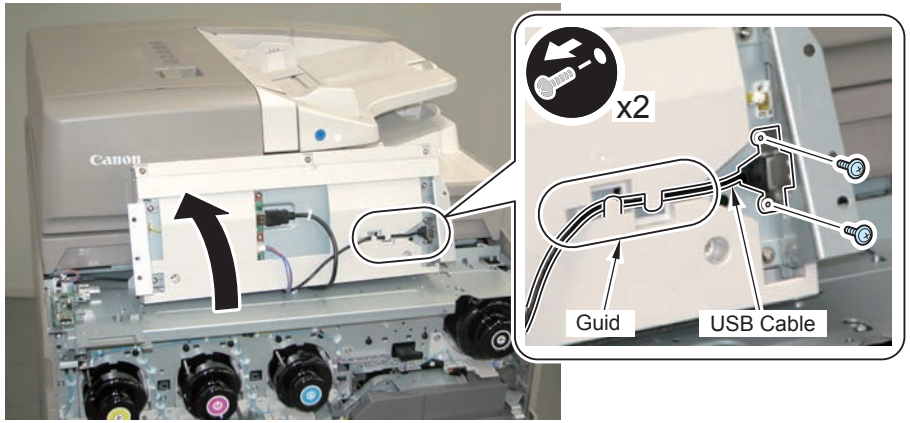


F-9-432

☐
6) Install the Wire Saddles to the Control Panel Plate.
- 3 Wire Saddles

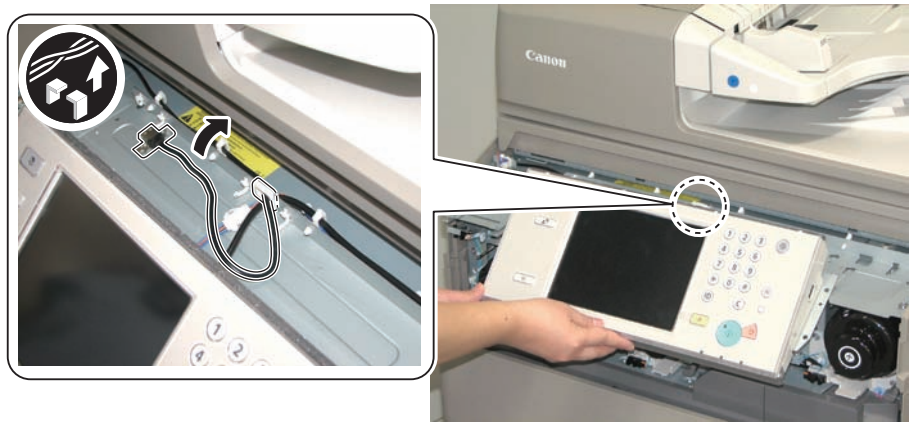
F-9-433

☐
7) Place the Flat Control Panel as shown in the figure, and disconnect the USB Cable.
- 2 Screws (The removed screws will be used in step 11.)
- 2 Guides



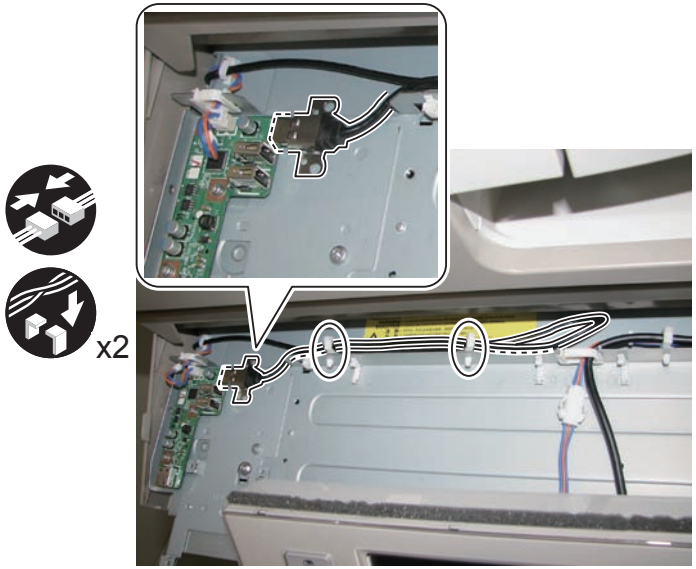
F-9-434

☐
8) Free the USB Cable from the Edge Saddle, and close the Edge Saddle.



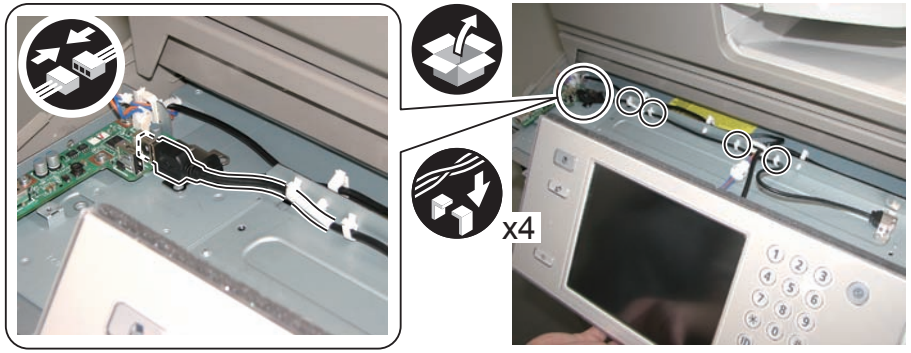
F-9-435

☐
9) Connect the USB Cable to the DUH-V3 Board.
- 2 Wire Saddles



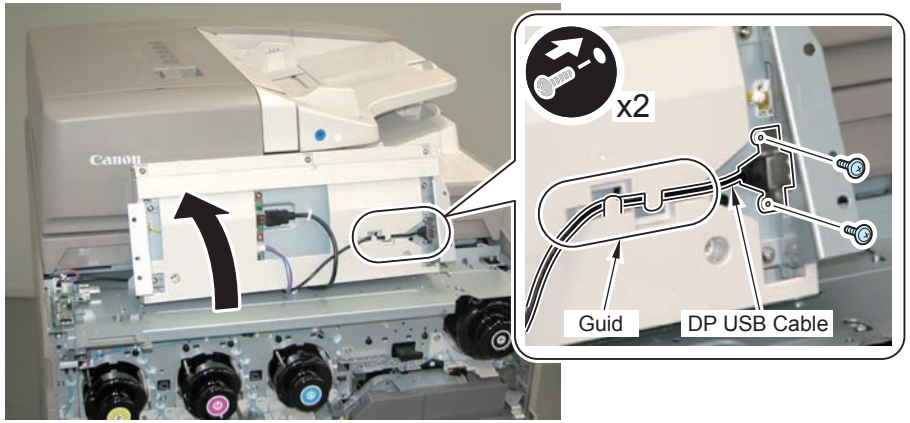
F-9-436

☐
10) Connect the DP USB Cable included in the package, and connect it to the DUH-V3 Board.
- 4 Wire Saddles



F-9-437

☐
11) Turn the Flat Control Panel in the direction of the arrow, and connect the DP USB Cable.
- 2 Screws (Use the screws removed in step 7.)
- 2 Guides



F-9-438

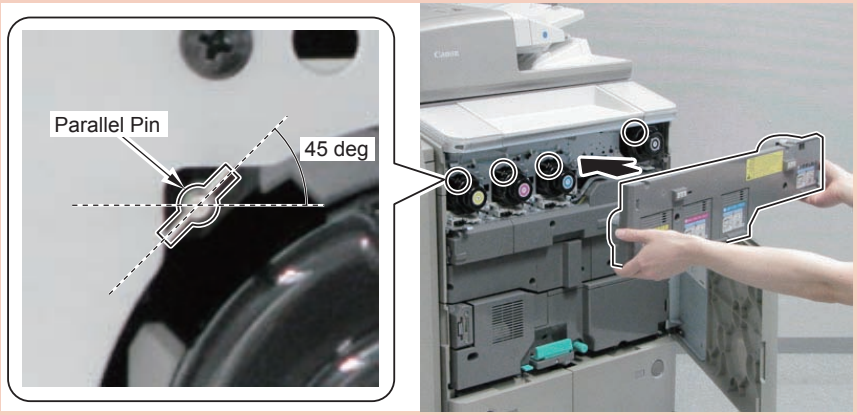
☐
12) Install the Flat Control Panel. (4 screws)

Installing the Covers

☐
1) Install the Toner Container Replacement Unit Inner Cover. (4 screws)

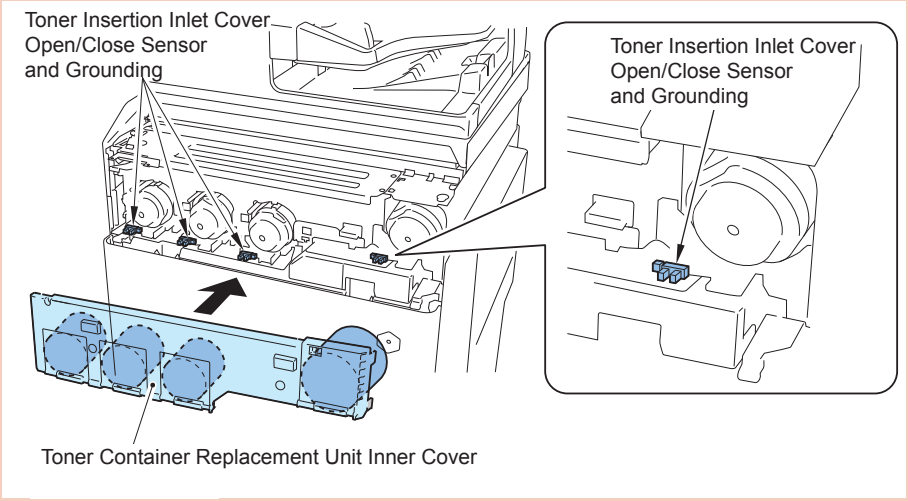
CAUTION:

- When installing, be sure to install the Toner Replacement Inner Cover while the 4 Parallel Pins of the Inner Door Link Shaft are tilted at an angle of approx. 45 degrees.



F-9-439

- When installing, be careful not to damage the 4 groundings on the upper side of the Toner Insertion Inlet Cover Open/Close Sensor.



F-9-440

☐
2) Install the Upper Middle Cover (1 screw).

NOTE:
When installing the Card Reader or Multimedia Reader/Writer simultaneously, it is efficient to install it before performing the following procedure.

☐
3) Install the Upper Left Cover (2 screws).
4) Front Upper Cover (2 Hinge Shafts).
5) Close the Front Cover.
6) Connect the power plug of the host machine to the power outlet.
7) Turn ON the main power switch.

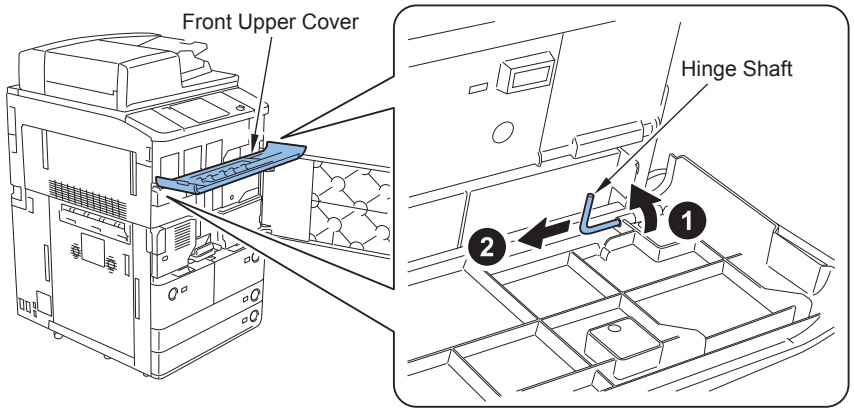
☐
8) Connect the USB memory to the USB Device Port and perform the operation check.
(Refer to steps of "Operation Check".)

Installing the Card Reader

☐ 1) Open the Front Cover.

☐ 2) Remove the Front Upper Cover.

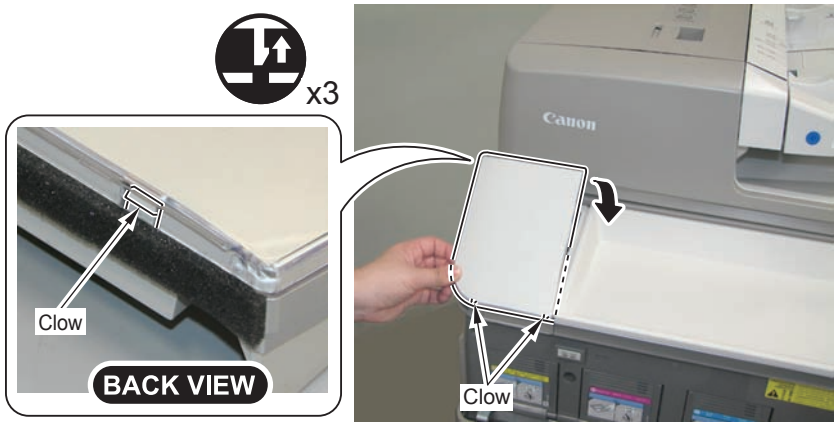
- 2 Hinge Shafts



F-9-441

☐ 3) Remove the clear cover.

- 3 Claws



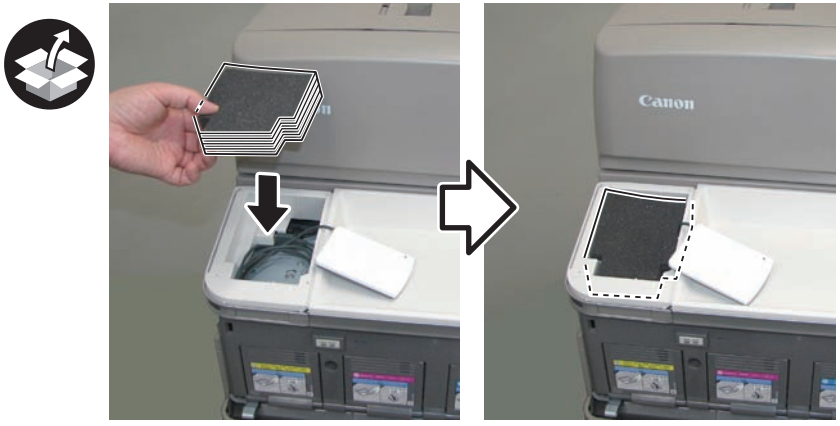
F-9-442

☐ 4) After connecting the Card Reader to the DUH-V3 Board, place the cable inside the cover.

F-9-443

☐ 5) Place the Cushions inside the Upper Left Cover.

NOTE:
Adjust the number of cushions to match the thickness of the Card Reader.

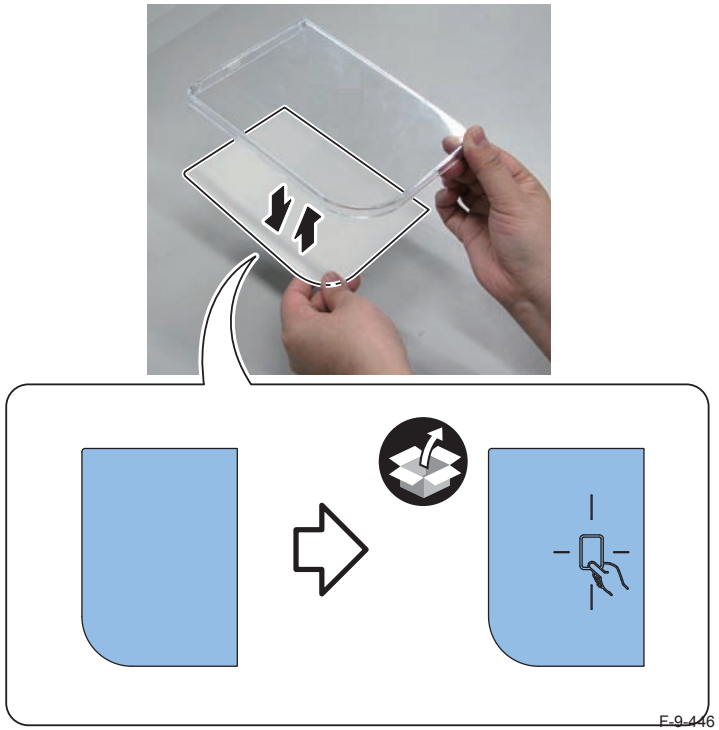


F-9-444

☐
6) Place the Card Reader on the Cushion.

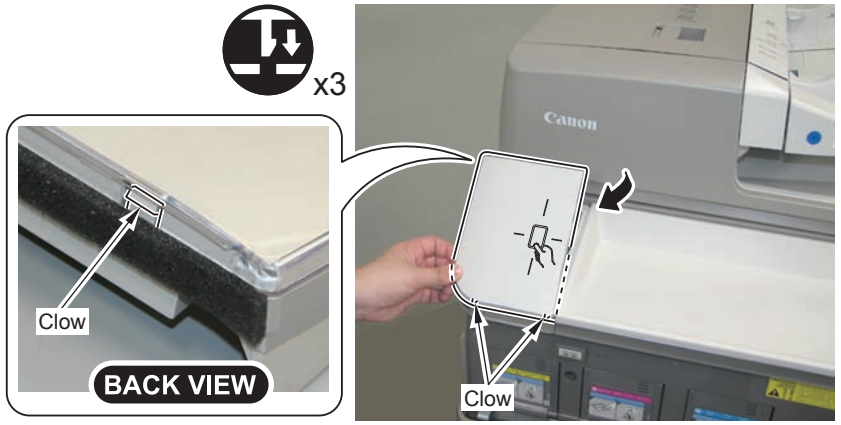
F-9-445

☐
7) Remove the Device Port Sheet and replace with the Case Sheet.
(The removed Device Port Sheet will not be used.)



F-9-446

☐
8) Return the clear cover.
• 3 Claws



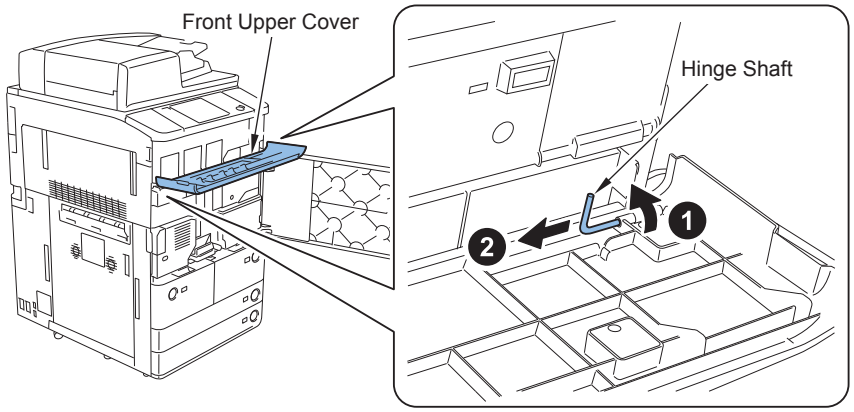
F-9-447

☐
9) Install the Front Upper Cover. (2 Hinge Shafts)

Installing the Multimedia Reader/Writer

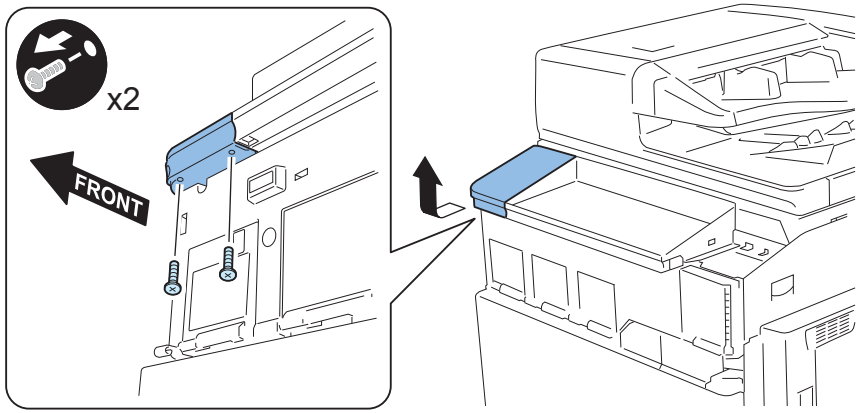
☐
1) Open the Front Cover.

☐
2) Remove the Front Upper Cover.
- 2 Hinge Shafts



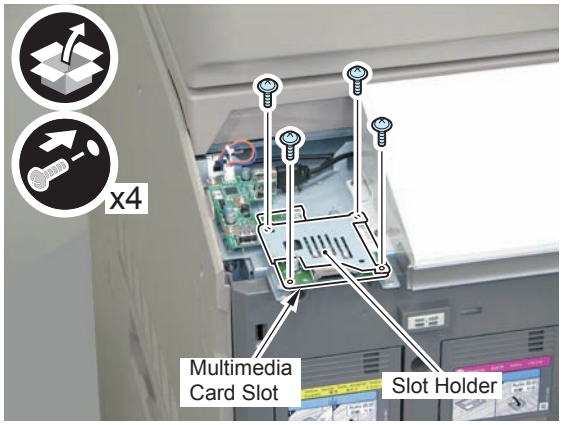
F-9-448

☐
3) Remove the Upper Left Cover.
- 2 Screws



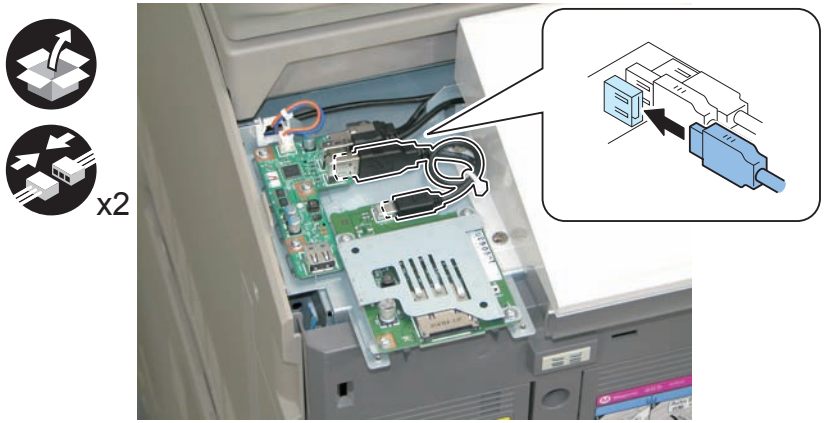
F-9-449

☐
4) Install the Multimedia Card Slot and the Slot Holder.
- 4 Screws (TP; M3x6)



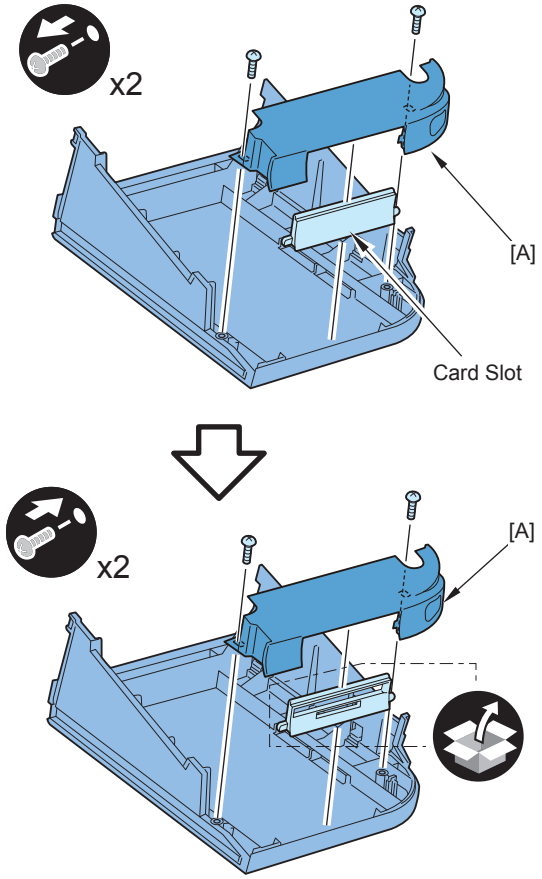
F-9-450

☐
5) Connect the USB Cable.



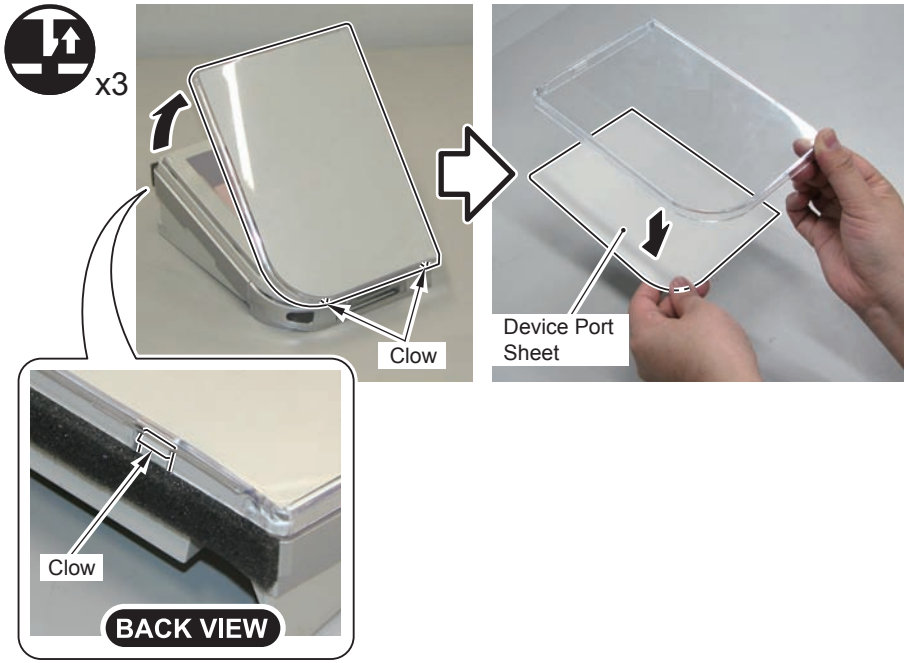
F-9-451

☐
6) Turn over the Upper Left Cover, remove the Card Slot from [A], and then attach the Card Insertion Slot included in the package. (The removed Card Slot will not be used.)
- 2 Screws



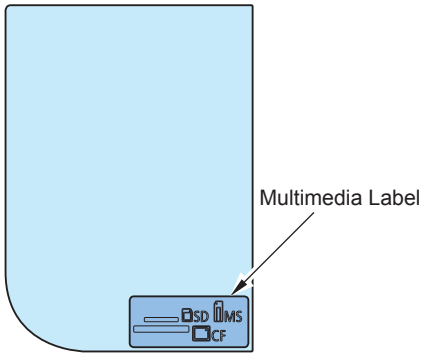
F-9-452

☐
7) Remove the Clear Cover and the Device Port Sheet of the Upper Left Cover.
- 3 Claws



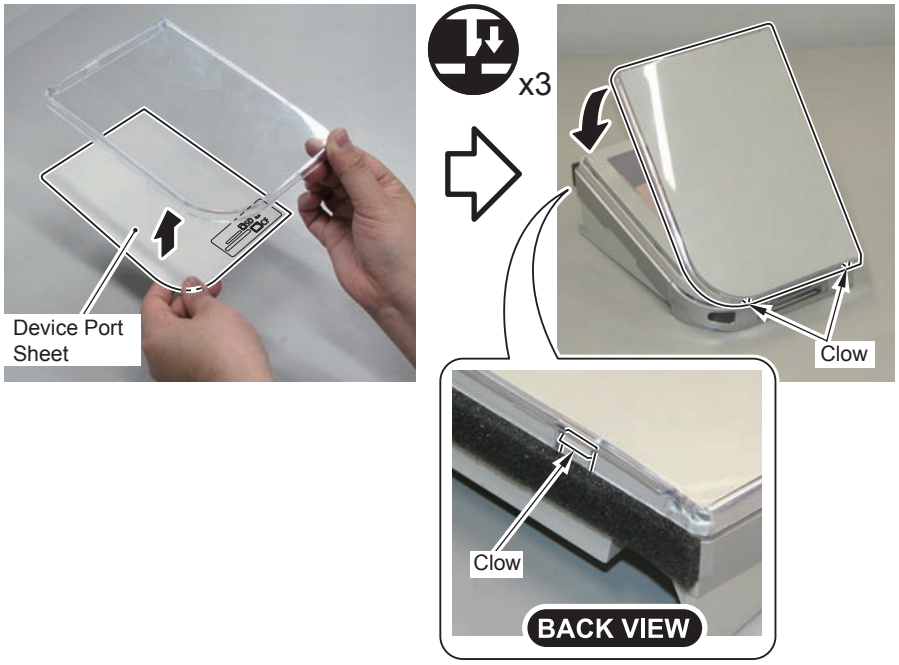
F-9-453

☐
8) Affix the Multimedia Label to the Device Port Sheet as shown in the figure.



F-9-454

☐
9) Install the Device Port Sheet and the Clear Cover.
- 3 Claws



F-9-455

☐
10) Return the Upper Left Cover to its original position. (2 Screws)

CAUTION:
Be careful not to trap the USB Cable.

☐
11) Install the Front Upper Cover and close it (2 Hinge Shafts).
12) Connect the power plug to the outlet.
13) Turn ON the main power switch.

Operation Check (USB Device Port/Multimedia Reader/Writer)

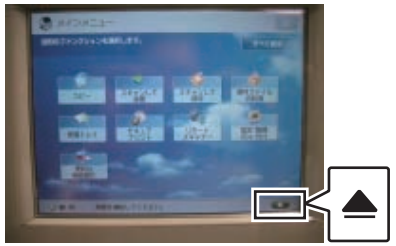
NOTE:
- Connect a USB memory device to the USB Device Port and perform the operation check.
- To the Multimedia Reader/Writer, Memory Media of the SD Card, Memory Stick, and CF Card can be connected. With one of the 3 types of Memory Media, perform the oepration check 1 through 3.
- When changing the settings upon user's request, it is required to log in as a system manager in accordance with instructions from the user administrator.

1.Writing Check

☐
1) Select "1" for the following Service Mode (Level 2) (Default value "0").
- COPIER > OPTION > DSPLY-SW > UI-MEM

2) To make the setting value effective, turn OFF/ON the main power of the Host Machine.

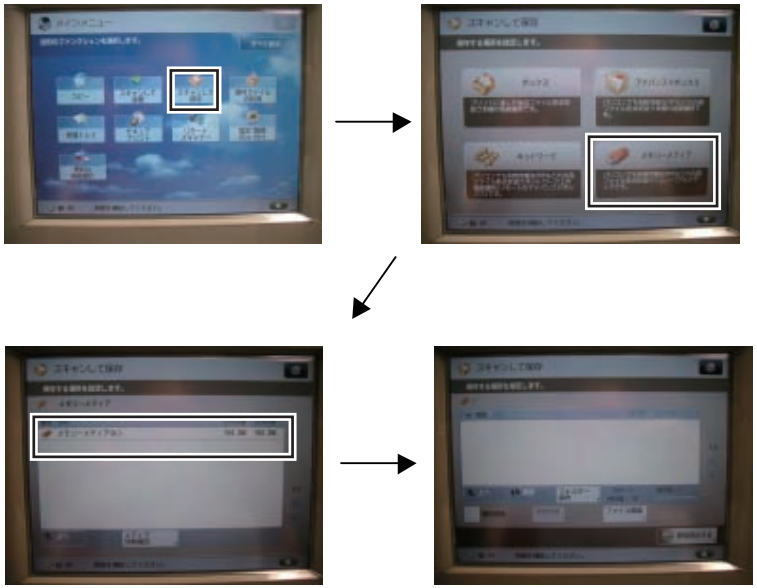
☐
3) Mount the Memory Media to the Multimedia Card Reader/Writer(Check that the Mount Mark is indicated in the bottom right.).



F-9-456

□

4) Make the following selection:[Scan and Store] > [Memory Media] > [Memory Media (A:)]



F-9-457

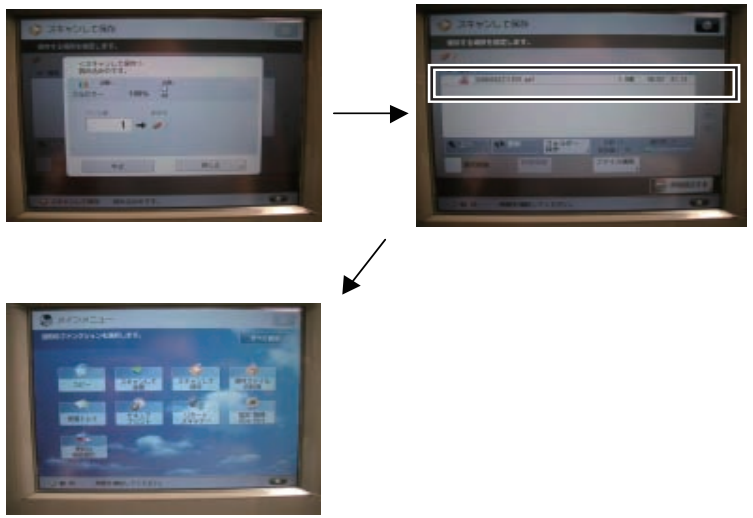
□

5) Set originals to Copyboard, and press the [Scan] button. Then, press the Start button on the Control Panel.

F-9-458

□

6) After scanning of the original is completed, press [Start Storing].
Confirm that data is stored in the media and press [Main Menu] on the Control Panel.



F-9-459

● 2. Reading Check

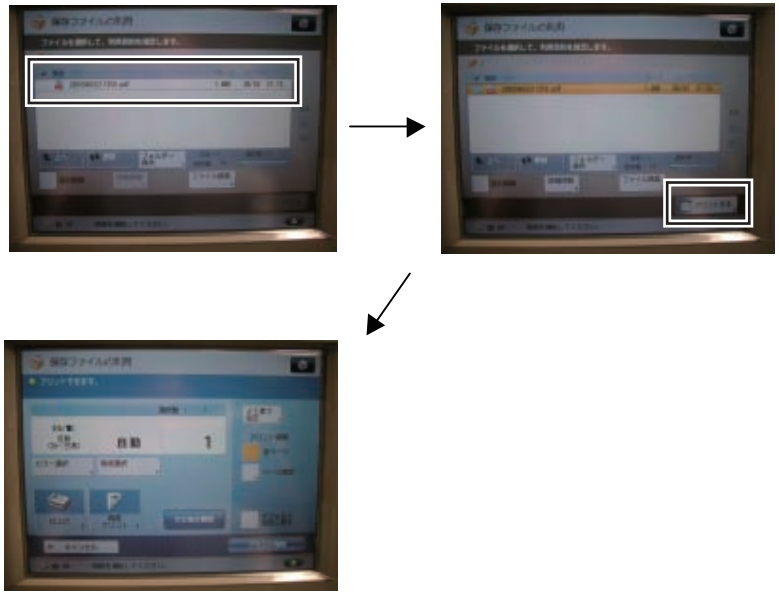
□

7) Make the following selection from Main Menu: [Access Stored Files] > [Memory Media] > [Memory Media(A:)]

F-9-460

□

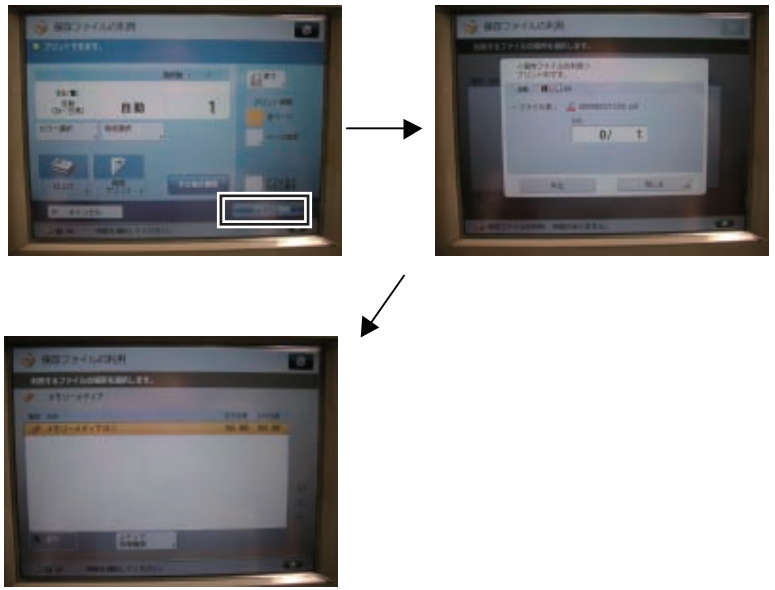
8) Select the files stored in step 4) to 6), and then press the [Print] button.



□

F-9-461

9) Press the [Start Printing] button, and print the file. Then check that the file is printed correctly.



F-9-462

□

10) Press the [Main Menu] button on the Control Panel.

F-9-463

● 3.Memory Media Removal

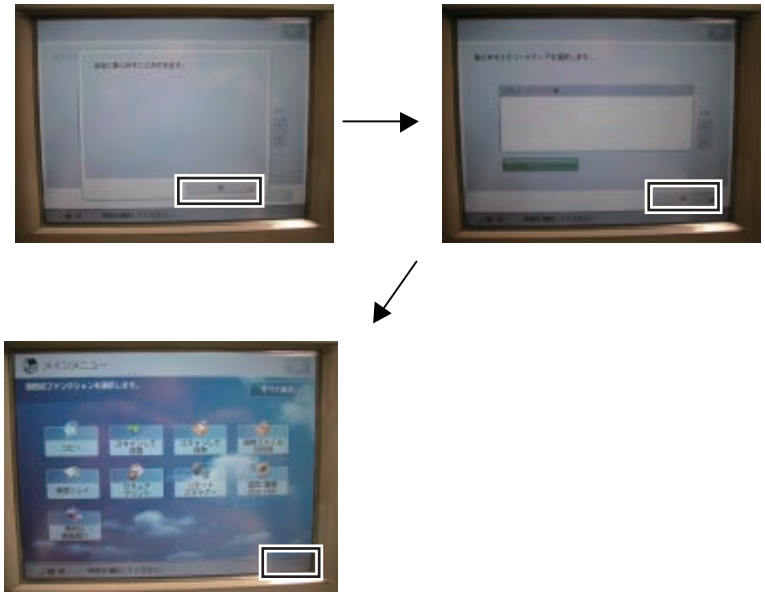
□

11) Press the [Mount Mark] in the bottom right.Then, select the memory media to be removed, and press the [Remove] button.

F-9-464

□

12) Press the [OK] button. Then, check that the Mount Mark is not indicated in the bottom right on the Main Menu screen.



F-9-465

Combination of HDD Options

When installing the HDD options (5 products indicated below), refer to the pages indicated in the following table.

- 2.5inch/160GB HDD-G1
- 2.5inch/1TB HDD-L1
- Removable HDD Kit-AH1
- HDD Mirroring Kit-D2
- HDD Data Encryption & Mirroring Kit-C7

CAUTION:

- When using the mirroring function, be sure to install 2 HDDs of the same capacity.
- The system software needs to be installed after replacing the HDD or after installing the HDD Data Encryption & Mirroring Kit.

Reference Pages in the Manual According to Product Combination:

Title	Combination of Product	Reference Pages	Remarks
TYPE-1	Option HDD (1TB)	p. 9-173 to p. 9-176	
TYPE-2	Standard HDD + Removable HDD Kit	p. 9-177 to p. 9-189	
TYPE-3	Option HDD (1TB) + Removable HDD Kit	p. 9-190 to p. 9-204	
TYPE-4	Standard HDD + Option HDD (160GB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-205 to p. 9-218	These types correspond to "CASE-8" described in Installation Procedure included in the package of HDD Data Encryption & Mirroring Kit-C7. (In the Case of HDD Data Encryption & Mirroring Kit-C7.)
TYPE-5	2 Option HDDs (1TB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-219 to p. 9-232	
TYPE-6	Standard HDD + HDD Data Encryption & Mirroring Kit	p. 9-233 to p. 9-244	
TYPE-7	Option HDD (1TB) + HDD Data Encryption & Mirroring Kit	p. 9-245 to p. 9-258	
TYPE-8	Standard HDD + Option HDD (160GB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-259 to p. 9-281	
TYPE-9	2 Option HDDs (1TB) + Removable HDD Kit + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit	p. 9-282 to p. 9-301	
TYPE-10	Standard HDD + Removable HDD Kit + HDD Data Encryption & Mirroring Kit	p. 9-302 to p. 9-321	
TYPE-11	Option HDD (1TB) + Removable HDD Kit + HDD Data Encryption & Mirroring Kit	p. 9-322 to p. 9-342	

T-9-8

Points to Note Regarding Data Backup/Export

(When the HDD has been replaced or when HDD Data Encryption & Mirroring Kit has been installed)

Before performing work that will result in the loss of data, inform the system administrator of the inevitable loss, asking him to make a backup or export of important data items.
Backup or export work must not be performed by the service person because of security considerations.
In this Installation Procedure, a series of backup or export procedures are described for reference.

[List of Data to be Deleted]

Data to be Deleted	Availability of Backup
Information registered in the Address Book	Yes
Settings made from the Settings/Registration screen	Yes *1
Forwarding Settings	Yes
License files for MEAP applications	Yes
MEAP applications	No
Data saved using MEAP applications	Yes *2
Favorite Settings registered in the Copy and Mail Box functions	No
Data stored in Mail Boxes or the Advanced Box	Yes *3
Scan modes registered in the Send Function	No
Unsent documents (documents waiting to be sent with the Delayed Send mode)	No
Image forms stored in the Superimpose Image	Yes
MEAP SMS (Service Management Service) password (the password will return to its default password if it was changed)	No
Job logs	No
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	Yes
Registration information for the Network Place	No
Key Pair and Server Certificate	No
Log information for the IP address/MAC address restriction settings	No
Password that is protected by TPM	Yes *4
Encryption key that is protected by TPM	No
Information for Web browser settings	Yes *5
Quick Menu Information	Yes
User Information of the Advanced Box	Yes

T-9-9

*1 Can only be backed up using the Remote UI.

*2 Depending on the MEAP application.

*3 Only the following items are backed up.

- Mail Box Settings (mail box names, passwords, and auto erase times)
- Files in Mail Box
- Files in Advanced Box
- Forms registered for the Superimpose Image

*4 You may not be able to back up, depending on the type of the password.

*5 Only the stored Favorite Settings can be backed up.

[List of Data that can be backed up]

Data that can be backed up	Reference
Address Book	See the "e-Manual > Remote UI".
Settings/Registration settings	
Device Settings (Forwarding Settings, Address List, Favorite Settings)	
Printer Settings	
Paper Information	
Image forms stored in the Superimpose Image	
Quick Menu Information	
User Information of the Advanced Box	
Favorite Settings for Web browser	See the e-Manual > Web Access. (You can select this if web browser (Option) is installed.)
License files for MEAP applications	For information on downloading license files, see the "e-Manual > MEAP".
Data saved by MEAP applications	Data saved by MEAP applications may be able to be backed up, depending on the MEAP application. See the documentation included with the MEAP application.
Data stored in Mail Boxes or the Advanced Box	See the e-Manual > Remote UI "Setting the Backup Location for Stored Data ".
SSO-H (Single Sign-On H) user authentication information	see the "e-Manual > MEAPI".

T-9-10

CAUTION: Work to Perform After Installing the Kit

- When you start using this product, passwords set for Mail Boxes, Confidential Fax Inboxes, and the Memory RX Inbox are erased. Set these passwords again.
- If you have logged on to the machine using a login service, such as SSO-H (Single Sign-On H) before using this product, you must select the login service again using SMS (Service Management Service) after restarting the machine.
  For more information on using SMS, see the e-Manual > MEAP.

Making a Backup of the Data (reference only)

The data items that have been backed up may be restored when the this product has been installed.
These data items are property of the user, and the restoration work must be performed by the system administrator.
The method of restoration is described in the Users Guide. See Table (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

Procedure for Import/Export ALL of User Settings

Following data can be batch exported.

- Address Book
- Settings/Registration settings
- Device Settings (Forwarding Settings, Address List, Favorite Settings)
- Printer Settings
- Paper Information
- Image forms stored in the Superimpose Image
- Quick Menu Information
- User Information of the Advanced Box

1) Access the URL given below, and then access Remote UI.
   http://[IP address of the device]/
   If the system administrator ID and password are set, a dialog box to enter the user name and password appears. Enter the system administrator ID in User Name and the password in Password, and then click [Administrator Login].
2) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Import/Export ALL] > [Export].
3) Select items to export.

CAUTION:
When exporting only specific items, this may cause setting information relating to multiple items to lose its relations and cause setting details to be switched.
In this case, export all related items simultaneously.

4) Enter the password into [Encryption Password] and click on [Start Exporting].
5) Click [Check Status].
6) Check the batch export result.

Backup of MEAP Application

When a MEAP application has been installed, the data and license that the MEAP application retains will be deleted. If no MEAP application is installed, there is no need to make a backup. If a MEAP application has a backup function, make a backup of the data peculiar to the MEAP application using this function. With regard to the license, there is a need to stop all applications from SMS (Service Management Service), invalidate the license, and download the invalid license file.

The overview of procedures for stop of MEAP applications, Disabling of the license, and download of an Disabled license file is described below. For more information, see the MEAPSMS Administrator Guide

Stop of MEAP Applications, Disabling, Download of Disabled License Files and Uninstallation

1) Select the URL given below and access SMS.
   http://[IP address of the device]:8000/sms/
   The default password is MeapSmsLogin. If a user has changed the password, ask the user to change the password again after the use of this product is started.

CAUTION:
The default password is MeapSmsLogin. If a user has changed the password, ask the user to change the password again after the use of this product is started.

2) Click [MEAP Application Management].
3) Click [Stop] button of the application you want to stop on the MEAP Application Management page.
4) Check the status of MEAP Application is [Stop],
5) Click on the name of applications to disable.
6) Click [License Control], and then click [Disable].
7) Click [Yes] in a confirmation window for disabling the license.
8) Return to the MEAP Application Management page and click on the appropriate application names.
9) Click [License Management] on the Application/License Information page.
10) Click [Download].

11) Following the instructions on the window, specify the location to save the file.
Set a distinctive name for the disabled license file so that you can recognize it for which application. After you download the disabled license file to your PC, click [Delete].
Click [Yes] in a confirmation window for license deletion.
12) Return to the MEAP Application Management page, click [Uninstall] button of the application you want to uninstall. Click [Yes] in a confirmation window for uninstallation.
If there are several applications, repeat the procedures 1) to 7).
13) After the use of this product is started, re-install the application using an application file (jar file) of each application from SMS and the disabled license file (lic file).

User Authentication Information Registered by SSO-H (Single Sign-ON H)

In the case that the MEAP login application has been changed to SSO-H, there is a need to make a backup of the user authentication information.

1) Access the URL given below.
http://[IP address of the device]:8000/sso/
2) Login with the user name and password registered as an administrator in SSO-H.
The default administrator user name and password are as follows:
User Name: Administrator
Password: password
3) Click [User Control].
4) Put a checkmark to Select All, and then click [Export].
5) Leave the file format and character code as defaults and click [Start Export].
6) Following the instructions on the window, specify the location to save the file and click [Save].

Backup of User inbox and Advanced Box document data

CAUTION: Backup of "Advanced Box"

When setting a SMB server as a backup destination, Advanced Box data saved in a large capacity HDD cannot be backed up. The Advanced Box data backed up from the large capacity HDD cannot be restored to the standard HDD. Depending on the system version of the machine, both backup and restoration might not be performed.

The procedure of backup and restoration of a box document data is described below.
Specify the backup destination of a document data:

- Backup to SMB server
  Select SMB as a backup destination and specify an address, a user name, a password, and a path to the SMB server to which saved data is backed up.
- Backup to USB HDD
  Select USB HDD as a backup destination and specify a path to the USB HDD folder to which saved data is backed up.

CAUTION: Data which cannot be backed up

If you back up/restore stored data without restarting the machine after changing the language displayed on the touch panel display by pressing [Settings/Registration] > [Preferences] from the control panel of the machine, the stored data may not be backed up/restored properly. For more information on the data that cannot be backed up, see Points to Note for Installation.

CAUTION:

If the language setting in the common specification settings (Settings/Registration) is set to ON, 'host address' and 'path to folder' might not be displayed correctly or cannot be referred.

CAUTION:

- Regarding the method of inputting characters, see 'Basic Operations' in the e-Manual.
- A host address can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,' 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A path to the folder can be up to 255 characters in 1 byte (127 characters in 2 bytes).
- A user name can be up to 128 characters in 1 byte or 64 characters in 2 bytes using the 'Kana-Kanji,', 'Katakana,' 'alphanumeric character,' 'mark,' and 'code input' modes.
- A password can be up to 7 to 48 characters using the 'alphanumeric character' and 'mark (1 byte)' modes.
- The voice sound symbol and the semi-voice sound symbol entered in the 'Katakana (1 byte)' mode are counted up as one 1-byte character.

[Backup method of User inbox and Advanced Box document data]

1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Backup].
2) Select 'All' or 'Changes' for the backup method.
3) Click [Execute].

CAUTION:

- If any of the host IP address, user name, password, or path to the folder is not correctly entered, a backup cannot be made.
- If you select to encrypt the backup data, the backup process may take longer.

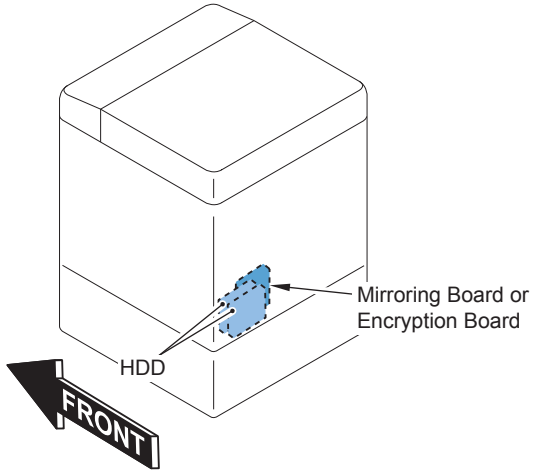
[Restoring the backup data of User inbox and Advanced Box document data]

1) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Restore].
2) Click [Display Backup Data].
3) Select the backup data to restore from the list and then click [Execute].

CAUTION:

- If you want to restore encrypted backup data, enter the same password used when backing up the data.
- Depending on the settings of the machine, the backup data may not be completely restored, or some documents may be automatically printed.
- Restoration is performed after all of the box data stored in the machine, or documents that are being sent, received, or stored, are erased.

Installation Outline Drawing



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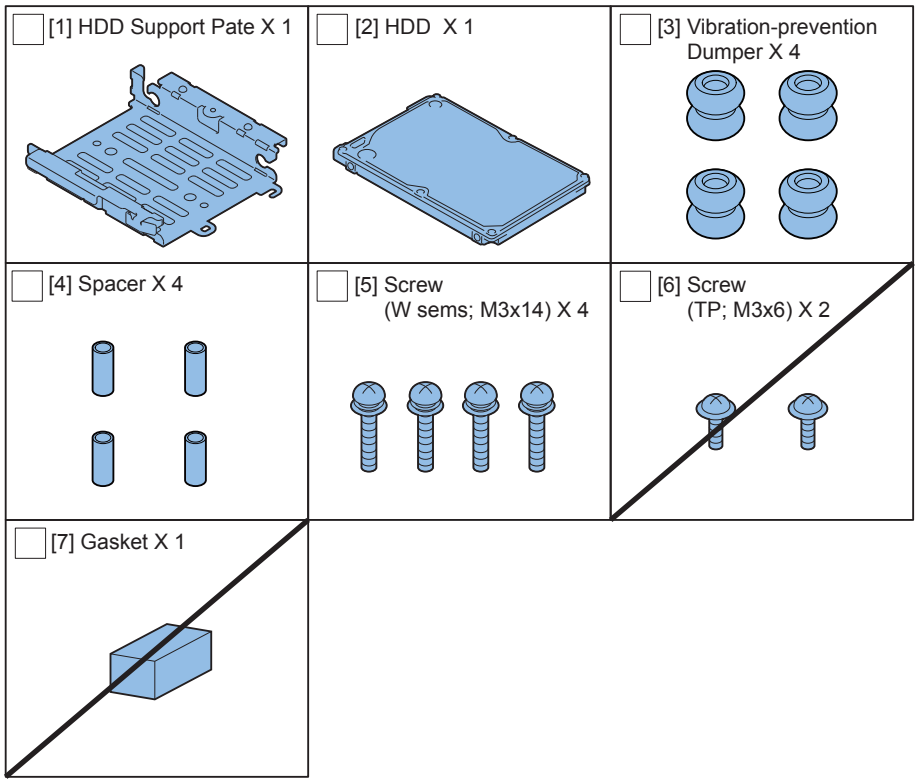
[TYPE-1]

Option HDD (1TB)

Checking the Contents



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< CD/Guides >

- FCC/IC Sheet

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

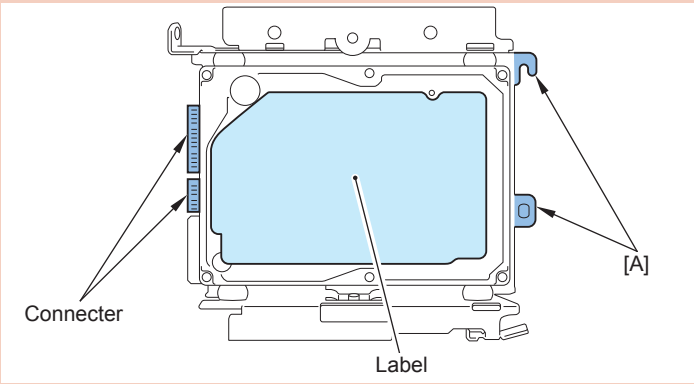
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Assembling the Option HDD

CAUTION:

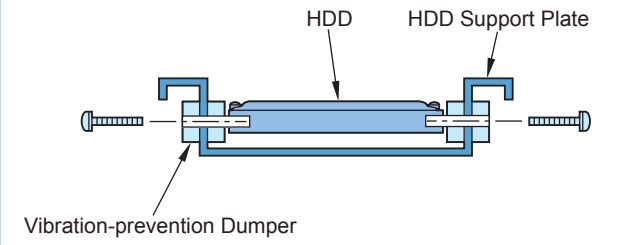
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.



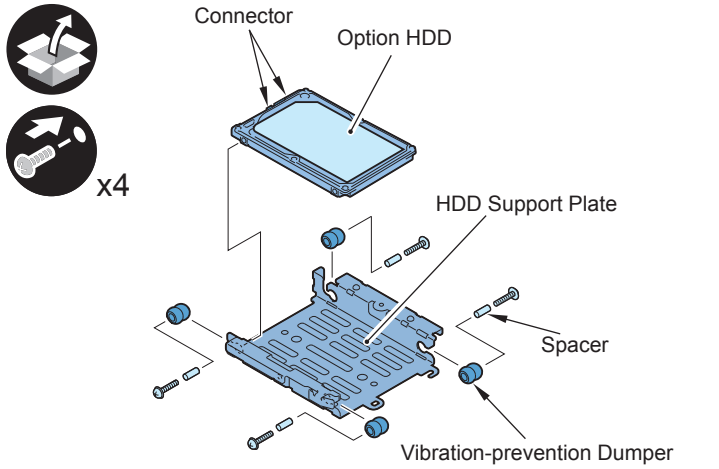
F-9-468

□
1) Assemble the Option HDD (1TB).
- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD.



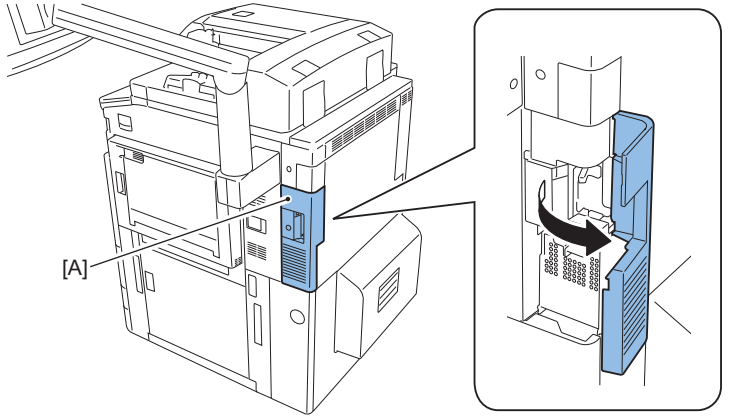
F-9-469



F-9-470

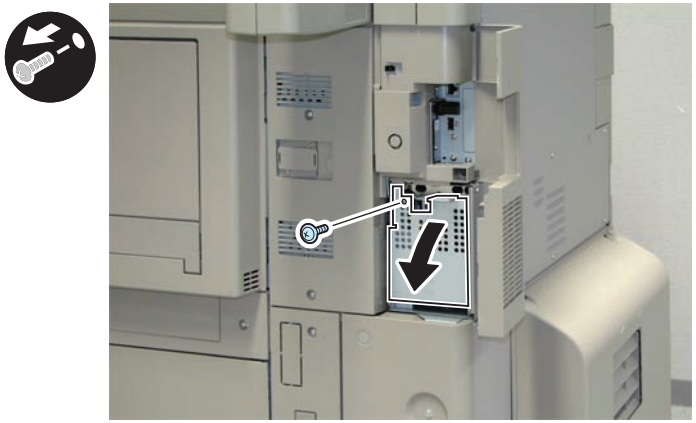
Procedure to Replace with the HDD

□
1) Push section [A] to open the HDD Cover.



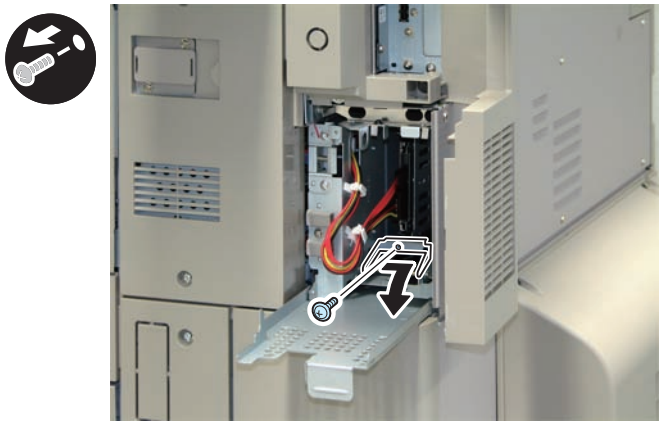
F-9-471

□
2) Open the HDD Lid.
- 1 Screw (The removed screws will be used in step 8.)



F-9-472

☐
3) Turn the HDD Fixation Plate toward the front.
- 1 Screw (The removed screws will be used in step 7.)



F-9-473

☐
4) Remove the HDD. (The removed HDD will not be used.)
- 2 Connecters

F-9-474

☐
5) Insert the assembled Option HDD into the Slot.1 (on the left side).

☐
6) Connect 2 connecters to the Option HDD.

F-9-475

☐
7) Return the HDD Fixed Plate to its original position. (1 Screw)
8) Close the HDD Lid. (1 Screw)
9) Close the HDD Cover.
10) Connect the power plug to the outlet.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
   Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

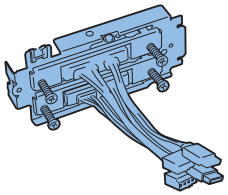
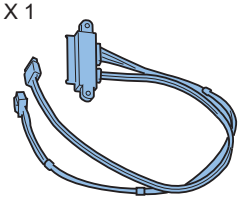
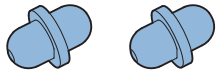
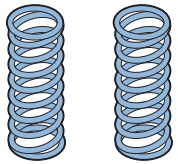
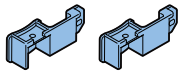
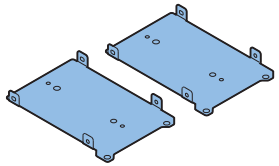
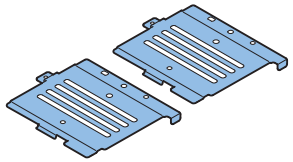
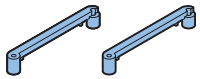
Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

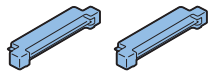
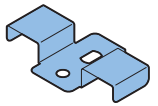
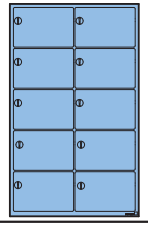
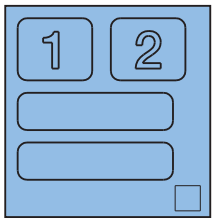
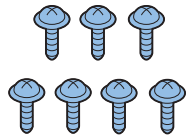
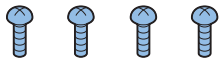
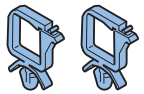
[TYPE-2]

Removable HDD Kit

Checking the Contents

☐ [1] HDD Drawer Unit X 1 	☐ [2] IV Cable (A:HDD-Pow1/A:HDD-Sig1) X 1 	☐ [3] HDD Lock Pin X 2 
☐ [4] HDD Lock Spring X 2 	☐ [5] HDD Face Plate X 1 	☐ [6] HDD Handle X 2 Use 1 of them 
☐ [7] HDD Connector Plate X 2 Use 1 of them 	☐ [8] HDD Cover X 2 Use 1 of them 	☐ [9] Connector Fixing Block X 2 Use 1 of them 

F-9-476

☐ [10] Conversion Connector X 2 Use 1 of them 	☐ [11] Gasket Cover Plate X 1 	☐ [12] Handle Label X 1 
☐ [13] Shutdown Caution Label X 1 	☐ [14] R-HDD Label X 1 	☐ [15] Screw (TP Round End; M3x6) X 7 Use 5 of them 
☐ [16] Screw (P Tightening; M3x8) X 4 Use 2 of them 	☐ [17] Wire Saddle X 2 	

F-9-477

< CD/ Guides >

- FCC/IC Sheet

Check Items when Turning OFF the Main Power

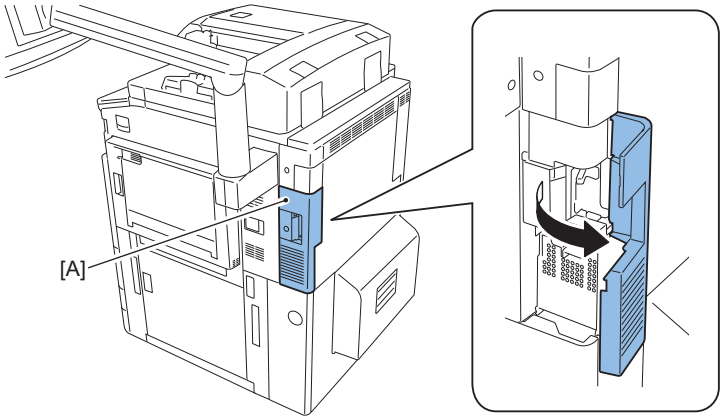
Check that the main power switch is OFF.

1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

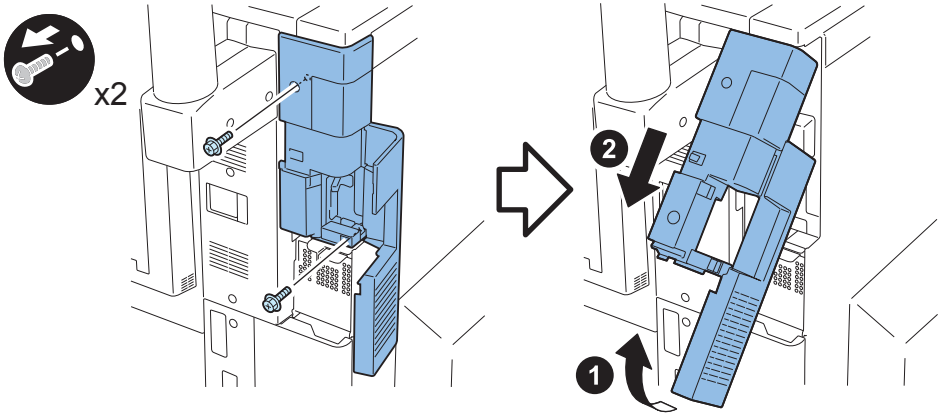
Removing the HDD Unit

☐
1) Push section [A] to open the HDD Cover.



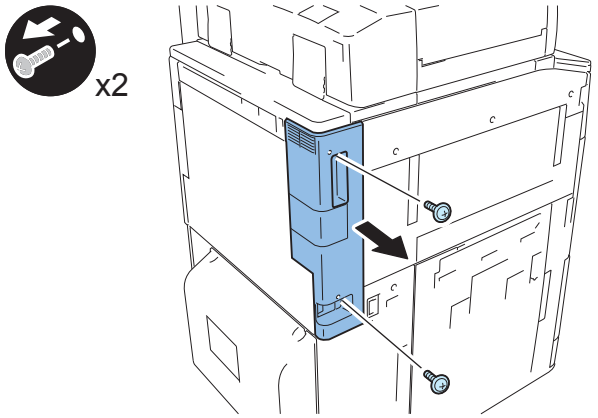
F-9-478

☐
2) Remove the Main Controller Right Cover Unit.
- 2 Screws



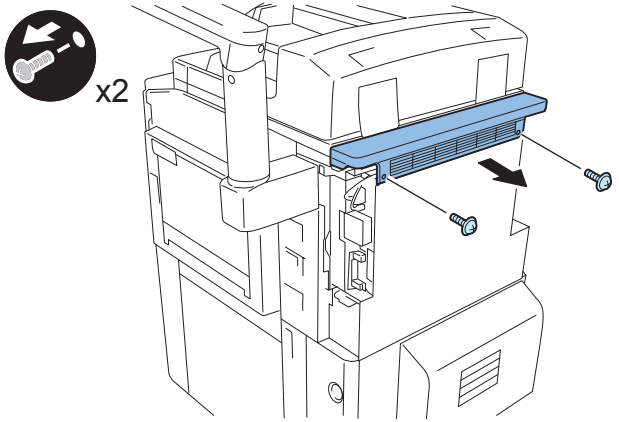
F-9-479

☐
3) Remove the Box Left Cover.
- 2 Screws



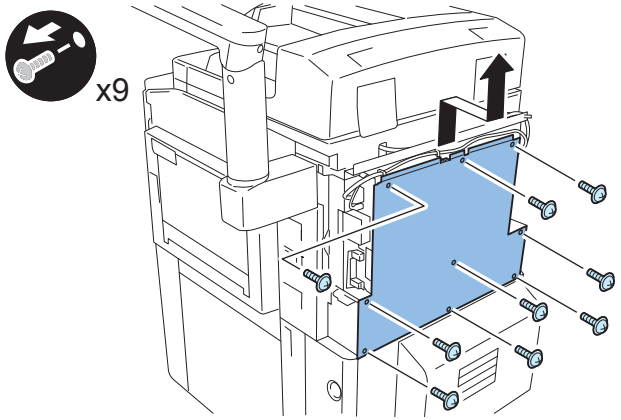
F-9-480

☐
4) Remove the Box Upper Cover.
- 2 Screws



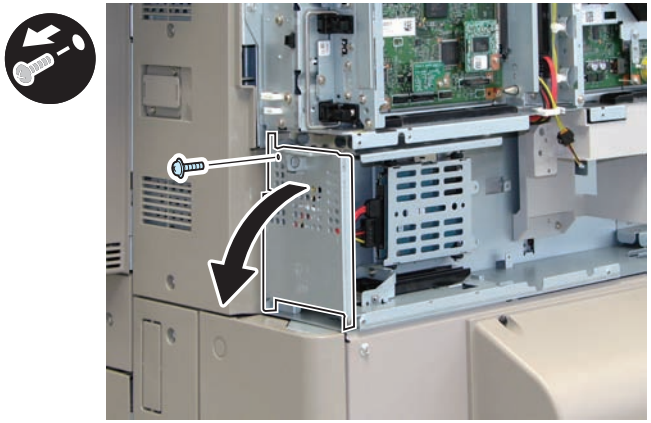
F-9-481

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-482

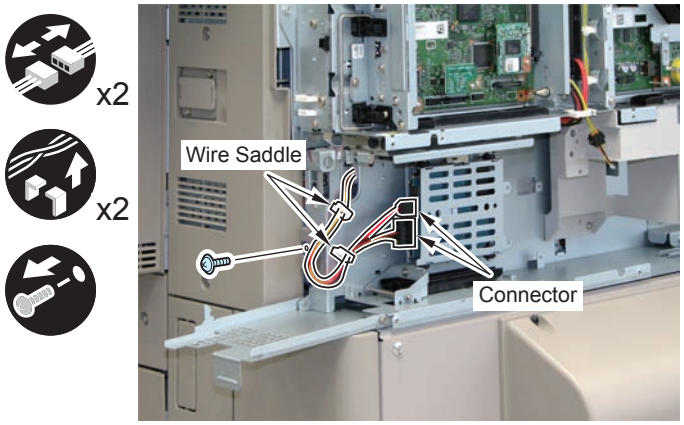
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw will not be used.)



F-9-483

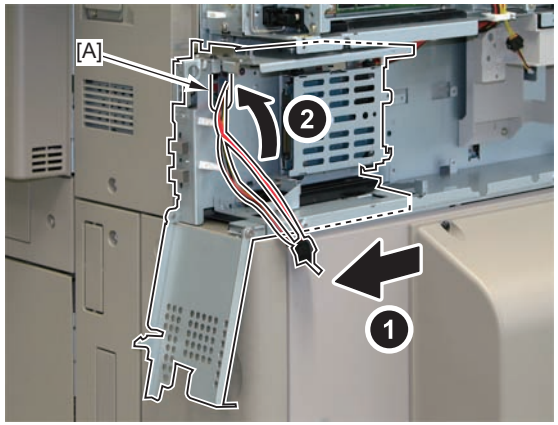
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 5.)



F-9-484

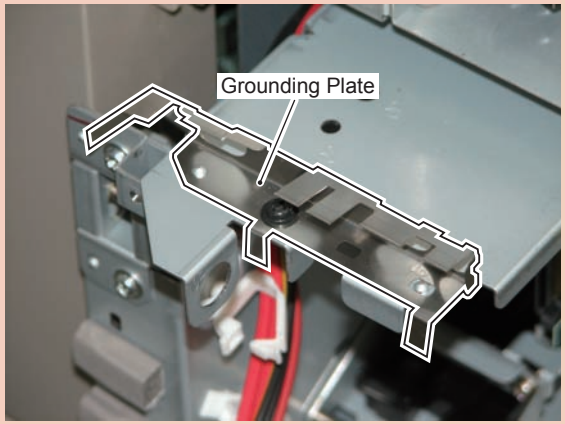
☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



F-9-485

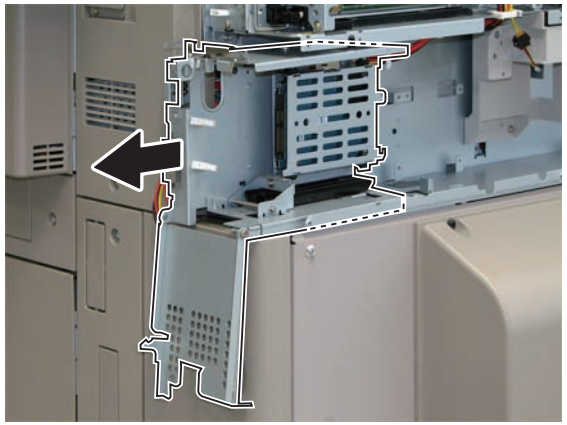
CAUTION:

Be sure not to deform the Grounding Plate.



F-9-486

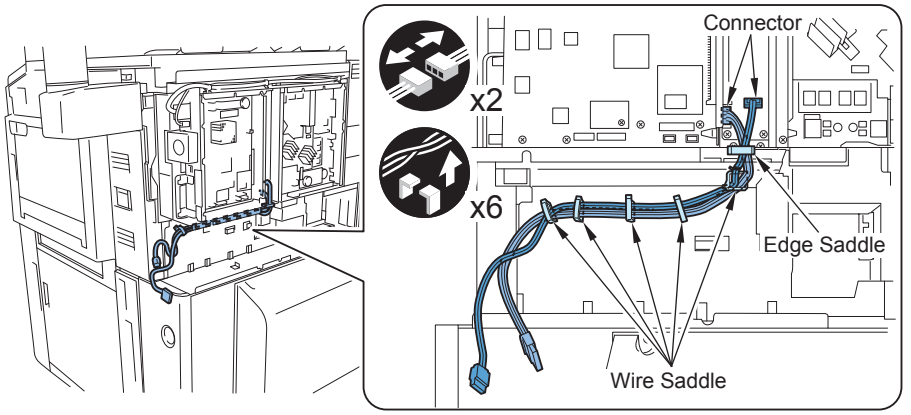
☐
10) Remove the HDD Unit from the host machine.



F-9-487

☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)

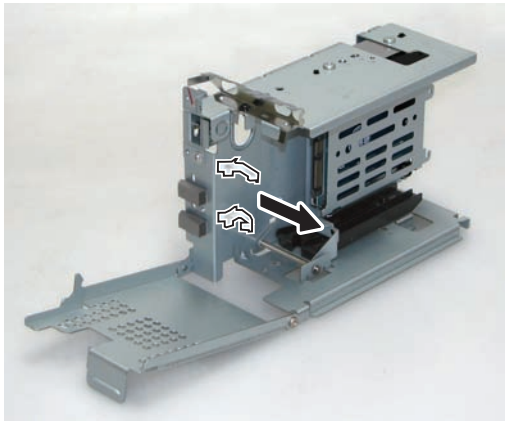
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-488

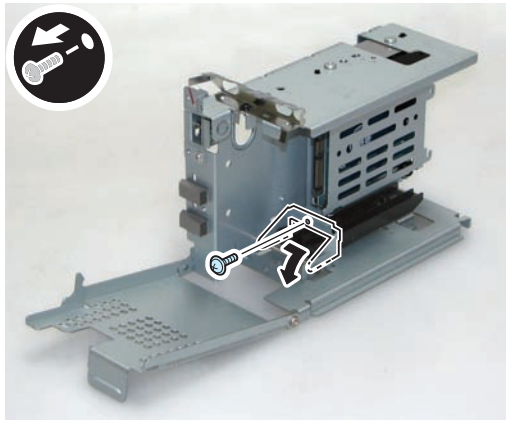
■ Changing Configuration inside of HDD Unit

☐
1) Remove the 2 wire saddles. (The removed wire saddles will not be used.)



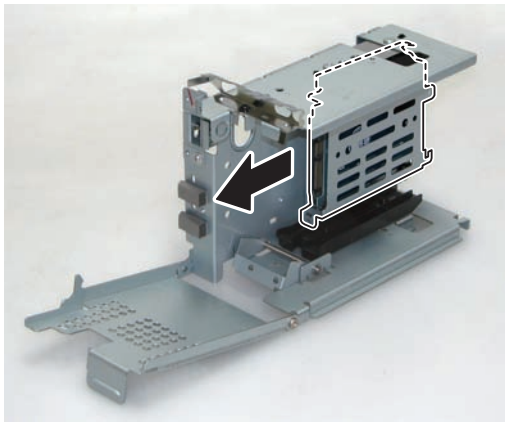
F-9-489

☐
2) Turn the HDD Fixation Plate toward the front.
- 1 Screw (The removed screw will not be used.)



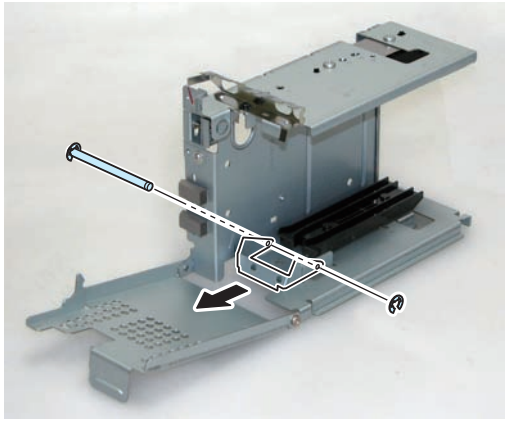
F-9-490

☐
3) Remove the HDD.



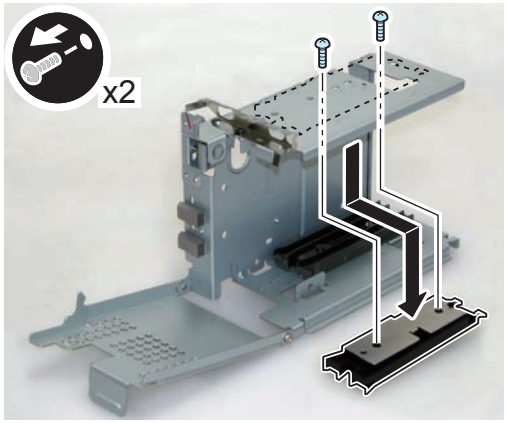
F-9-491

☐
4) Remove the E ring and the shaft from the HDD Unit, and remove the HDD Fixation Plate.
(The removed E ring, shaft and HDD Fixation Plate will not be used.)



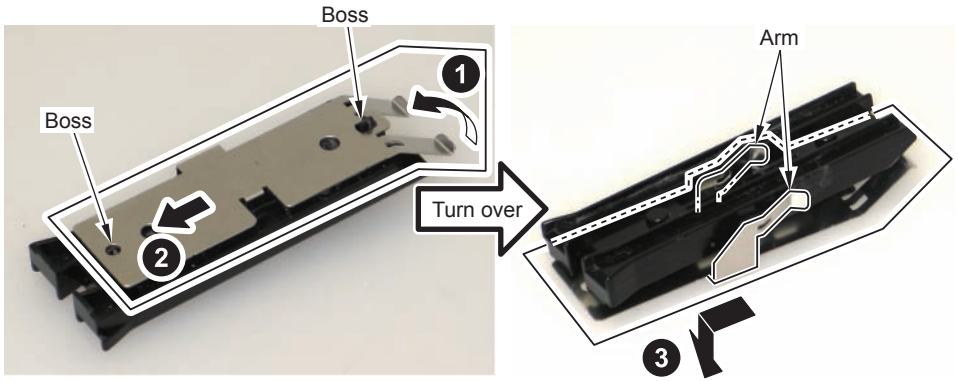
F-9-492

☐
5) Remove the Upper Rail from the HDD Unit.
- • Screws (The removed screws will be used in step 8.)



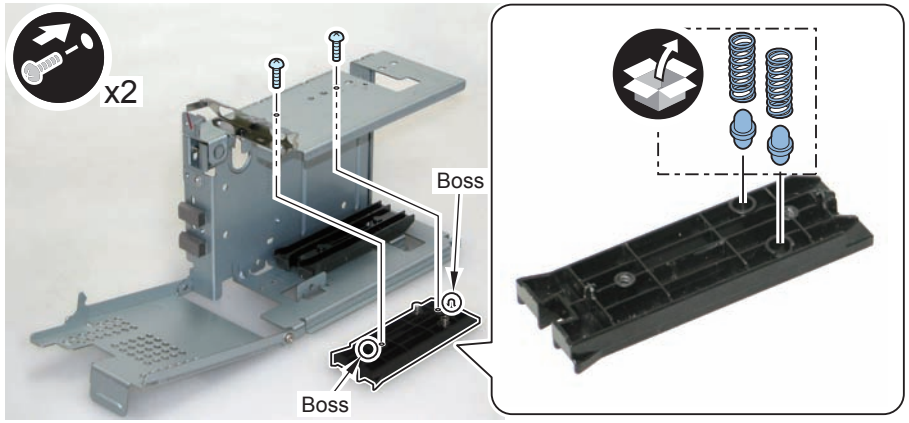
F-9-493

☐
6) Remove the Leaf Spring from the removed Upper Rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)
- 2 Bosses
- 2 Arms



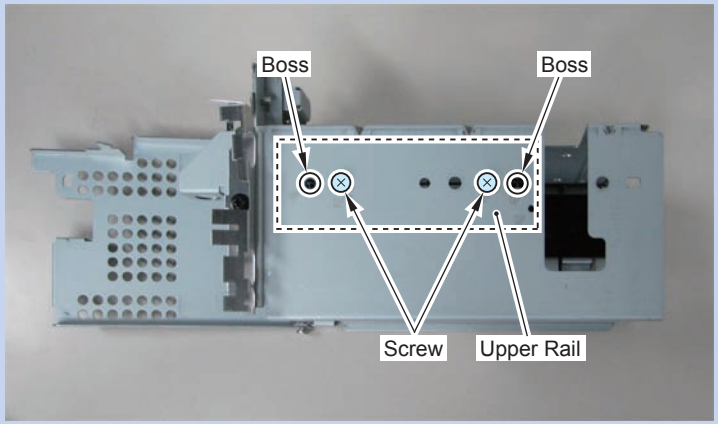
F-9-494

☐
7) Put the 2 HDD Lock Pins and 2 HDD Lock Springs into the holes of the Upper Rail.
8) Install the Upper Rail to a position shifted toward the HDD Cap.
2 Bosses
- 2 Screws (Use the screws removed in step 5.)



F-9-495

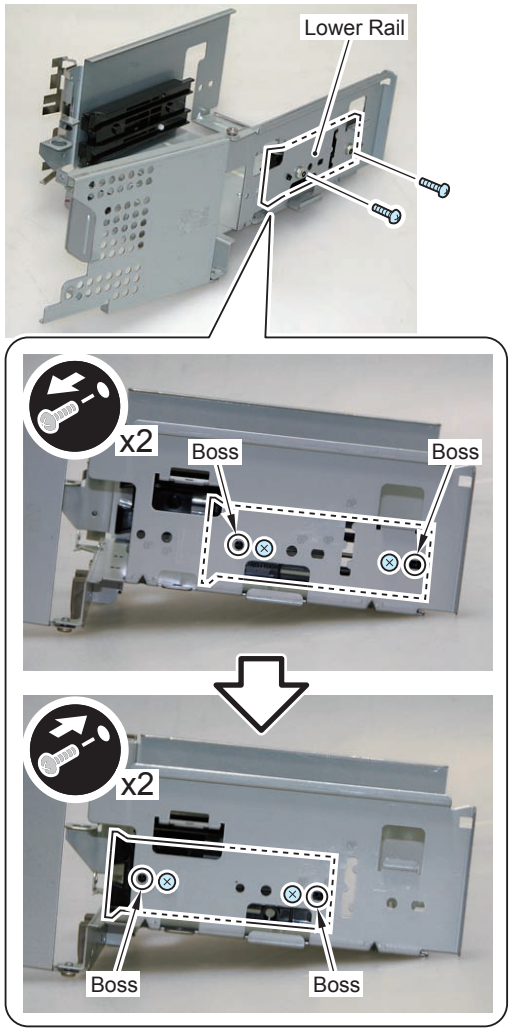
NOTE:
The position where the Upper Rail is to be installed is different from the position where it was originally installed. Be careful not to install it to the original position.



F-9-496

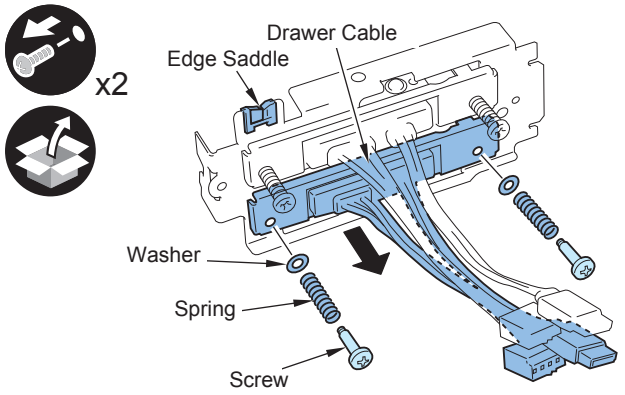
☐
9) Remove the Lower Rail, and then install it to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws

NOTE:
Perform this work with the HDD Unit placed on its side in order to prevent the Grounding Plate from being deformed.



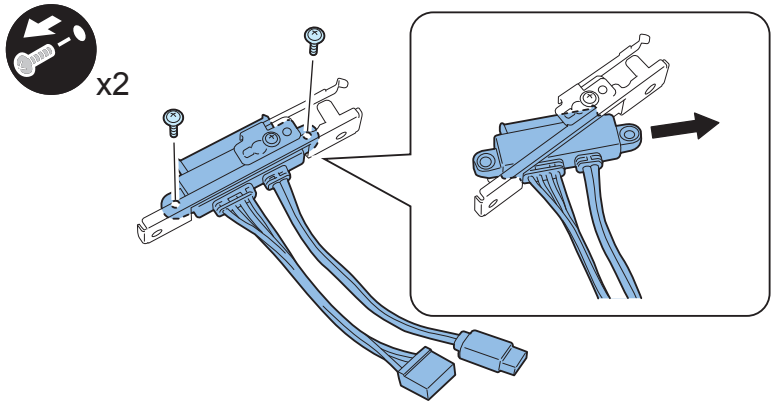
F-9-497

☐
10) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the Lower Drawer Cable (The Signal Cable Blue side).
- 2 Screws
- 2 Springs
- 2 Washers (The removed springs and washers will be used in step 13.)



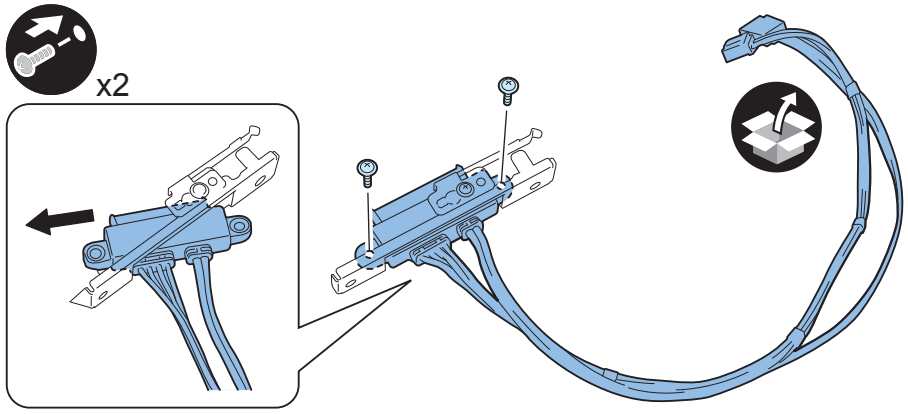
F-9-498

☐
11) Remove the Drawer Cable. (The removed Drawer Cable will not be used.)
- 2 Screws (Removed screw will be used in step 12.)



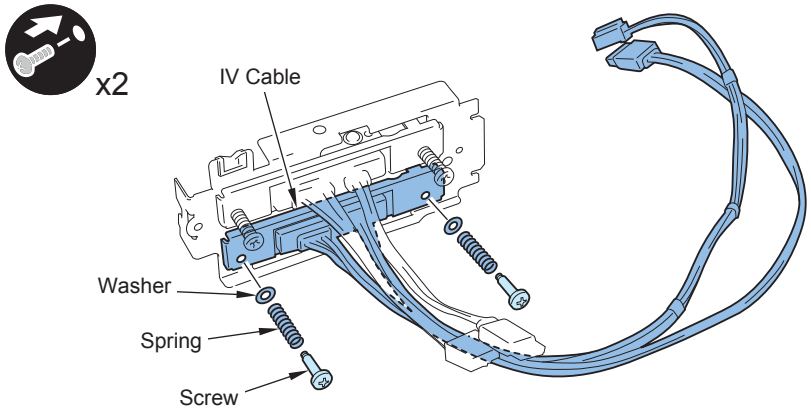
F-9-499

☐
12) Install the IV Cable.
- 2 Screws (Use the screws removed in step 11.)



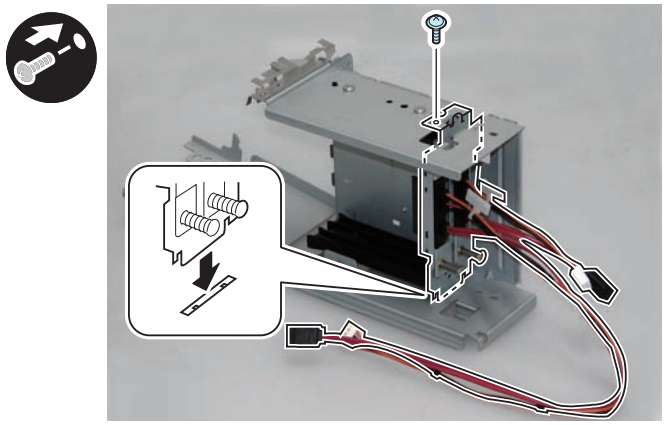
F-9-500

☐
13) Install the IV Cable of HDD Drawer Unit.
- 2 Screws
- 2 Springs
- 2 Washers (Use the parts removed in step 10.)



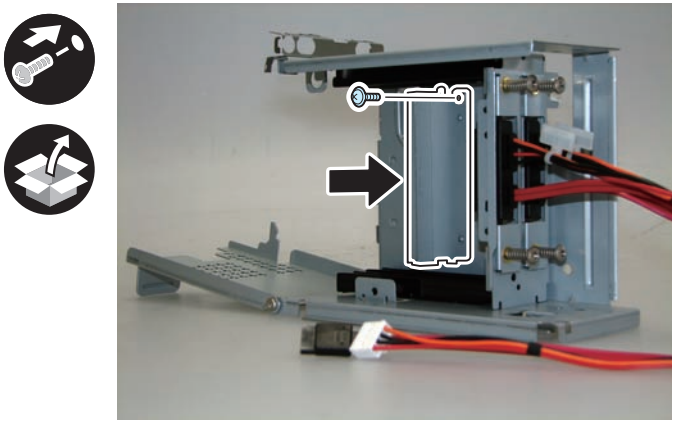
F-9-501

☐
14) Install the HDD Drawer Unit.
- 2 Screws (TP Round End; M3x6)



F-9-502

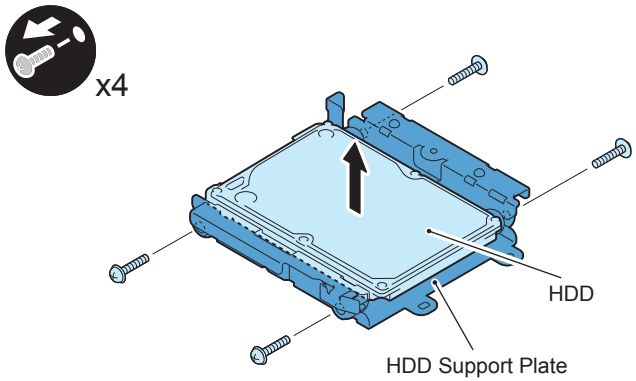
☐
15) Install the HDD Face Plate.
- 2 Screws (TP Round End; M3x6)



F-9-503

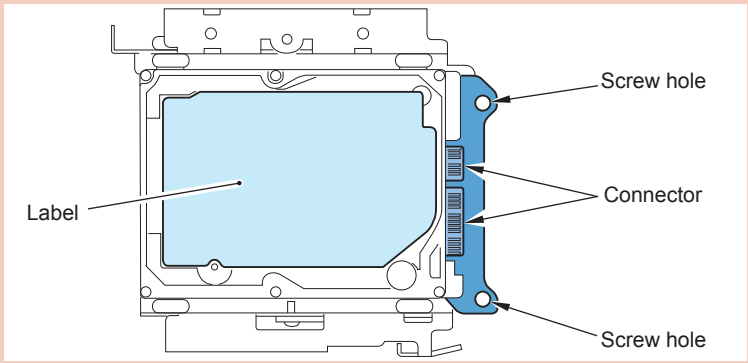
Disassembling and Assembling of the HDD Removed from the Host Machine

☐
1) Disassemble the removed HDD.
- 4 Screws (W Sems)
- 1 HDD Support Plate



F-9-504

CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate.

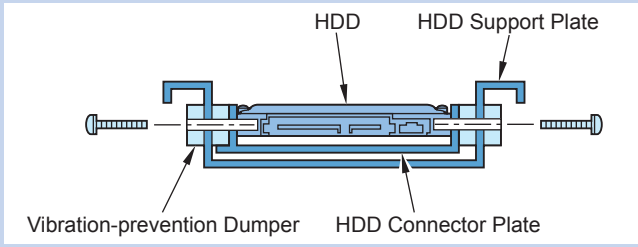


F-9-505

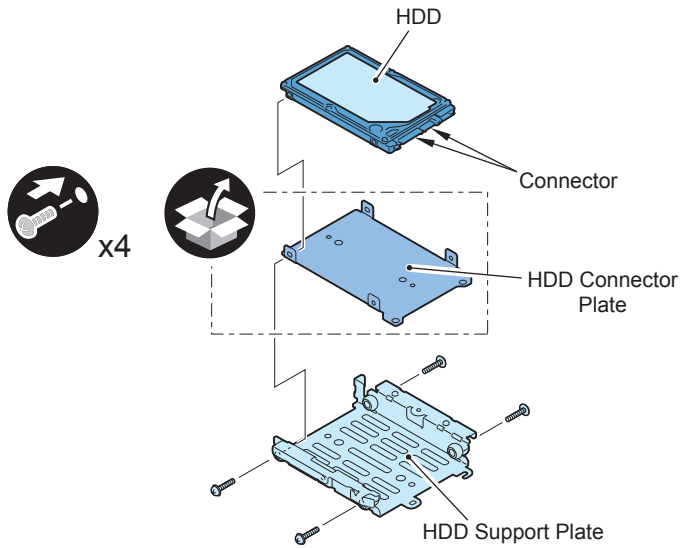
NOTE:
Use the parts disassembled in step 1 and parts included in the Removable HDD Kit.

☐
2) Assemble the HDD disassembled in step 1.
- 1 HDD Support Plate
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 HDD
- 4 Screws (W Sems)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



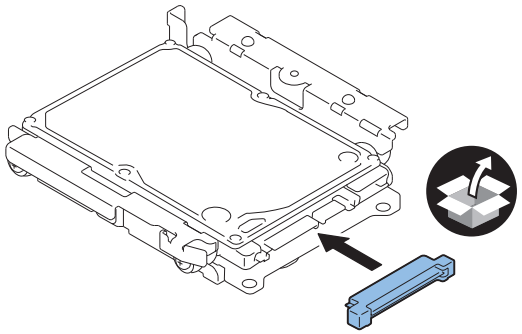
F-9-506



F-9-507

☐
3) Install the Conversion Connector.

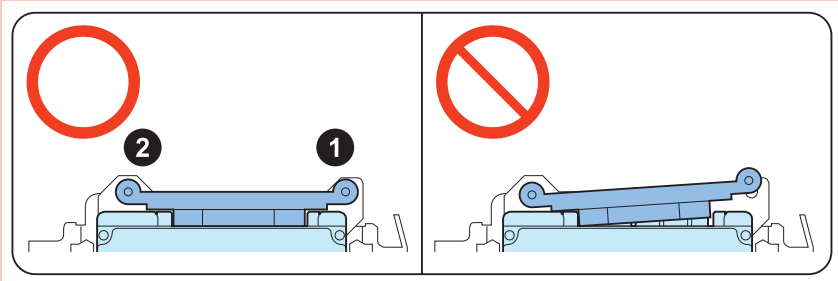
CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



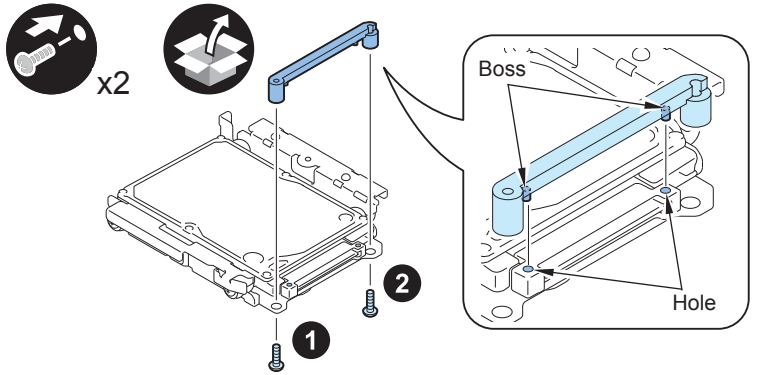
F-9-508

☐
4) Fit the 2 bosses of the Connector Fixing Block into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.
- 2 Screws (P tightening; M3x8)

CAUTION:
- Be sure to firmly hold the Connector Fixing Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



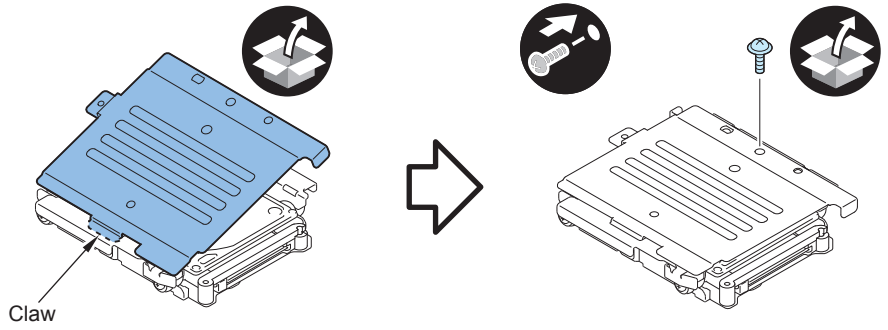
F-9-509



F-9-510

☐
5) Install the HDD Cover.
- 1 Claw
- 1 Screw (TP Round End; M3x6)

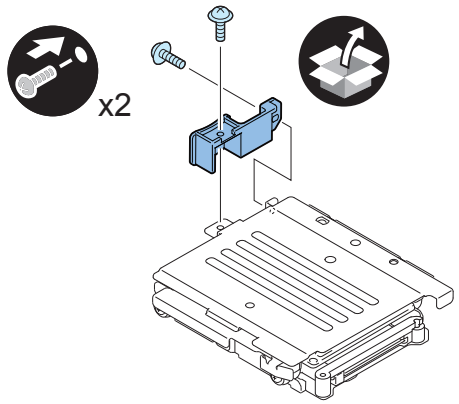
CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-511

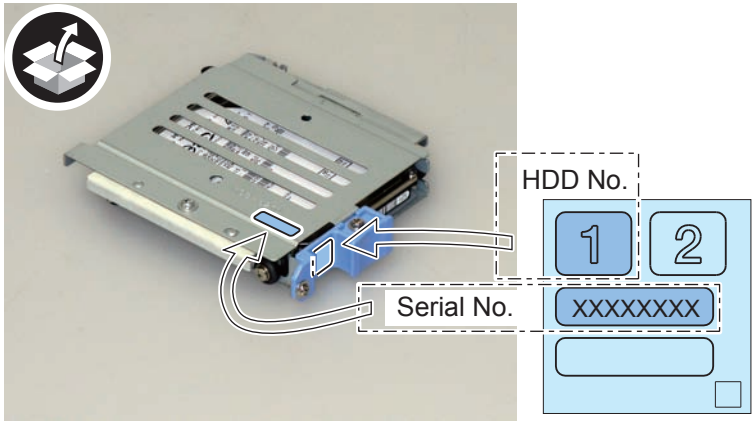
☐
6) Install the HDD Handle.
- 2 Screws (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-512

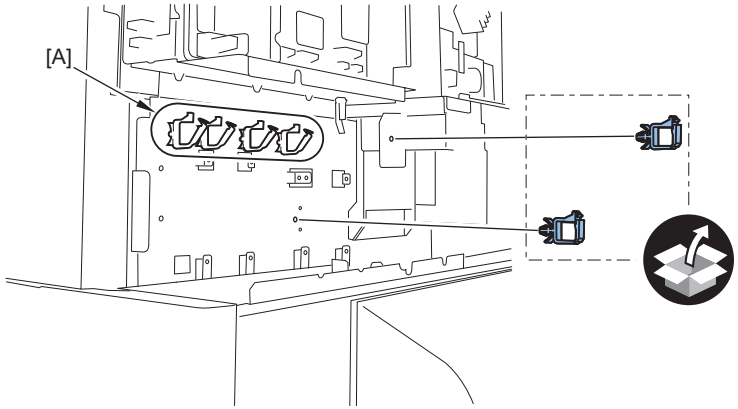
☐
7) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.
8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-513

Installing the HDD Unit

☐
1) Close the 4 wire saddles [A].
2) Install the 2 wire saddles.

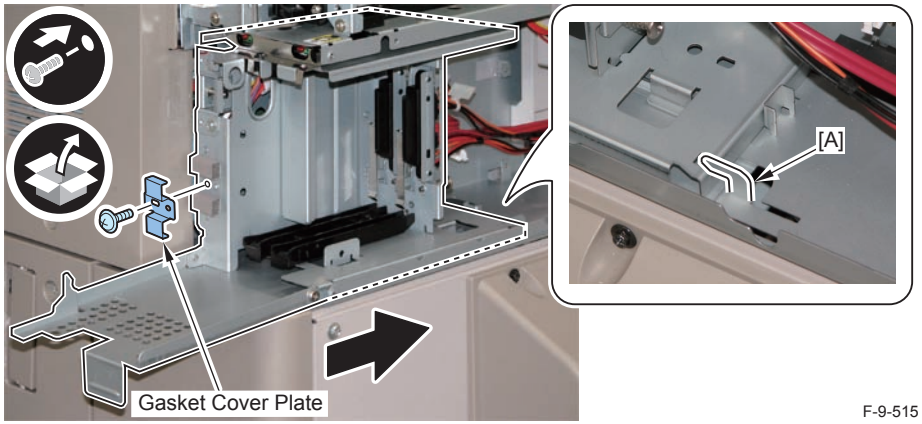


F-9-514

☐
3) Insert the HDD Unit until it stops.

NOTE:
The [A] part should be fitted in the cut-off.

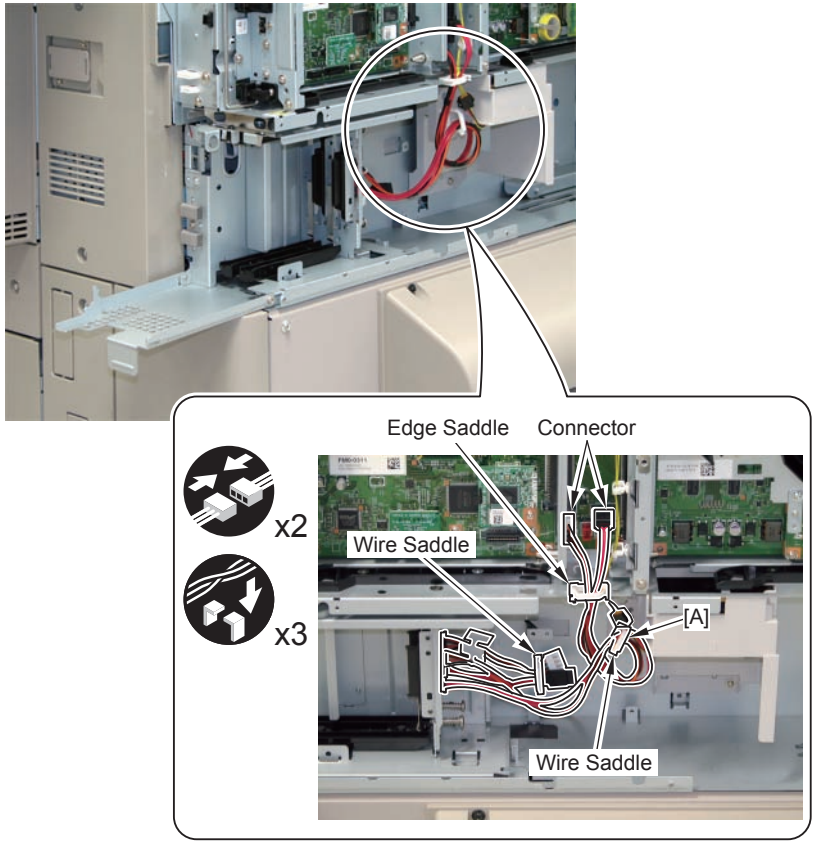
4) Install the Gasket Cover Plate on the Gasket.
5) Secure the HDD Unit.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)



F-9-515

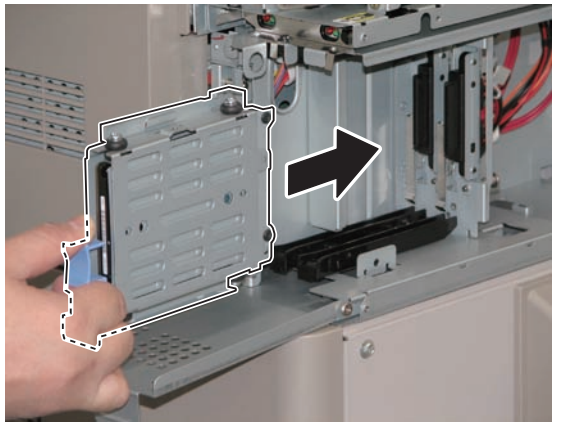
☐
6) Secure the cable (Short) of the Slot.1 (on the host machine side) in place using the Wire Saddle.
7) Connect the 2 connectors of the cable (Long) of Slot.2 (on the rear side), and secure the cable as shown in the figure.
- 1 Edge Saddle
- 2 Wire Saddles

NOTE:
Secure the cable (Long) of the Slot.2 (on the rear side) using the Wire Saddle [A] with the cable wound 1 time.



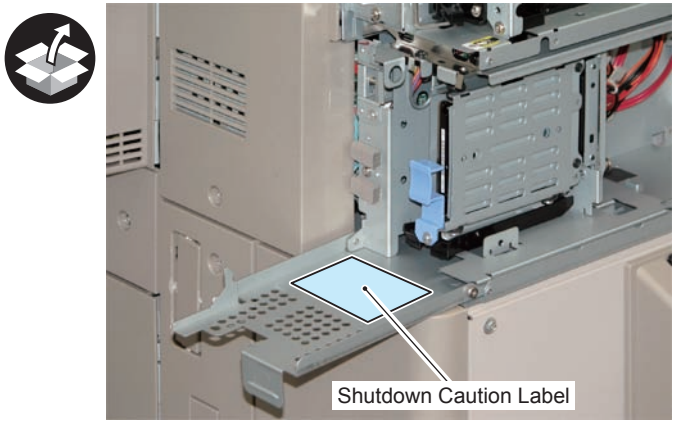
F-9-516

☐
8) Insert the Removable HDD into the Slot.2 (on the rear side).



F-9-517

☐
9) Affix the Shutdown Caution Label for applicable language to align with the ruled line on the HDD Lid.



F-9-518

☐
10) Close the HDD Lid.
11) Affix the Handle Label on the Handle part of the HDD Lid.

F-9-519

☐
12) Install the removed covers.
- Rear Upper Cover (9 Screws)

CAUTION:
When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

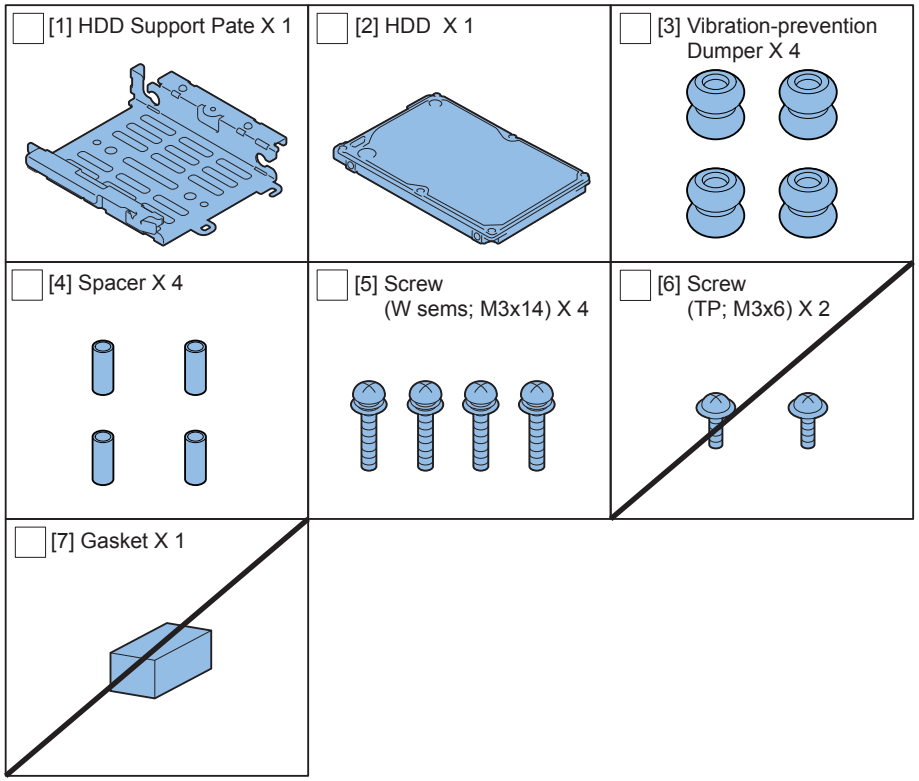
☐
13) Insert the power plug to the outlet.
14) Turn ON the main power switch.

[TYPE-3]

Option HDD (1TB) + Removable HDD Kit

Checking the Contents

Option HDD (1TB)

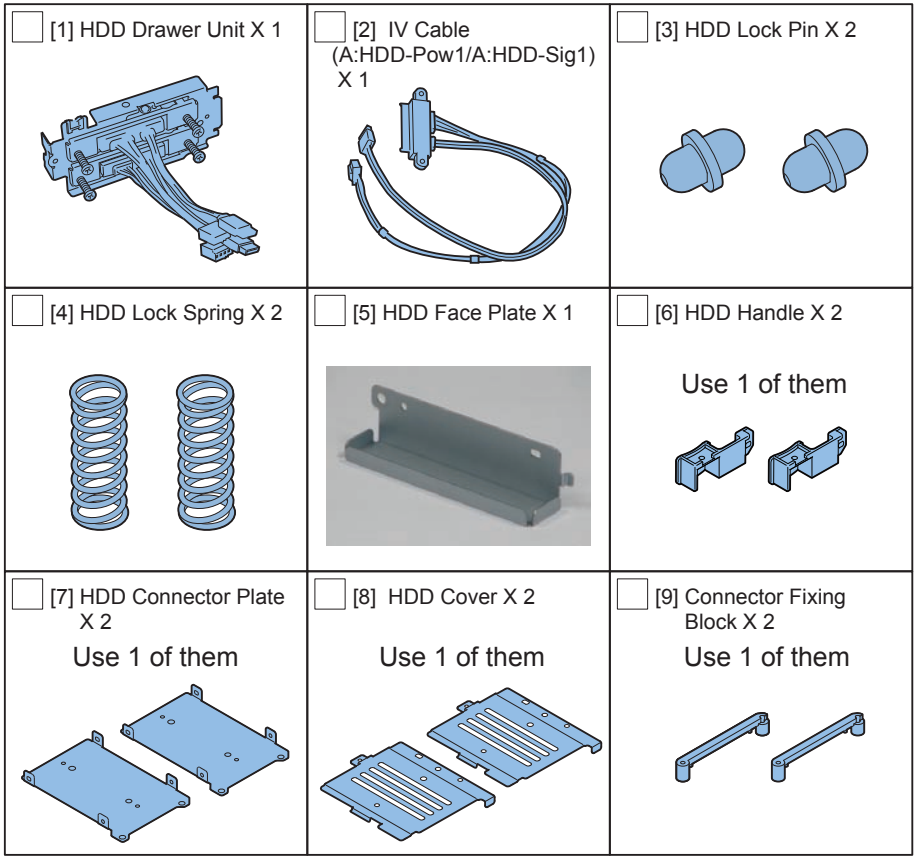


F-9-520

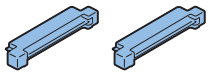
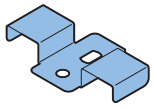
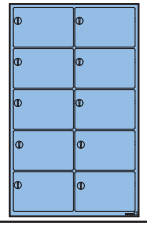
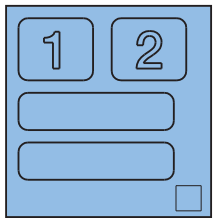
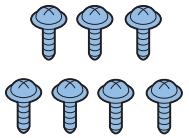
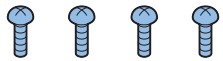
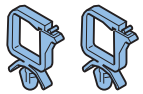
< CD/Guides >

- FCC/IC Sheet

Removable HDD Kit



F-9-521

☐ [10] Conversion Connector X 2 Use 1 of them 	☐ [11] Gasket Cover Plate X 1 	☐ [12] Handle Label X 1 
☐ [13] Shutdown Caution Label X 1 	☐ [14] R-HDD Label X 1 	☐ [15] Screw (TP Round End; M3x6) X 7 Use 5 of them 
☐ [16] Screw (P Tightening; M3x8) X 4 Use 2 of them 	☐ [17] Wire Saddle X 2 	

F-9-522

< CD/Guides >

- FCC/IC Sheet

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

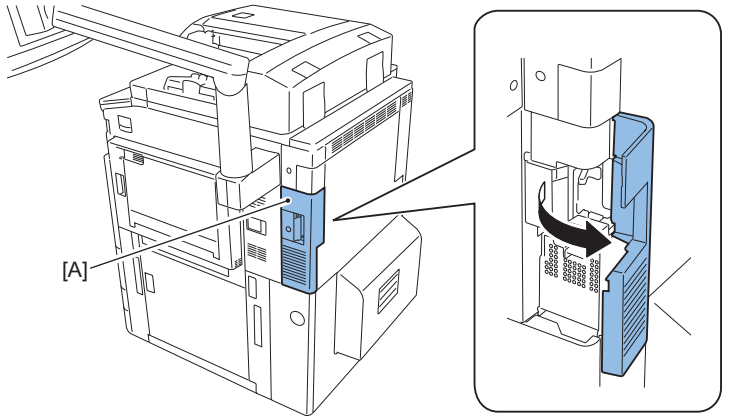
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Removing the HDD Unit

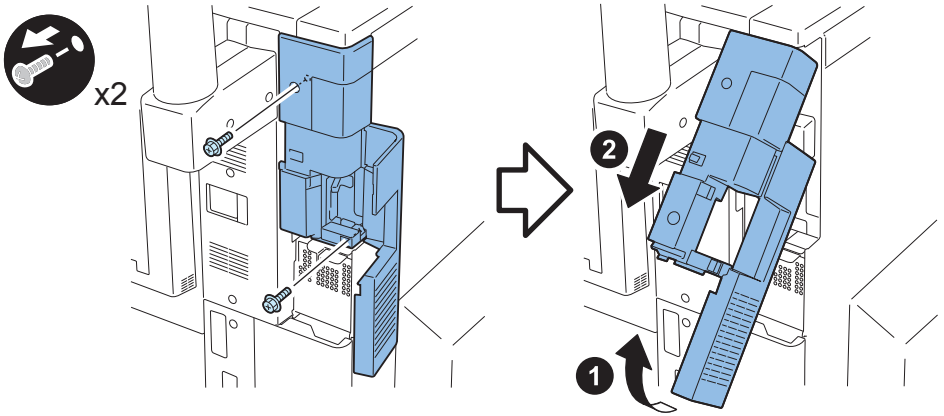
☐

1) Push section [A] to open the HDD Cover.



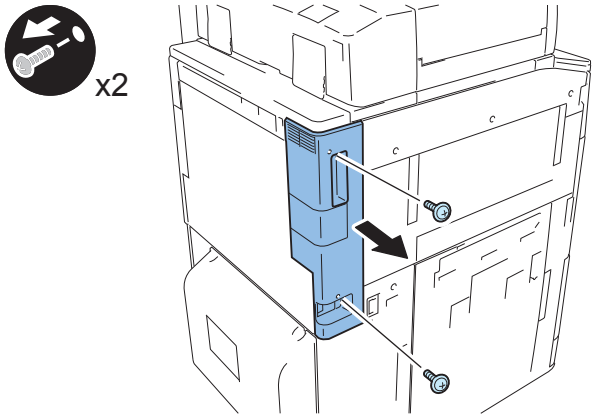
F-9-523

☐
2) Remove the Main Controller Right Cover Unit.
- 2 Screws



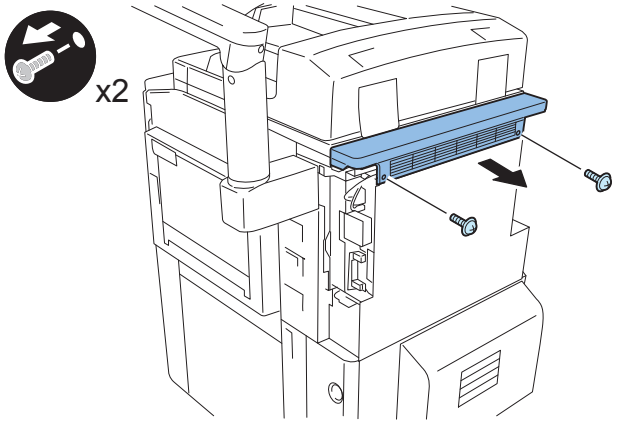
F-9-524

☐
3) Remove the Box Left Cover.
- 2 Screws



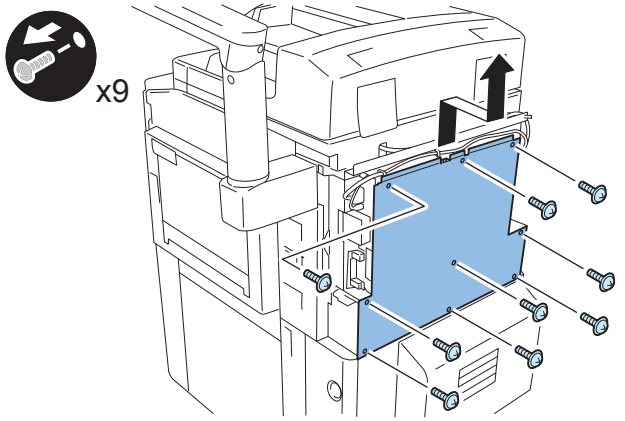
F-9-525

☐
4) Remove the Box Upper Cover.
- 2 Screws



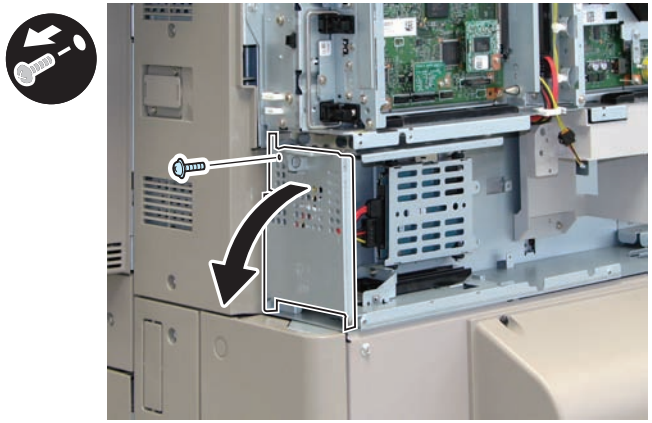
F-9-526

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-527

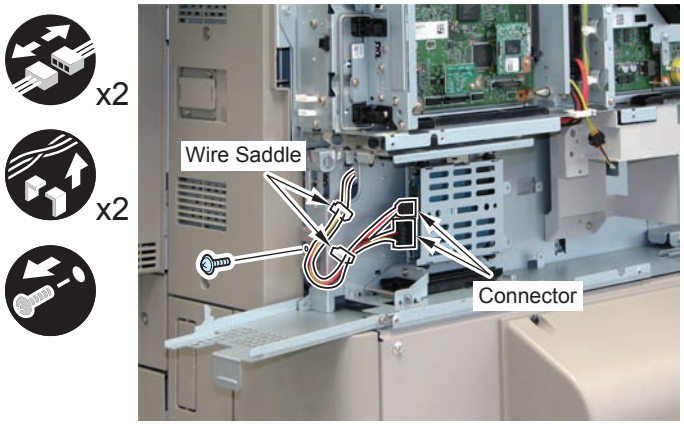
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw will not be used.)



F-9-528

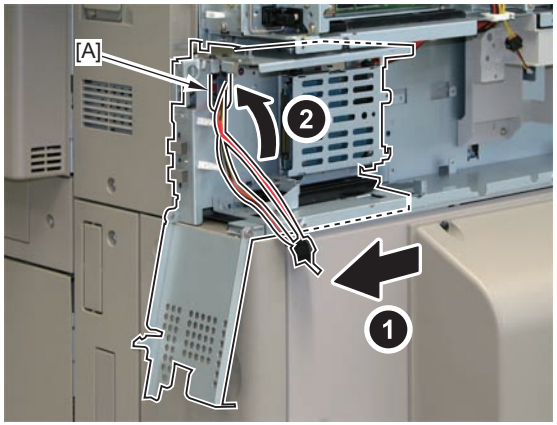
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 5.)



F-9-529

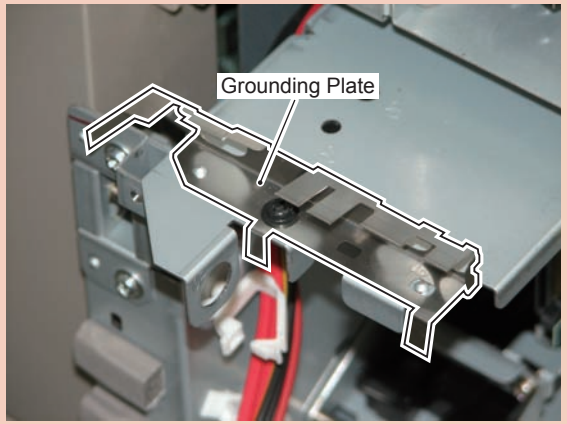
☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



F-9-530

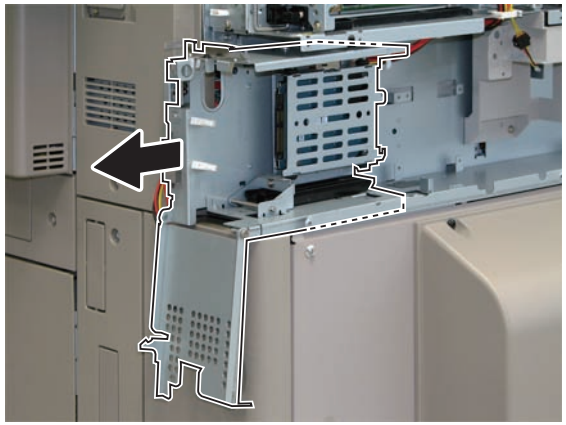
CAUTION:

Be sure not to deform the Grounding Plate.



F-9-531

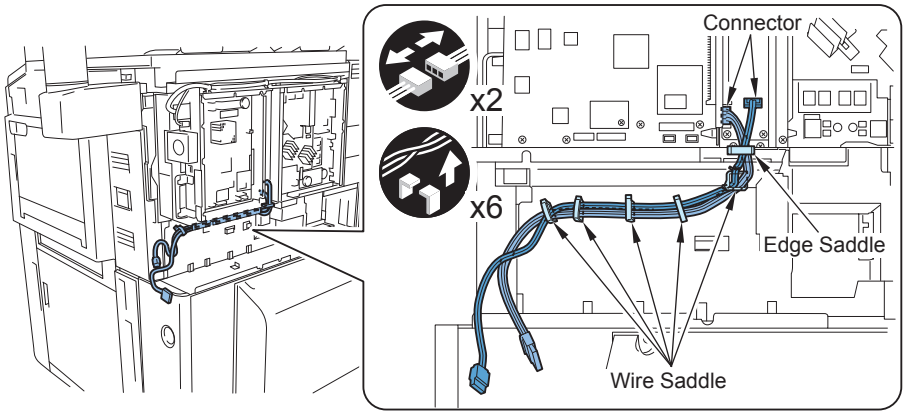
☐
10) Remove the HDD Unit from the host machine.



F-9-532

☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)

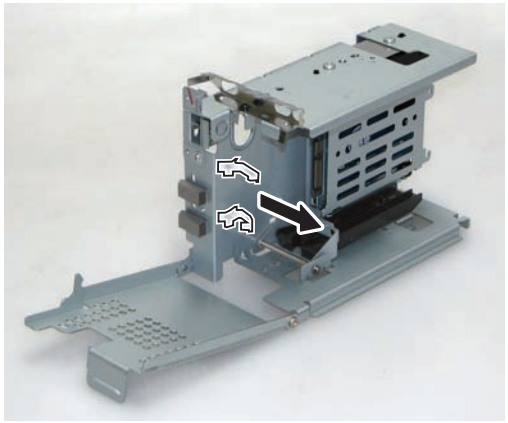
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-533

Changing Configuration inside of HDD Unit

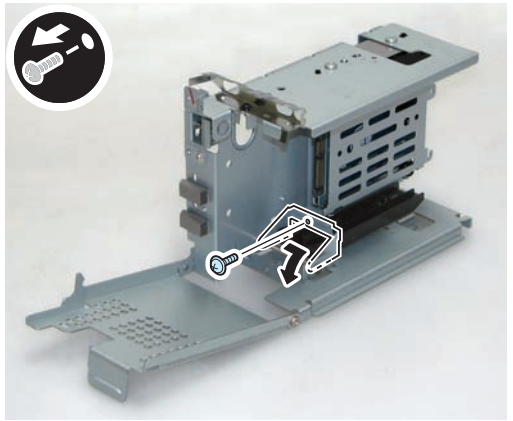
☐
1) Remove the 2 wire saddles. (The removed wire saddles will not be used.)



F-9-534

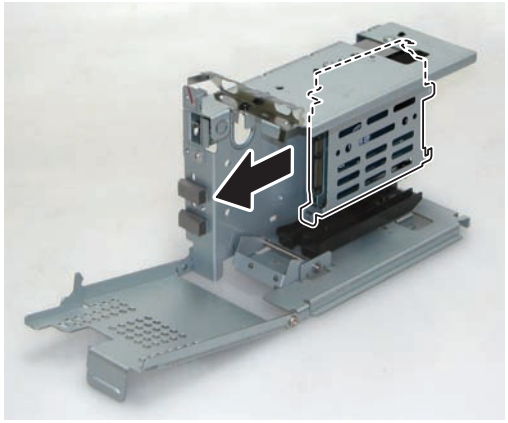
☐
2) Turn the HDD Fixation Plate toward the front.

- 1 Screw (The removed screw will not be used.)



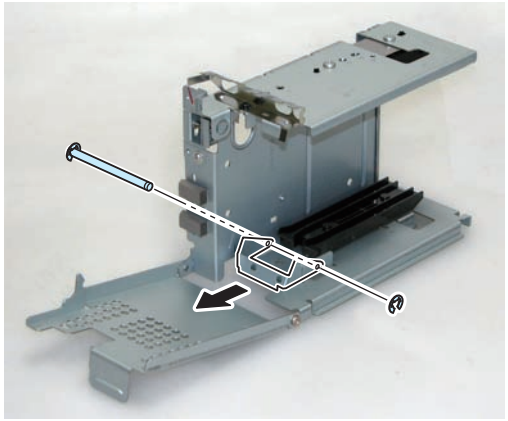
F-9-535

☐
3) Remove the HDD. (The removed HDD will not be used.)



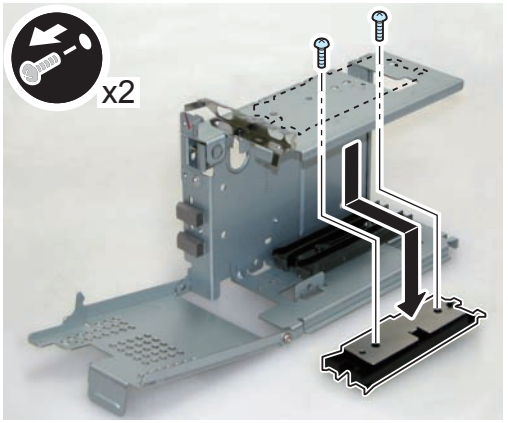
F-9-536

☐
4) Remove the E ring and the shaft from the HDD Unit, and remove the HDD Fixation Plate. (The removed E ring, shaft and HDD Fixation Plate will not be used.)



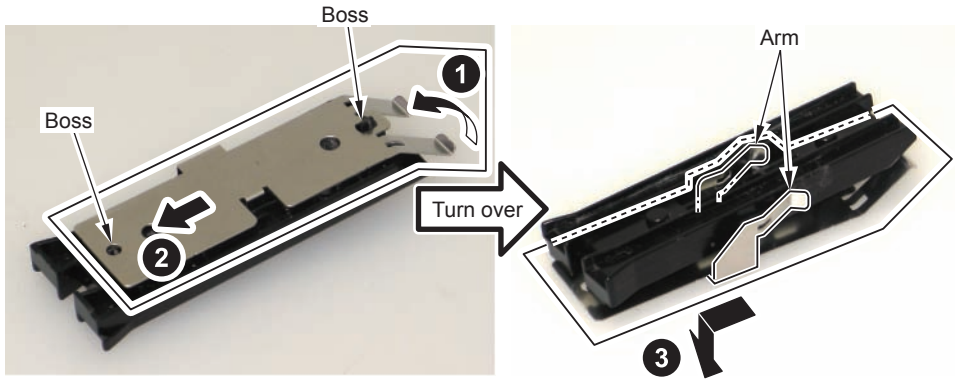
F-9-537

☐
5) Remove the Upper Rail from the HDD Unit.
- • Screws (The removed screws will be used in step 8.)



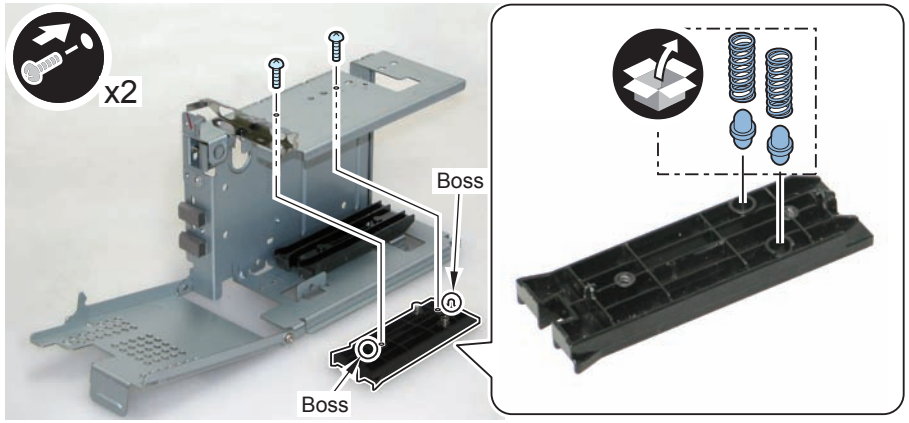
F-9-538

☐
6) Remove the Leaf Spring from the removed Upper Rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)
- 2 Bosses
- 2 Arms



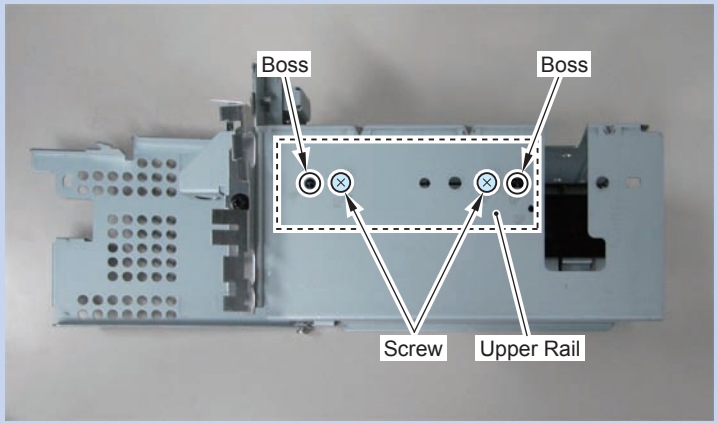
F-9-539

☐
7) Put the 2 HDD Lock Pins and 2 HDD Lock Springs into the holes of the Upper Rail.
8) Install the Upper Rail to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws (Use the screws removed in step 5.)



F-9-540

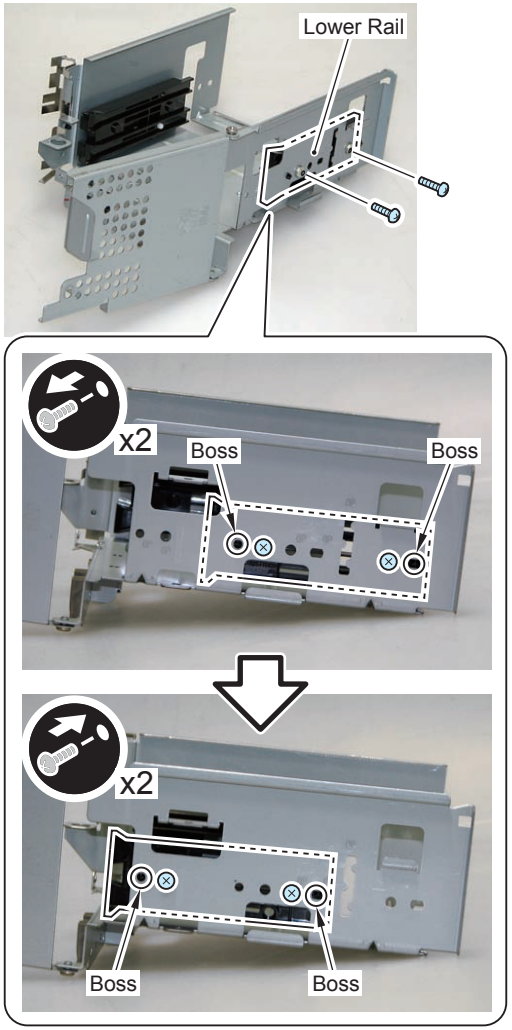
NOTE:
The position where the Upper Rail is to be installed is different from the position where it was originally installed. Be careful not to install it to the original position.



F-9-541

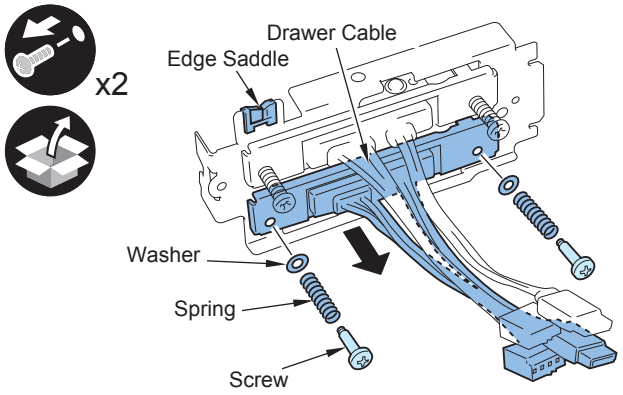
☐
9) Remove the Lower Rail, and then install it to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws

NOTE:
Perform this work with the HDD Unit placed on its side in order to prevent the Grounding Plate from being deformed.



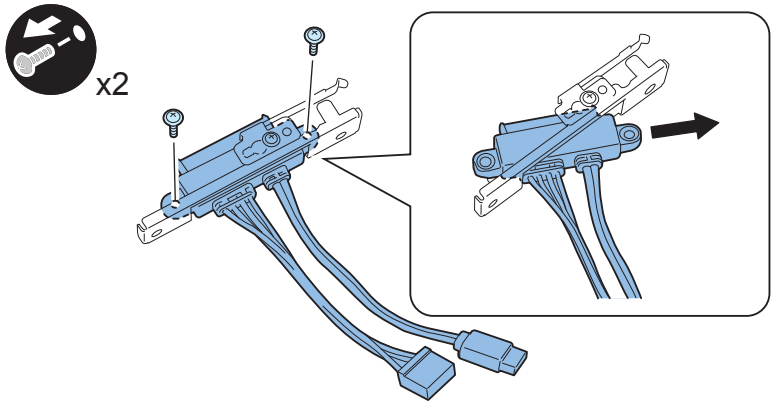
F-9-542

☐
10) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the Lower Drawer Cable (The Signal Cable Blue side).
- 2 Screws
- 2 Springs
- 2 Washers (The removed springs and washers will be used in step 13.)



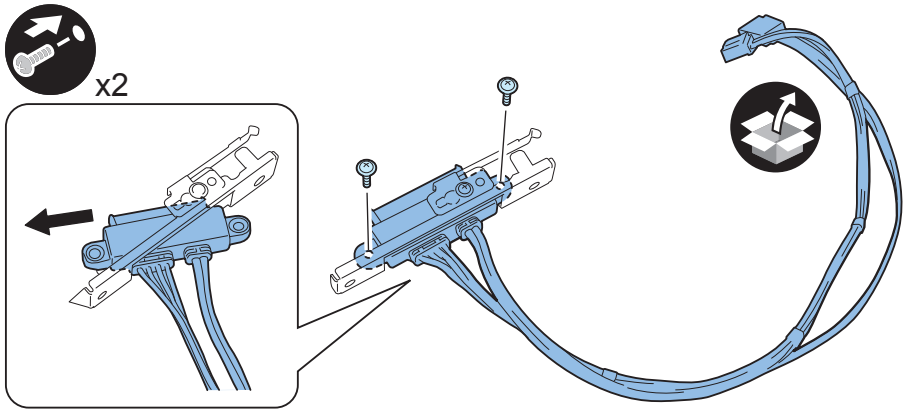
F-9-543

☐
11) Remove the Drawer Cable. (The removed Drawer Cable will not be used.)
- 2 Screws (Removed screw will be used in step 12.)



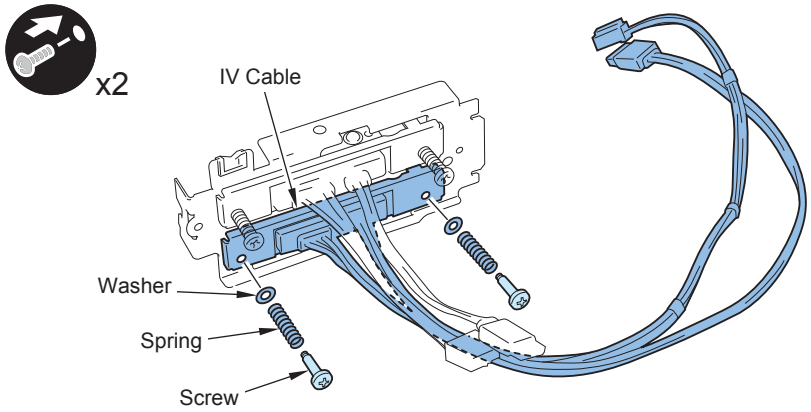
F-9-544

☐
12) Install the IV Cable.
- 2 Screws (Use the screws removed in step 11.)



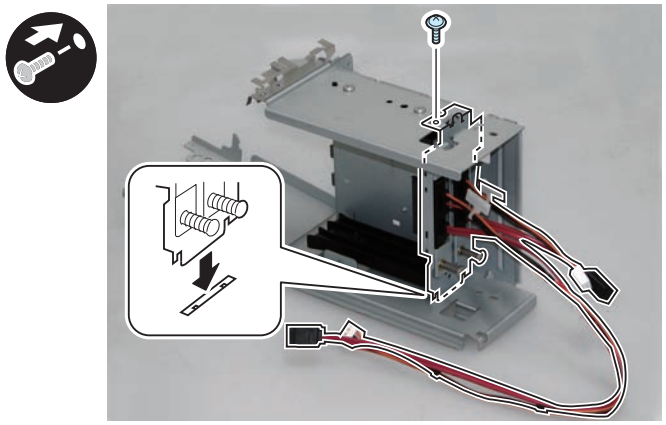
F-9-545

☐
13) Install the IV Cable of HDD Drawer Unit.
- 2 Screws
- 2 Springs
- 2 Washers (Use the parts removed in step 10.)



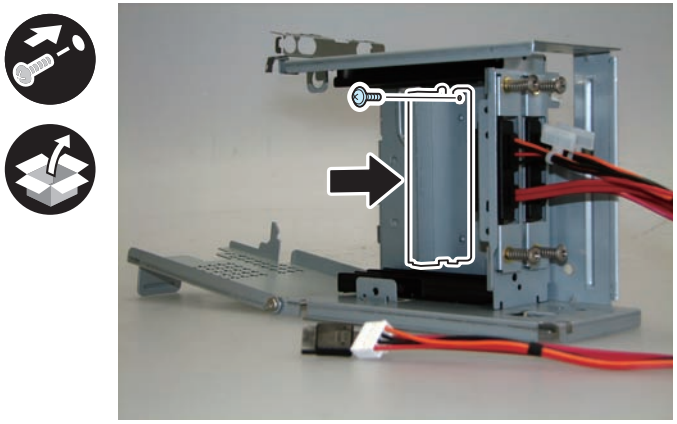
F-9-546

☐
14) Install the HDD Drawer Unit.
- 2 Screws (TP Round End; M3x6)



F-9-547

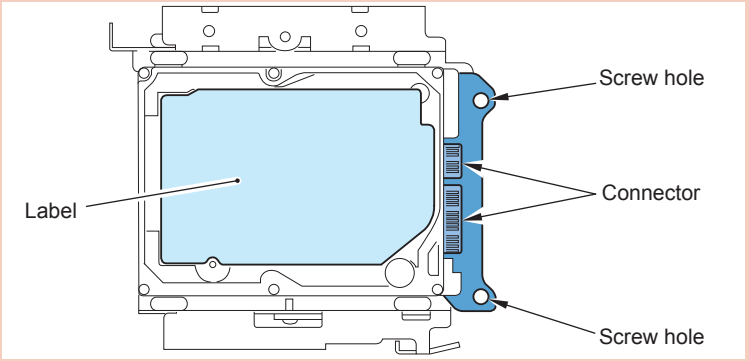
☐
15) Install the HDD Face Plate.
- 2 Screws (TP Round End; M3x6)



F-9-548

■ Assembling the Option HDD

CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate.



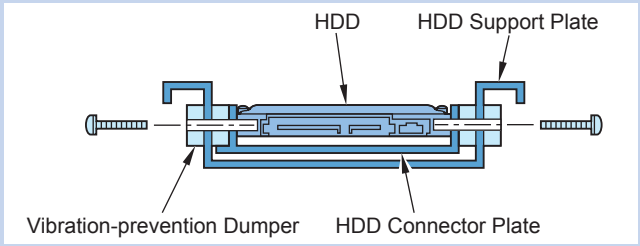
F-9-549

NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

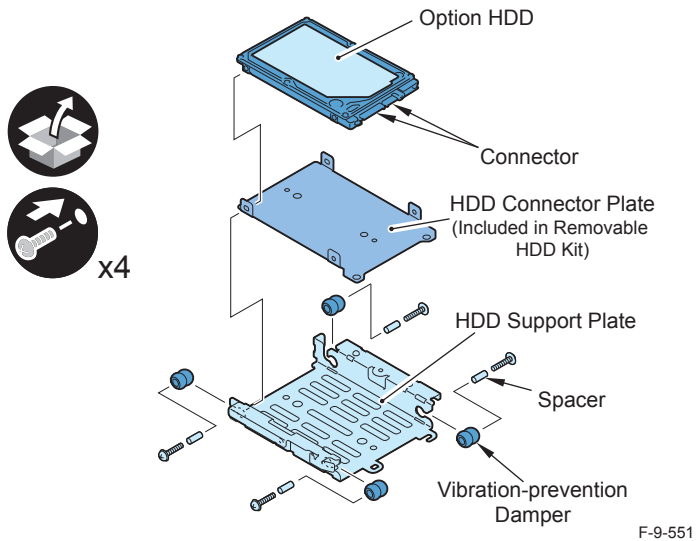
☐
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



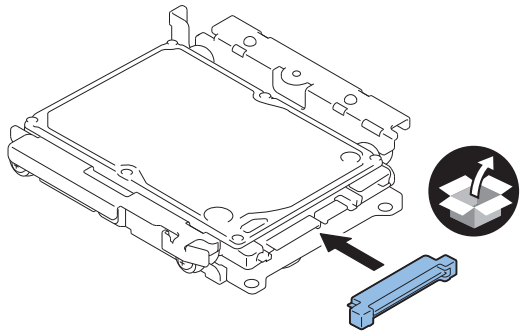
F-9-550



F-9-551

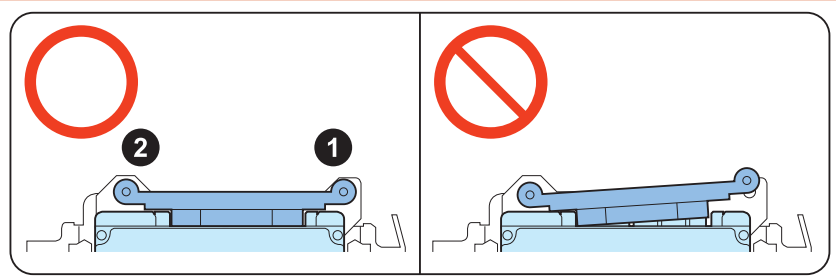
☐
2) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.

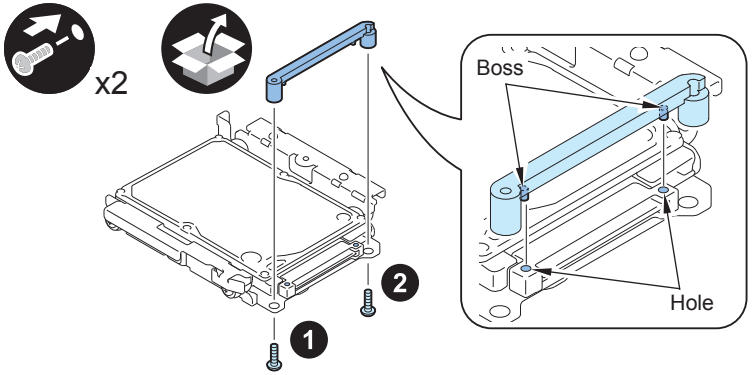

F-9-552

☐
3) Fit the 2 bosses of the Connector Fixing Block into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.
- 2 Screws (P tightening; M3x8)

CAUTION:
- Be sure to firmly hold the Connector Fixing Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



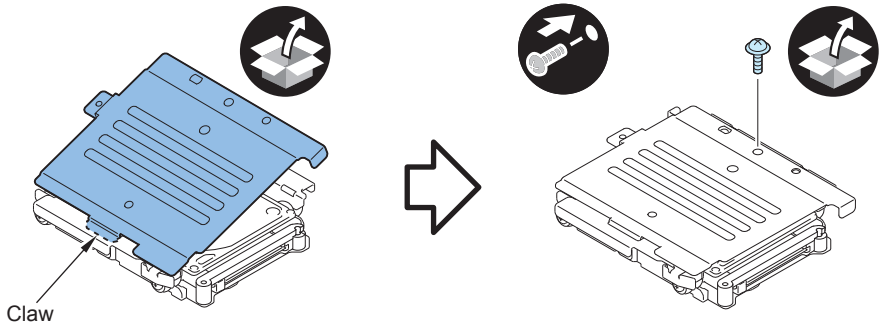
F-9-553



F-9-554

☐
4) Install the HDD Cover.
- 1 Claw
- 1 Screw (TP Round End; M3x6)

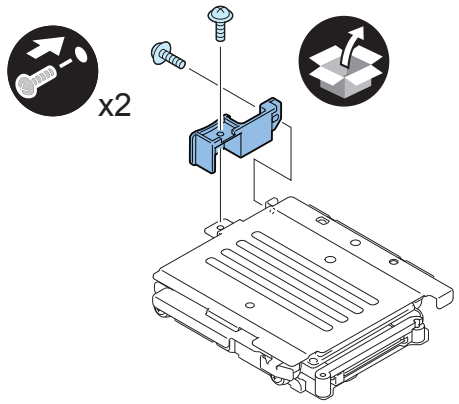
CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-555

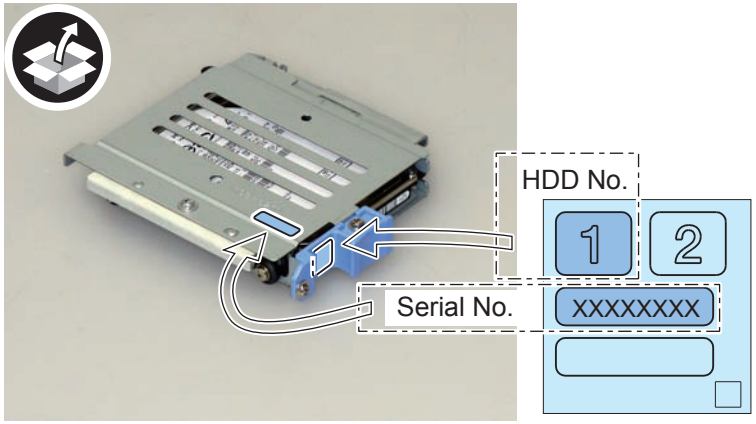
☐
5) Install the HDD Handle.
- 2 Screws (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-556

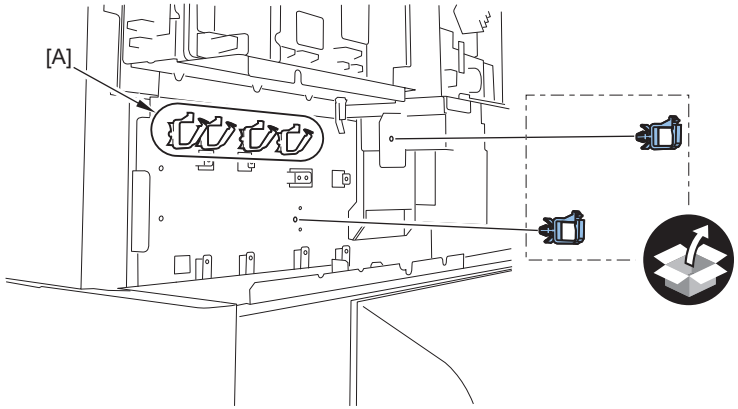
☐
6) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.
7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-557

Installing the HDD Unit

☐
1) Close the 4 wire saddles [A].
2) Install the 2 wire saddles.

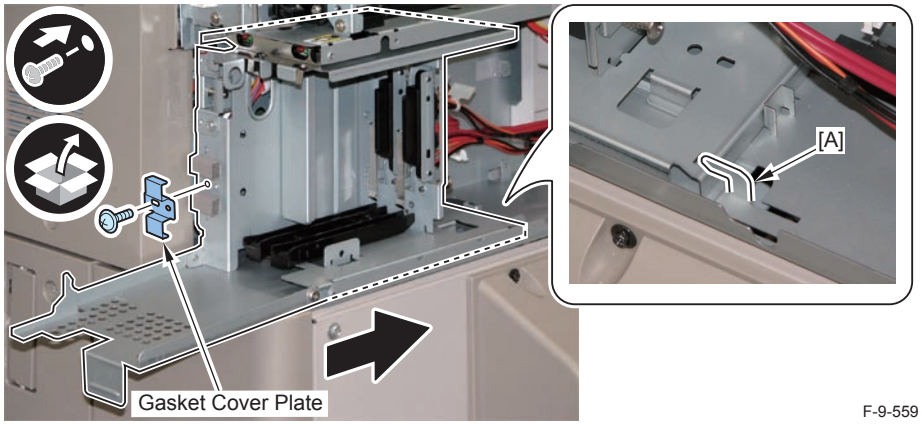


F-9-558

☐
3) Insert the HDD Unit until it stops.

NOTE:
The [A] part should be fitted in the cut-off.

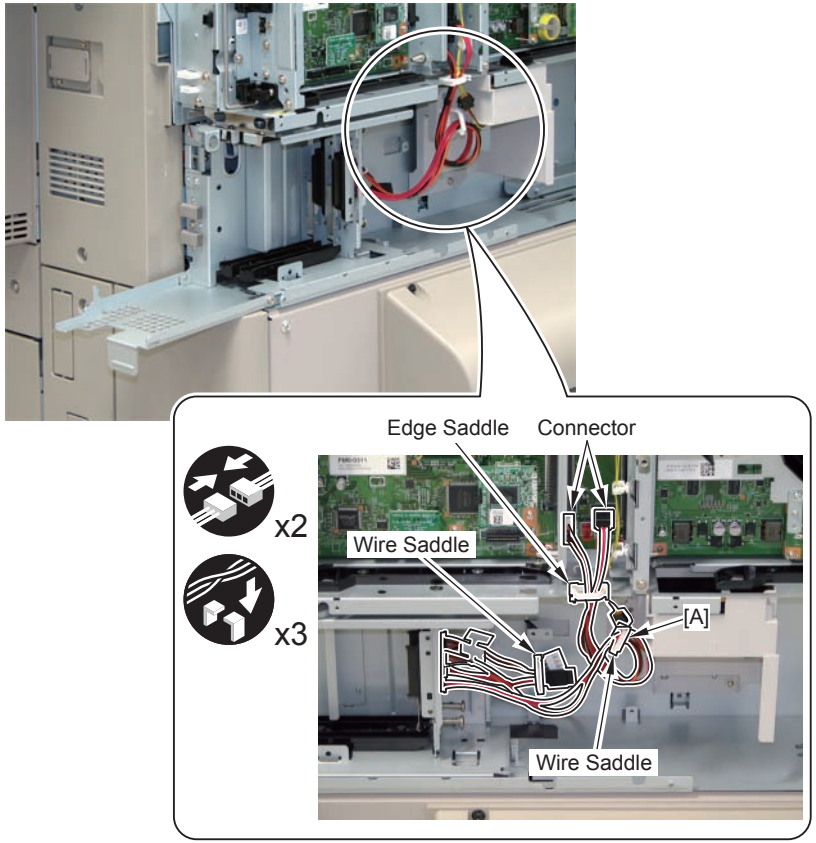
4) Install the Gasket Cover Plate on the Gasket.
5) Secure the HDD Unit.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)



F-9-559

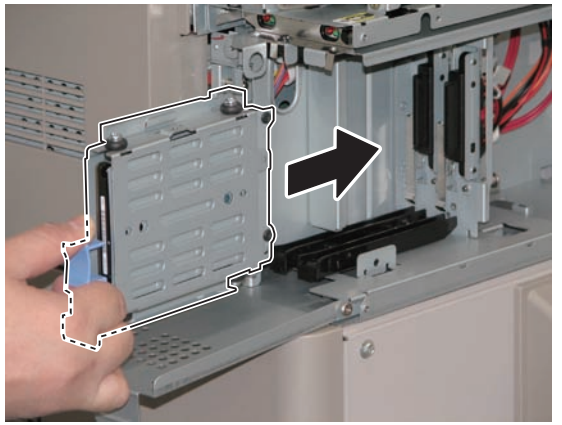
☐
6) Secure the cable (Short) of the Slot.1 (on the host machine side) in place using the Wire Saddle.
7) Connect the 2 connectors of the cable (Long) of Slot.2 (on the rear side), and secure the cable as shown in the figure.
- 1 Edge Saddle
- 2 Wire Saddles

NOTE:
Secure the cable (Long) of the Slot.2 (on the rear side) using the Wire Saddle [A] with the cable wound 1 time.



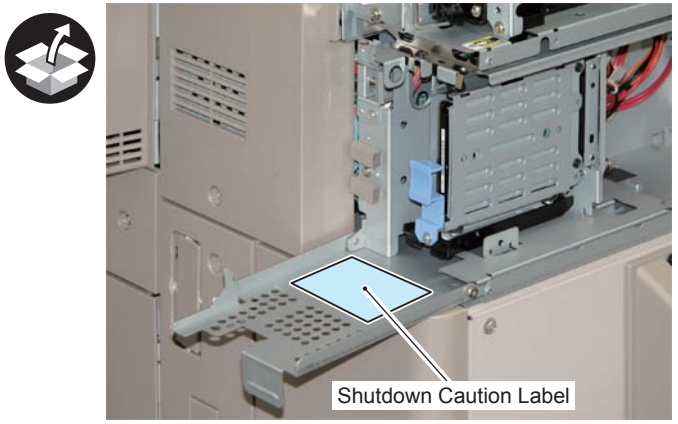
F-9-560

☐
8) Insert the Removable HDD into the Slot.2 (on the rear side).



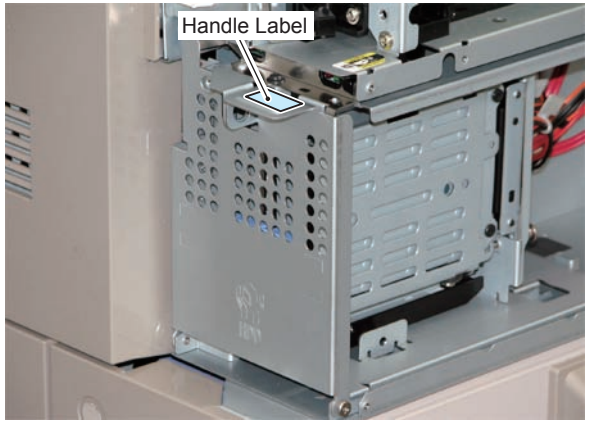
F-9-561

☐
9) Affix the Shutdown Caution Label for applicable language to align with the ruled line on the HDD Lid.



F-9-562

☐
10) Close the HDD Lid.
11) Affix the Handle Label on the Handle part of the HDD Lid.



F-9-563

☐
12) Install the removed covers.
- Rear Upper Cover (9 Screws)

CAUTION:
When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
13) Insert the power plug to the outlet.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-4]

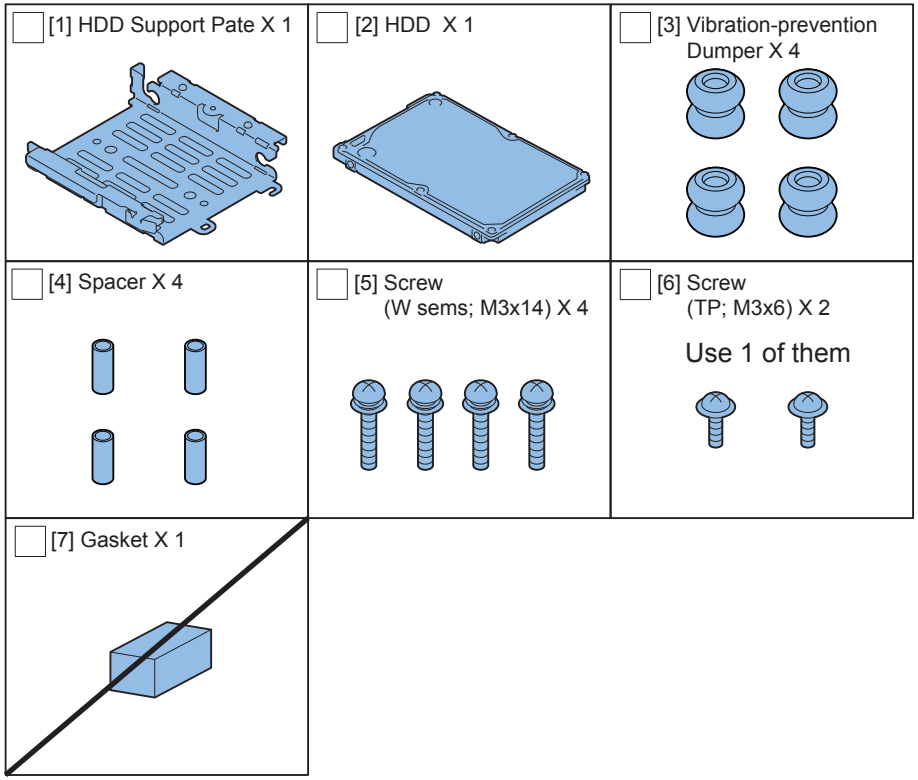
Standard HDD + Option HDD (160GB)
+ HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

Option HDD (160GB)

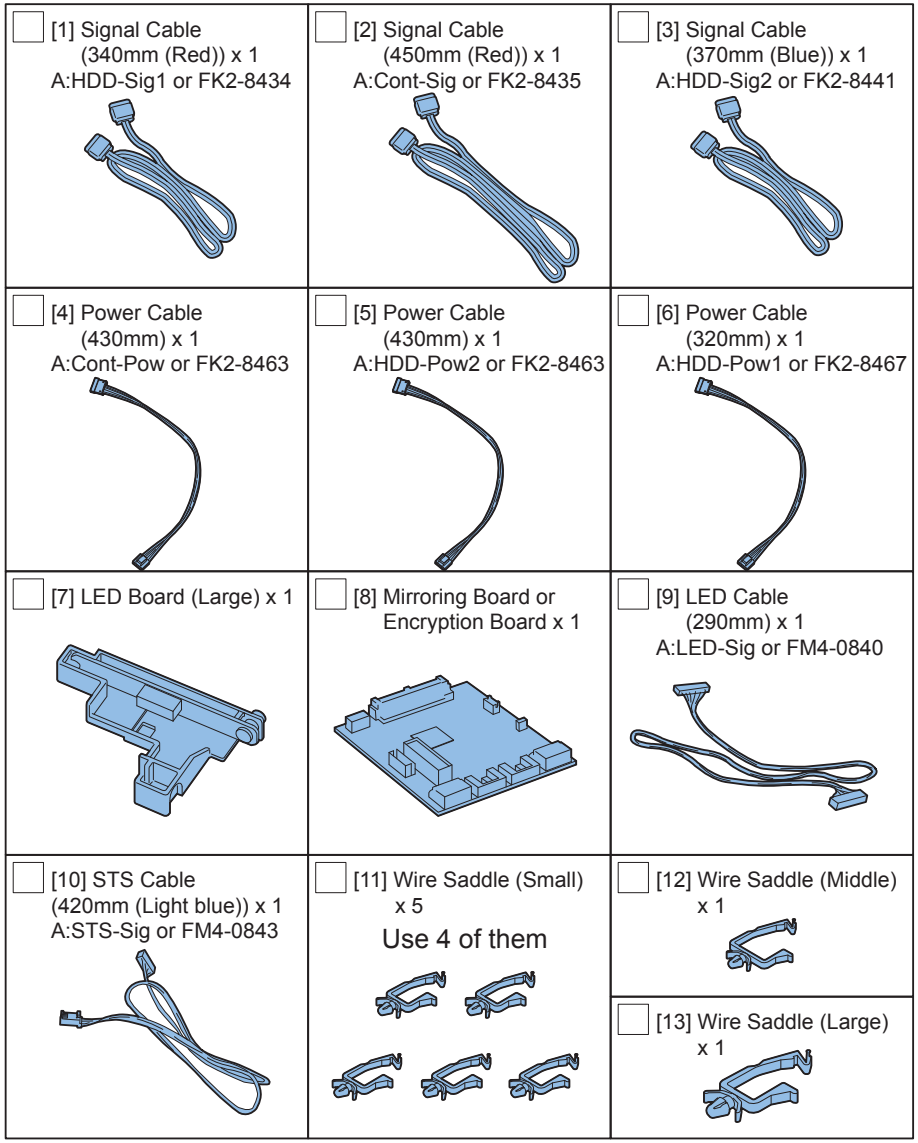


F-9-564

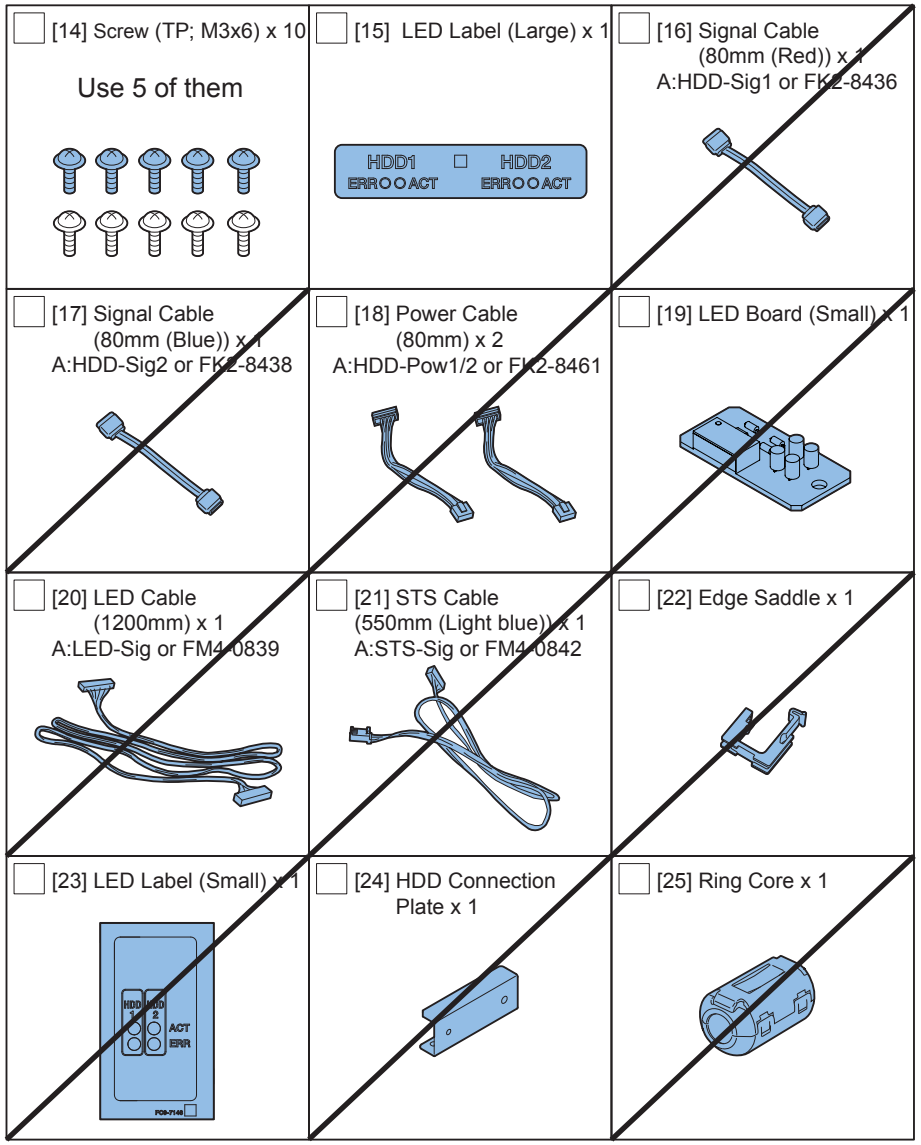
< CD/Guides >

- FCC/IC Sheet

■ HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit



F-9-565



F-9-566

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Documentation CD
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power (HDD Data Encryption & Mirroring Kit only)

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

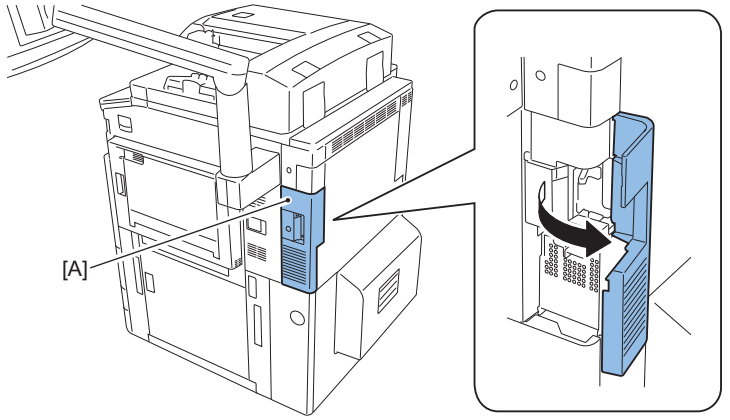
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Removing the HDD Unit

☐

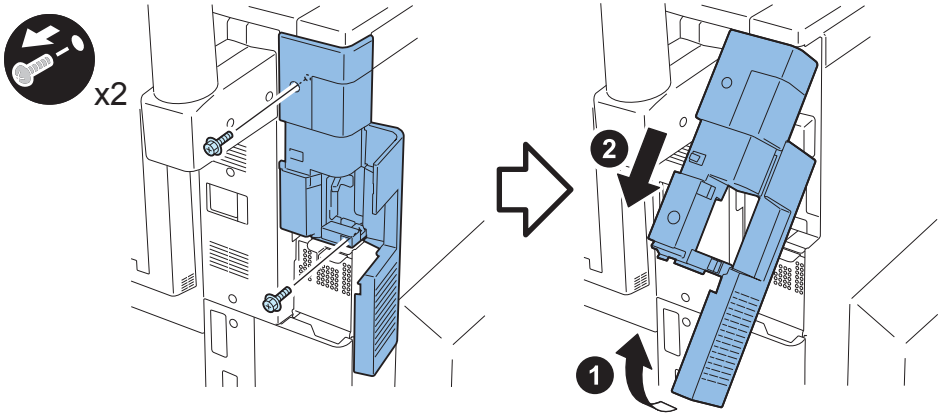
1) Push section [A] to open the HDD Cover.



F-9-567

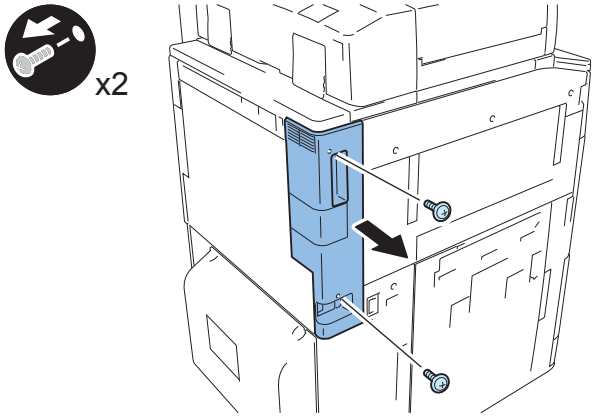
☐

2) Remove the Main Controller Right Cover Unit.
- 2 Screws



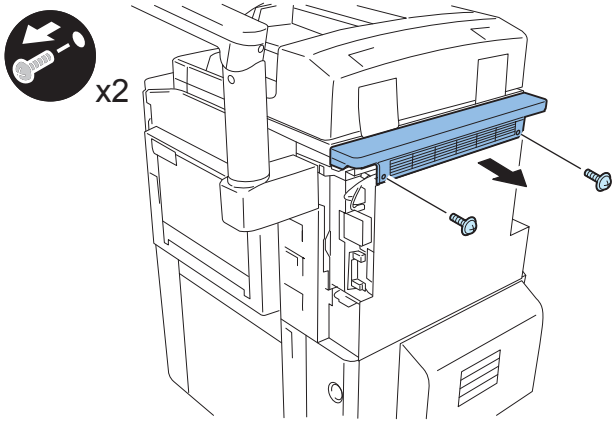
F-9-568

☐
3) Remove the Box Left Cover.
- 2 Screws



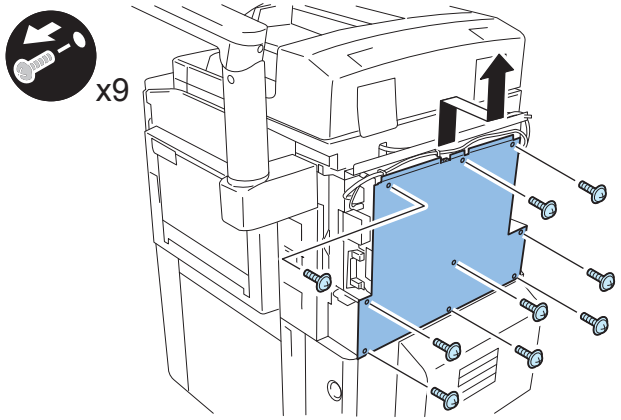
F-9-569

☐
4) Remove the Box Upper Cover.
- 2 Screws



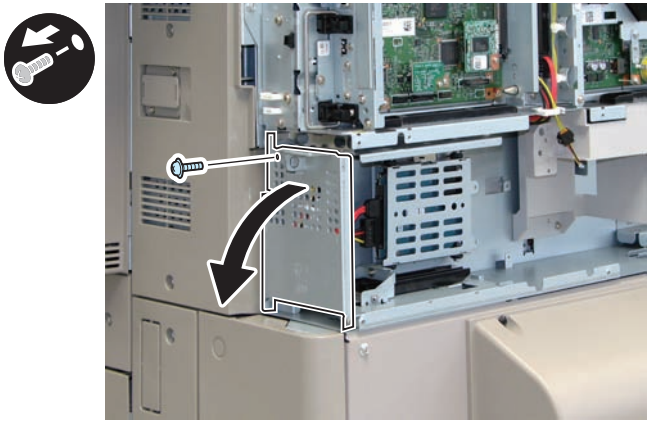
F-9-570

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-571

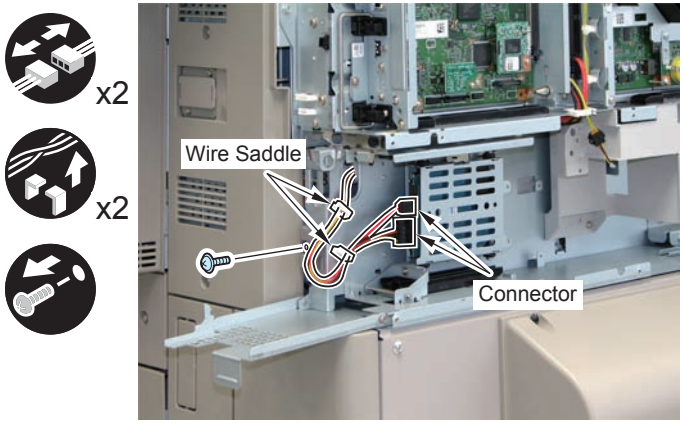
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw is reused at step 4 of “Installing the HDD Unit”)



F-9-572

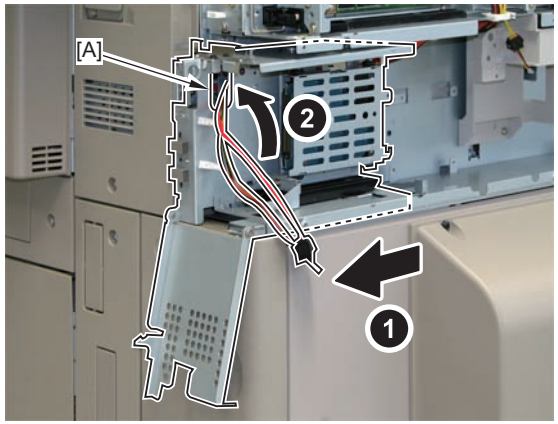
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 2.)



F-9-573

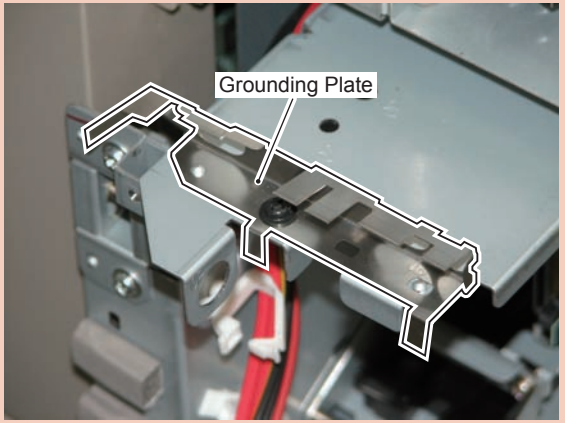
☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



F-9-574

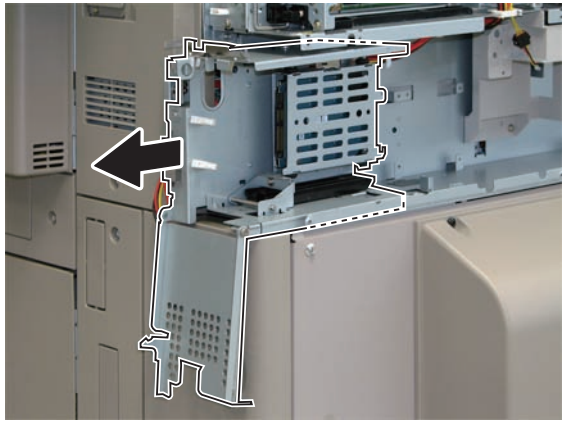
CAUTION:

Be sure not to deform the Grounding Plate.



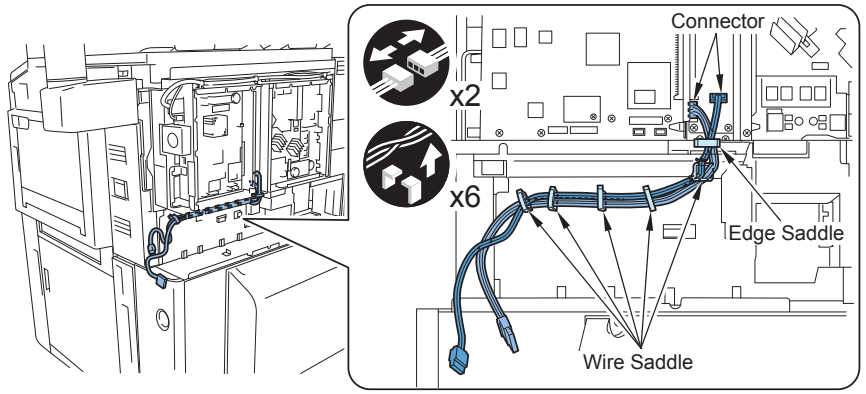
F-9-575

☐
10) Remove the HDD Unit from the host machine.



F-9-576

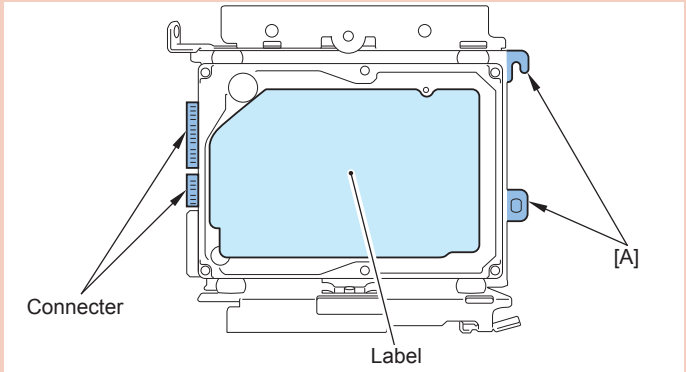
☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-577

Assembling and Installing the Option HDD

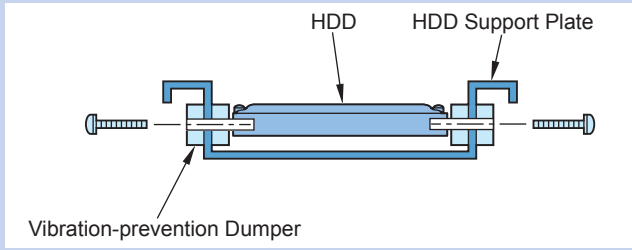
CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.



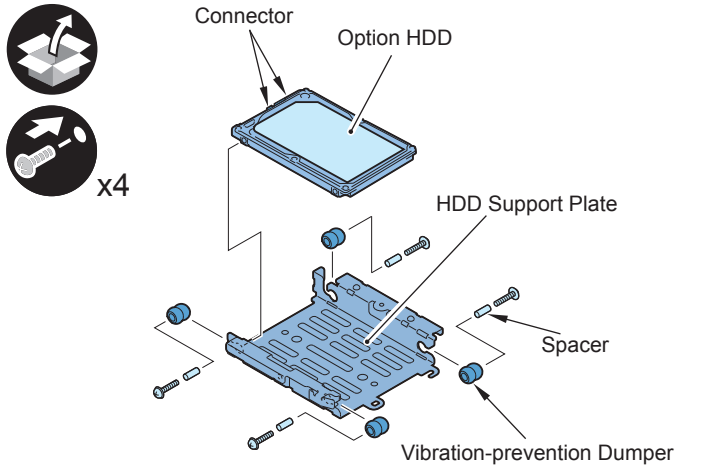
F-9-578

☐
1) Assemble the Option HDD (160GB).
- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD.

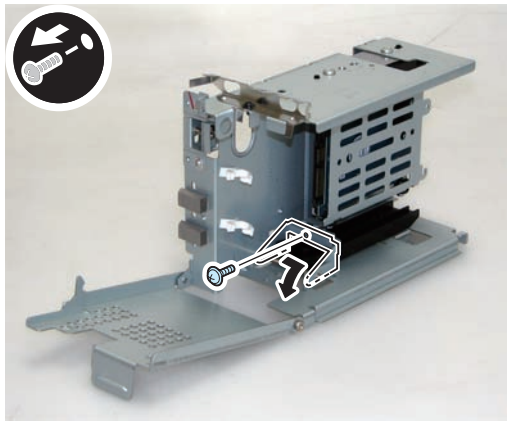


F-9-579



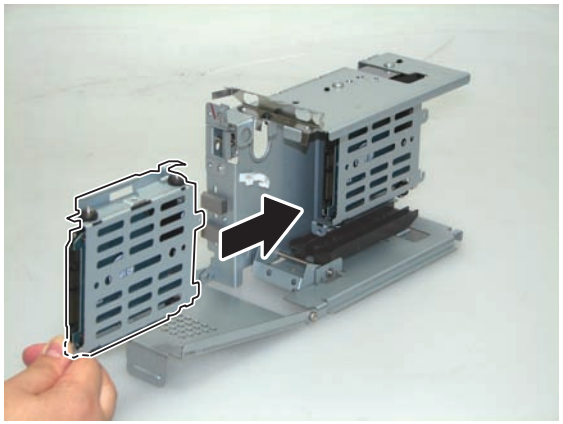
F-9-580

☐
2) Turn the HDD Fixation Plate toward the front.
- 1 Screw (The removed screws will be used in step 4.)

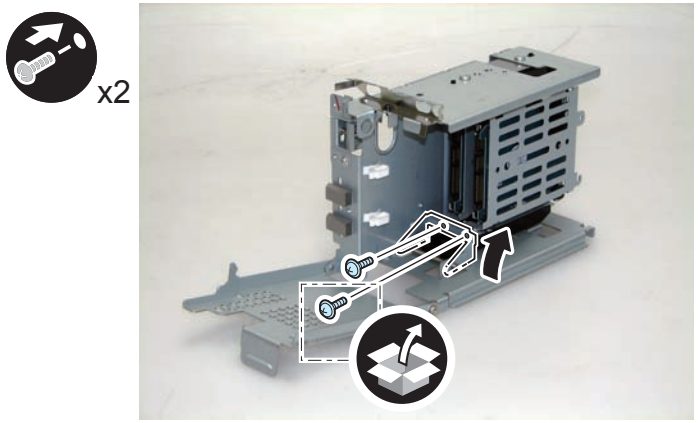


F-9-581

☐
3) Insert the assembled Option HDD into the Slot.2 (on the right side).



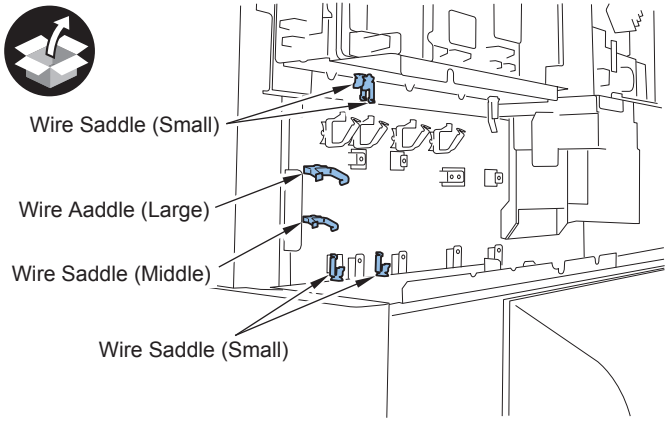
☐
4) Install the HDD Fixed Plate.
- 1 Screw (Use the screws removed in step 2.)
- 1 Screw (TP; M3x6) (Use the contents included in the Option HDD.)



F-9-582

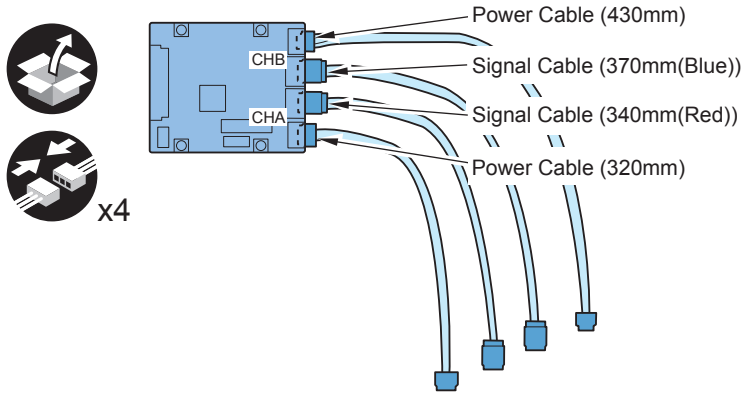
Installing the Mirroring Board or Encryption Board

☐
1) Install 1 wire saddle (Large), 1 wire saddle (Middle), and 4 wire saddles (Small).



F-9-583

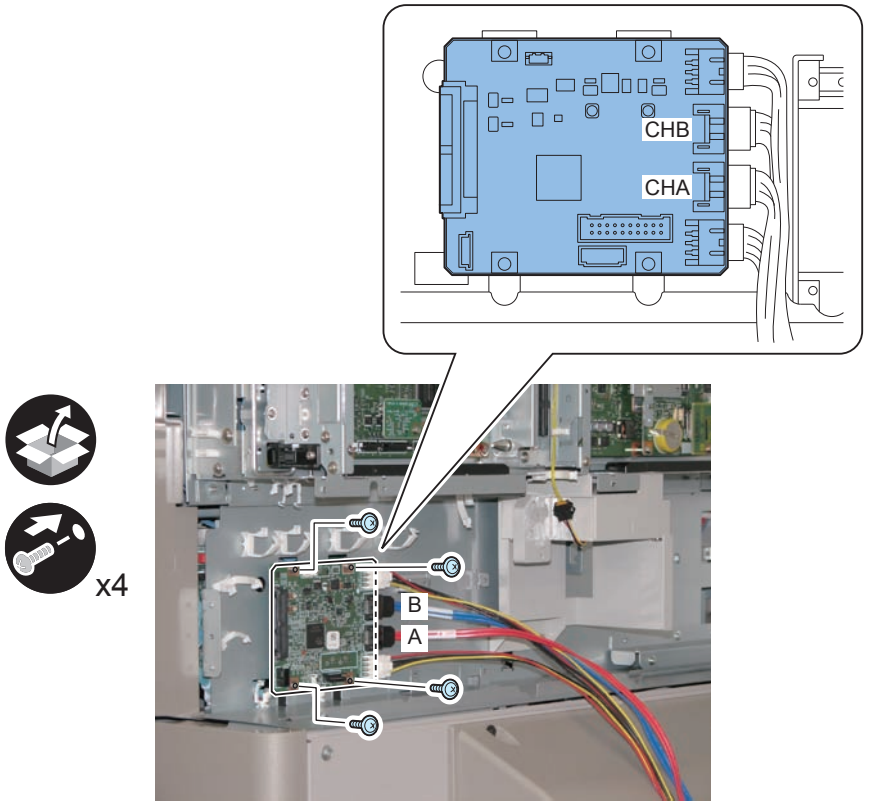
☐
2) Connect the Signal Cable and Power Cable to the Mirroring Board or Encryption Board.
- Power Cable (Long) (430mm; A:HDD-Pow2 or FK2-8463)
- Signal Cable (370mm (Blue); A:HDD-Sig2 or FK2-8441)
- Signal Cable (340mm (Red); A:HDD-Sig1 or FK2-8434)
- Power Cable (Short) (320mm; A:HDD-Pow1 or FK2-8467)



F-9-584

☐
3) Install the Mirroring Board or Encryption Board.
- 4 screws (TP; M3x6)

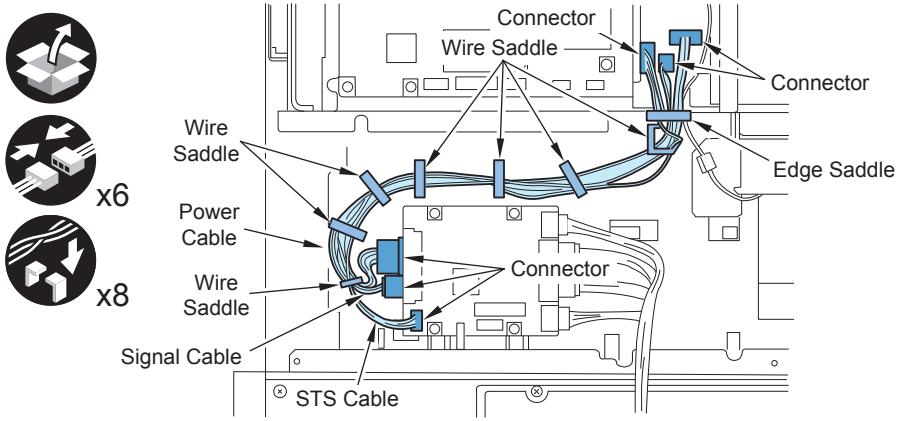
CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



F-9-585

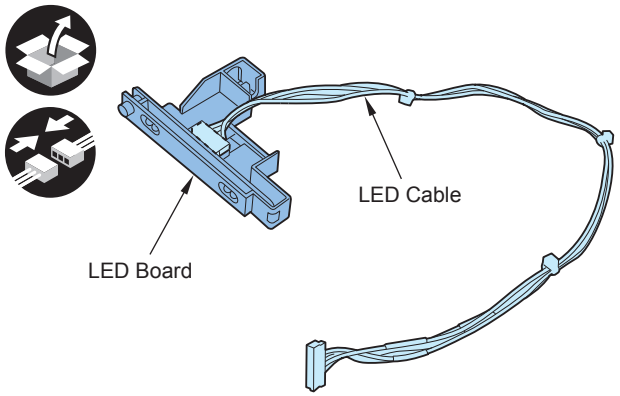
☐
4) Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435), the Power Cable (430mm; A:Cont-Pow or FK2-8463) and STS Cable (420mm (Light blue); A:STS-Sig or FM4-0843).
- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

CAUTION:
- Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow or FK2-8463) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



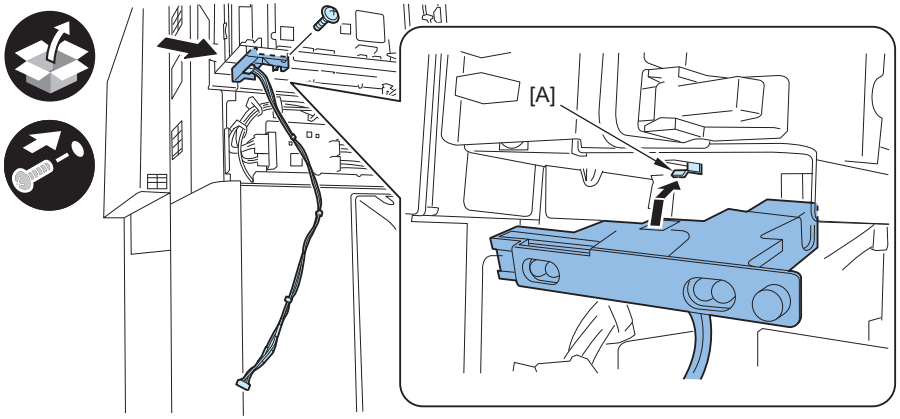
F-9-586

☐
5) Install the LED Cable (290mm; A:LED-Sig or FM4-0840) to the LED Board (Large).



F-9-587

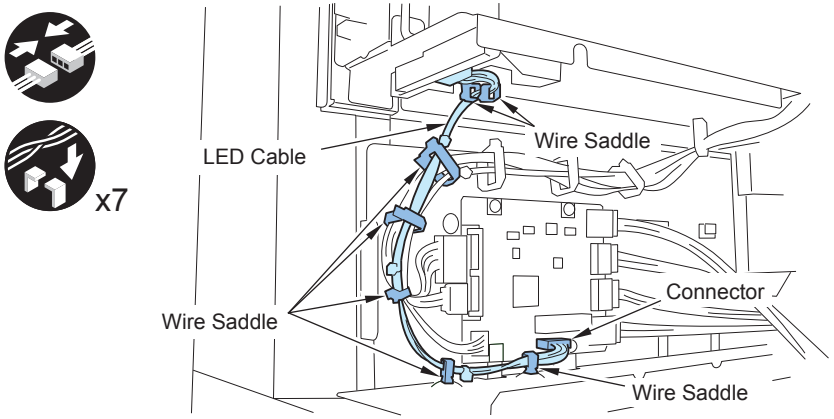
☐
6) Insert the LED Board (Large) to the hook part [A] of the host machine to install.
- 1 Screw (TP; M3x6)



F-9-588

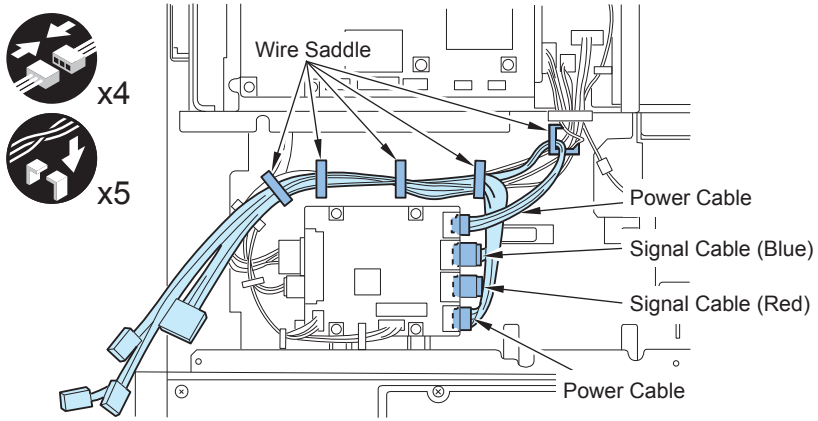
☐
7) Connect the LED Cable (290mm; A:LED-Sig or FM4-0840) to the Mirroring Board or Encryption Board.
- 1 Connector
- 7 Wire Saddles

CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-589

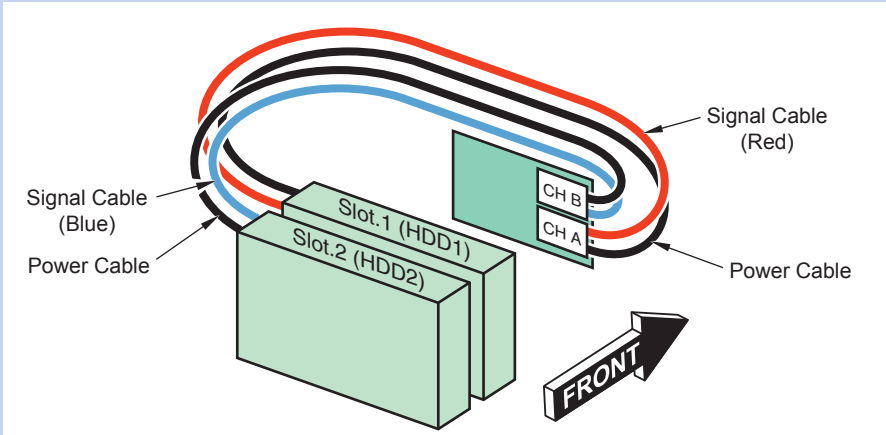
☐
8) Secure the Signal Cable and the Power Cable with the 5 wire saddles.



F-9-590

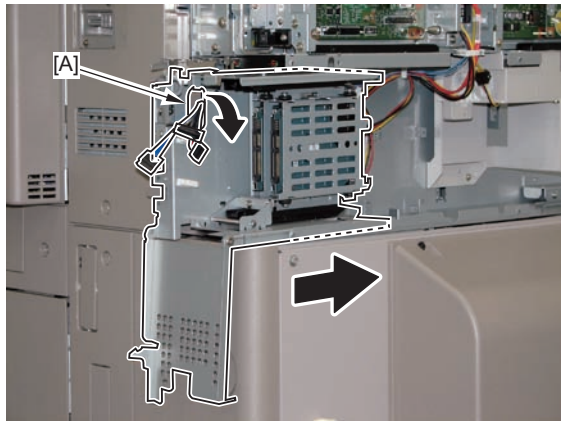
Installing the HDD Unit

NOTE:
The following shows the combination of the HDD and the Mirroring Board or Encryption Board.
- Connect Slot.1 to “CH A” (The HDD which originally mounted)
- Connect Slot.2 to “CH B” (New HDD)



F-9-591

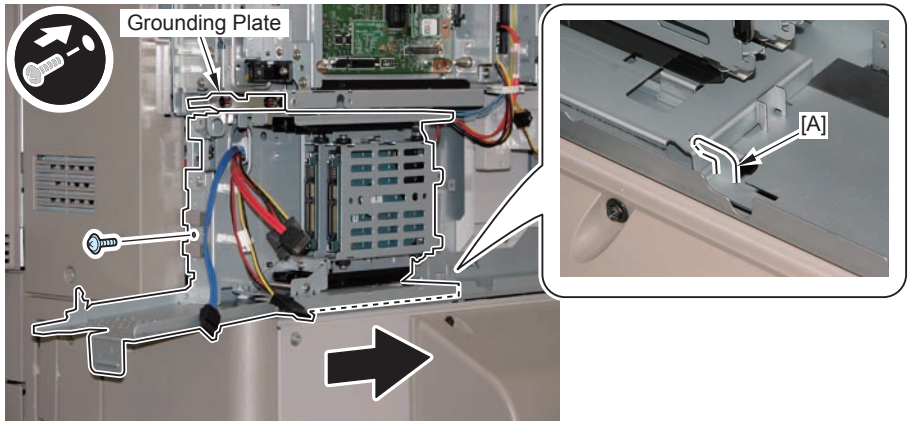
☐
1) Insert the HDD Unit approx. 2/3 along the rails of the host machine, and pass the Signal Cable and the Power Cable through the hole [A].



F-9-592

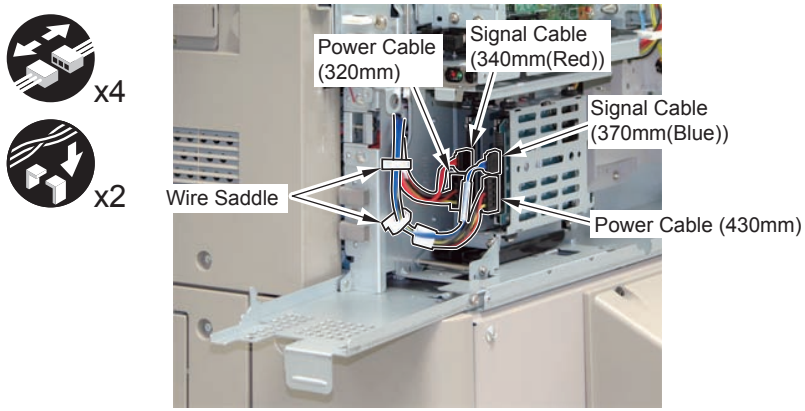
☐
2) Install the HDD Unit by inserting it until it stops.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)

NOTE:
- The [A] part should be fitted in the cut-off.
- Be sure not to deform the Grounding Plate.



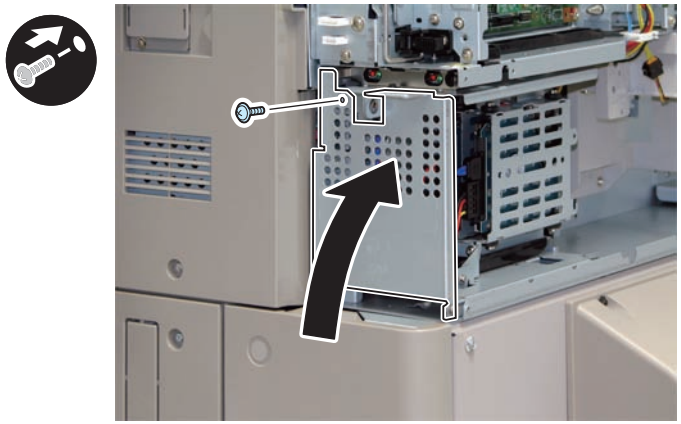
F-9-593

☐
3) Connect the Signal Cable and the Power Cable to the HDD.
- Connect the Power Cable (320 mm; A: HDD-Pow1 or FK2-8467) and the Signal Cable (340 mm (Red); A: HDD-Sig1 or FK2-8434) to the Slot.1 (on the host machine side).
- Connect the Signal Cable (370 mm (Blue); A: HDD-Sig2 or FK2-8441) and the Power Cable (430 mm; A: HDD-Pow2 or FK2-8463) to the Slot.2 (on the rear side), and secure the 4 cables using the 2 Wire Saddles.



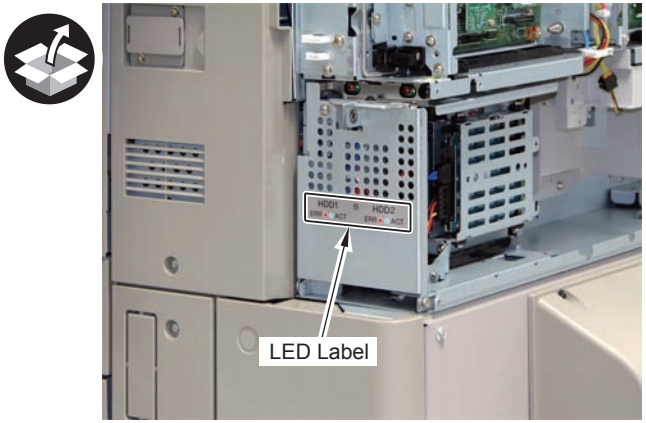
F-9-594

☐
4) Close the HDD Lid.
- 1 Screw (use the screw removed at step 6 of the “Removing the HDD Unit”)



F-9-595

☐
5) Affix the LED Label according to align with the ruled line on the HDD Lid.



F-9-596

☐
6) Install the removed covers.
- Rear Upper Cover (9 Screws)

CAUTION:
When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
7) Insert the power plug to the outlet.
8) Turn ON the main power switch.

After Installing HDD Data Encryption & Mirroring Kit

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that ‘2.00’ or '2.01' is displayed in ‘Canon MFP Security Chip’ as version information of the security chip.
   When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark ( ) is displayed on the lower left corner of a panel screen.

Setting for Mirroring

1) Specify the setting for Mirroring.
- Service Mode > COPIER > OPTION > FNC-SW > W/RAID; select “1” for W/RAID.

2) Turn OFF/ON the main power switch to enable the setting value.
3) Check that the UI screen is started normally.
4) Open the HDD Cover, and check that the LED is flashing.
- The green LED of HDD1 (Slot.1) is flashing.
- The green and red LEDs of HDD2 (Slot.2) are flashing.

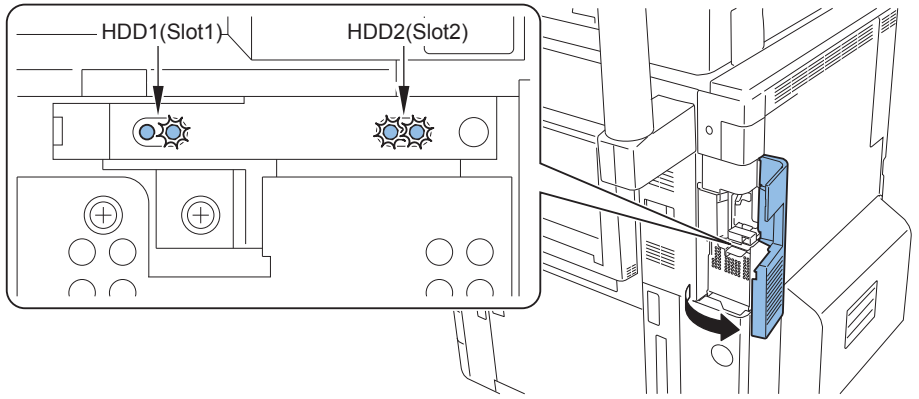
CAUTION:

Re-building process starts after setting W/RAID to “1”.

When the error indicating the message of “Need to replace Hard Disk (Contact with Service Technician)” on the UI occurs, re-execute the re-building process as follows;

1) Check the lighted Red LED is for the HDD2.
2) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to “0”.
3) Turn OFF/ON the main power switch of the host machine to enable the setting value.
4) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to “1”.
5) Turn OFF/ON e the main power switch of the host machine to enable the setting value.

The abovementioned procedure is limited only for the re-building process at the initial installation. The error occurred at re-building process during operation is not targeted.



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After Installing HDD Data Encryption & Mirroring Kit

Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-5]

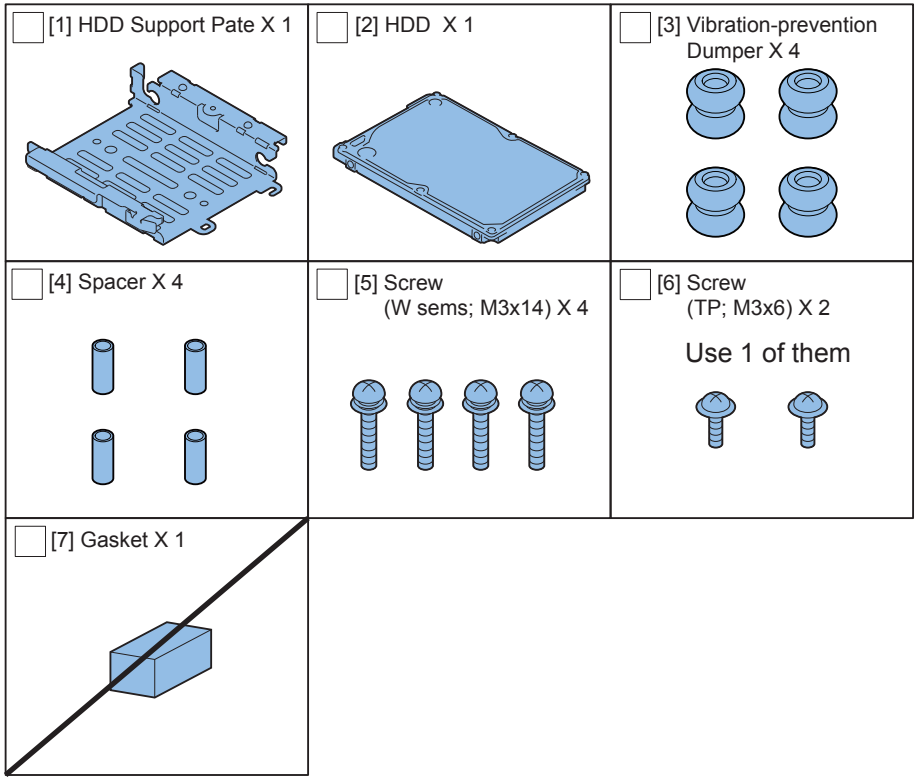
2 Option HDDs (1TB) + HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

2 Option HDDs (1TB)



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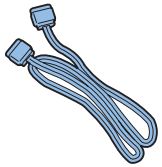
< CD/Guides >

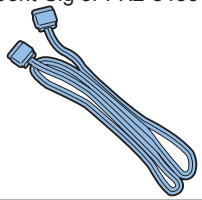
- FCC/IC Sheet

■ HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

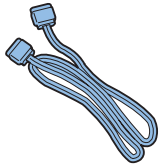
- ☐ [1] Signal Cable (340mm (Red)) x 1 A:HDD-Sig1 or FK2-8434



- ☐ [2] Signal Cable (450mm (Red)) x 1 A:Cont-Sig or FK2-8435



- ☐ [3] Signal Cable (370mm (Blue)) x 1 A:HDD-Sig2 or FK2-8441

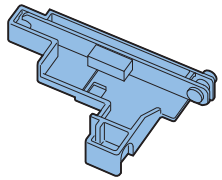


- ☐ [4] Power Cable (430mm) x 1 A:Cont-Pow or FK2-8463

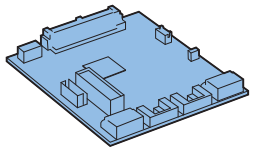
- ☐ [5] Power Cable (430mm) x 1 A:HDD-Pow2 or FK2-8463

- ☐ [6] Power Cable (320mm) x 1 A:HDD-Pow1 or FK2-8467

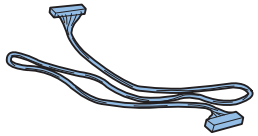
- ☐ [7] LED Board (Large) x 1



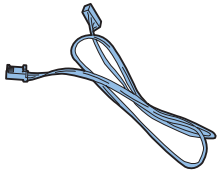
- ☐ [8] Mirroring Board or Encryption Board x 1



- ☐ [9] LED Cable (290mm) x 1 A:LED-Sig or FM4-0840

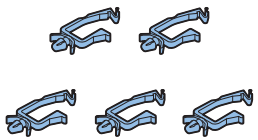


- ☐ [10] STS Cable (420mm (Light blue)) x 1 A:STS-Sig or FM4-0843



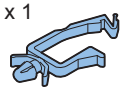
- ☐ [11] Wire Saddle (Small) x 5

Use 4 of them



- ☐ [12] Wire Saddle (Middle) x 1

- ☐ [13] Wire Saddle (Large) x 1



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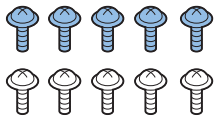
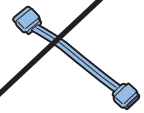
- ☐ [14] Screw (TP; M3x6) x 10

Use 5 of them

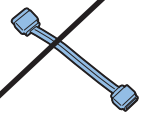


- ☐ [15] LED Label (Large) x 1

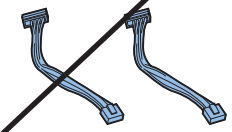
- ☐ [16] Signal Cable (80mm (Red)) x 1 A:HDD-Sig1 or FK2-8436



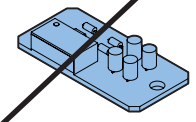
- ☐ [17] Signal Cable (80mm (Blue)) x 1 A:HDD-Sig2 or FK2-8438



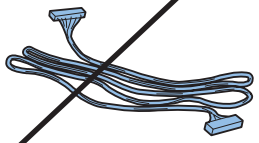
- ☐ [18] Power Cable (80mm) x 2 A:HDD-Pow1/2 or FK2-8461



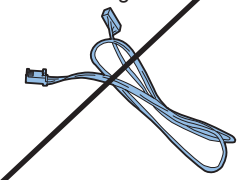
- ☐ [19] LED Board (Small) x 1



- ☐ [20] LED Cable (1200mm) x 1 A:LED-Sig or FM4-0839

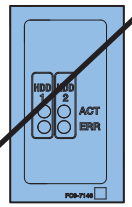


- ☐ [21] STS Cable (550mm (Light blue)) x 1 A:STS-Sig or FM4-0842

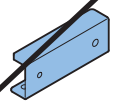


- ☐ [22] Edge Saddle x 1

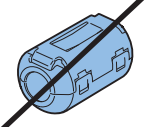
- ☐ [23] LED Label (Small) x 1



- ☐ [24] HDD Connection Plate x 1



- ☐ [25] Ring Core x 1



F-9-600

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Documentation CD
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power (HDD Data Encryption & Mirroring Kit only)

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

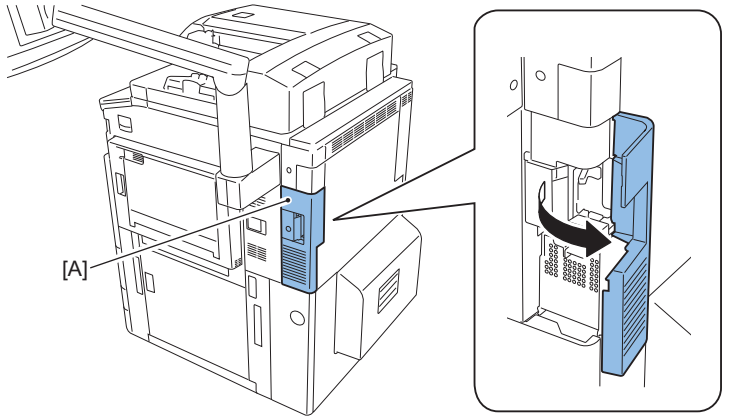
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Removing the HDD Unit

☐

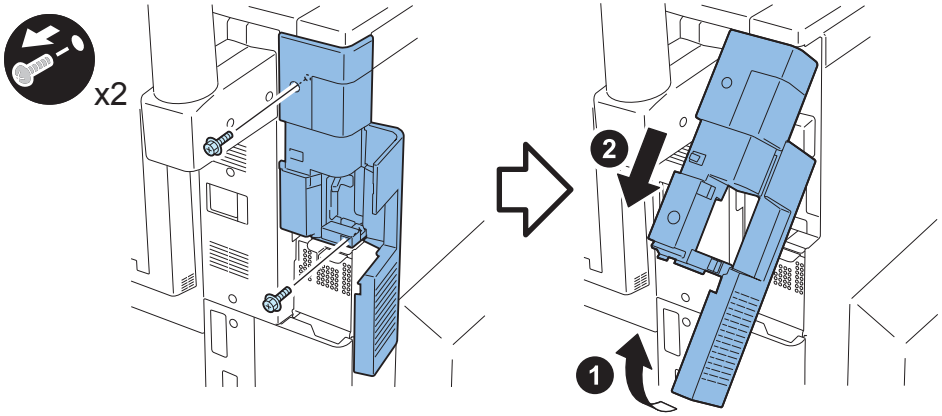
1) Push section [A] to open the HDD Cover.



F-9-601

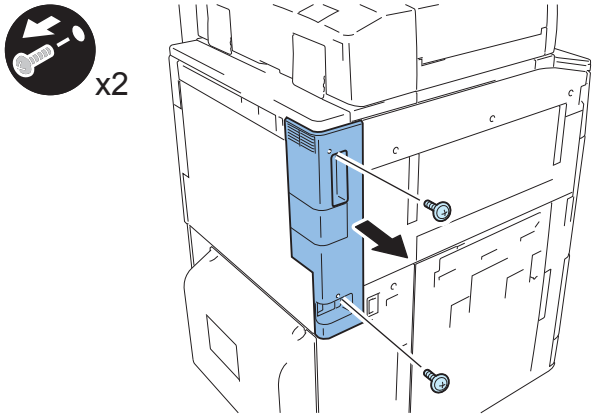
☐

2) Remove the Main Controller Right Cover Unit.
- 2 Screws



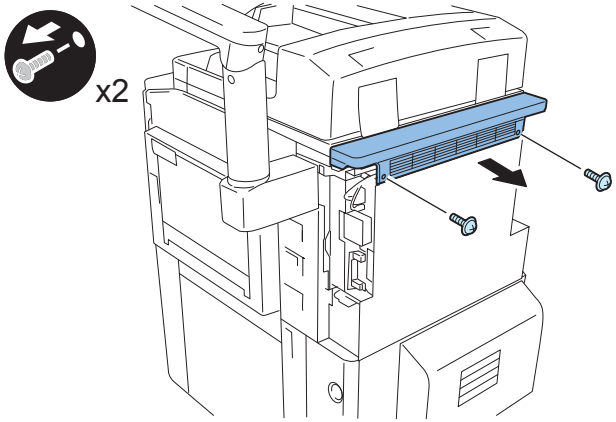
F-9-602

☐
3) Remove the Box Left Cover.
- 2 Screws



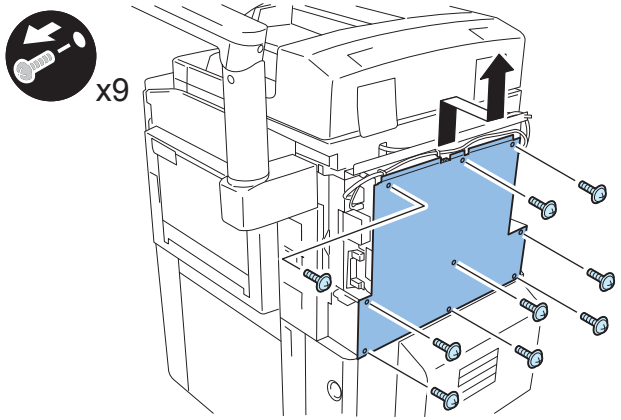
F-9-603

☐
4) Remove the Box Upper Cover.
- 2 Screws



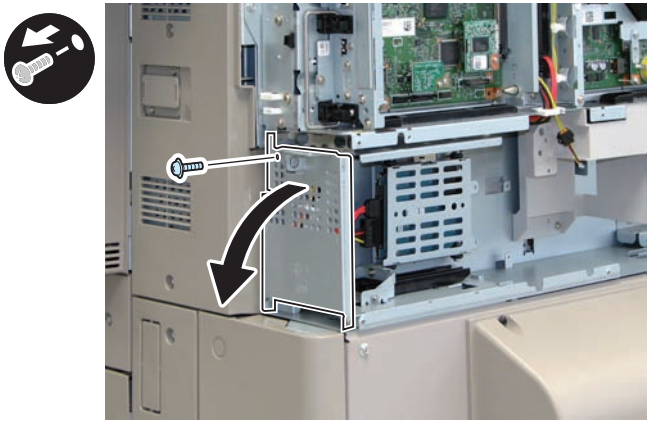
F-9-604

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-605

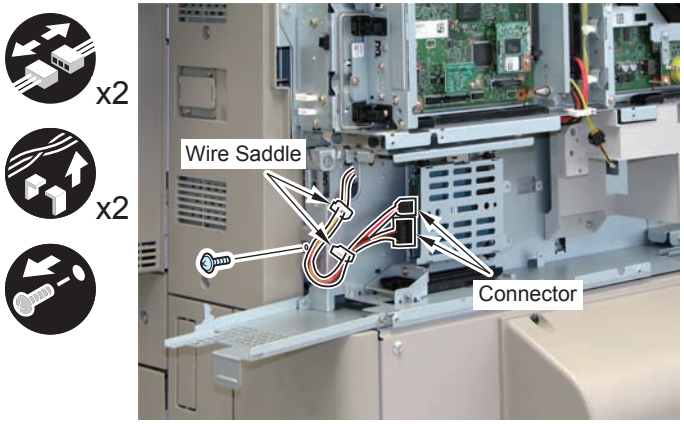
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw is reused at step 4 of “Installing the HDD Unit”)



F-9-606

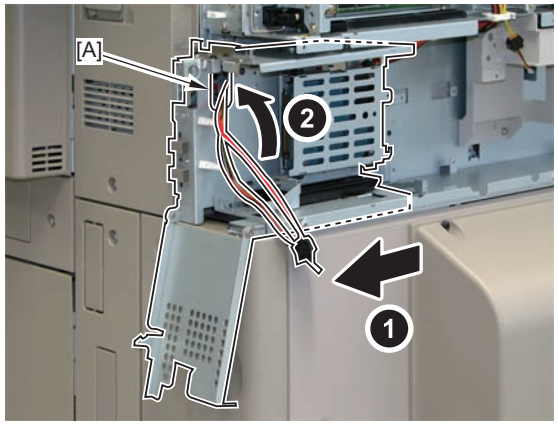
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 2.)



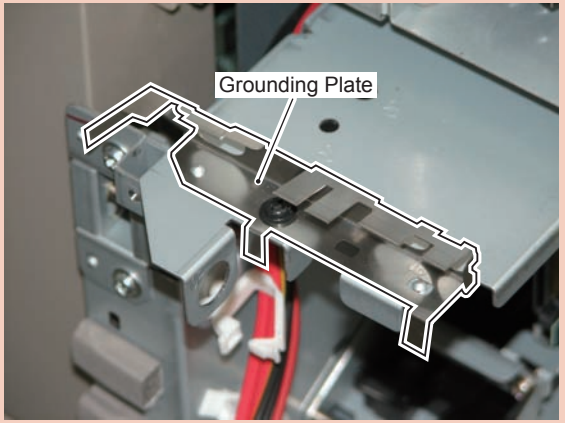
F-9-607

☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



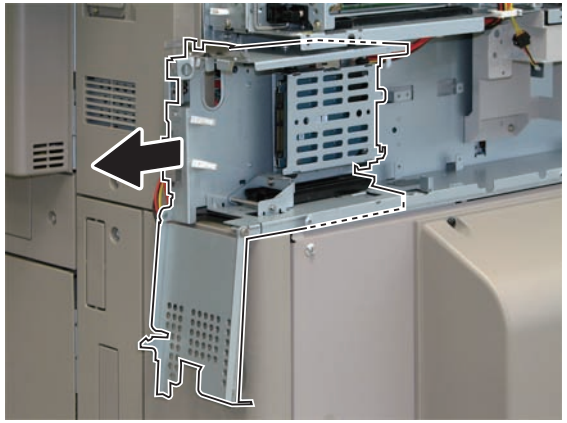
F-9-608

CAUTION:
Be sure not to deform the Grounding Plate.



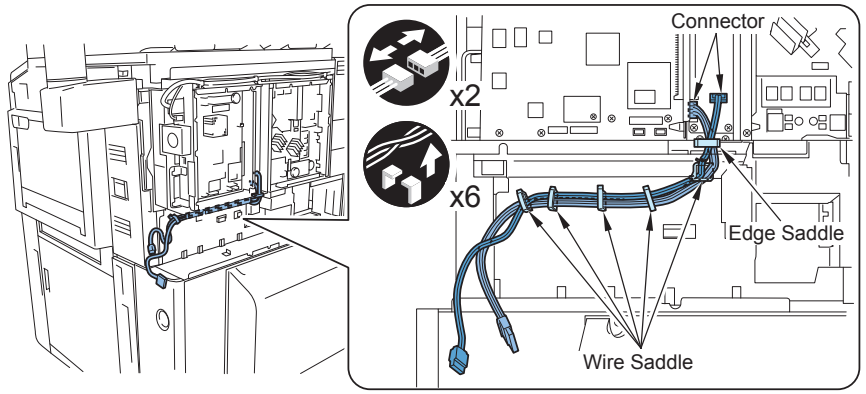
F-9-609

☐
10) Remove the HDD Unit from the host machine.



F-9-610

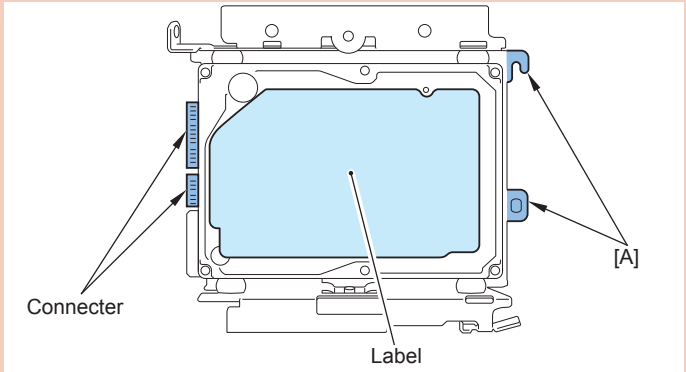
☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-611

Assembling and Installing the Option HDD

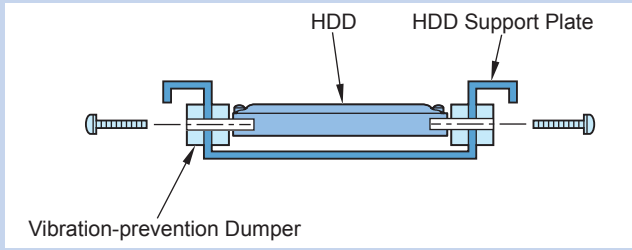
CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.



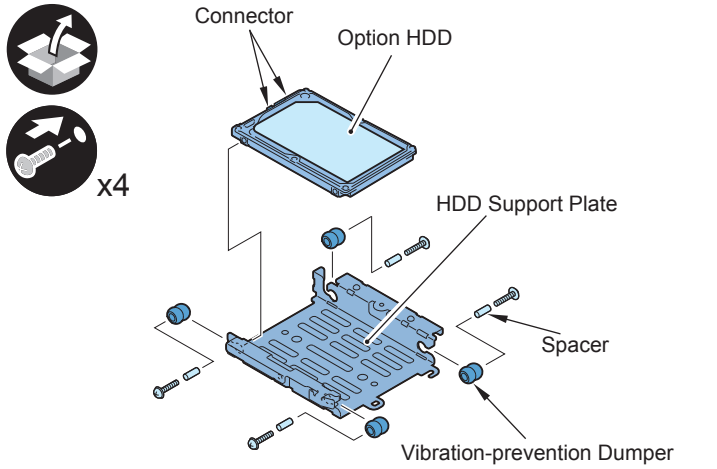
F-9-612

☐
1) Assemble the Option HDD (1TB).
- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD.



F-9-613

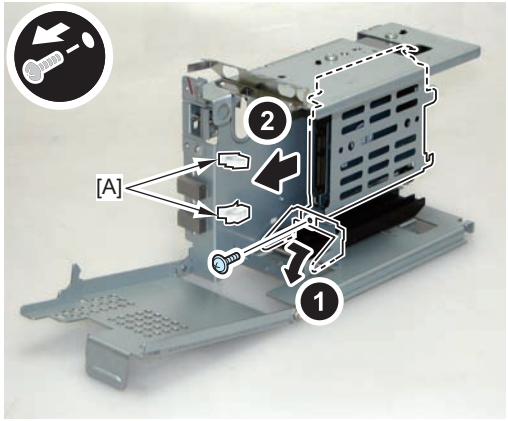


F-9-614

☐
2) Assemble the other Option HDD (1TB) in the same way.

☐
3) Turn the HDD Fixation Plate toward the front, and remove the HDD. (The removed HDD will not be used.)
- 1 Screw (The removed screws will be used in step 5.)

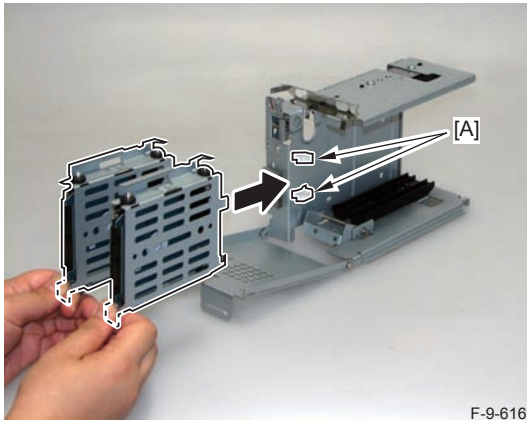
NOTE:
If the Wire Saddles [A] interfere with removal of the HDD, remove the 2 Wire Saddles [A].



F-9-615

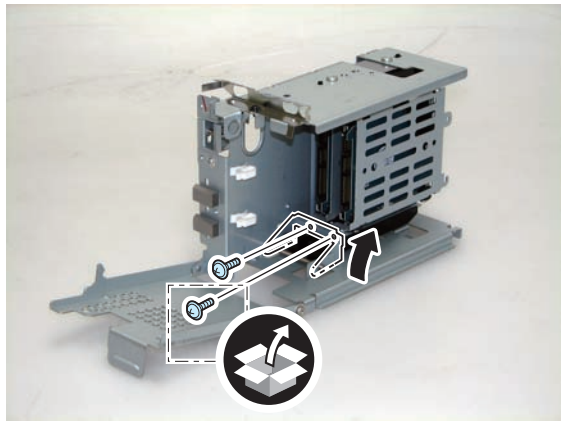
☐
4) Insert the 2 assembled Option HDDs into the slots 1 and 2.

NOTE:
If you have removed the Wire Saddles [A] in the previous step, install the 2 Wire Saddles [A] after inserting the 2 Option HDDs.



F-9-616

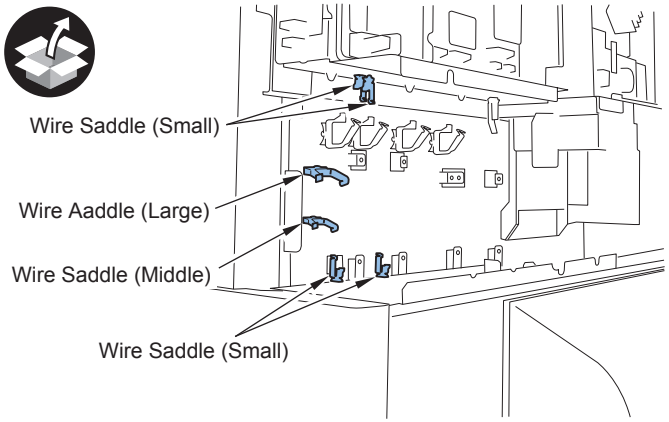
☐
5) Install the HDD Fixed Plate.
- 1 Screw (Use the screws removed in step 3.)
- 1 Screw (TP; M3x6) (Use the contents included in the Option HDD.)



F-9-617

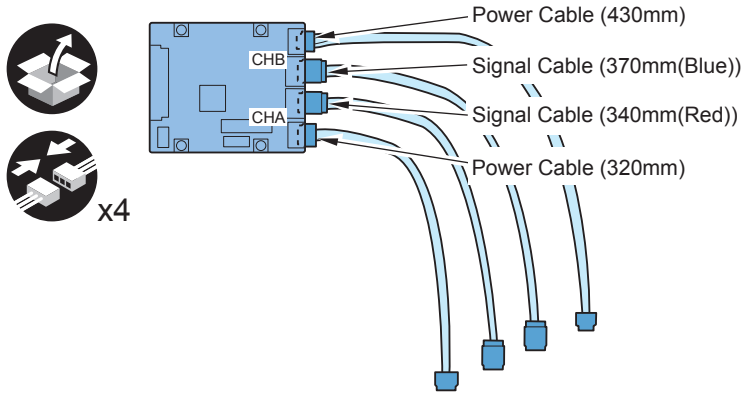
Installing the Mirroring Board or Encryption Board

☐
1) Install 1 wire saddle (Large), 1 wire saddle (Middle), and 4 wire saddles (Small).



F-9-618

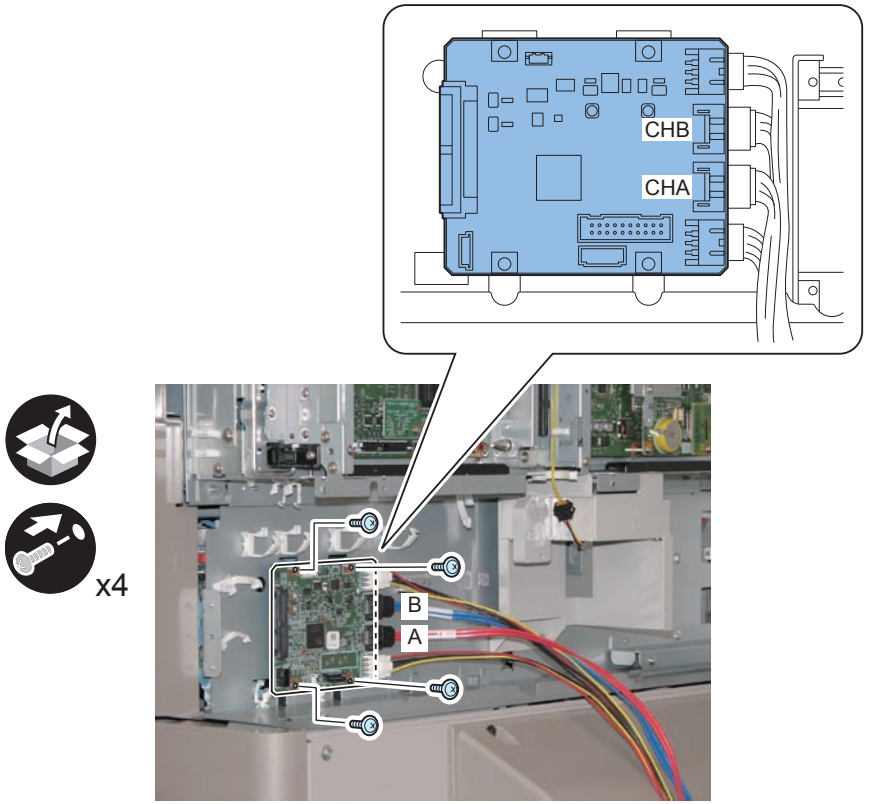
☐
2) Connect the Signal Cable and Power Cable to the Mirroring Board or Encryption Board.
- Power Cable (Long) (430mm; A:HDD-Pow2 or FK2-8463)
- Signal Cable (370mm (Blue); A:HDD-Sig2 or FK2-8441)
- Signal Cable (340mm (Red); A:HDD-Sig1 or FK2-8434)
- Power Cable (Short) (320mm; A:HDD-Pow1 or FK2-8467)



F-9-619

☐
3) Install the Mirroring Board or Encryption Board.
- 4 screws (TP; M3x6)

CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



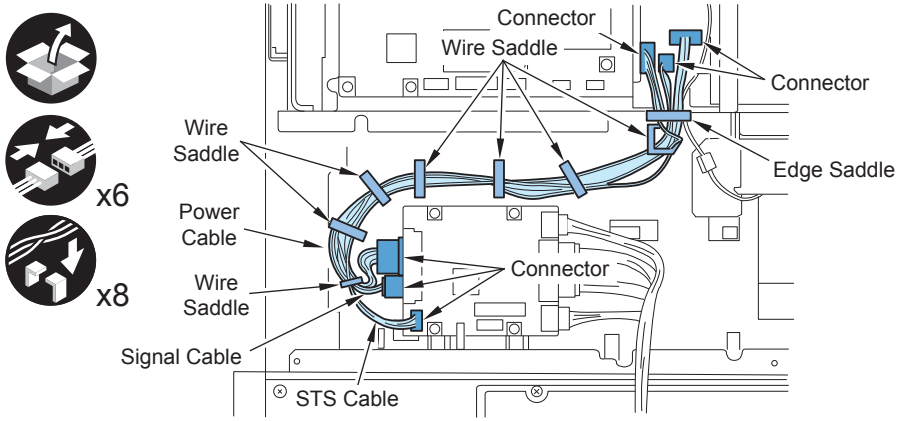
F-9-620

☐
4) Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435), the Power Cable (430mm; A:Cont-Pow or FK2-8463) and STS Cable (420mm (Light blue); A:STS-Sig or FM4-0843).

- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

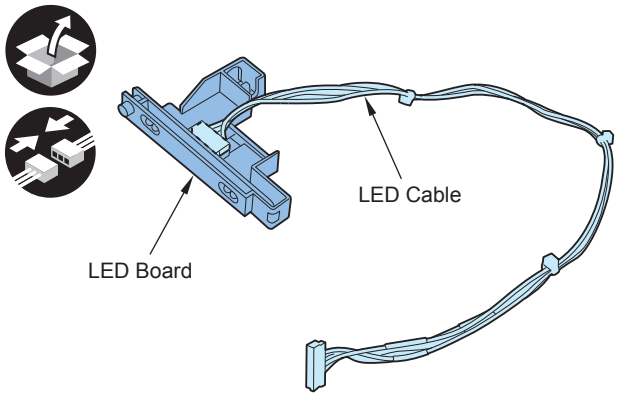
CAUTION:

- Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow or FK2-8463) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



F-9-621

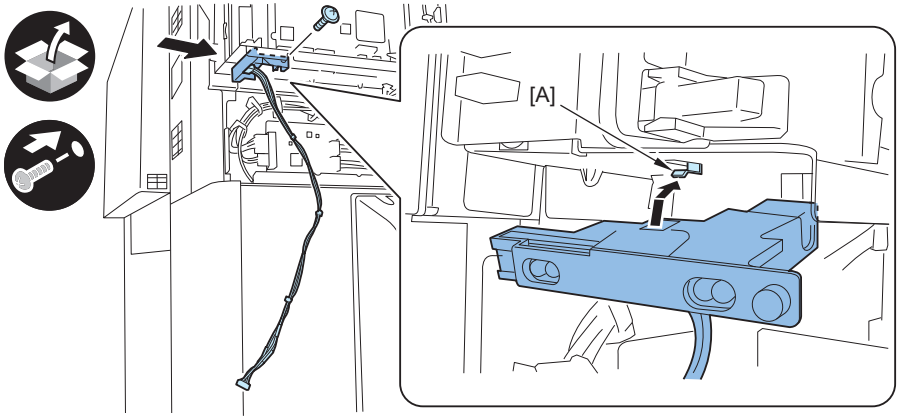
☐
5) Install the LED Cable (290mm; A:LED-Sig or FM4-0840) to the LED Board (Large).



F-9-622

☐
6) Insert the LED Board (Large) to the hook part [A] of the host machine to install.

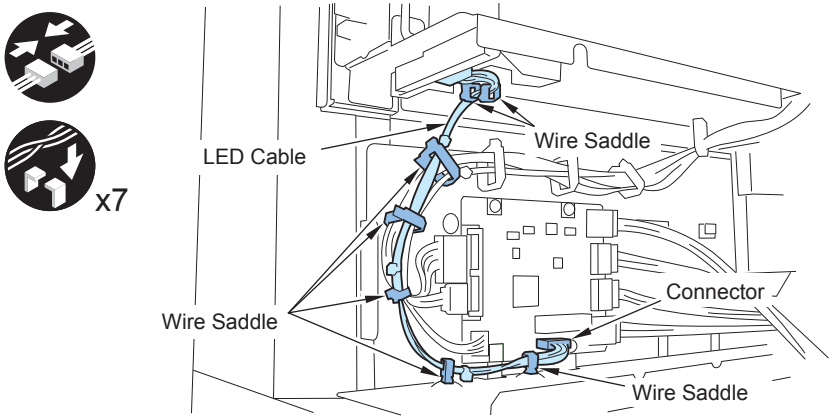
- 1 Screw (TP; M3x6)



F-9-623

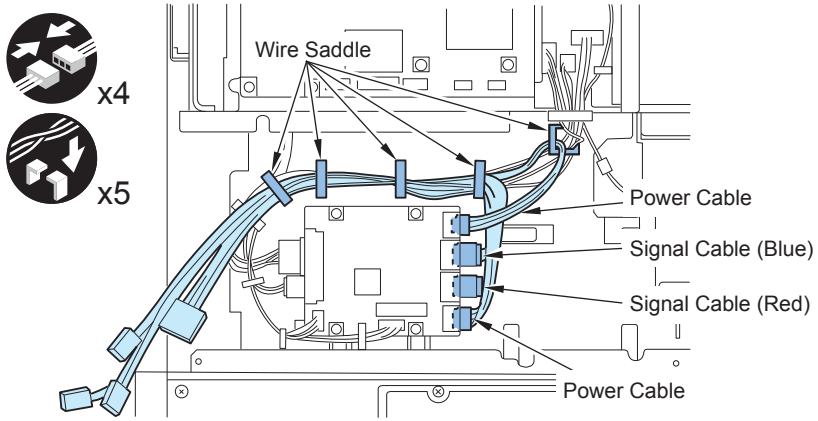
☐
7) Connect the LED Cable (290mm; A:LED-Sig or FM4-0840) to the Mirroring Board or Encryption Board.
- 1 Connector
- 7 Wire Saddles

CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-624

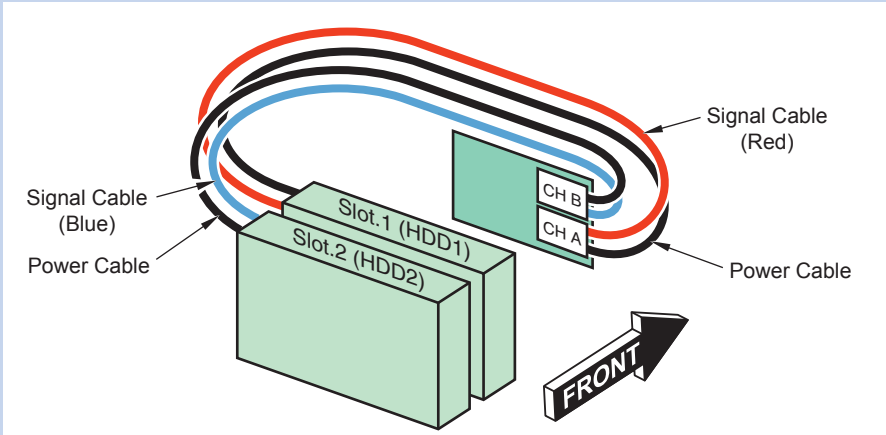
☐
8) Secure the Signal Cable and the Power Cable with the 5 wire saddles.



F-9-625

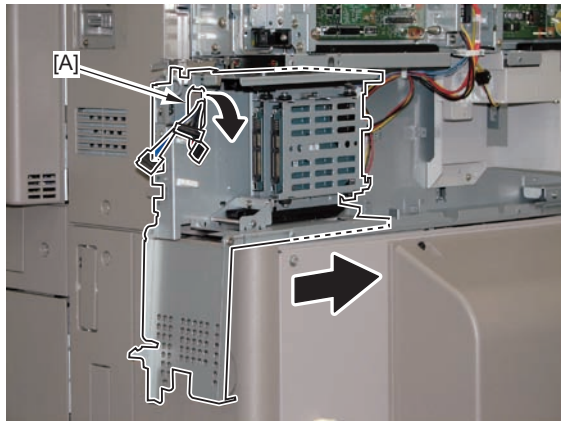
Installing the HDD Unit

NOTE:
The following shows the combination of the HDD and the Mirroring Board or Encryption Board.
- Connect Slot.1 to “CH A” (New HDD)
- Connect Slot.2 to “CH B” (New HDD)



F-9-626

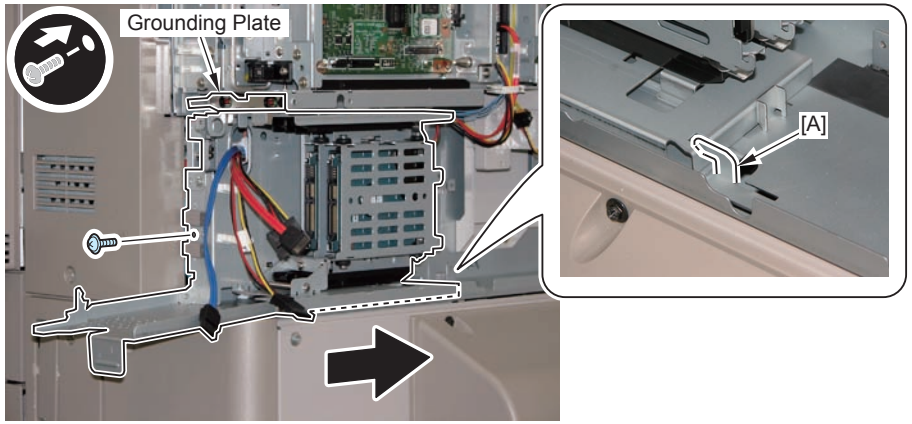
☐
1) Insert the HDD Unit approx. 2/3 along the rails of the host machine, and pass the Signal Cable and the Power Cable through the hole [A].



F-9-627

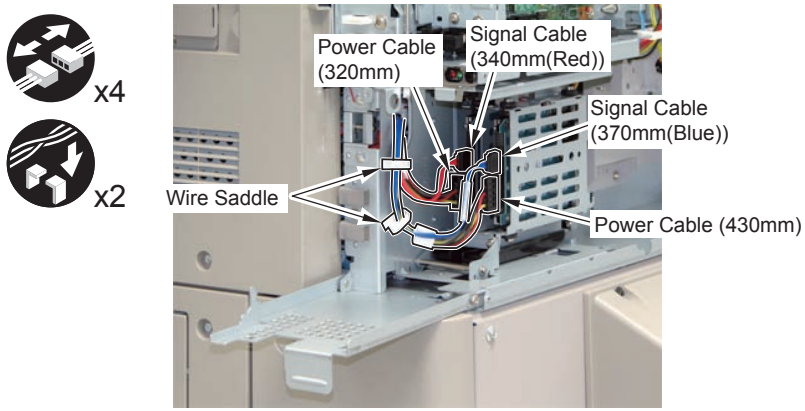
☐
2) Install the HDD Unit by inserting it until it stops.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)

NOTE:
- The [A] part should be fitted in the cut-off.
- Be sure not to deform the Grounding Plate.



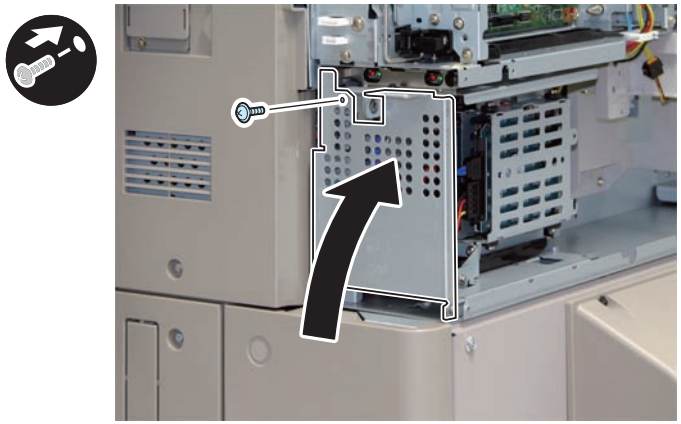
F-9-628

☐
3) Connect the Signal Cable and the Power Cable to the HDD.
- Connect the Power Cable (320 mm; A: HDD-Pow1 or FK2-8467) and the Signal Cable (340 mm (Red); A: HDD-Sig1 or FK2-8434) to the Slot.1 (on the host machine side).
- Connect the Signal Cable (370 mm (Blue); A: HDD-Sig2 or FK2-8441) and the Power Cable (430 mm; A: HDD-Pow2 or FK2-8463) to the Slot.2 (on the rear side), and secure the 4 cables using the 2 Wire Saddles.



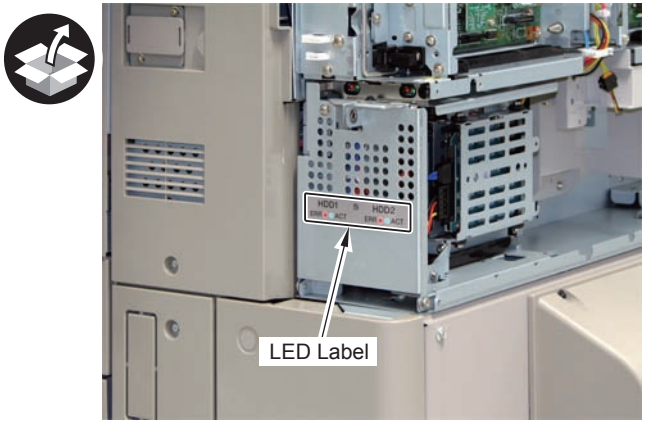
F-9-629

☐
4) Close the HDD Lid.
- 1 Screw (use the screw removed at step 6 of the “Removing the HDD Unit”)



F-9-630

☐
5) Affix the LED Label according to align with the ruled line on the HDD Lid.



F-9-631

☐
6) Install the removed covers.
- Rear Upper Cover (9 Screws)

CAUTION:
When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
7) Insert the power plug to the outlet.
8) Turn ON the main power switch.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

After Installing HDD Data Encryption & Mirroring Kit

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
   When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information (2.00) indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark ( ) is displayed on the lower left corner of a panel screen.

Setting for Mirroring

1) Specify the setting for Mirroring.
- Service Mode > COPIER > OPTION > FNC-SW > W/RAID; select "1" for W/RAID.

2) Turn OFF/ON the main power switch to enable the setting value.
3) Check that the UI screen is started normally.
4) Open the HDD Cover, and check that the LED is flashing.
- The green LED of HDD1 (Slot.1) is flashing.
- The green and red LEDs of HDD2 (Slot.2) are flashing.

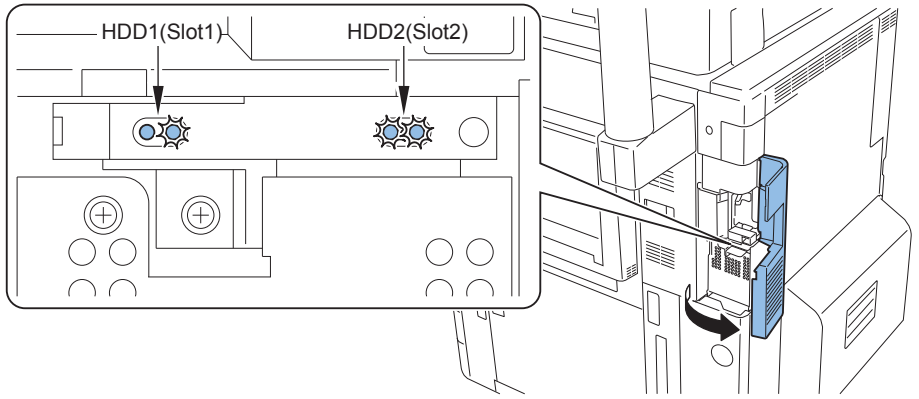
CAUTION:

Re-building process starts after setting W/RAID to "1".

When the error indicating the message of "Need to replace Hard Disk (Contact with Service Technician)" on the UI occurs, re-execute the re-building process as follows;

1) Check the lighted Red LED is for the HDD2.
2) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to "0".
3) Turn OFF/ON the main power switch of the host machine to enable the setting value.
4) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to "1".
5) Turn OFF/ON e the main power switch of the host machine to enable the setting value.

The abovementioned procedure is limited only for the re-building process at the initial installation. The error occurred at re-building process during operation is not targeted.



F-9-632

Reporting to the System Administrator at the End of the Work (only when HDD Data Encryption & Mirroring Kit has been installed)

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-6]

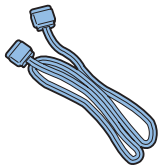
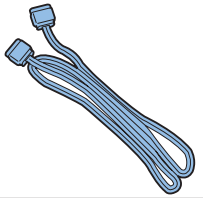
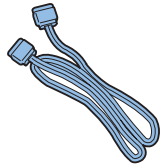
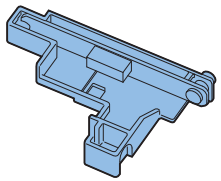
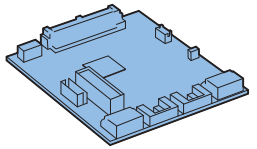
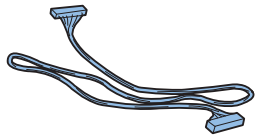
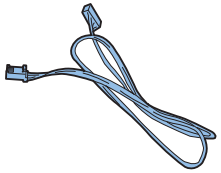
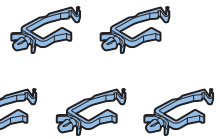
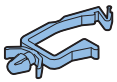
Standard HDD + HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.

If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

☐ [1] Signal Cable (340mm (Red); A:HDD-Sig1) x 1 	☐ [2] Signal Cable (450mm (Red); A:Cont-Sig) x 1 	☐ [3] Signal Cable (370mm (Blue); A:HDD-Sig2) x 1 
☐ [4] Power Cable (430mm; A:Cont-Pow) x 1 	☐ [5] Power Cable (430mm; A:HDD-Pow2) x 1 	☐ [6] Power Cable (320mm; A:HDD-Pow1) x 1 
☐ [7] LED Board (Large) x 1 	☐ [8] Encryption Board x 1 	☐ [9] LED Cable (290mm; A:LED-Sig) x 1 
☐ [10] STS Cable (420mm (Light blue); A:STS-Sig) x 1 	☐ [11] Wire Saddle (Small) x 5 Use 4 of them 	☐ [12] Wire Saddle (Middle) x 1 
		☐ [13] Wire Saddle (Large) x 1 

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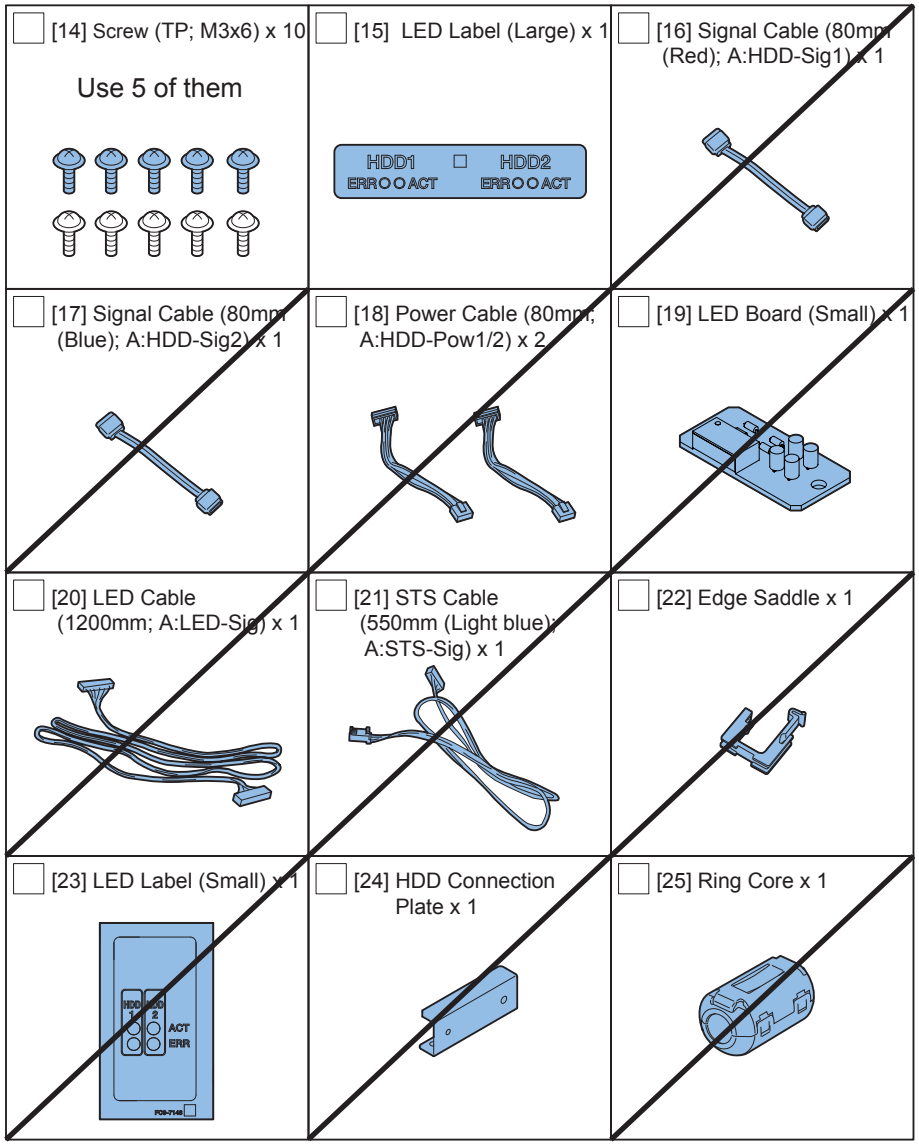


F-9-634

< CD/Guides >

- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

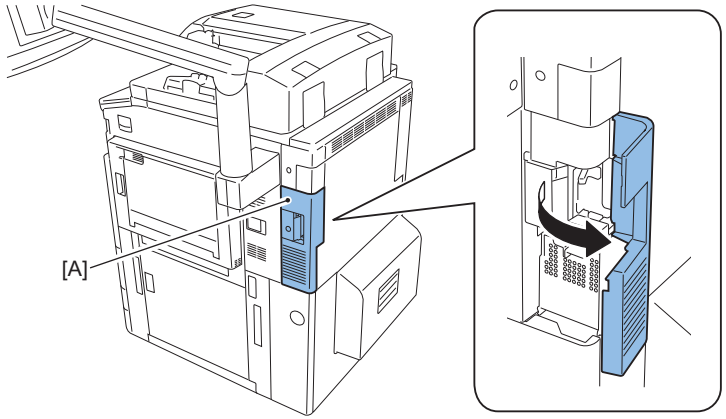
Check that the main power switch is OFF.

1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

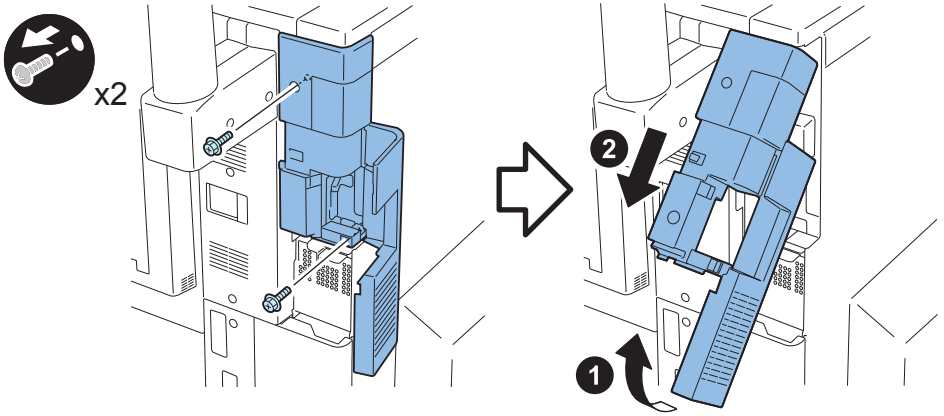
Removing the HDD Unit

☐
1) Push section [A] to open the HDD Cover.



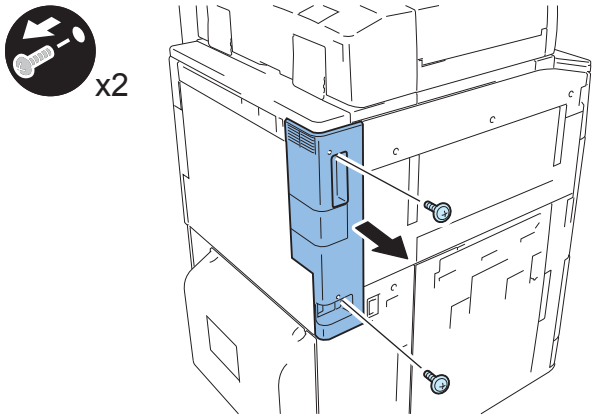
F-9-635

☐
2) Remove the Main Controller Right Cover Unit.
- 2 Screws



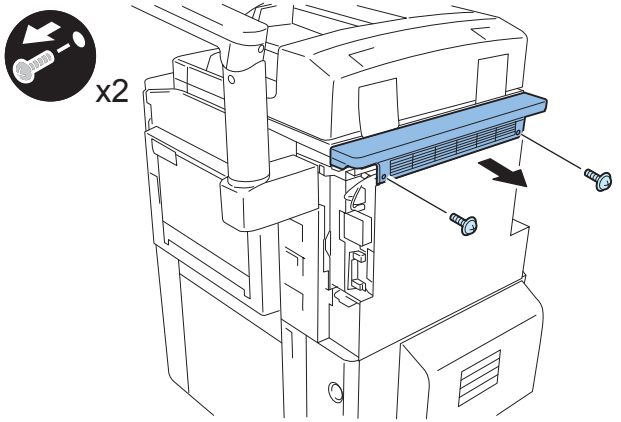
F-9-636

☐
3) Remove the Box Left Cover.
- 2 Screws



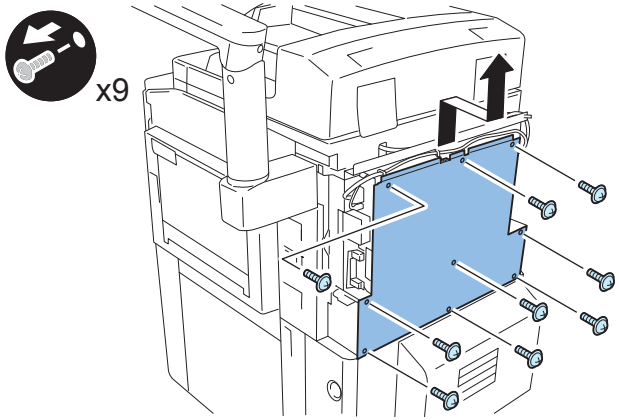
F-9-637

☐
4) Remove the Box Upper Cover.
- 2 Screws



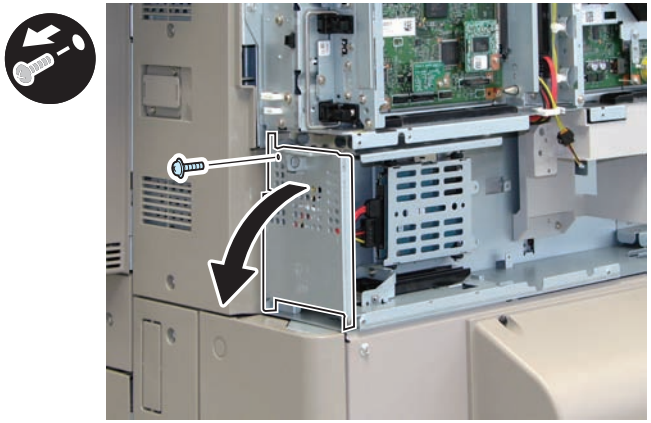
F-9-638

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-639

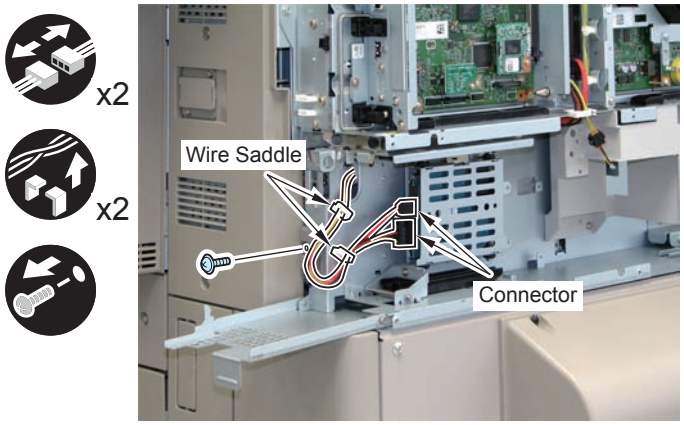
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw is reused at step 4 of “Installing the HDD Unit”)



F-9-640

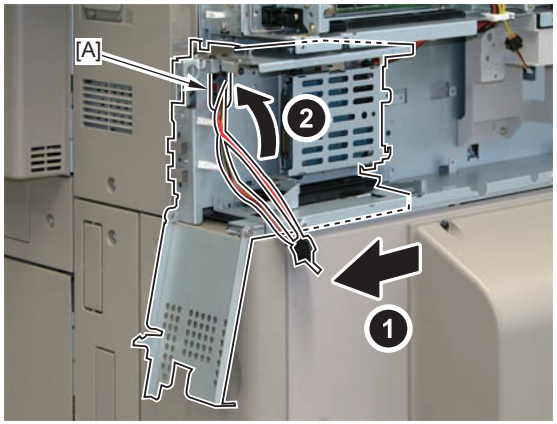
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 2.)



F-9-641

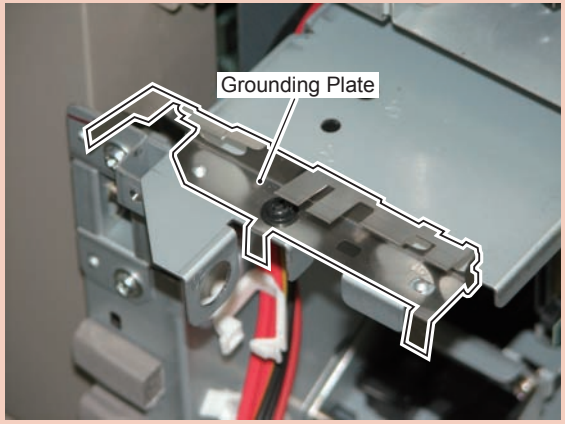
☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



F-9-642

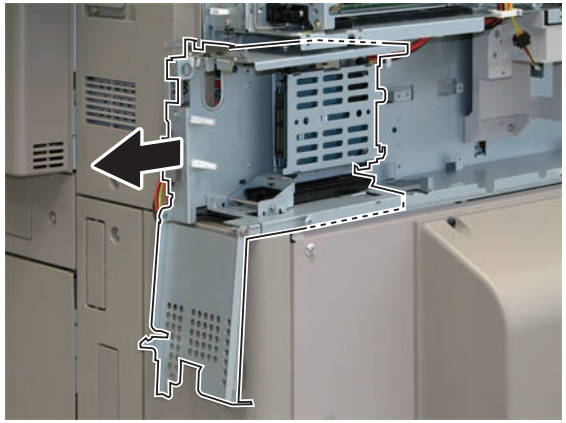
CAUTION:

Be sure not to deform the Grounding Plate.



F-9-643

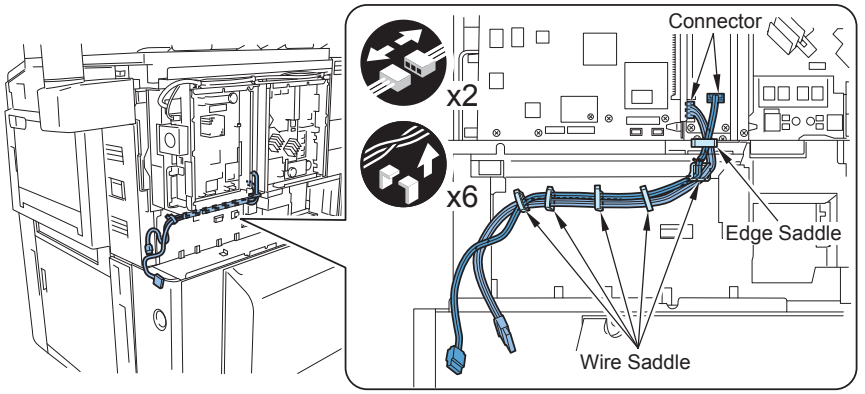
☐ 10) Remove the HDD Unit from the host machine.



F-9-644

☐ 11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)

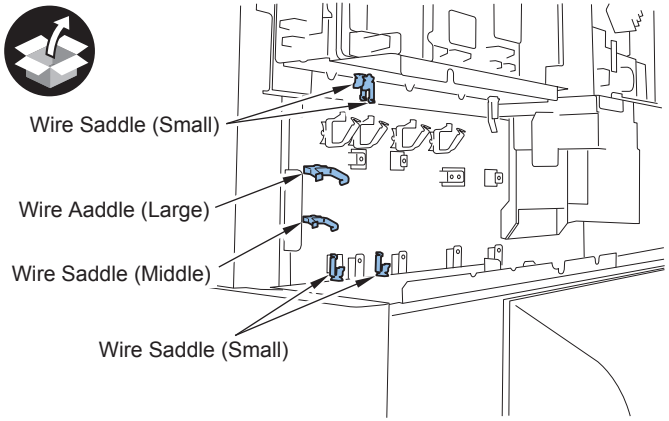
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-645

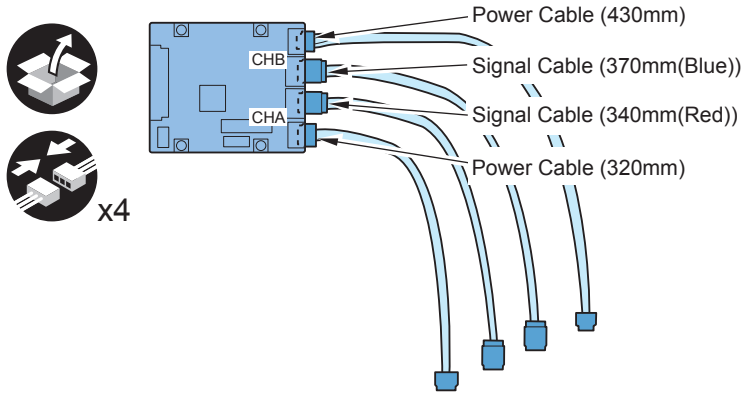
Installing the Encryption Board

☐
1) Install 1 wire saddle (Large), 1 wire saddle (Middle), and 4 wire saddles (Small).



F-9-646

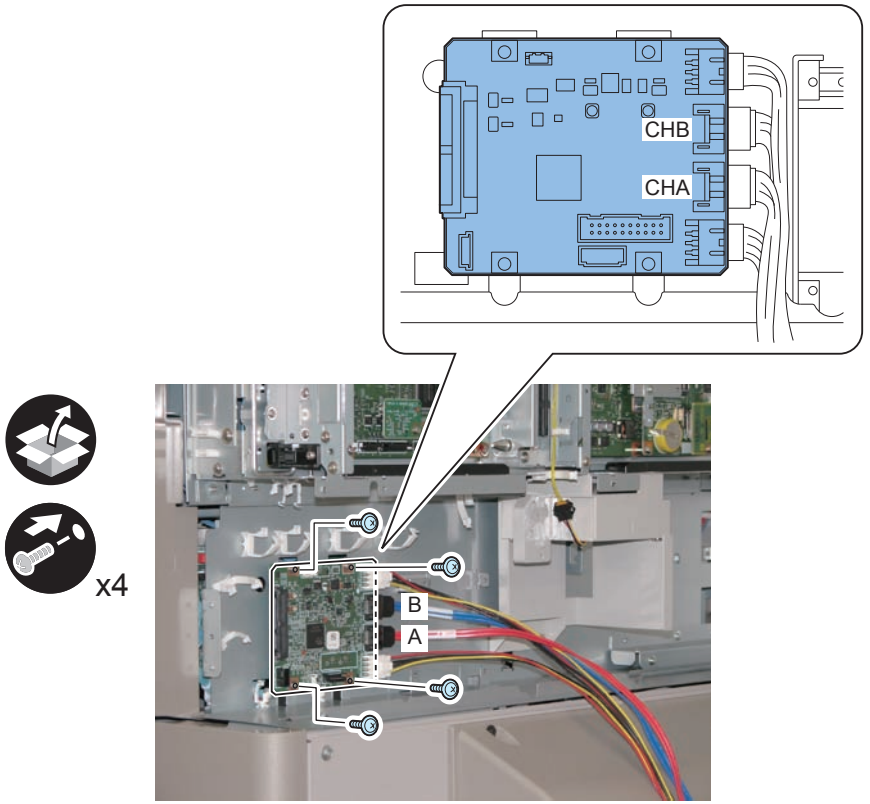
☐
2) Connect the Signal Cable and Power Cable to the Encryption Board.
- Power Cable (Long) (430mm; A:HDD-Pow2)
- Signal Cable (370mm (Blue); A:HDD-Sig2)
- Signal Cable (340mm (Red); A:HDD-Sig1)
- Power Cable (Short) (320mm; A:HDD-Pow1)



F-9-647

☐
3) Install the Encryption Board.
- 4 screws (TP; M3x6)

CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



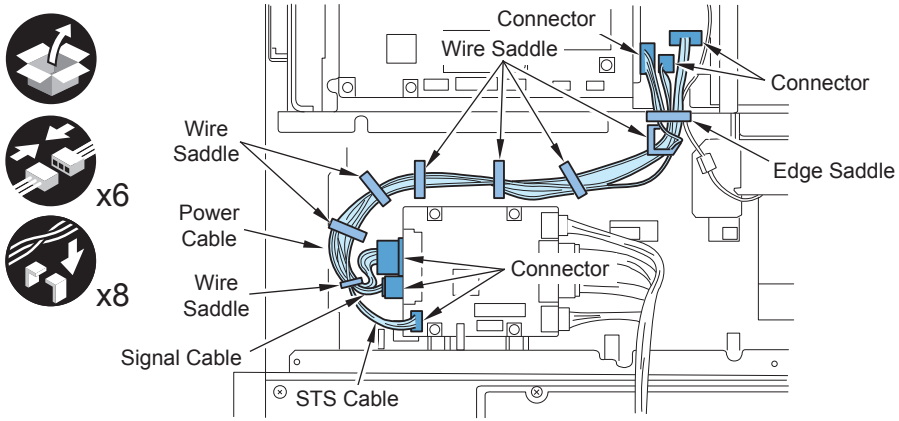
F-9-648

☐
4) Install the Signal Cable (450mm (Red); A:Cont-Sig), the Power Cable (430mm; A:Cont-Pow) and STS Cable (420mm (Light blue); A:STS-Sig).

- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

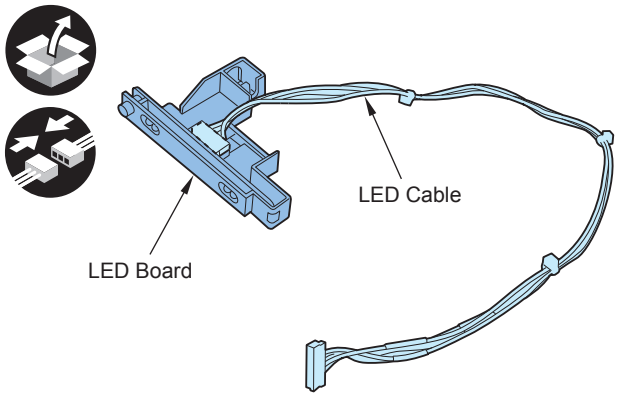
CAUTION:

- Install the Signal Cable (450mm (Red); A:Cont-Sig) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



F-9-649

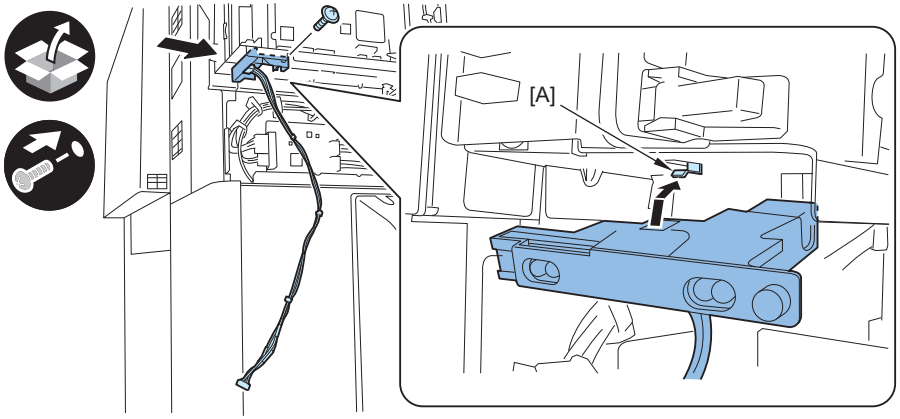
☐
5) Install the LED Cable (290mm; A:LED-Sig) to the LED Board (Large).



F-9-650

☐
6) Insert the LED Board (Large) to the hook part [A] of the host machine to install.

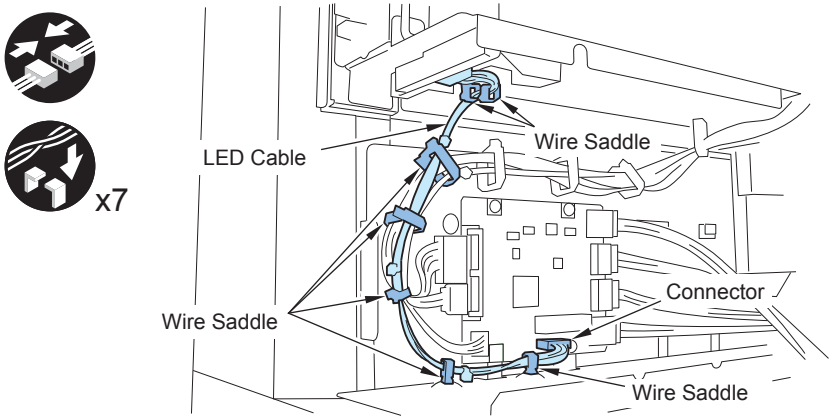
- 1 Screw (TP; M3x6)



F-9-651

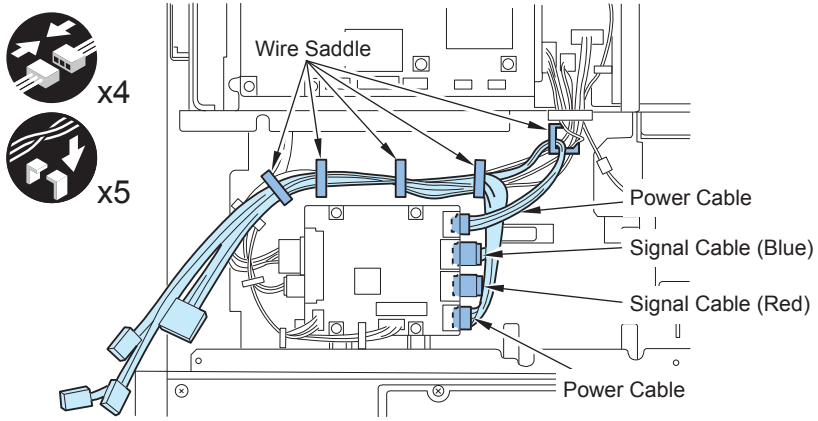
☐
7) Connect the LED Cable (290mm; A:LED-Sig) to the Encryption Board.
- 1 Connector
- 7 Wire Saddles

CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-652

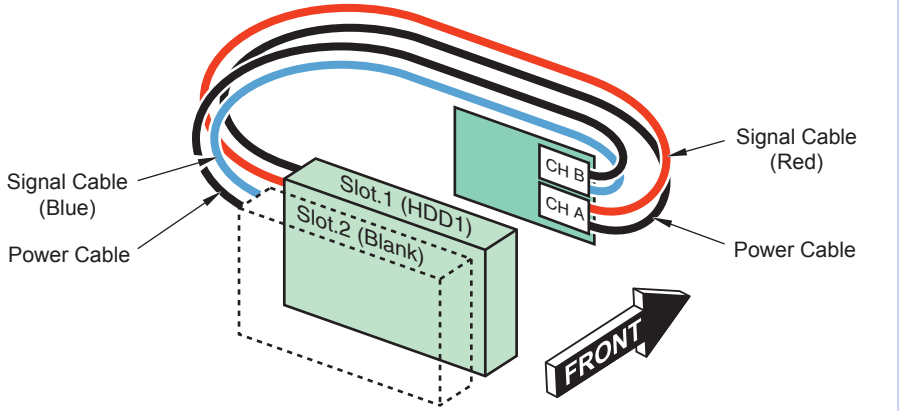
☐
8) Secure the Signal Cable and the Power Cable with the 5 wire saddles.



F-9-653

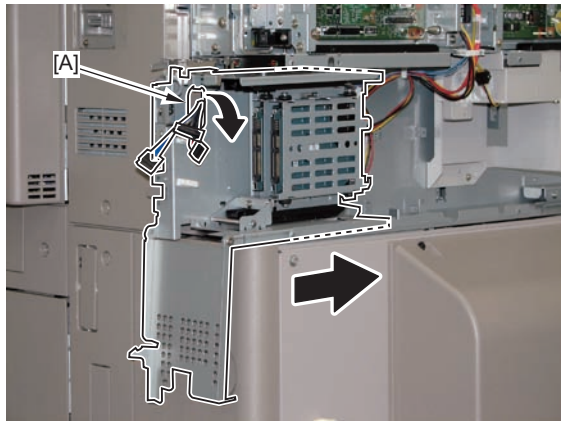
Installing the HDD Unit

NOTE:
The following shows the combination of the HDD and the Encryption Board.
- Connect Slot.1 to “CH A” (The HDD which originally mounted)
- No HDD to Slot.2



F-9-654

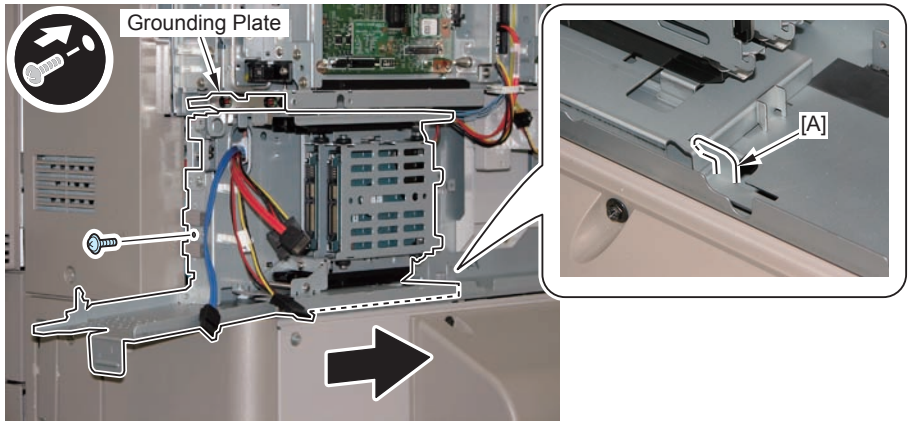
☐
1) Insert the HDD Unit approx. 2/3 along the rails of the host machine, and pass the Signal Cable and the Power Cable through the hole [A].



F-9-655

☐
2) Install the HDD Unit by inserting it until it stops.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)

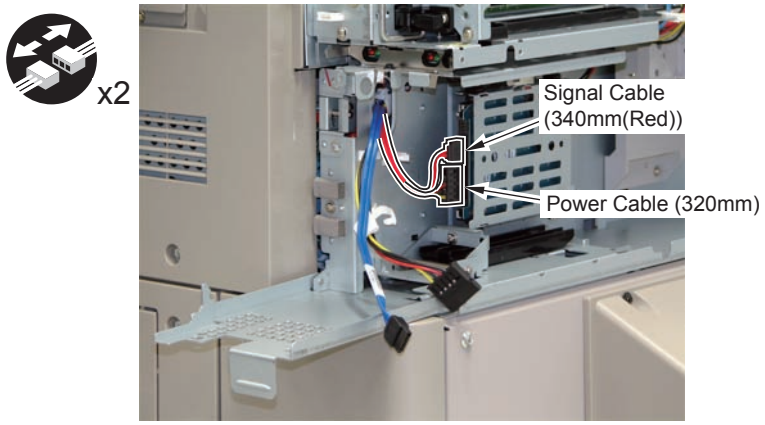
NOTE:
- The [A] part should be fitted in the cut-off.
- Be sure not to deform the Grounding Plate.



F-9-656

☐
3) Connect the Signal Cable and the Power Cable to the HDD.

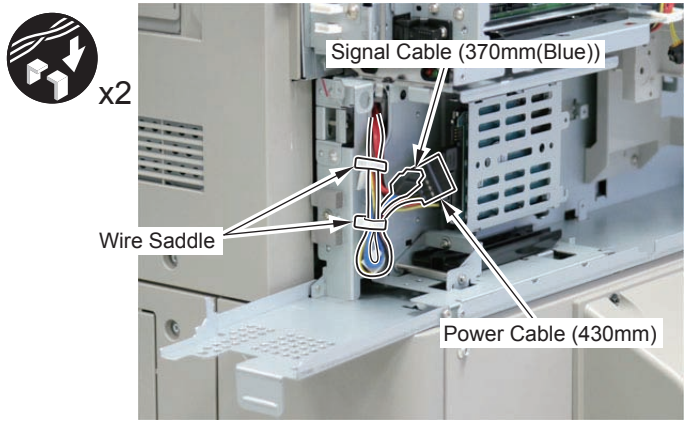
☐
3-1) Connect the Power Cable (320 mm; A: HDD-Pow1) and the Signal Cable (340 mm (Red); A: HDD-Sig1) to the Slot.1 (on the host machine side).



F-9-657

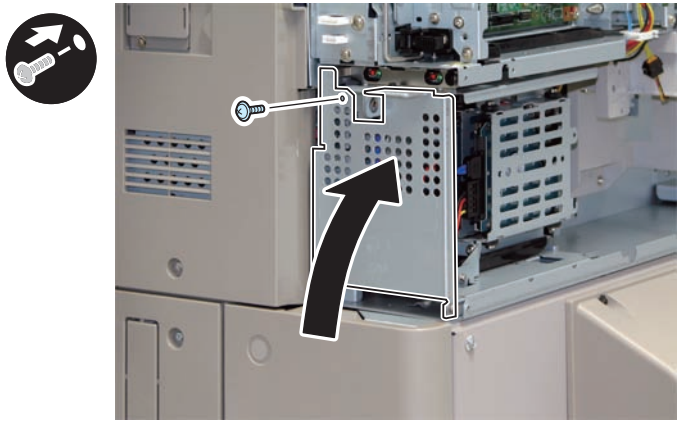
☐
3-2) Fold the Signal Cable (370mm (Blue); A: HDD-Sig2) and the Power Cable (430mm; A: HDD-Pow2), and secure the 4 cables using the 2 Wire Saddles as shown in the figure.

NOTE:
Secure the cables with the ends of the connectors facing the HDD.



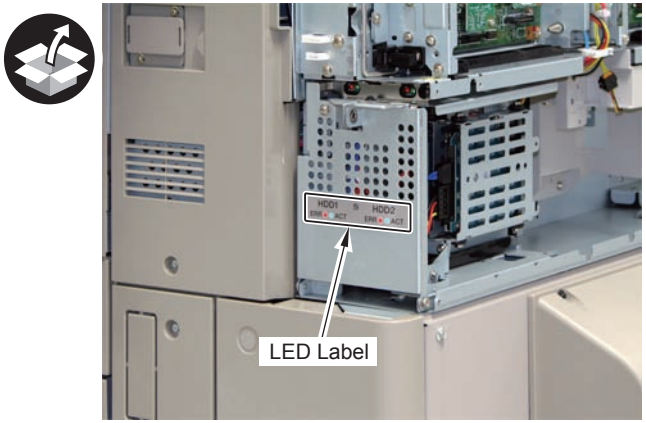
F-9-658

☐
4) Close the HDD Lid.
- 1 Screw (use the screw removed at step 6 of the “Removing the HDD Unit”)



F-9-659

☐
5) Affix the LED Label according to align with the ruled line on the HDD Lid.



F-9-660

☐
6) Install the removed covers.
- Rear Upper Cover (9 Screws)

CAUTION:
When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
7) Insert the power plug to the outlet.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

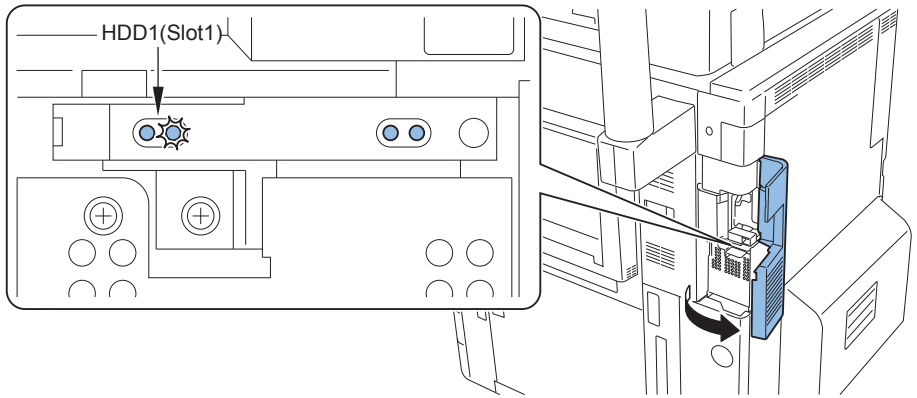
The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark ( ) is displayed on the lower left corner of a panel screen.

Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.
- The green LED of HDD1 (Slot.1) is flashing.



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Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-7]

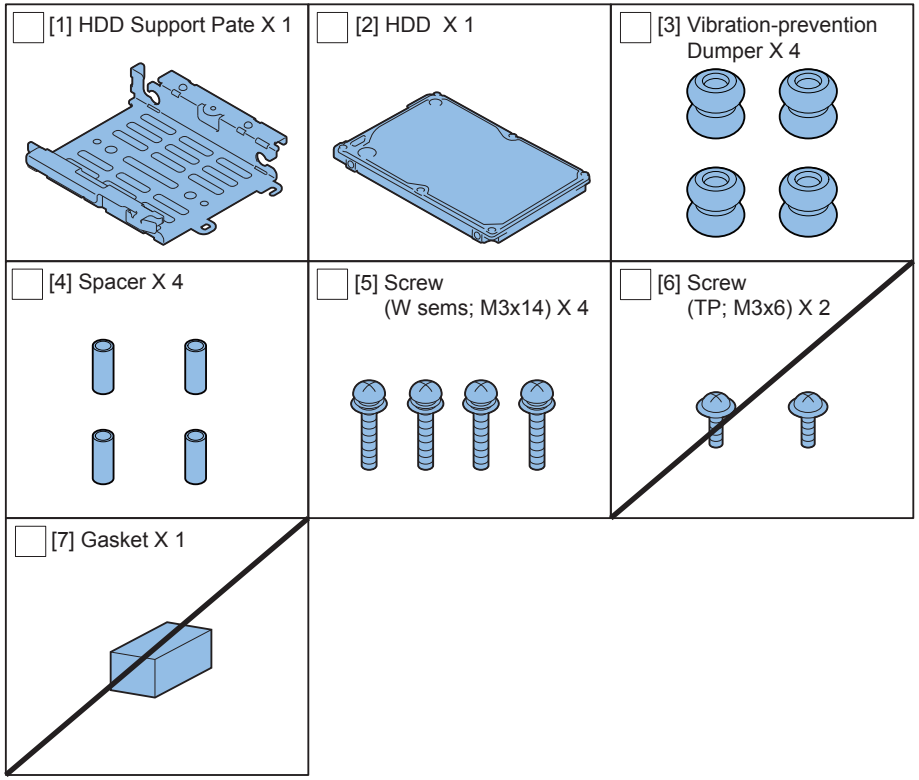
Option HDD (1TB) + HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

Option HDD (1TB)



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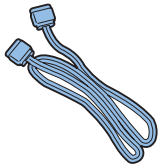
< CD/Guides >

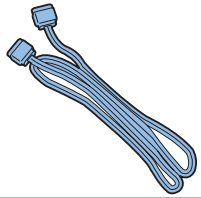
- FCC/IC Sheet

HDD Data Encryption & Mirroring Kit

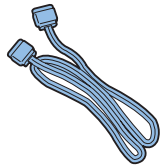
- [ ] [1] Signal Cable (340mm (Red); A:HDD-Sig1) x 1



- [ ] [2] Signal Cable (450mm (Red); A:Cont-Sig) x 1



- [ ] [3] Signal Cable (370mm (Blue); A:HDD-Sig2) x 1

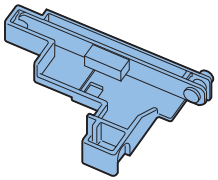


- [ ] [4] Power Cable (430mm; A:Cont-Pow) x 1

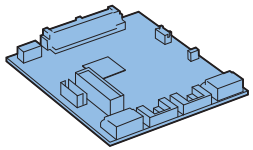
- [ ] [5] Power Cable (430mm; A:HDD-Pow2) x 1

- [ ] [6] Power Cable (320mm; A:HDD-Pow1) x 1

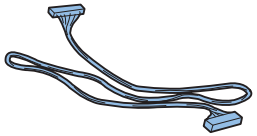
- [ ] [7] LED Board (Large) x 1



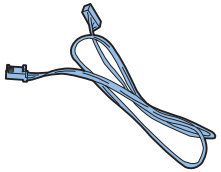
- [ ] [8] Encryption Board x 1



- [ ] [9] LED Cable (290mm; A:LED-Sig) x 1

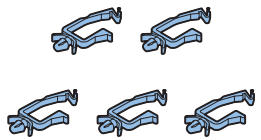


- [ ] [10] STS Cable (420mm (Light blue); A:STS-Sig) x 1



- [ ] [11] Wire Saddle (Small) x 5

Use 4 of them



- [ ] [12] Wire Saddle (Middle) x 1

- [ ] [13] Wire Saddle (Large) x 1

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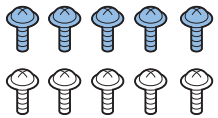
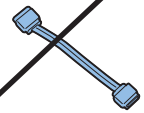
- [ ] [14] Screw (TP; M3x6) x 10

Use 5 of them

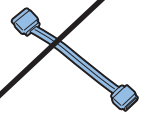


- [ ] [15] LED Label (Large) x 1

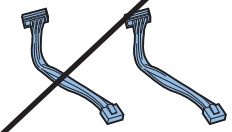
- [ ] [16] Signal Cable (80mm; (Red); A:HDD-Sig1) x 1



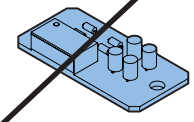
- [ ] [17] Signal Cable (80mm; (Blue); A:HDD-Sig2) x 1



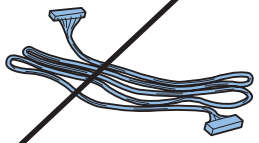
- [ ] [18] Power Cable (80mm; A:HDD-Pow1/2) x 2



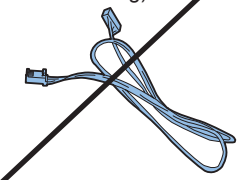
- [ ] [19] LED Board (Small) x 1



- [ ] [20] LED Cable (1200mm; A:LED-Sig) x 1

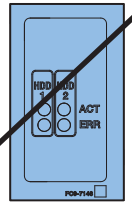


- [ ] [21] STS Cable (550mm (Light blue); A:STS-Sig) x 1

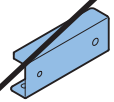


- [ ] [22] Edge Saddle x 1

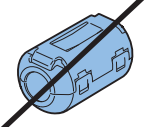
- [ ] [23] LED Label (Small) x 1



- [ ] [24] HDD Connection Plate x 1



- [ ] [25] Ring Core x 1



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< CD/Guides >
- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

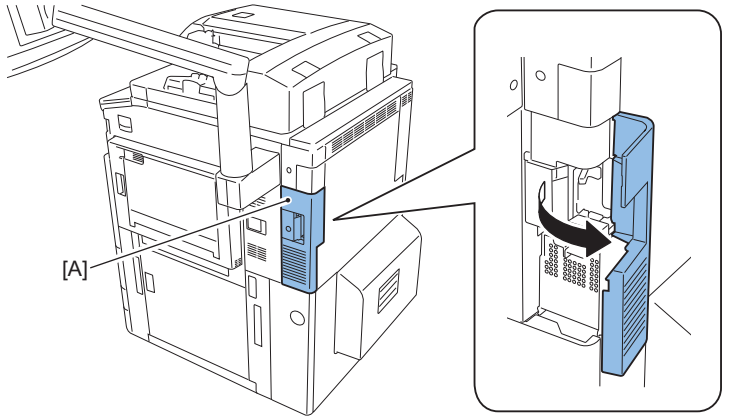
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Removing the HDD Unit

☐

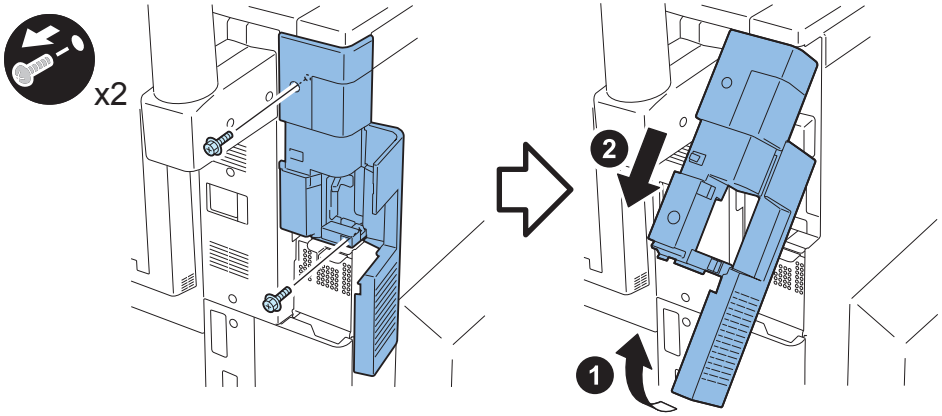
1) Push section [A] to open the HDD Cover.



F-9-665

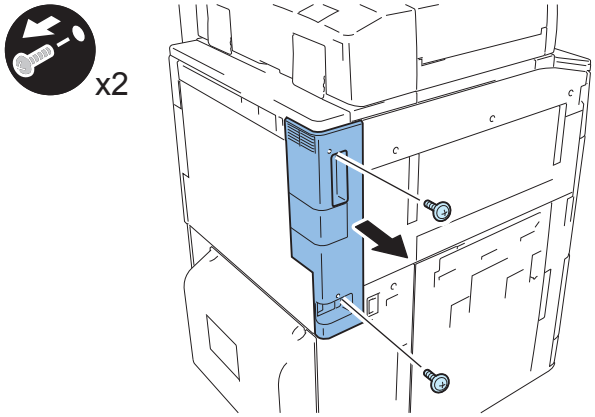
☐

2) Remove the Main Controller Right Cover Unit.
- 2 Screws



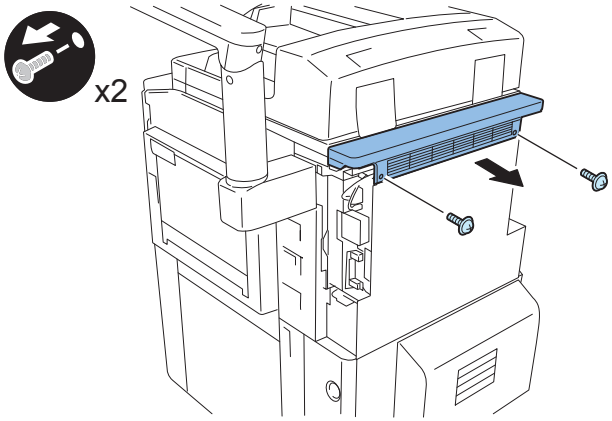
F-9-666

☐
3) Remove the Box Left Cover.
- 2 Screws



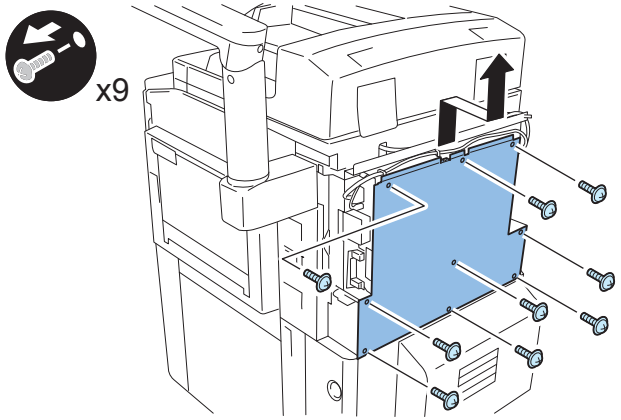
F-9-667

☐
4) Remove the Box Upper Cover.
- 2 Screws



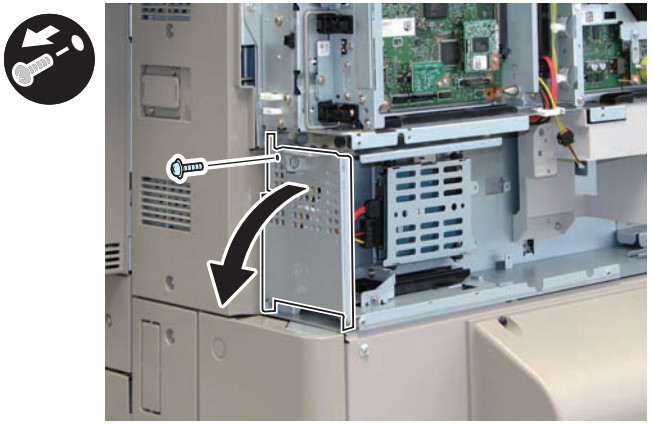
F-9-668

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-669

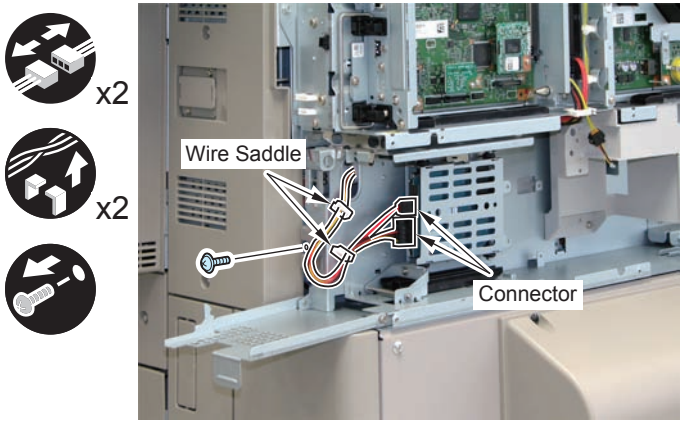
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw is reused at step 4 of “Installing the HDD Unit”)



F-9-670

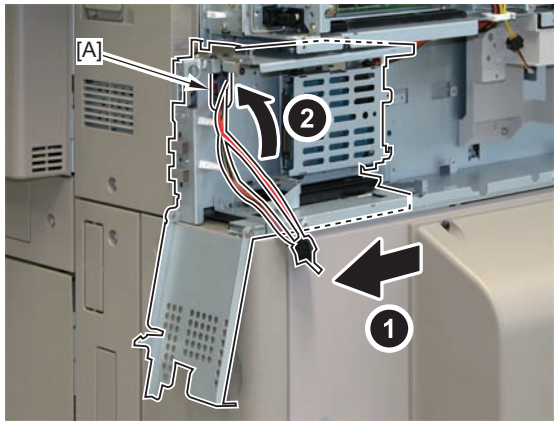
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 2.)



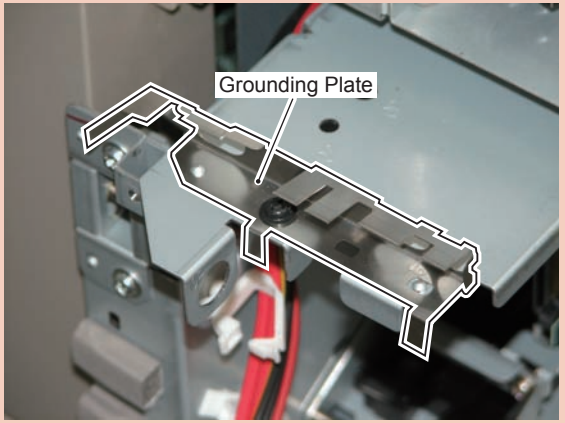
F-9-671

☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



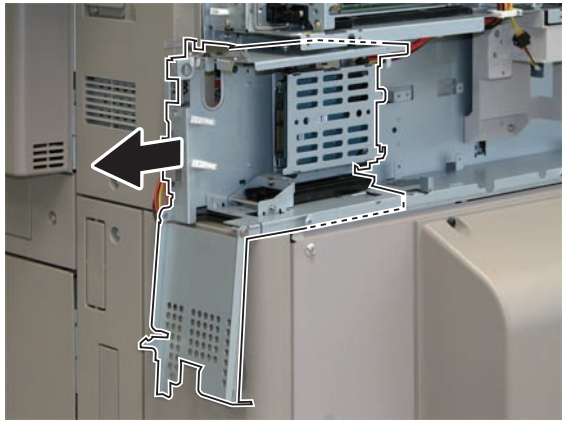
F-9-672

CAUTION:
Be sure not to deform the Grounding Plate.



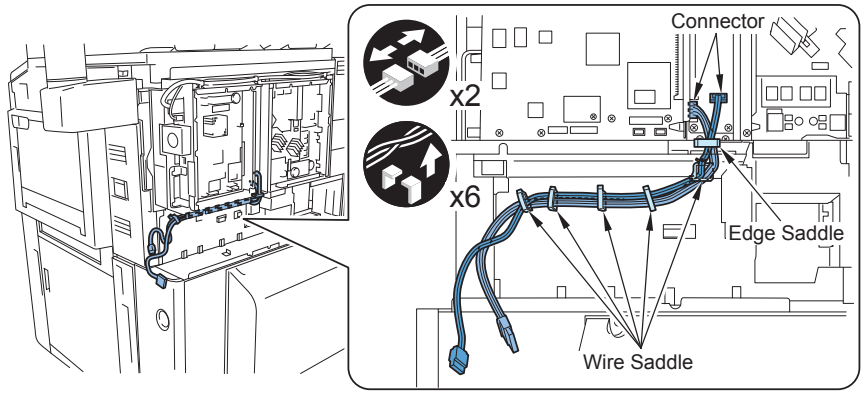
F-9-673

☐
10) Remove the HDD Unit from the host machine.



F-9-674

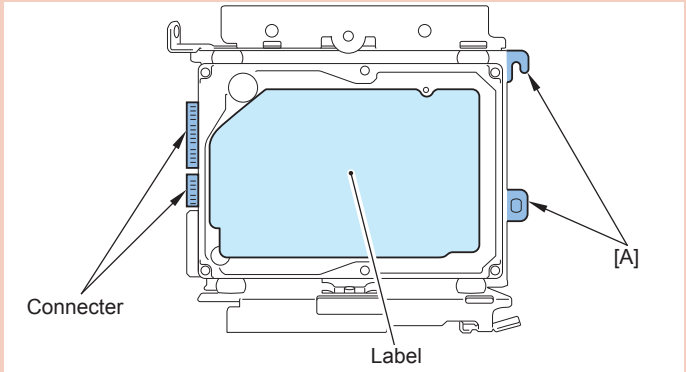
☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-675

Assembling and Installing the Option HDD

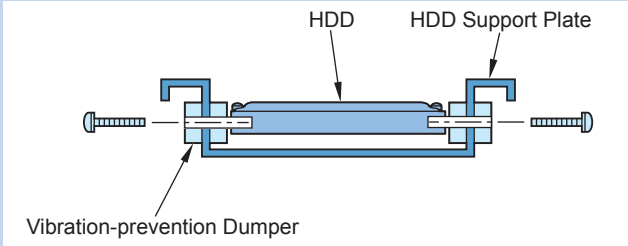
CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Make sure that [A] part of HDD Support Plate is placed at the opposite side of connector.



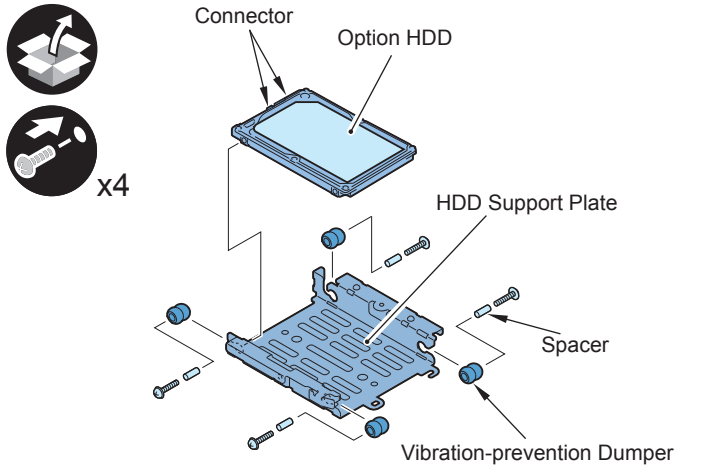
F-9-676

☐
1) Assemble the Option HDD (1TB).
- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD.



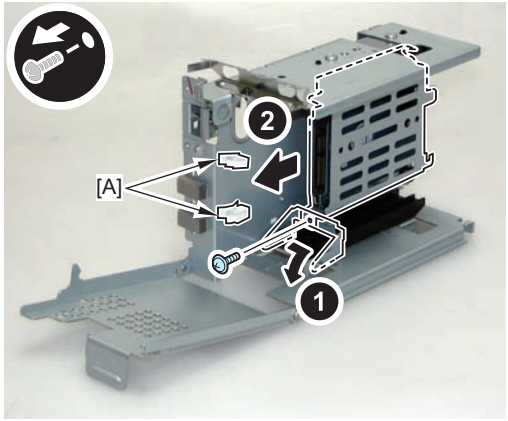
F-9-677



F-9-678

☐
2) Turn the HDD Fixation Plate toward the front, and remove the HDD. (The removed HDD will not be used.)
- 1 Screw (The removed screws will be used in step 4.)

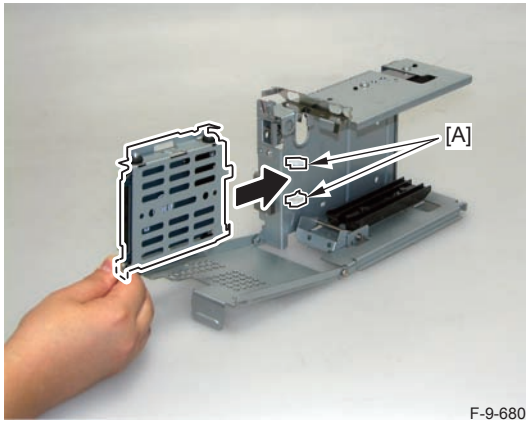
NOTE:
If the Wire Saddles [A] interfere with removal of the HDD, remove the 2 Wire Saddles [A].



F-9-679

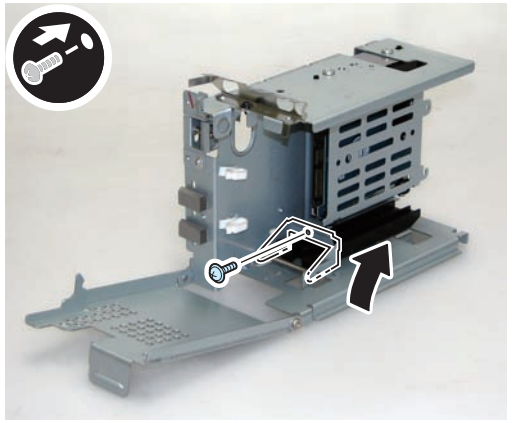
☐
3) Insert the 2 assembled Option HDDs into the slots 1 and 2.

NOTE:
If you have removed the Wire Saddles [A] in the previous step, install the 2 Wire Saddles [A] after inserting the 2 Option HDDs.



F-9-680

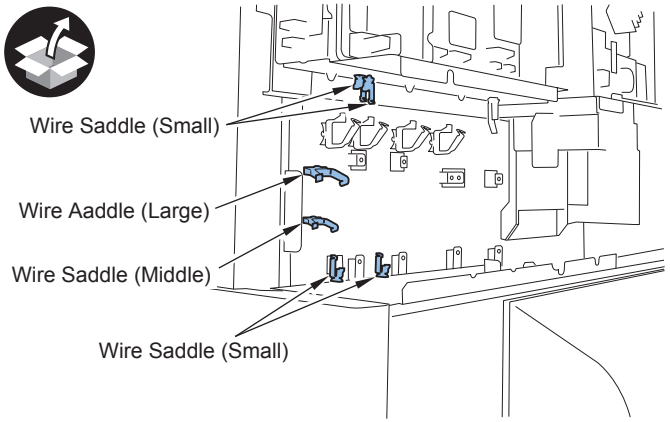
☐
4) Install the HDD Fixed Plate.
- 1 Screw (Use the screws removed in step 2.)



F-9-681

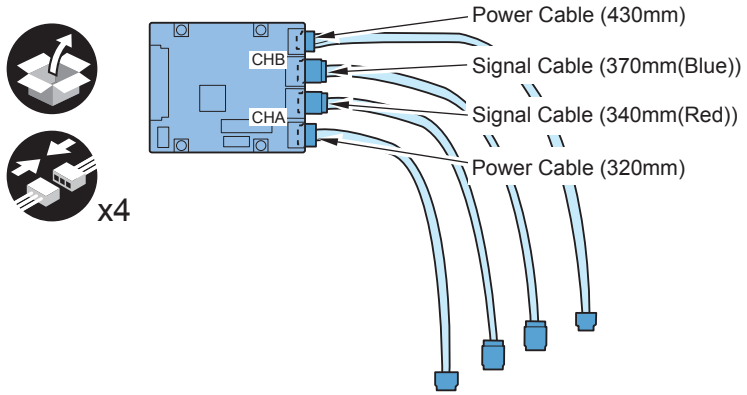
Installing the Encryption Board

☐
1) Install 1 wire saddle (Large), 1 wire saddle (Middle), and 4 wire saddles (Small).



F-9-682

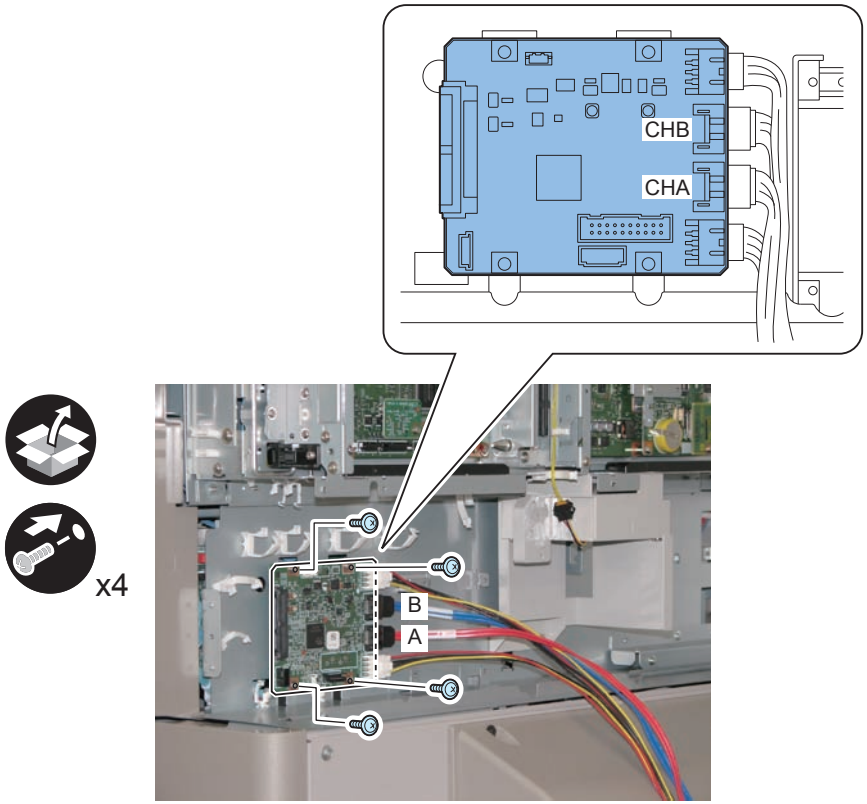
☐
2) Connect the Signal Cable and Power Cable to the Encryption Board.
- Power Cable (Long) (430mm; A:HDD-Pow2)
- Signal Cable (370mm (Blue); A:HDD-Sig2)
- Signal Cable (340mm (Red); A:HDD-Sig1)
- Power Cable (Short) (320mm; A:HDD-Pow1)



F-9-683

☐
3) Install the Encryption Board.
- 4 screws (TP; M3x6)

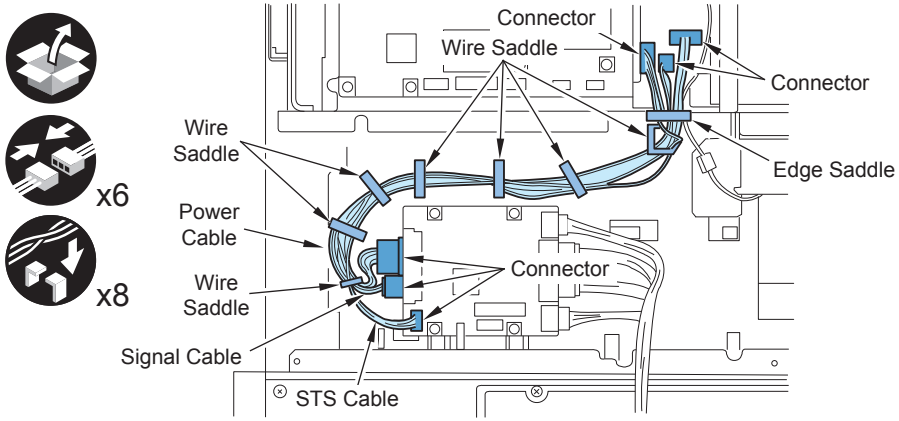
CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



F-9-684

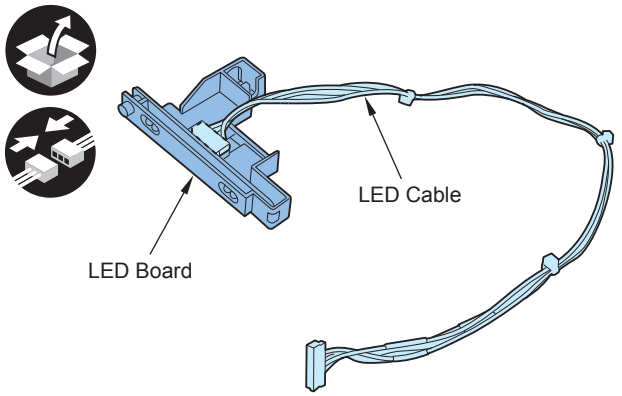
☐
4) Install the Signal Cable (450mm (Red); A:Cont-Sig), the Power Cable (430mm; A:Cont-Pow) and STS Cable (420mm (Light blue); A:STS-Sig).
- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

CAUTION:
- Install the Signal Cable (450mm (Red); A:Cont-Sig) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



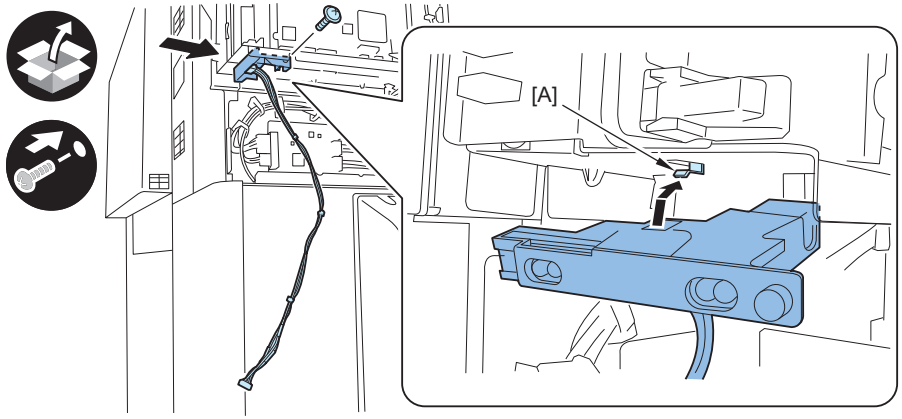
F-9-685

☐
5) Install the LED Cable (290mm; A:LED-Sig) to the LED Board (Large).



F-9-686

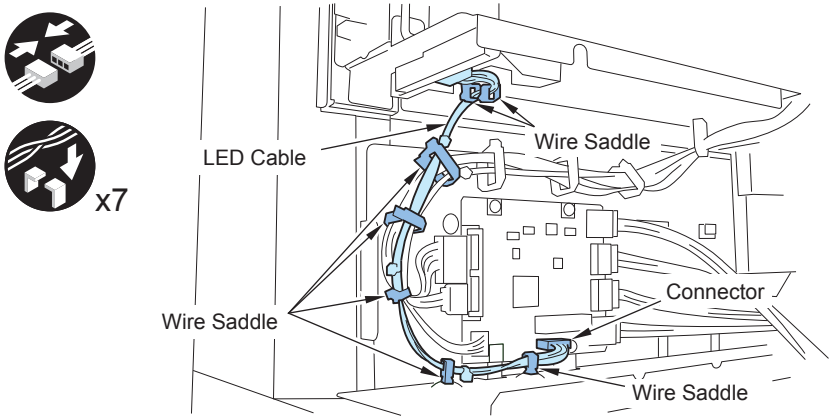
☐
6) Insert the LED Board (Large) to the hook part [A] of the host machine to install.
- 1 Screw (TP; M3x6)



F-9-687

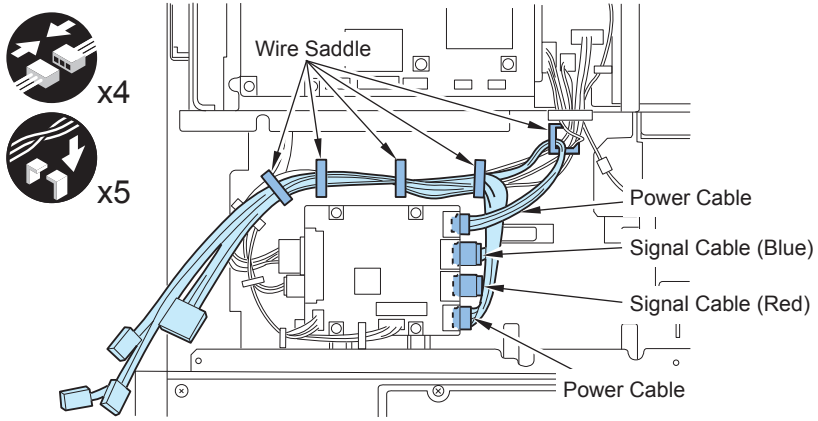
☐
7) Connect the LED Cable (290mm; A:LED-Sig) to the Encryption Board.
- 1 Connector
- 7 Wire Saddles

CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-688

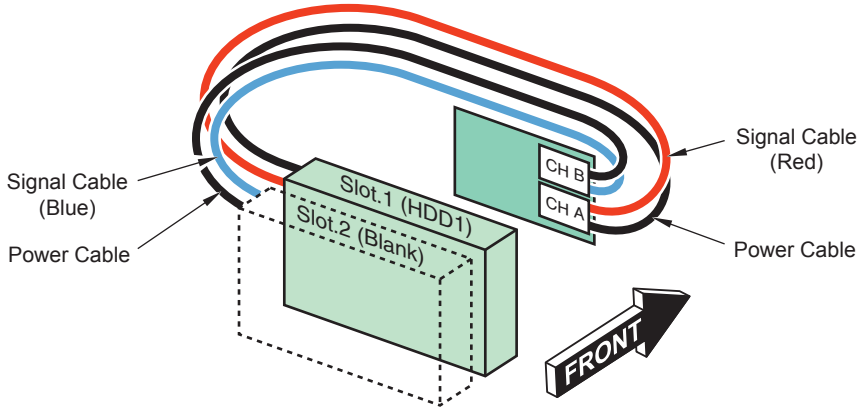
☐
8) Secure the Signal Cable and the Power Cable with the 5 wire saddles.



F-9-689

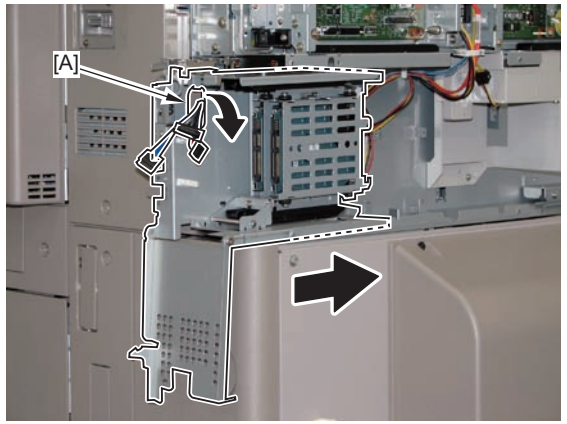
Installing the HDD Unit

NOTE:
The following shows the combination of the HDD and the Encryption Board.
- Connect Slot.1 to “CH A” (New HDD)
- No HDD to Slot.2



F-9-690

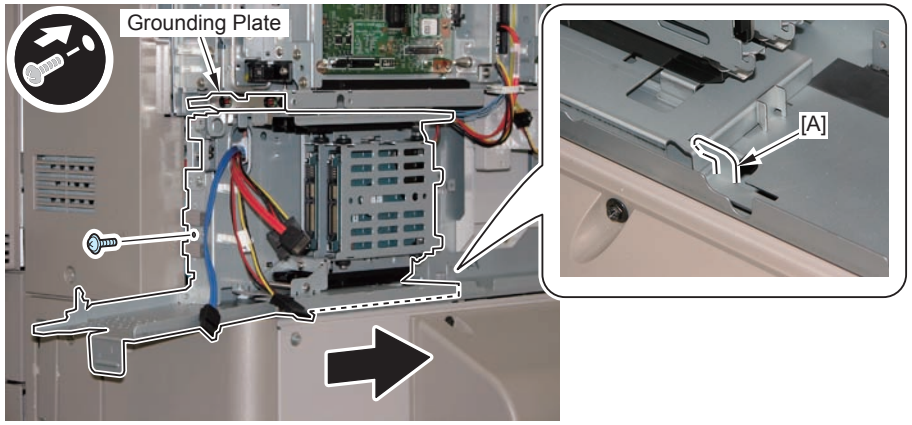
☐
1) Insert the HDD Unit approx. 2/3 along the rails of the host machine, and pass the Signal Cable and the Power Cable through the hole [A].



F-9-691

☐
2) Install the HDD Unit by inserting it until it stops.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)

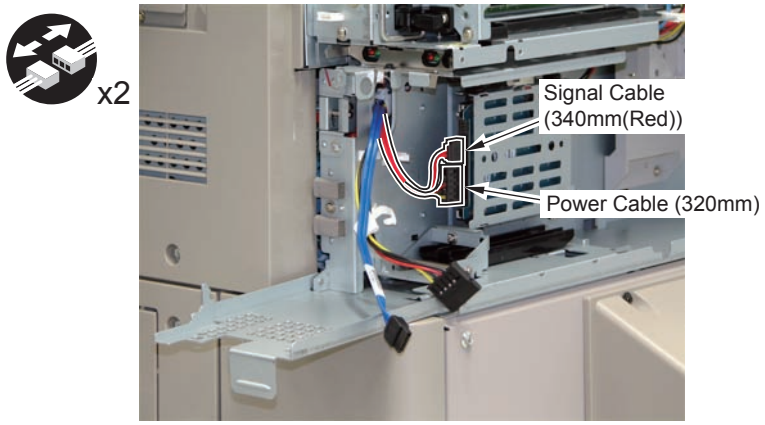
NOTE:
- The [A] part should be fitted in the cut-off.
- Be sure not to deform the Grounding Plate.



F-9-692

☐
3) Connect the Signal Cable and the Power Cable to the HDD.

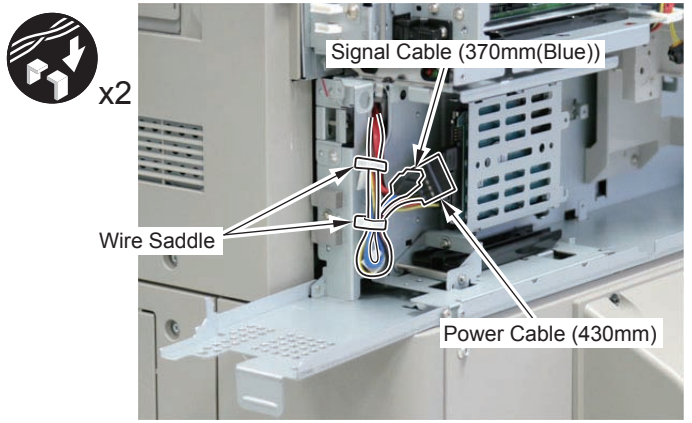
☐
3-1) Connect the Power Cable (320 mm; A: HDD-Pow1) and the Signal Cable (340 mm (Red); A: HDD-Sig1) to the Slot.1 (on the host machine side).



F-9-693

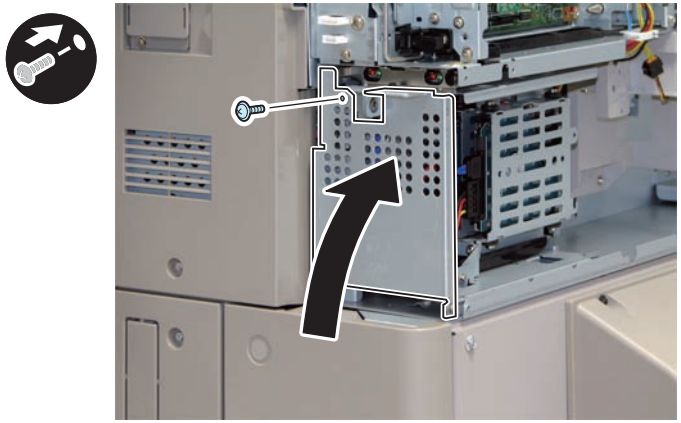
☐
3-2) Fold the Signal Cable (370mm (Blue); A: HDD-Sig2) and the Power Cable (430mm; A: HDD-Pow2), and secure the 4 cables using the 2 Wire Saddles as shown in the figure.

NOTE:
Secure the cables with the ends of the connectors facing the HDD.



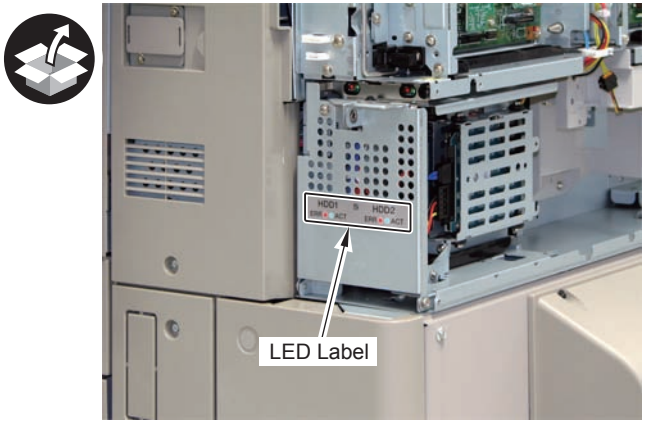
F-9-694

☐
4) Close the HDD Lid.
- 1 Screw (use the screw removed at step 6 of the “Removing the HDD Unit”)



F-9-695

☐
5) Affix the LED Label according to align with the ruled line on the HDD Lid.



F-9-696

☐
6) Install the removed covers.
- Rear Upper Cover (9 Screws)

CAUTION:
When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
7) Insert the power plug to the outlet.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

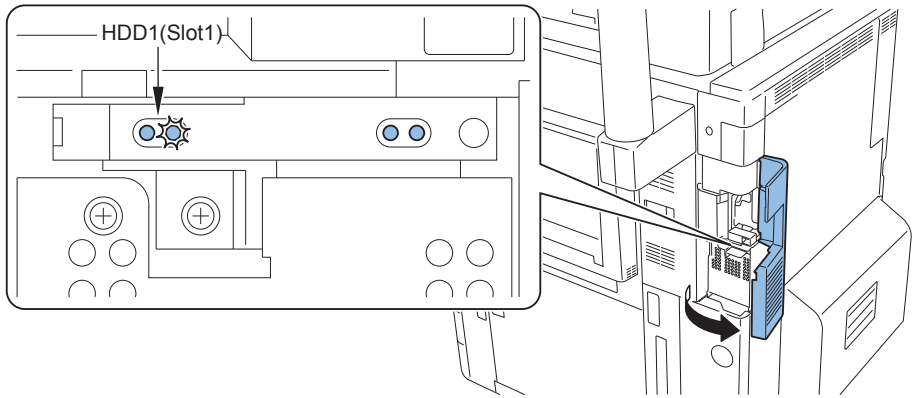
The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark ( ) is displayed on the lower left corner of a panel screen.

Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.
- The green LED of HDD1 (Slot.1) is flashing.



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Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-8]

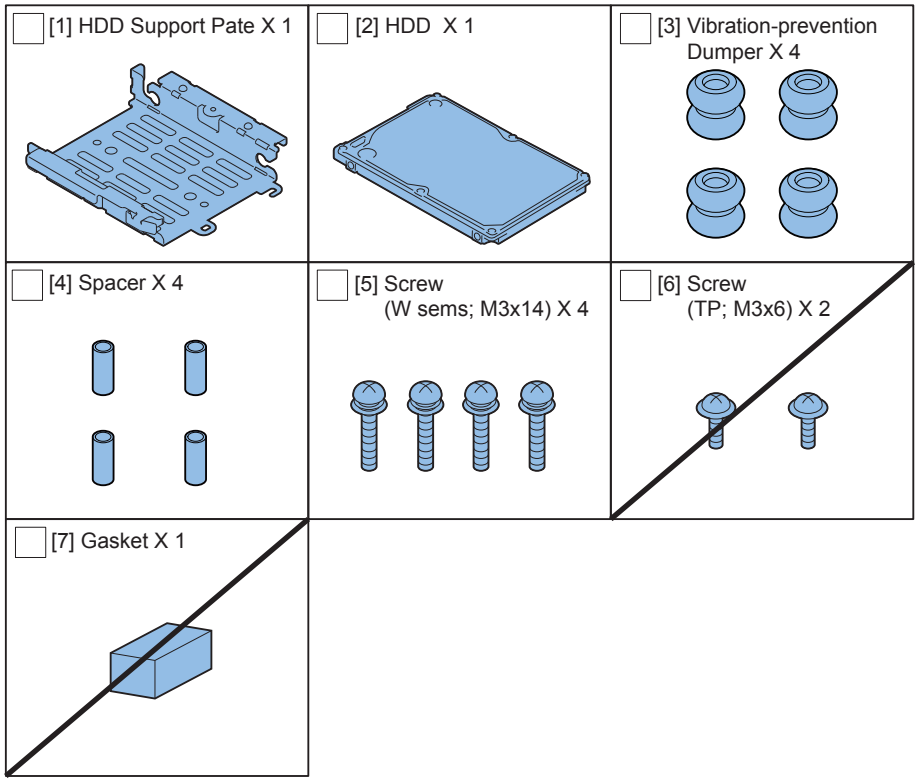
Standard HDD + Option HDD (160GB) + Removable HDD Kit
+ HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

Option HDD (160GB)

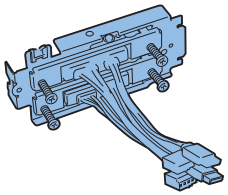
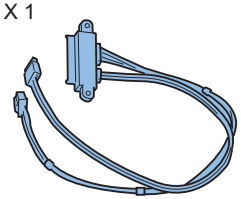
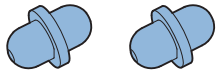
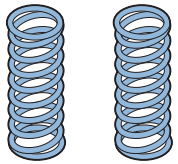
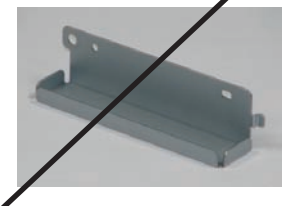
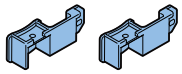
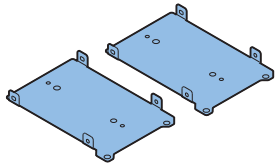
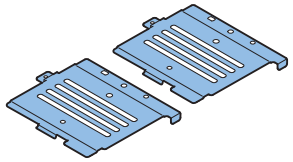
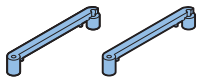


F-9-698

< CD/Guides >

- FCC/IC Sheet

Removable HDD Kit

☐ [1] HDD Drawer Unit X 1 	☐ [2] IV Cable (A:HDD-Pow1/A:HDD-Sig1) X 1 	☐ [3] HDD Lock Pin X 2 
☐ [4] HDD Lock Spring X 2 	☐ [5] HDD Face Plate X 1 	☐ [6] HDD Handle X 2 
☐ [7] HDD Connector Plate X 2 	☐ [8] HDD Cover X 2 	☐ [9] Connector Fixing Block X 2 

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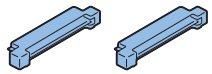
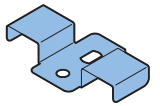
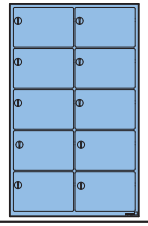
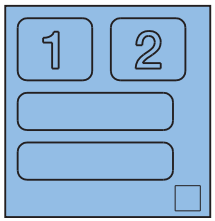
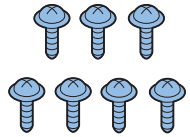
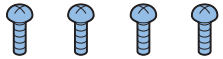
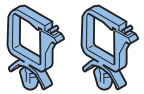
☐ [10] Conversion Connector X 2 	☐ [11] Gasket Cover Plate X 1 	☐ [12] Handle Label X 1 
☐ [13] Shutdown Caution Label X 1 	☐ [14] R-HDD Label X 1 	☐ [15] Screw (TP Round End; M3x6) X 7 
☐ [16] Screw (P Tightening; M3x8) X 4 	☐ [17] Wire Saddle X 2 	

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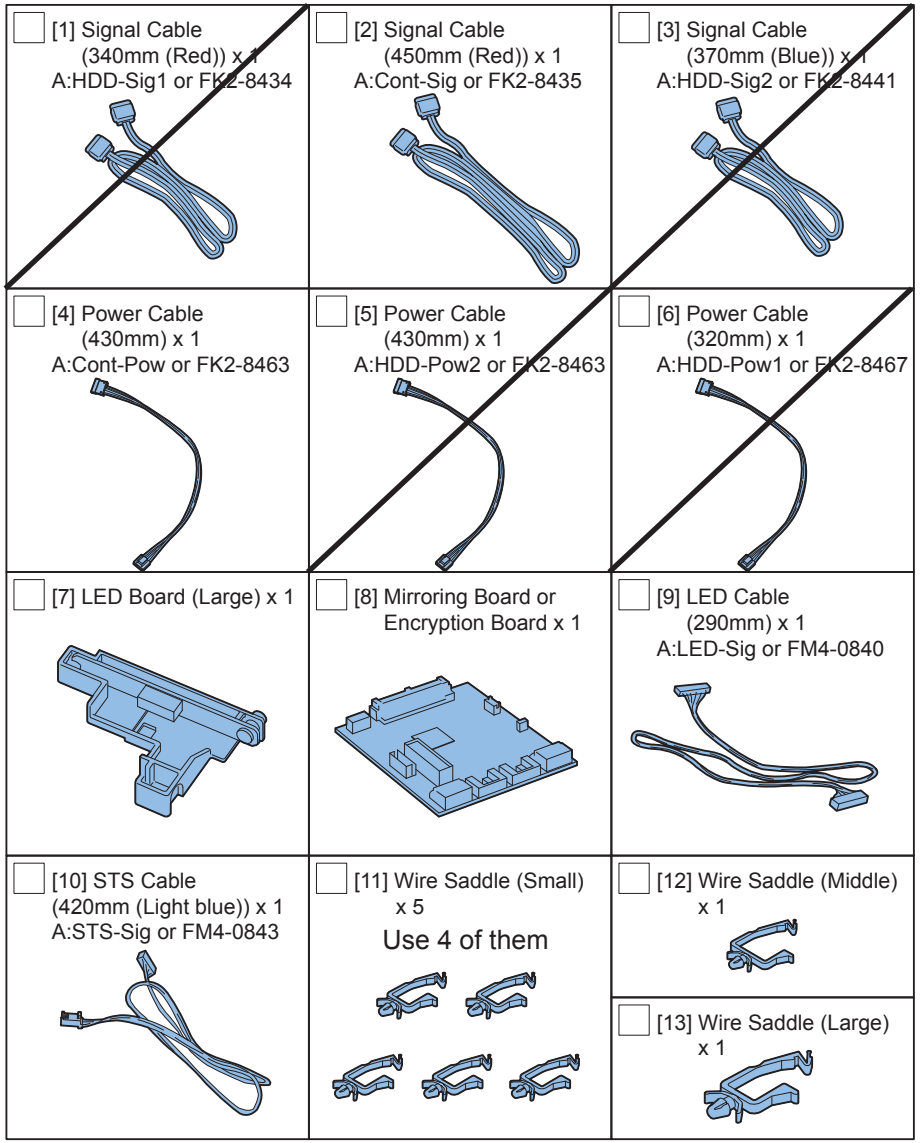
< CD/ Guides >

- FCC/IC Sheet

HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

- [1] Signal Cable (340mm (Red)) x 1 A:HDD-Sig1 or FK2-8434
- [2] Signal Cable (450mm (Red)) x 1 A:Cont-Sig or FK2-8435
- [3] Signal Cable (370mm (Blue)) x 1 A:HDD-Sig2 or FK2-8441
- [4] Power Cable (430mm) x 1 A:Cont-Pow or FK2-8463
- [5] Power Cable (430mm) x 1 A:HDD-Pow2 or FK2-8463
- [6] Power Cable (320mm) x 1 A:HDD-Pow1 or FK2-8467
- [7] LED Board (Large) x 1
- [8] Mirroring Board or Encryption Board x 1
- [9] LED Cable (290mm) x 1 A:LED-Sig or FM4-0840
- [10] STS Cable (420mm (Light blue)) x 1 A:STS-Sig or FM4-0843
- [11] Wire Saddle (Small) x 5 Use 4 of them
- [12] Wire Saddle (Middle) x 1
- [13] Wire Saddle (Large) x 1



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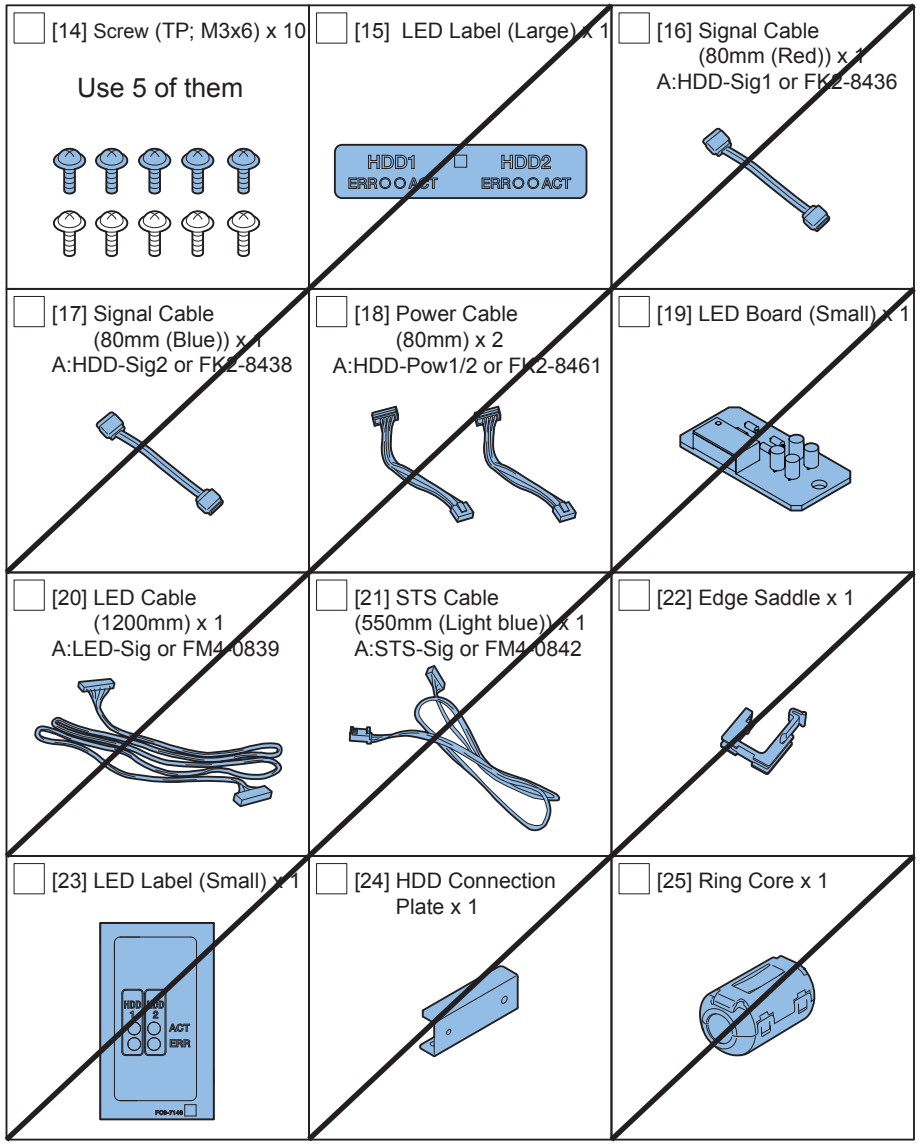
- [14] Screw (TP; M3x6) x 10 Use 5 of them
- [15] LED Label (Large) x 1
- [16] Signal Cable (80mm (Red)) x 1 A:HDD-Sig1 or FK2-8436
- [17] Signal Cable (80mm (Blue)) x 1 A:HDD-Sig2 or FK2-8438
- [18] Power Cable (80mm) x 2 A:HDD-Pow1/2 or FK2-8461
- [19] LED Board (Small) x 1
- [20] LED Cable (1200mm) x 1 A:LED-Sig or FM4-0839
- [21] STS Cable (550mm (Light blue)) x 1 A:STS-Sig or FM4-0842
- [22] Edge Saddle x 1
- [23] LED Label (Small) x 1
- [24] HDD Connection Plate x 1
- [25] Ring Core x 1



F-9-702

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Documentation CD
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power (HDD Data Encryption & Mirroring Kit only)

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

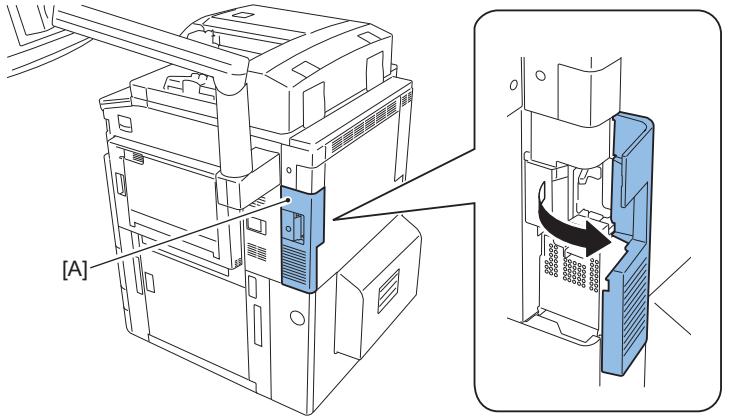
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Removing the HDD Unit

☐

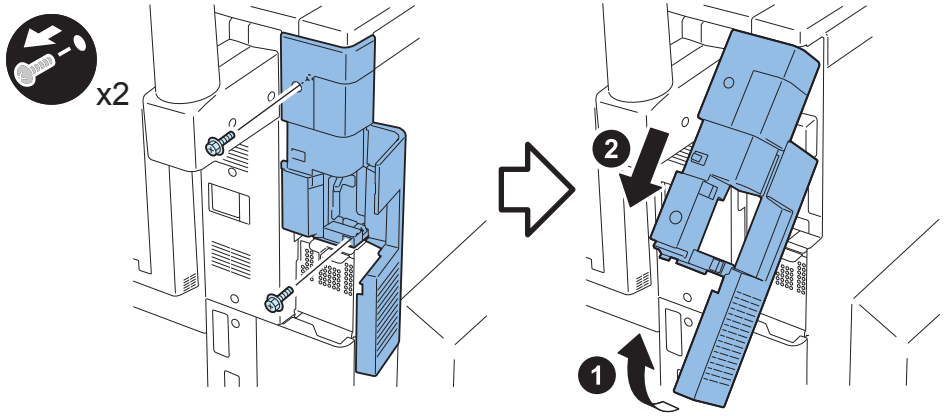
1) Push section [A] to open the HDD Cover.



F-9-703

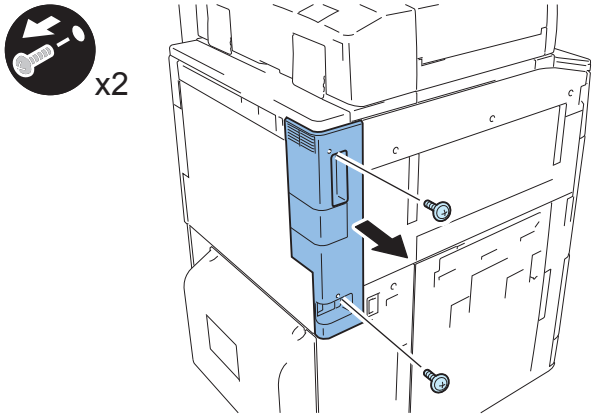
☐

2) Remove the Main Controller Right Cover Unit.
- 2 Screws



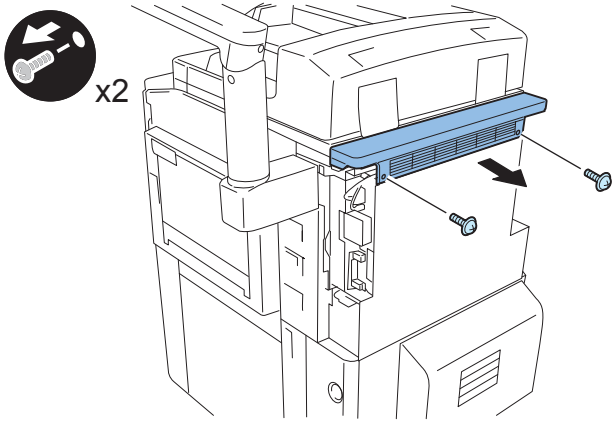
F-9-704

☐
3) Remove the Box Left Cover.
- 2 Screws



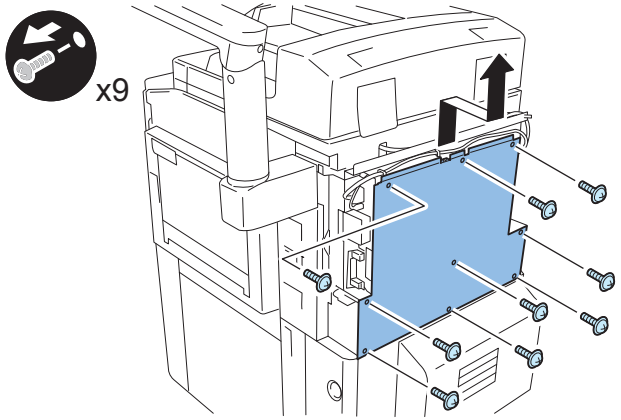
F-9-705

☐
4) Remove the Box Upper Cover.
- 2 Screws



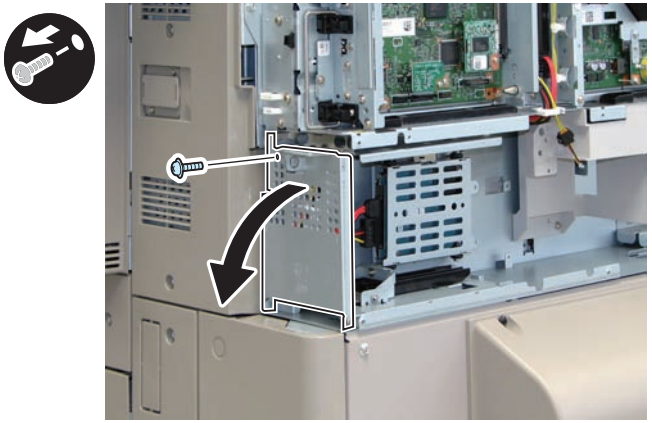
F-9-706

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-707

☐
6) Open the HDD Lid.
- 1 Screw (The removed screw will not be used.)



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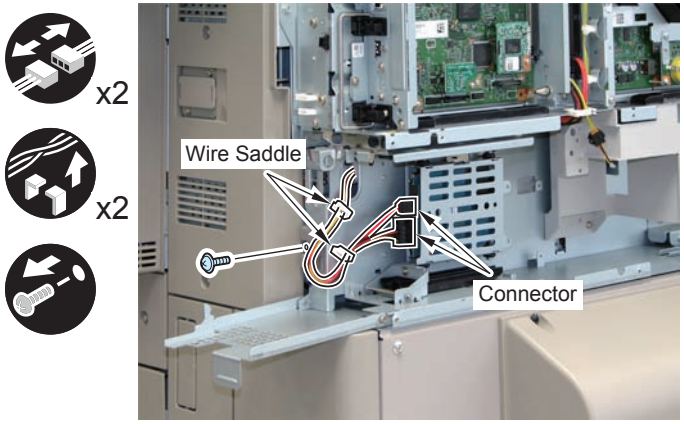
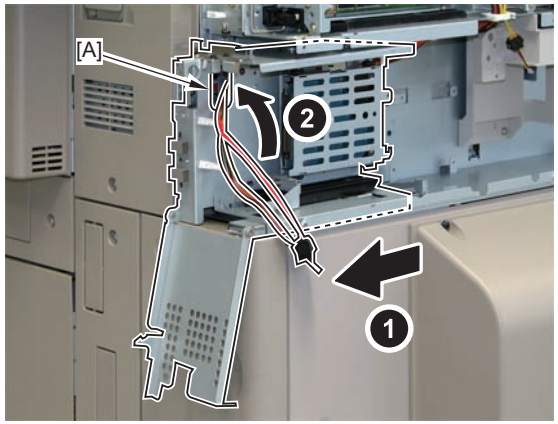
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 5.)



F-9-709

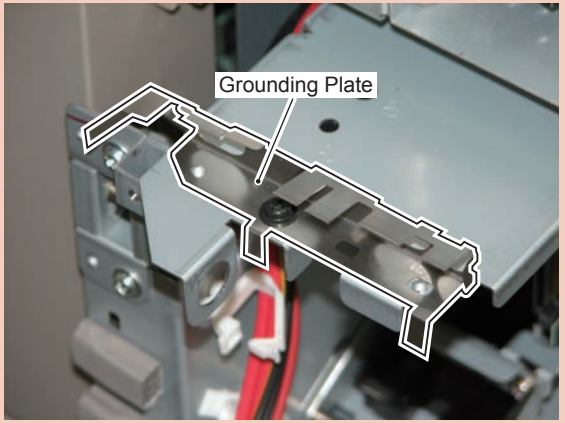
☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



F-9-710

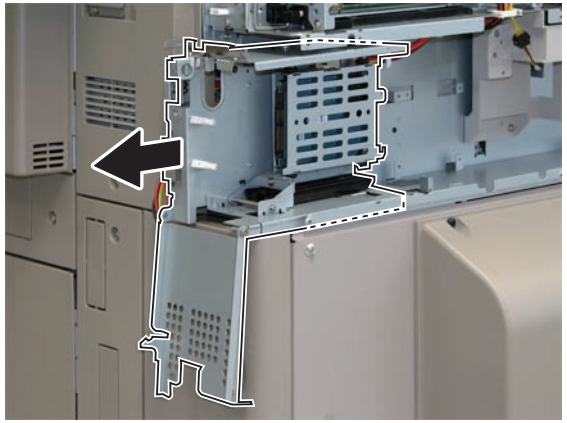
CAUTION:

Be sure not to deform the Grounding Plate.



F-9-711

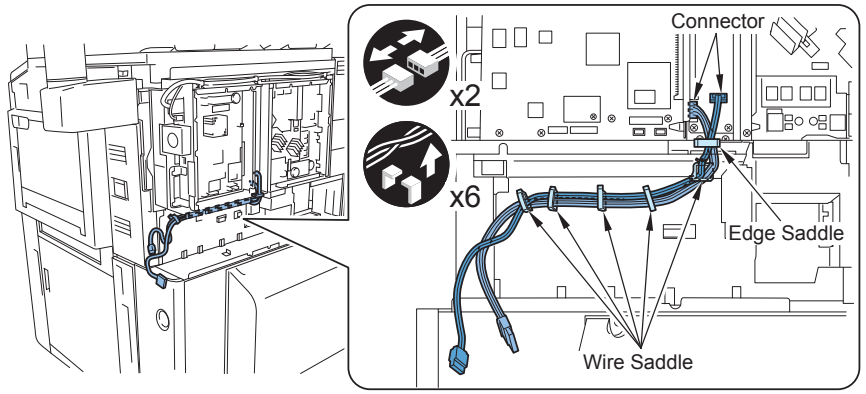
☐
10) Remove the HDD Unit from the host machine.



F-9-712

☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)

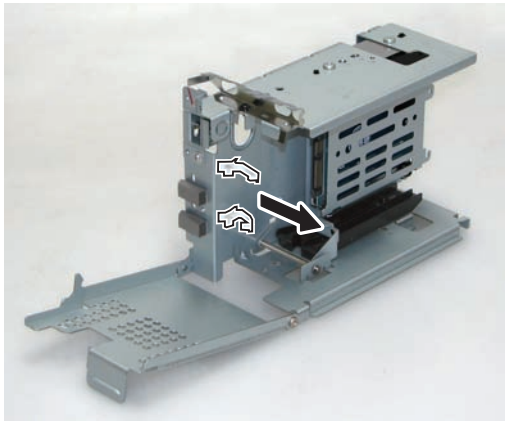
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-713

Changing Configuration inside of HDD Unit

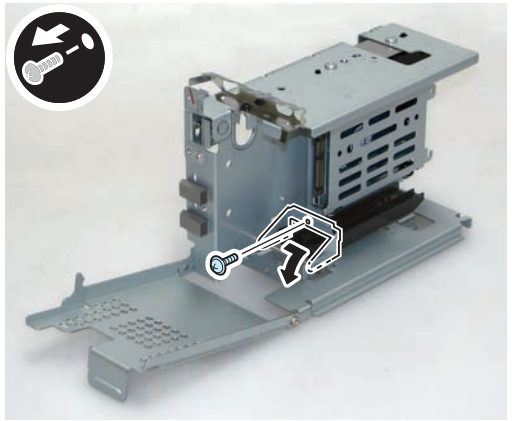
☐
1) Remove the 2 wire saddles. (The removed wire saddles will not be used.)



F-9-714

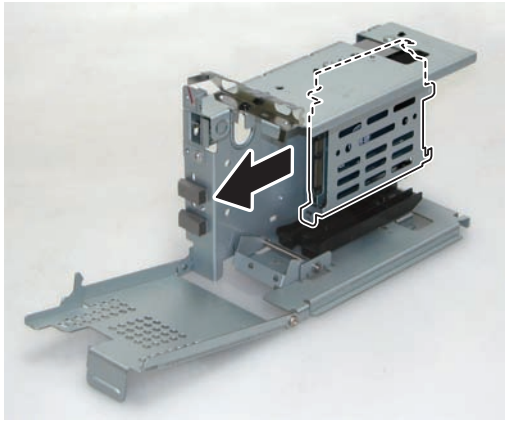
☐
2) Turn the HDD Fixation Plate toward the front.

- 1 Screw (The removed screw will not be used.)



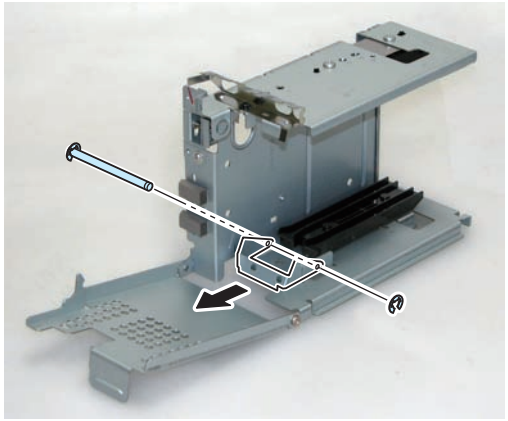
F-9-715

☐
3) Remove the HDD.



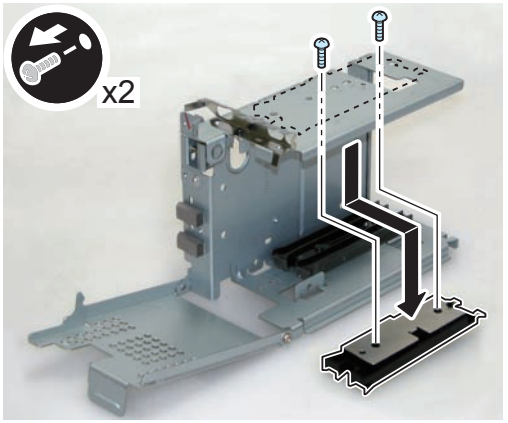
F-9-716

☐
4) Remove the E ring and the shaft from the HDD Unit, and remove the HDD Fixation Plate.
(The removed E ring, shaft and HDD Fixation Plate will not be used.)



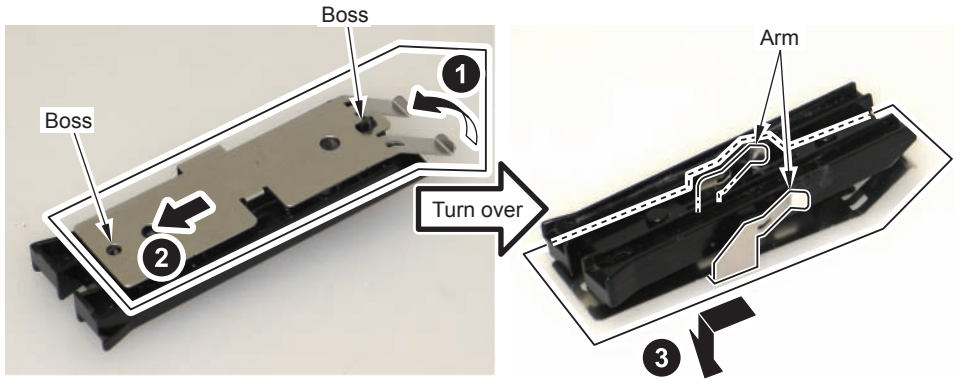
F-9-717

☐
5) Remove the Upper Rail from the HDD Unit.
• • Screws (The removed screws will be used in step 8.)



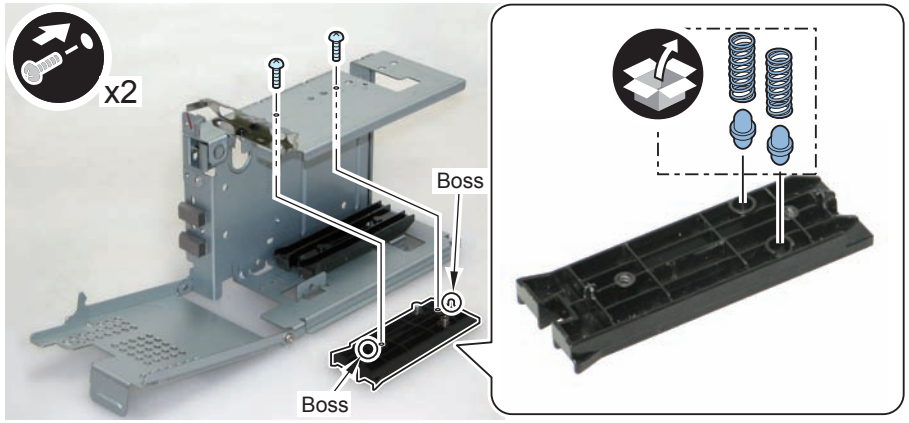
F-9-718

☐
6) Remove the Leaf Spring from the removed Upper Rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)
• 2 Bosses
• 2 Arms



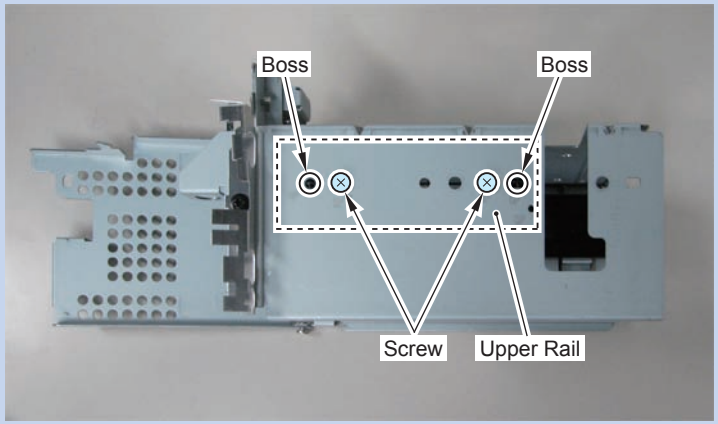
F-9-719

☐
7) Put the 2 HDD Lock Pins and 2 HDD Lock Springs into the holes of the Upper Rail.
8) Install the Upper Rail to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws (Use the screws removed in step 5.)



F-9-720

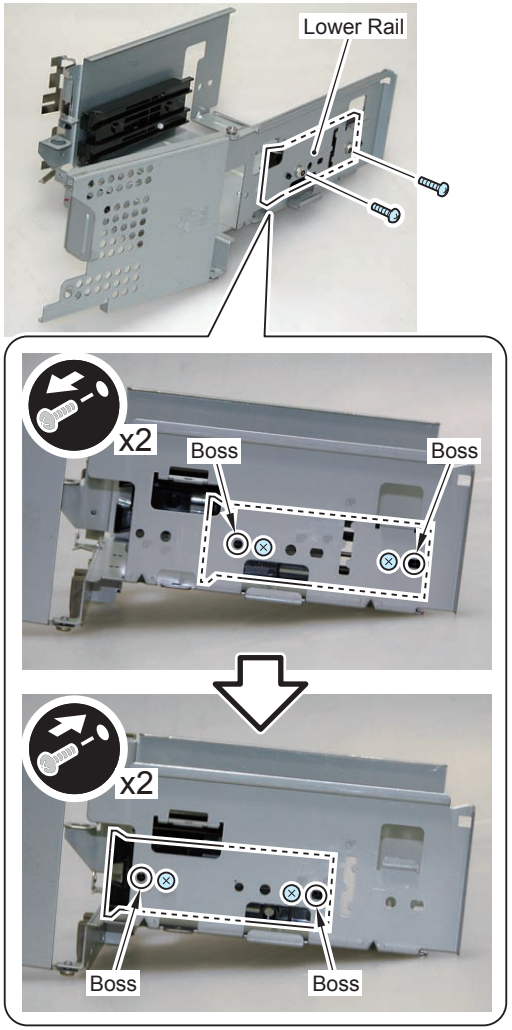
NOTE:
The position where the Upper Rail is to be installed is different from the position where it was originally installed. Be careful not to install it to the original position.



F-9-721

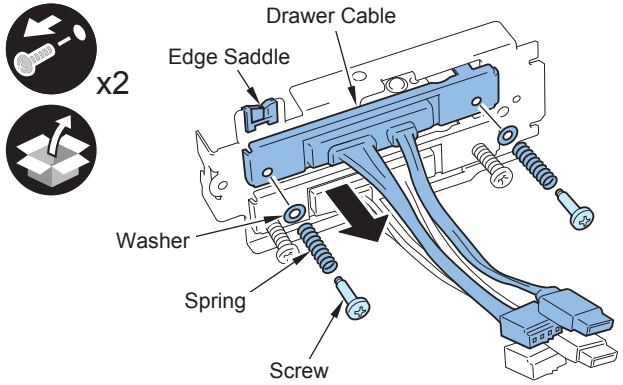
☐
9) Remove the Lower Rail, and then install it to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws

NOTE:
Perform this work with the HDD Unit placed on its side in order to prevent the Grounding Plate from being deformed.



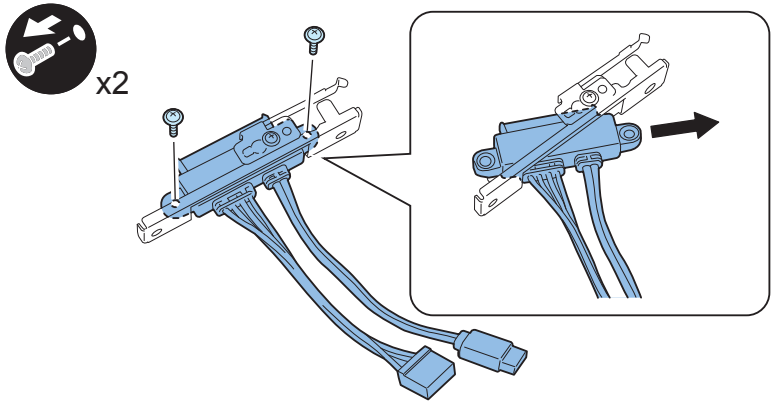
F-9-722

☐
10) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the Upper Drawer Cable (The Signal Cable Red side).
- 2 Screws
- 2 Springs
- 2 Washers (The removed springs and washers will be used in step 13.)



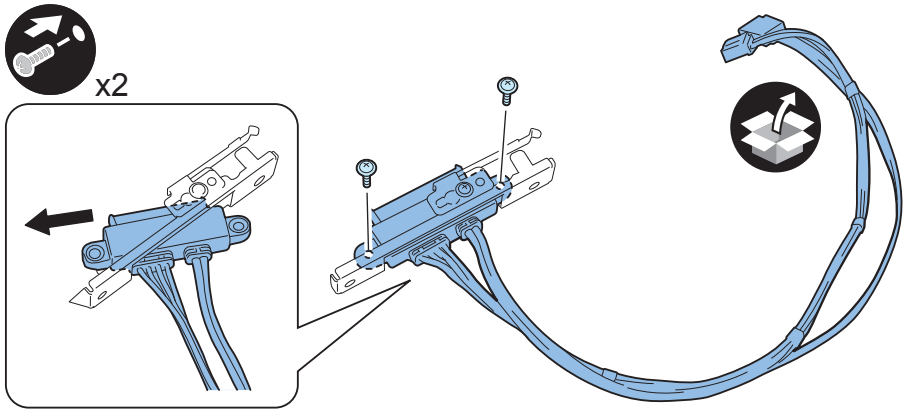
F-9-723

☐
11) Remove the Drawer Cable. (The removed Drawer Cable will not be used.)
- 2 Screws (Removed screw will be used in step 12.)



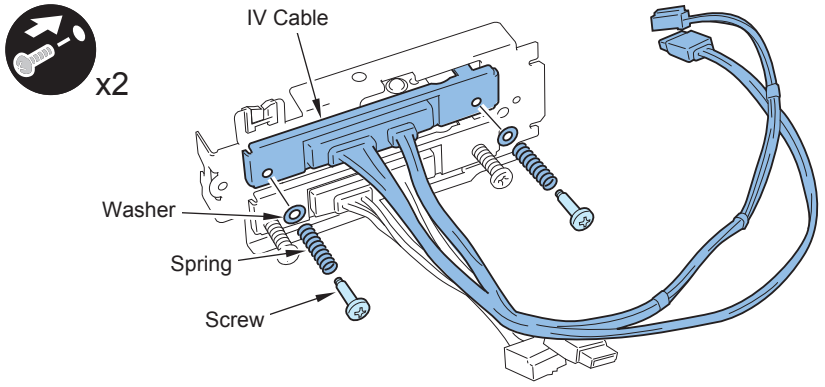
F-9-724

☐
12) Install the IV Cable.
- 2 Screws (Use the screws removed in step 11.)



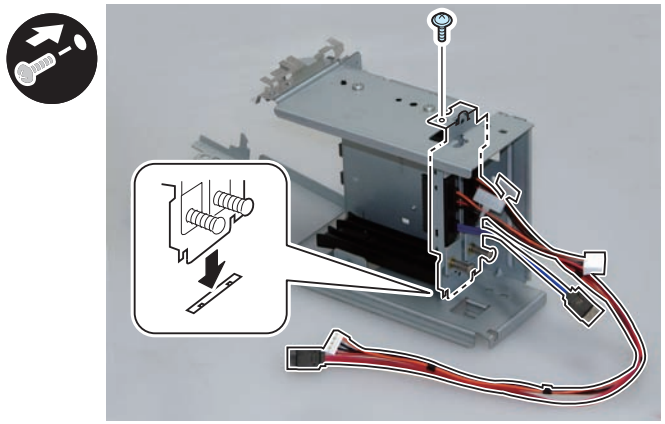
F-9-725

☐
13) Install the IV Cable of HDD Drawer Unit.
- 2 Screws
- 2 Springs
- 2 Washers (Use the parts removed in step 10.)



F-9-726

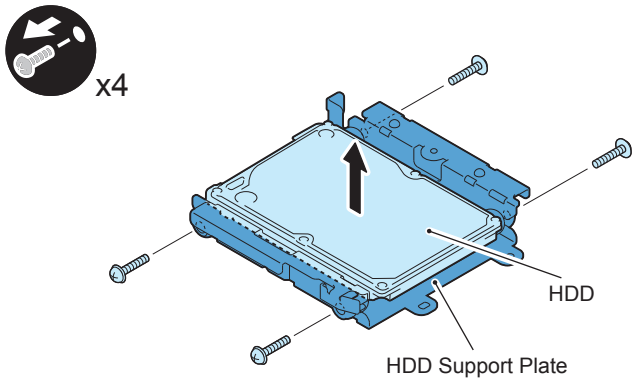
☐
14) Install the HDD Drawer Unit.
- 2 Screws (TP Round End; M3x6)



F-9-727

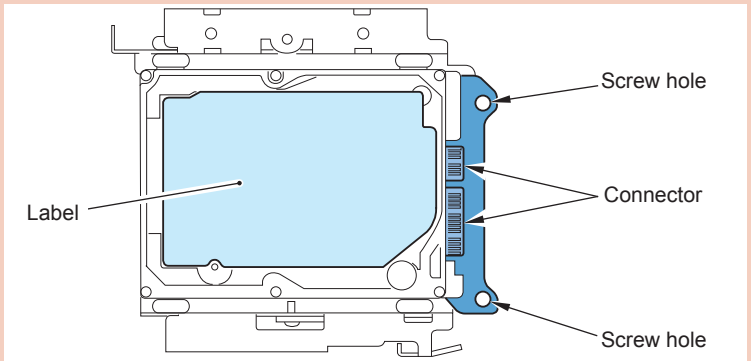
Disassembling and Assembling of the HDD Removed from the Host Machine (the First HDD)

☐
1) Disassemble the removed HDD.
- 4 Screws (W Sems)
- 1 HDD Support Plate



F-9-728

CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate.



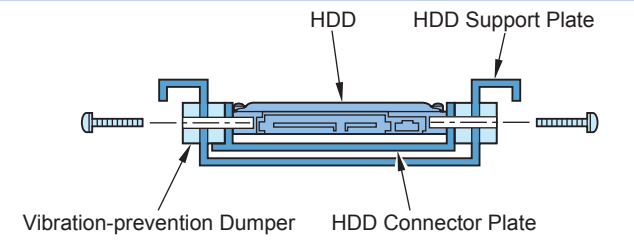
F-9-729

NOTE:
Use the parts disassembled in step 1 and parts included in the Removable HDD Kit.

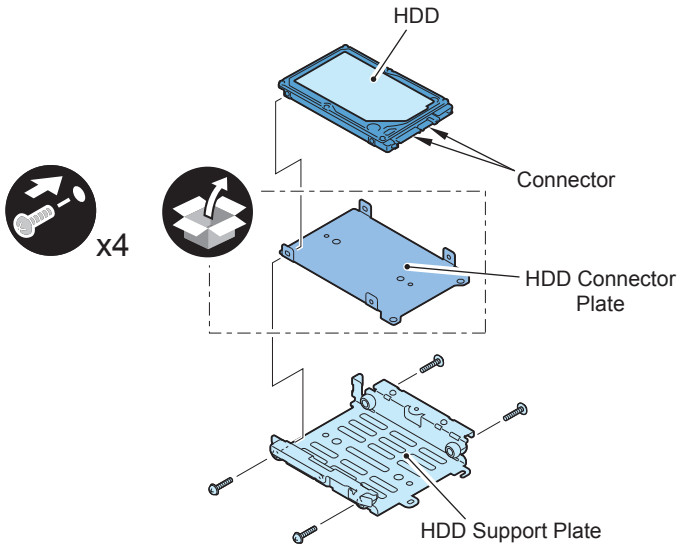
☐
2) Assemble the HDD disassembled in step 1.

- 1 HDD Support Plate
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 HDD
- 4 Screws (W Sems)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



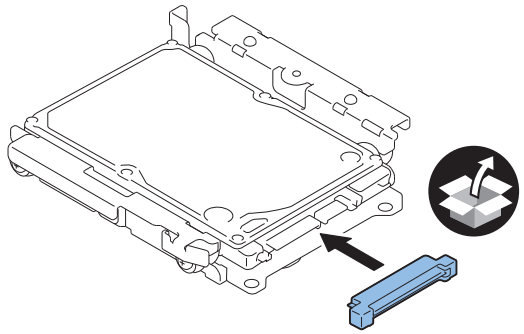
F-9-730



F-9-731

☐
3) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



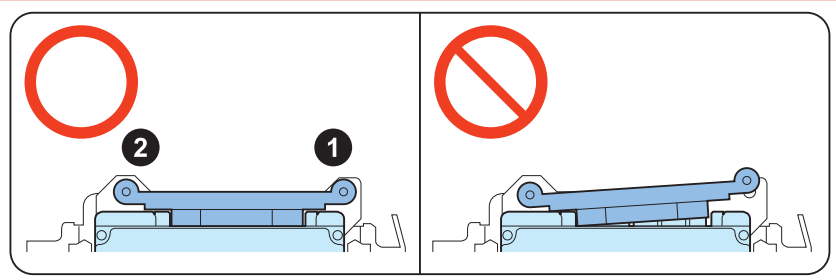
F-9-732

☐ 4) Fit the 2 bosses of the Connector Fixing Block into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.

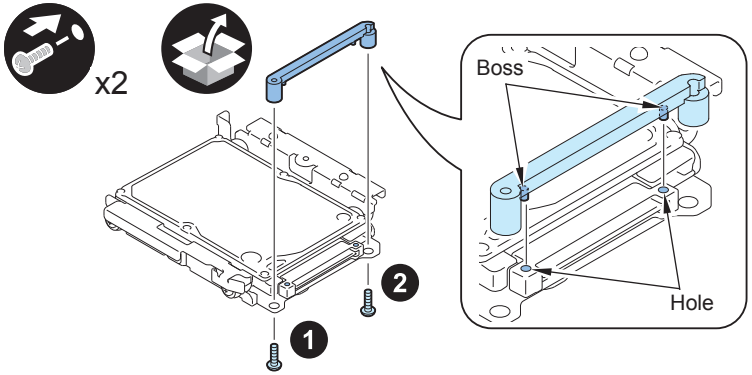
- 2 Screws (P tightening; M3x8)

CAUTION:

- Be sure to firmly hold the Connector Fixing Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



F-9-733



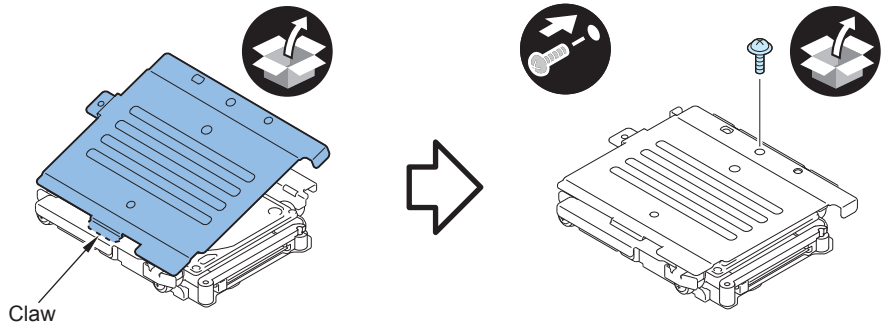
F-9-734

☐ 5) Install the HDD Cover.

- 1 Claw
- 1 Screw (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



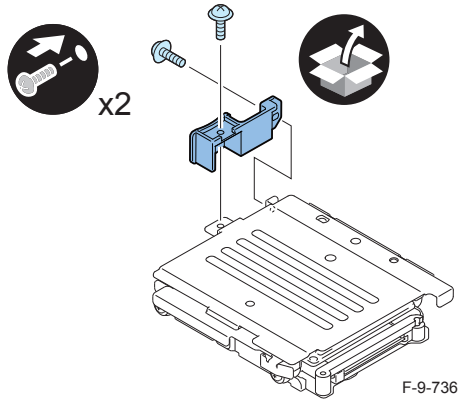
F-9-735

☐ 6) Install the HDD Handle.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

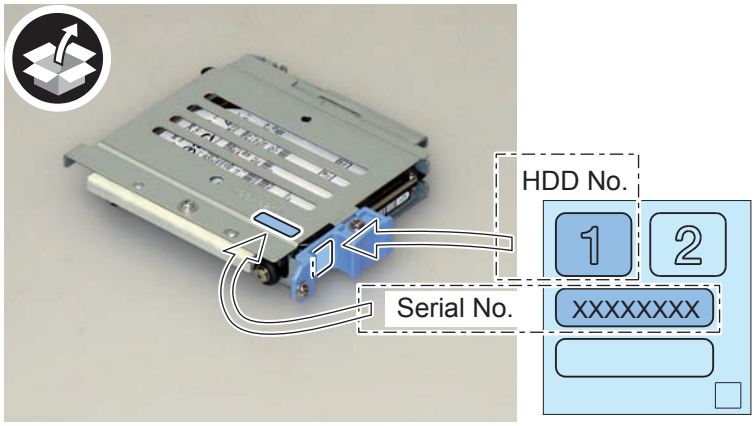


F-9-736

☐

7) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.

8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

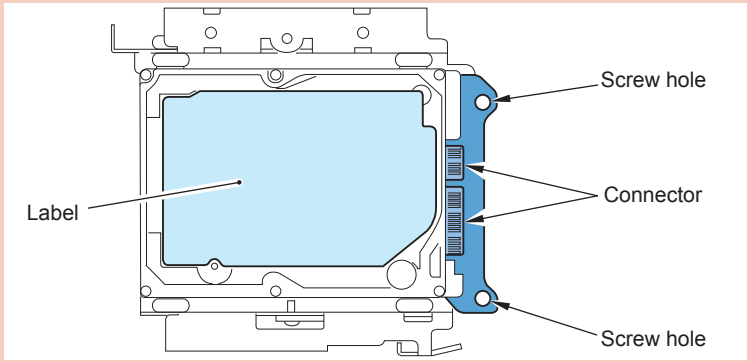


F-9-737

■ Assembling the Option HDD (the Second HDD)

CAUTION:

- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate.



F-9-738

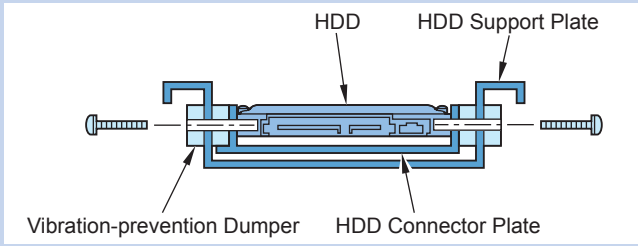
NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

☐

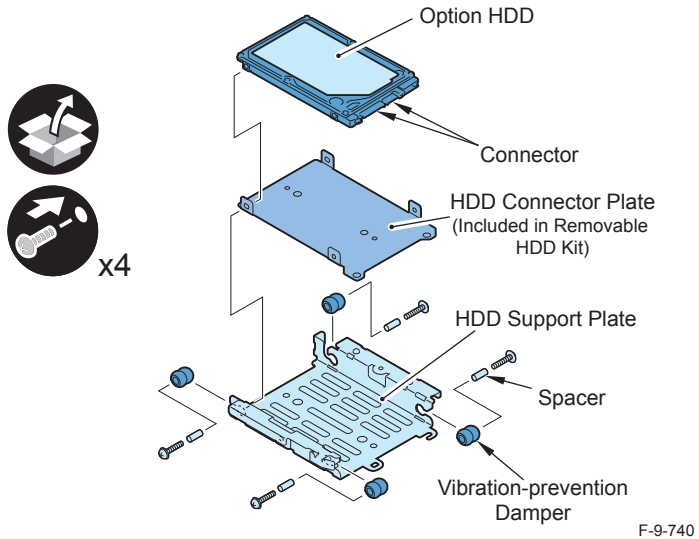
1) Assemble the Option HDD (160GB).

- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



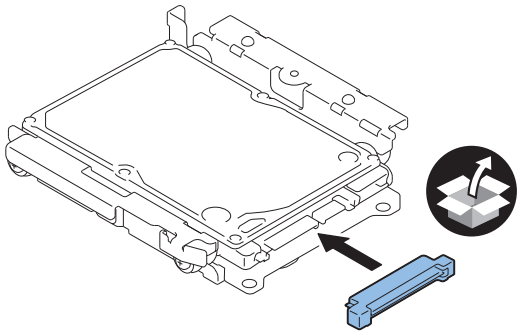
F-9-739



F-9-740

☐
2) Install the Conversion Connector.

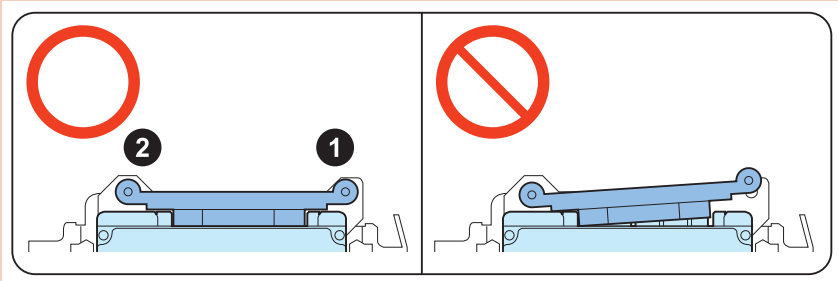
CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



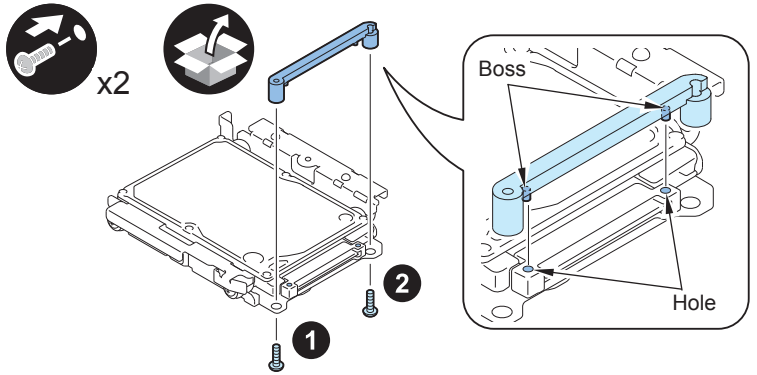
F-9-741

☐
3) Fit the 2 bosses of the Connector Fixing Block into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.
- 2 Screws (P tightening; M3x8)

CAUTION:
- Be sure to firmly hold the Connector Fixing Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



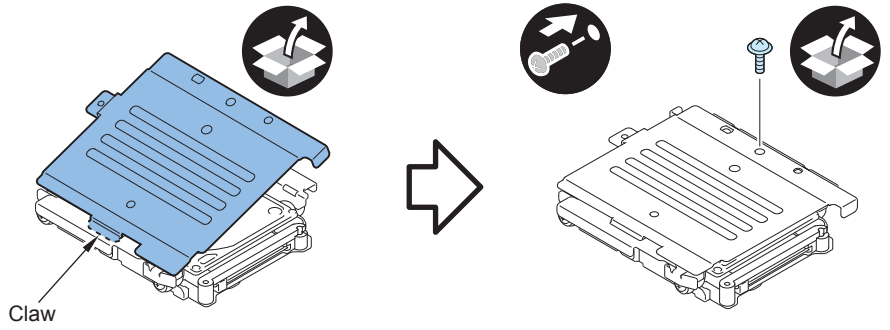
F-9-742



F-9-743

☐
4) Install the HDD Cover.
- 1 Claw
- 1 Screw (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-744

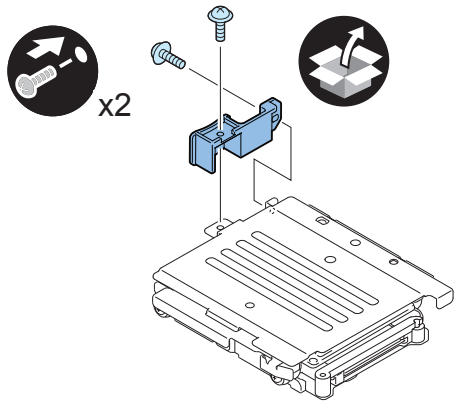
□

5) Install the HDD Handle.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

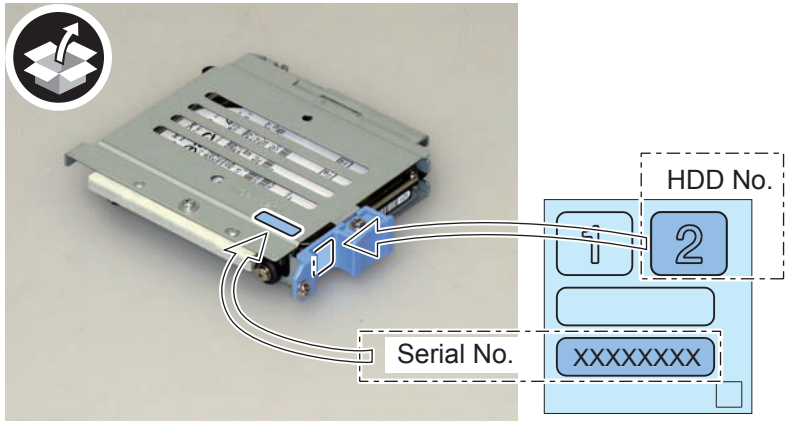


F-9-745

□

6) Affix the HDD No.2 of the R-HDD Label to the handle of the Removable HDD.

7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

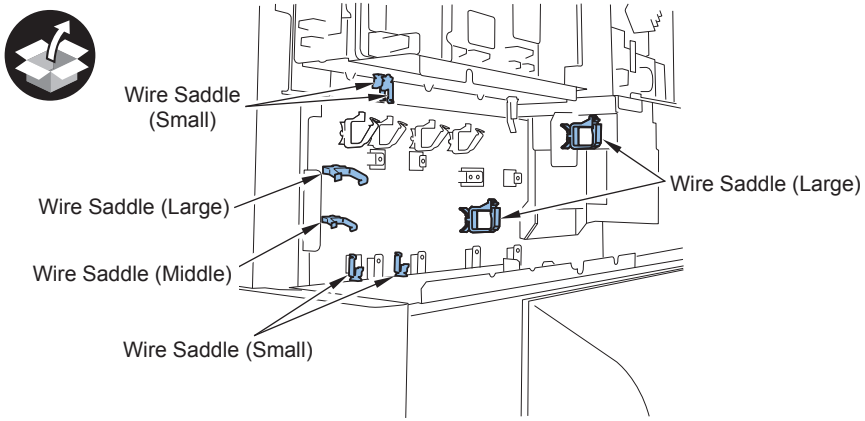


F-9-746

Installing the Mirroring Board or Encryption Board

□

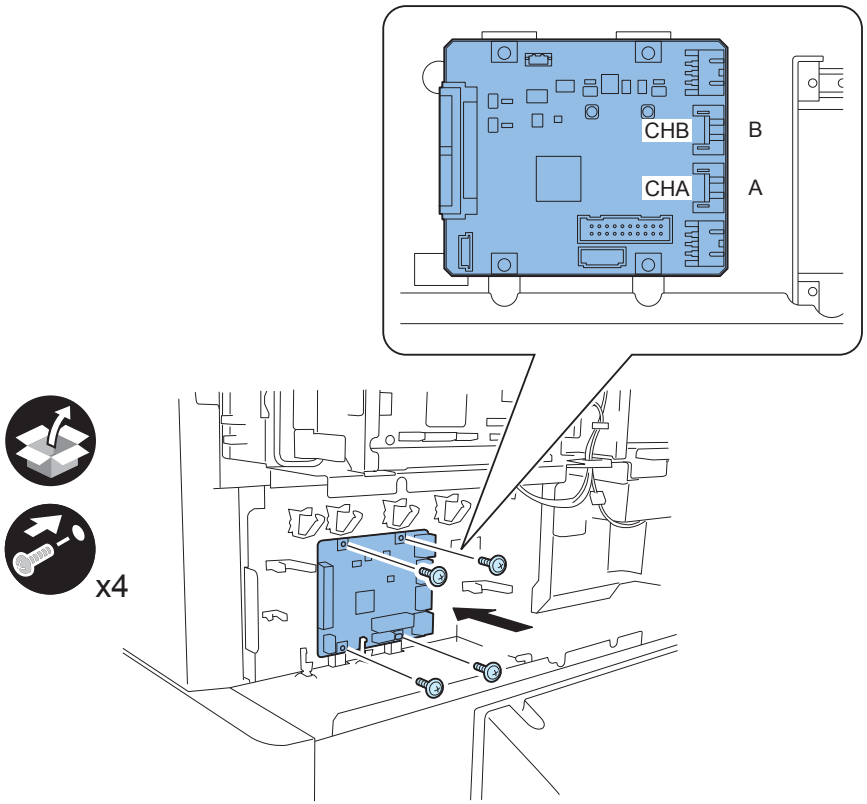
1) Install the 3 wire saddles (Large) (one of them is included in the HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit, and two of them are included in the Removable HDD Kit), 1 wire saddle (Medium), and 4 wire saddles (Small).



F-9-747

☐
2) Install the Mirroring Board or Encryption Board.
- 4 screws (TP; M3x6)

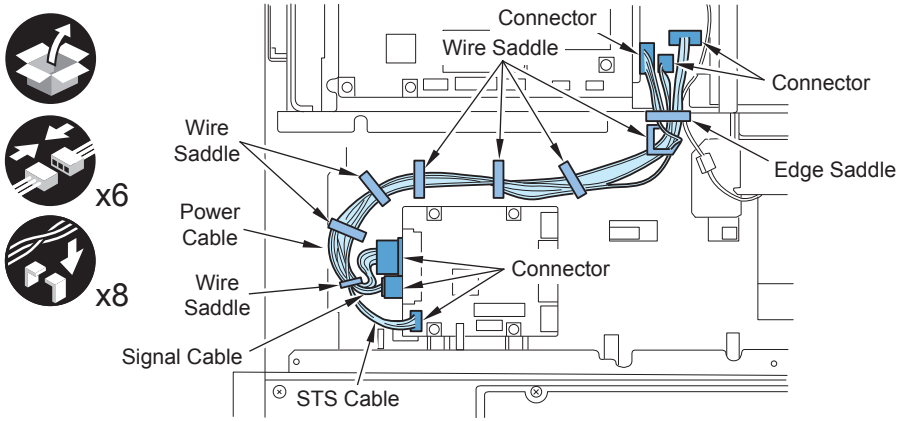
CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



F-9-748

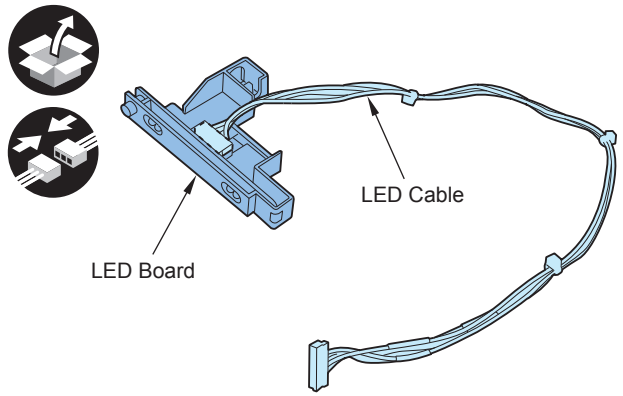
☐
3) Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435), the Power Cable (430mm; A:Cont-Pow or FK2-8463) and STS Cable (420mm (Light blue); A:STS-Sig or FM4-0843).
- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

CAUTION:
- Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow or FK2-8463) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



F-9-749

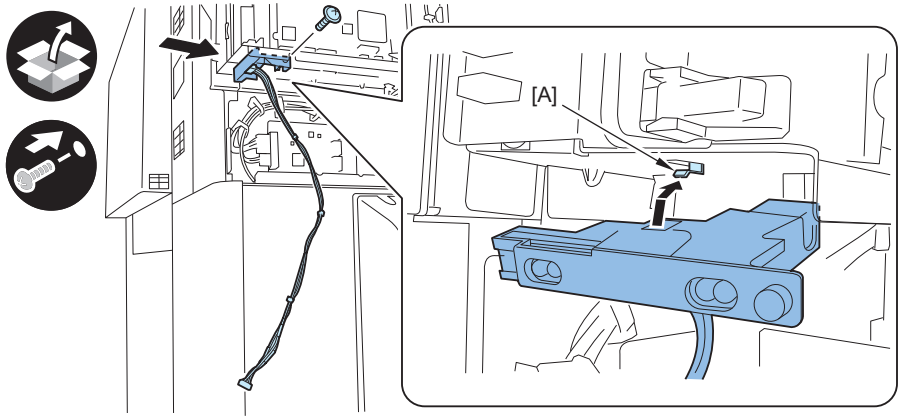
☐
4) Install the LED Cable (290mm; A:LED-Sig or FM4-0840) to the LED Board (Large).



F-9-750

☐
5) Insert the LED Board (Large) to the hook part [A] of the host machine to install.

- 1 Screw (TP; M3x6)

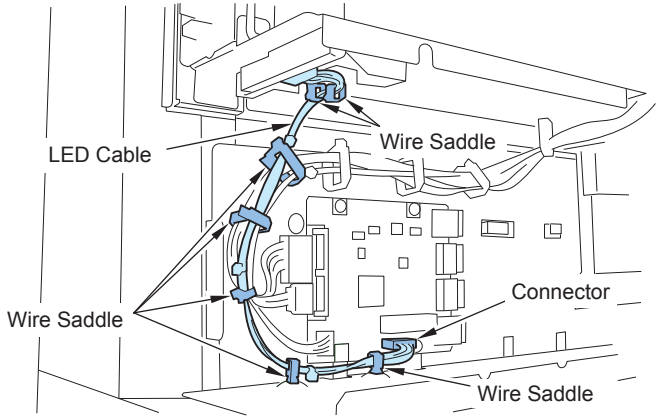


F-9-751

☐
6) Connect the LED Cable (290mm; A:LED-Sig or FM4-0840) to the Mirroring Board or Encryption Board.

- 1 Connector
- 7 Wire Saddles

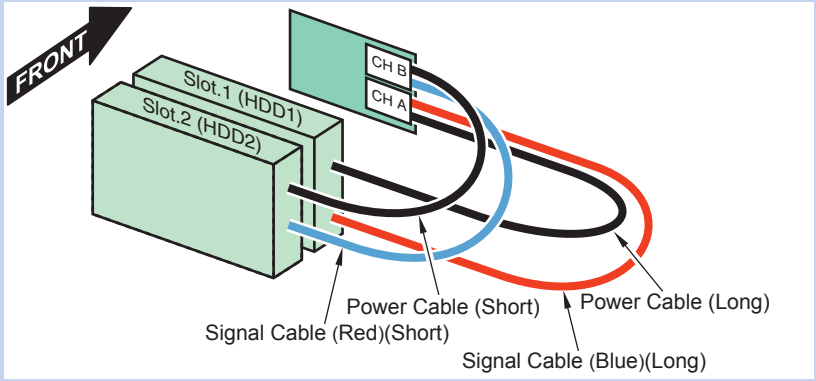
CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-752

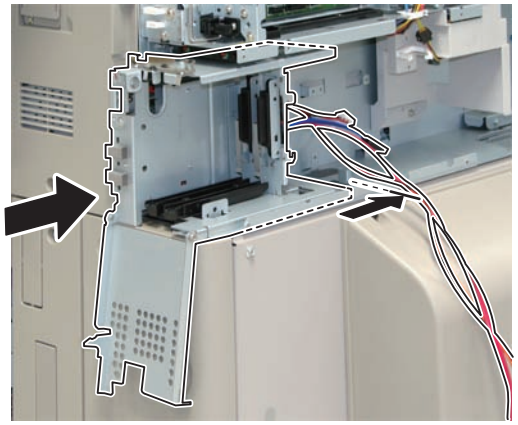
Installing the HDD Unit

NOTE:
The following shows the combination of the HDD and the Mirroring Board or Encryption Board.
- Connect Slot.1 to “CH A” (The HDD which originally mounted)
- Connect Slot.2 to “CH B” (New HDD)



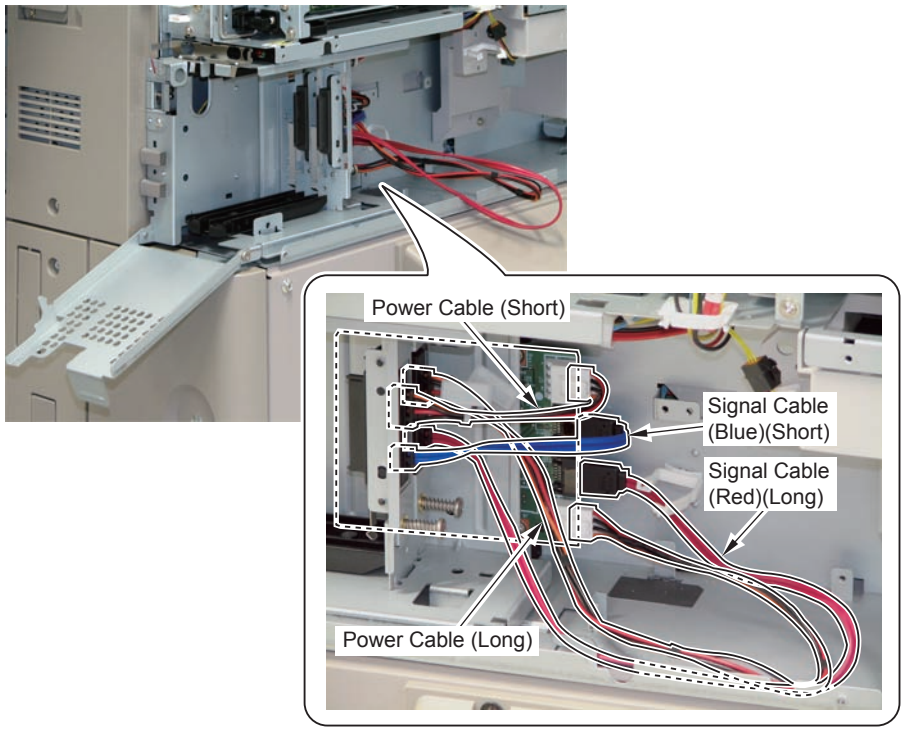
F-9-753

☐
1) Insert 2/3 of the HDD Unit along with the rail on the host machine.



F-9-754

☐
2) Connect the Signal Cable and the Power Cable to the Mirroring Board or Encryption Board.
- Connect the Power Cable (Long) and the Signal Cable (Red)(Long) of the Slot.1 (on the host machine side) to CH A.
- Connect the Power Cable (Short) and the Signal Cable (Blue)(Short) of the Slot.2 (on the rear side) to CH B.

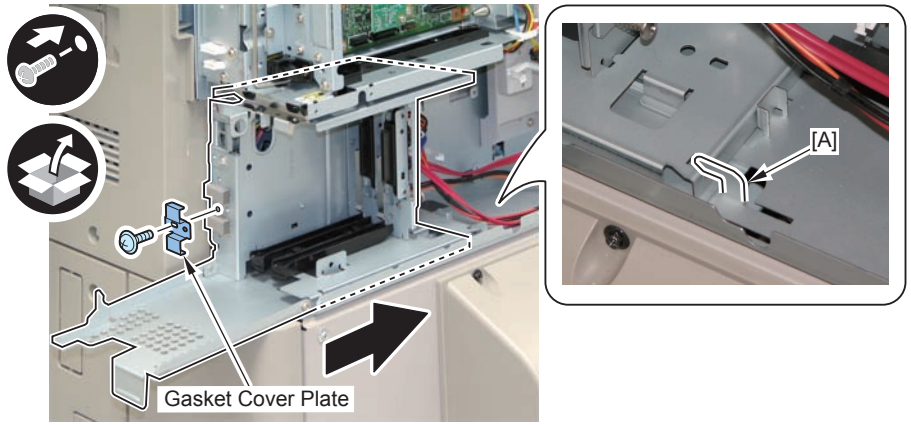


F-9-755

☐
3) Insert the HDD Unit until it stops.

NOTE:
The [A] part should be fitted in the cut-off.

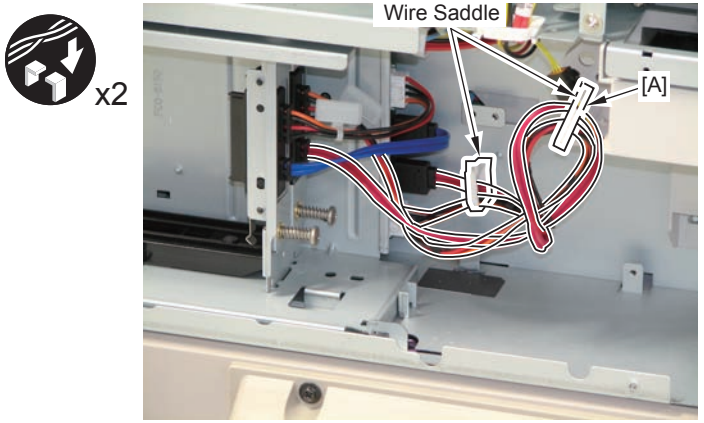
4) Install the Gasket Cover Plate on the Gasket.
5) Secure the HDD Unit.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)



F-9-756

☐
6) Secure the cables (Long) of the Slot.1 (on the host machine side) as shown in the figure.
- 2 Wire Saddles

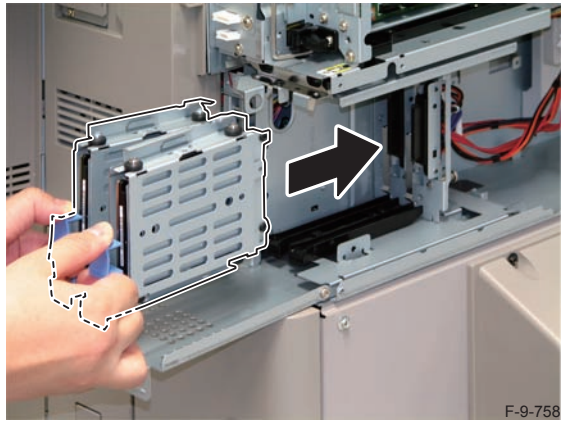
NOTE:
Secure the cables (Long) of the Slot.1 (on the host machine side) using the Wire Saddles [A] with the cables wound 1 time.



F-9-757

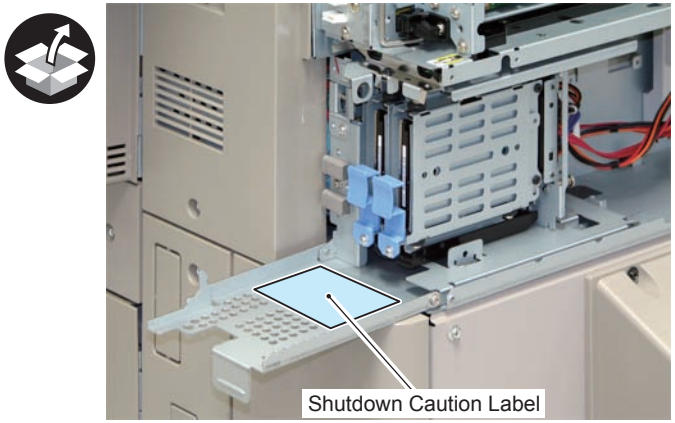
☐
7) Insert the removable HDD.

CAUTION:
Be sure to insert the HDD No. 1 to the Slot.1 (on the host machine side) and insert the HDD No. 2 to the Slot.2 (on the rear side).



F-9-758

☐
8) Affix the Shutdown Caution Label for applicable language to align with the ruled line on the HDD Lid.



F-9-759

☐
9) Close the HDD Lid.

10) Affix the Handle Label on the Handle part of the HDD Lid.

F-9-760

☐
11) Install the removed covers.

- Rear Upper Cover (9 Screws)

CAUTION:

When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:

When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
12) Insert the power plug to the outlet.

13) Turn ON the main power switch.

After Installing HDD Data Encryption & Mirroring Kit

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that ‘2.00’ or '2.01' is displayed in ‘Canon MFP Security Chip’ as version information of the security chip.

When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark () is displayed on the lower left corner of a panel screen.

Setting for Mirroring

1) Specify the setting for Mirroring.
- Service Mode > COPIER > OPTION > FNC-SW > W/RAID; select “1” for W/RAID.

2) Turn OFF/ON the main power switch to enable the setting value.
3) Check that the UI screen is started normally.
4) Open the HDD Cover, and check that the LED is flashing.
- The green LED of HDD1 (Slot.1) is flashing.
- The green and red LEDs of HDD2 (Slot.2) are flashing.

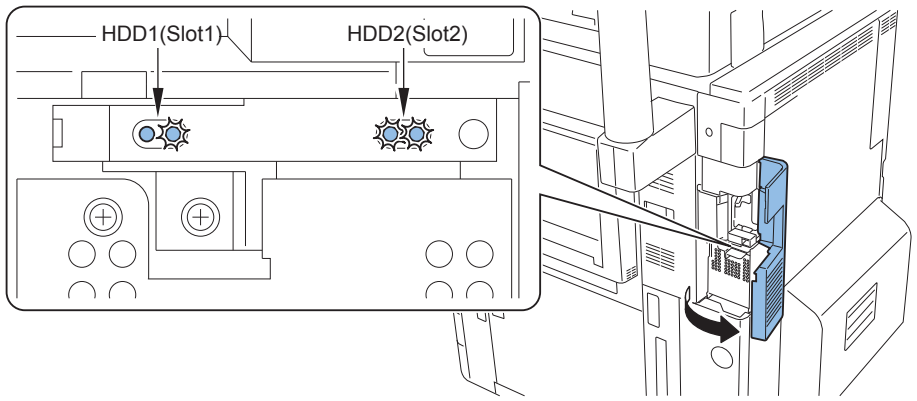
CAUTION:

Re-building process starts after setting W/RAID to “1”.

When the error indicating the message of “Need to replace Hard Disk (Contact with Service Technician)” on the UI occurs, re-execute the re-building process as follows;

1) Check the lighted Red LED is for the HDD2.
2) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to “0”.
3) Turn OFF/ON the main power switch of the host machine to enable the setting value.
4) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to “1”.
5) Turn OFF/ON e the main power switch of the host machine to enable the setting value.

The abovementioned procedure is limited only for the re-building process at the initial installation. The error occurred at re-building process during operation is not targeted.



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After Installing HDD Data Encryption & Mirroring Kit

Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-9]

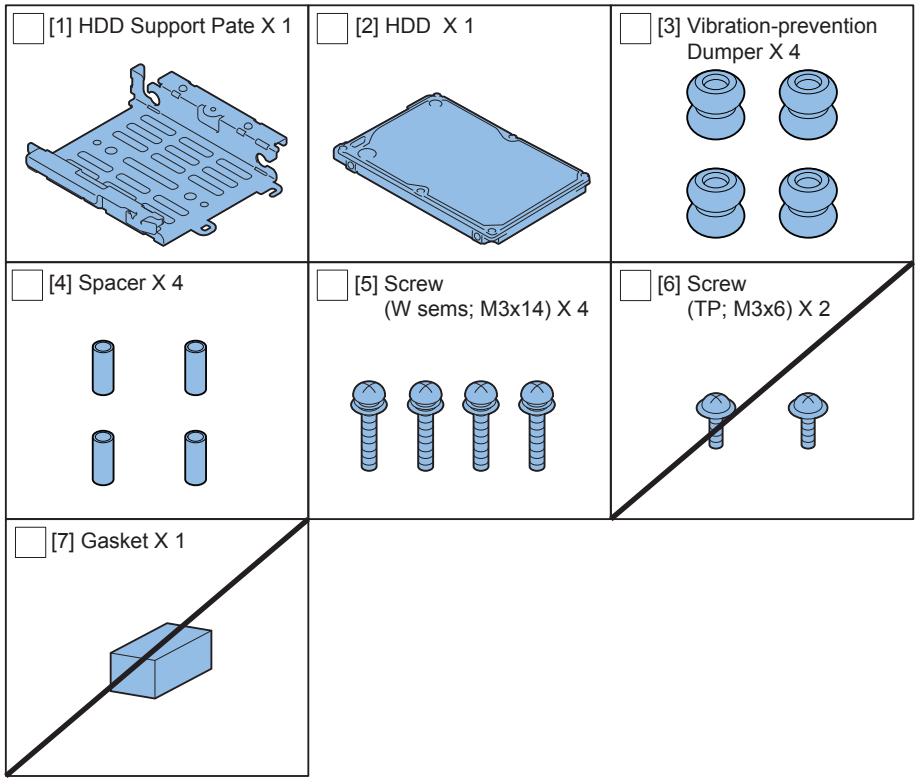
2 Option HDDs (1TB) + Removable HDD Kit
+ HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

2 Option HDDs (1TB)

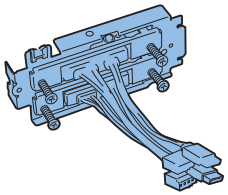
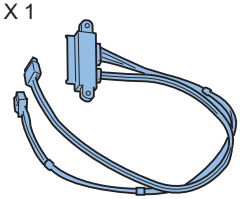
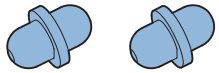
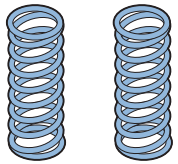
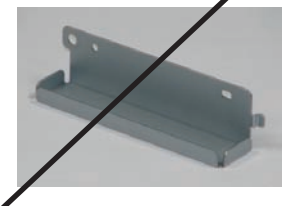
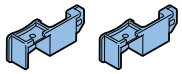
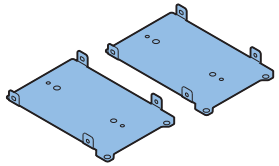
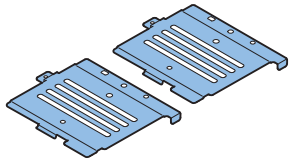
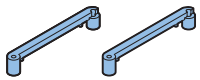


F-9-762

< CD/Guides >

- FCC/IC Sheet

Removable HDD Kit

☐ [1] HDD Drawer Unit X 1 	☐ [2] IV Cable (A:HDD-Pow1/A:HDD-Sig1) X 1 	☐ [3] HDD Lock Pin X 2 
☐ [4] HDD Lock Spring X 2 	☐ [5] HDD Face Plate X 1 	☐ [6] HDD Handle X 2 
☐ [7] HDD Connector Plate X 2 	☐ [8] HDD Cover X 2 	☐ [9] Connector Fixing Block X 2 

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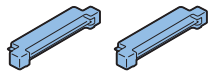
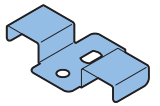
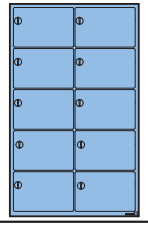
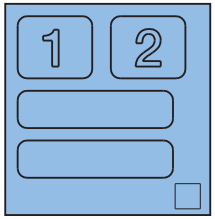
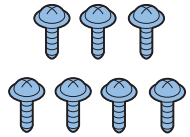
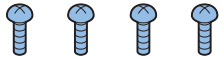
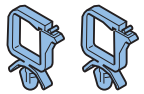
☐ [10] Conversion Connector X 2 	☐ [11] Gasket Cover Plate X 1 	☐ [12] Handle Label X 1 
☐ [13] Shutdown Caution Label X 1 	☐ [14] R-HDD Label X 1 	☐ [15] Screw (TP Round End; M3x6) X 7 
☐ [16] Screw (P Tightening; M3x8) X 4 	☐ [17] Wire Saddle X 2 	

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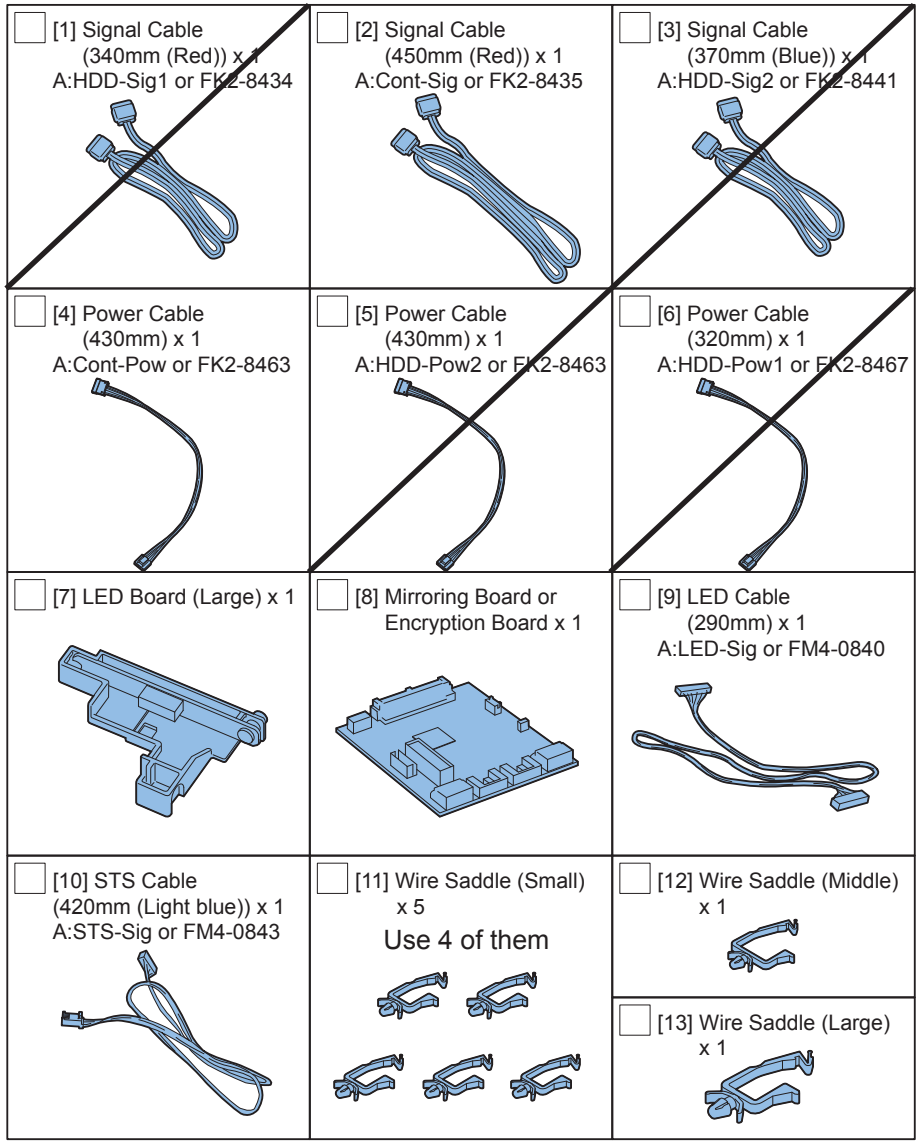
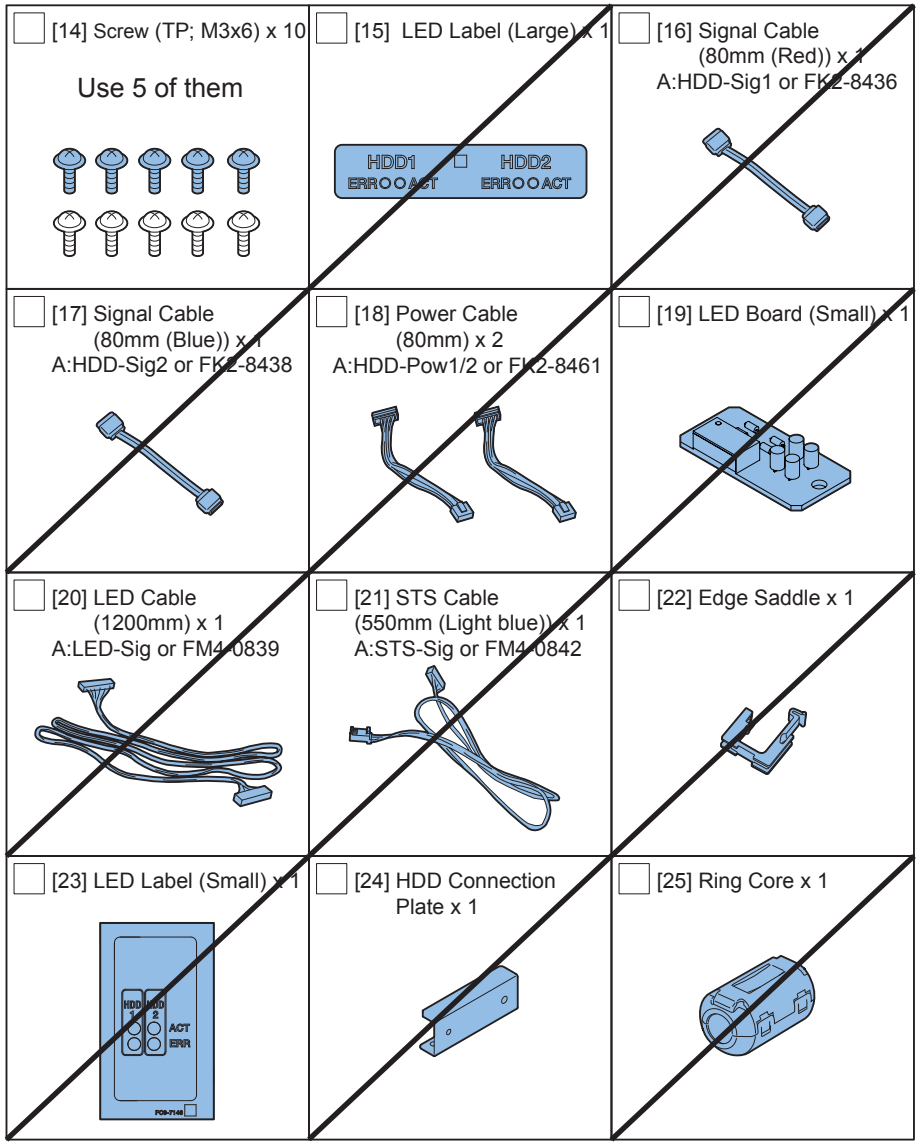
< CD/ Guides >

- FCC/IC Sheet

HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit



F-9-765



F-9-766

< CD/Guides of HDD Mirroring Kit >
- HDD Mirroring Kit User Documentation CD
- FCC/IC Sheet

< CD/Guides of HDD Data Encryption & Mirroring Kit >
- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power (HDD Data Encryption & Mirroring Kit only)

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

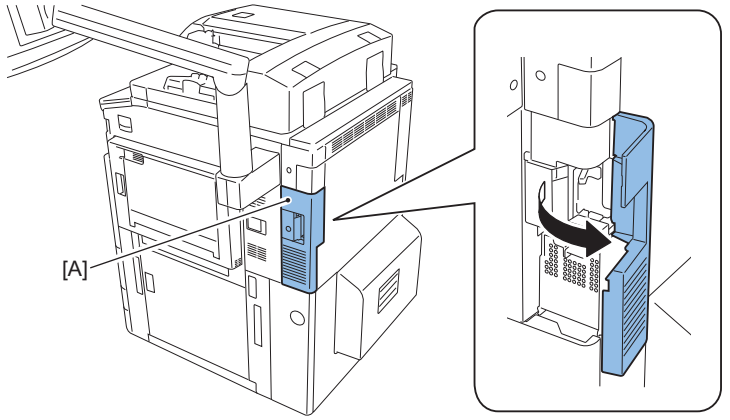
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Removing the HDD Unit

☐

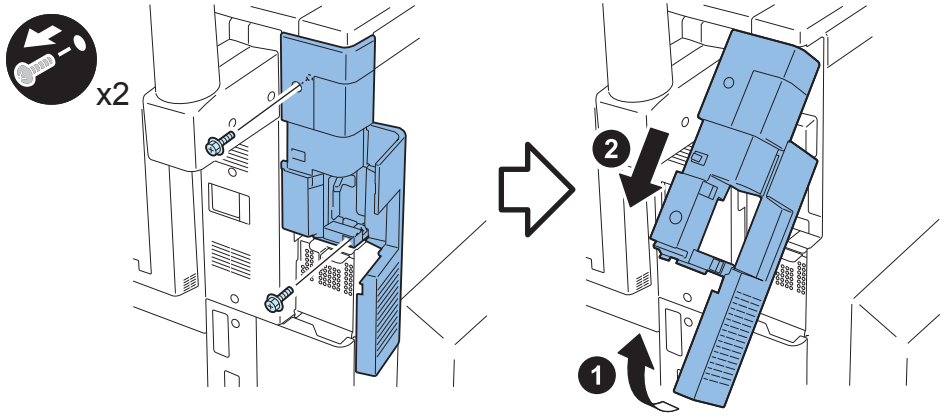
1) Push section [A] to open the HDD Cover.



F-9-767

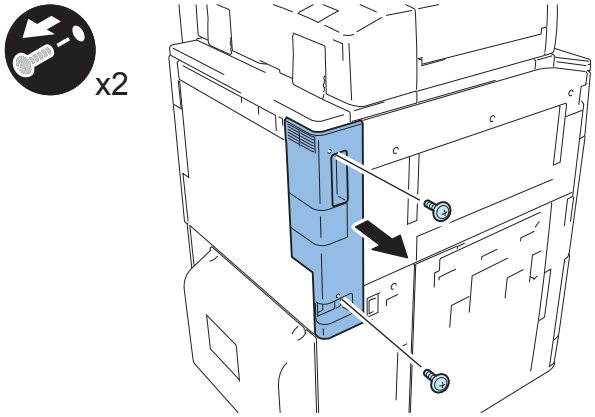
☐

2) Remove the Main Controller Right Cover Unit.
- 2 Screws



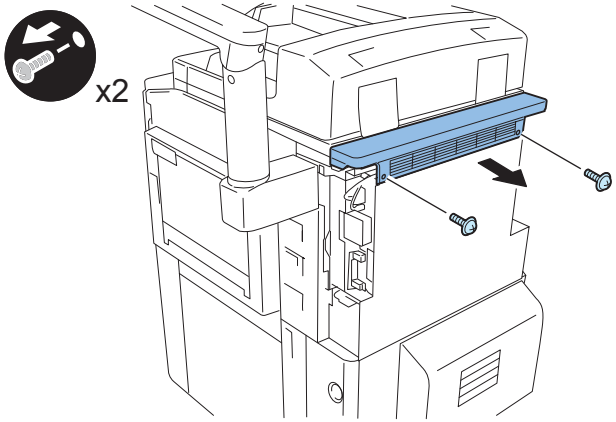
F-9-768

☐
3) Remove the Box Left Cover.
- 2 Screws



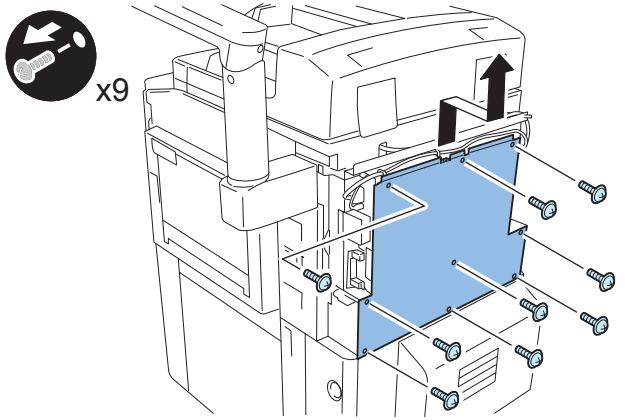
F-9-769

☐
4) Remove the Box Upper Cover.
- 2 Screws



F-9-770

☐
5) Remove the Rear Upper Cover.
- 9 Screws



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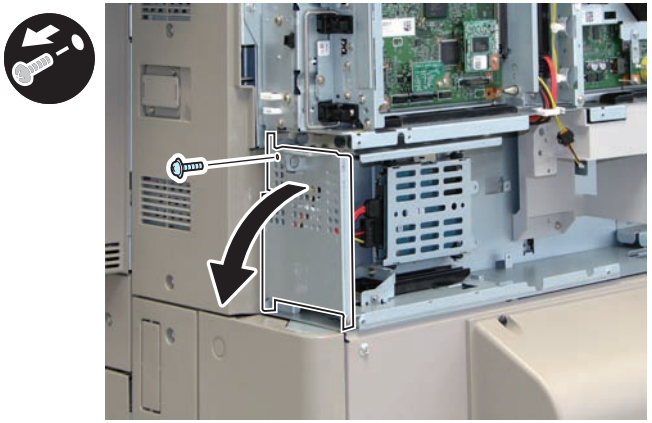
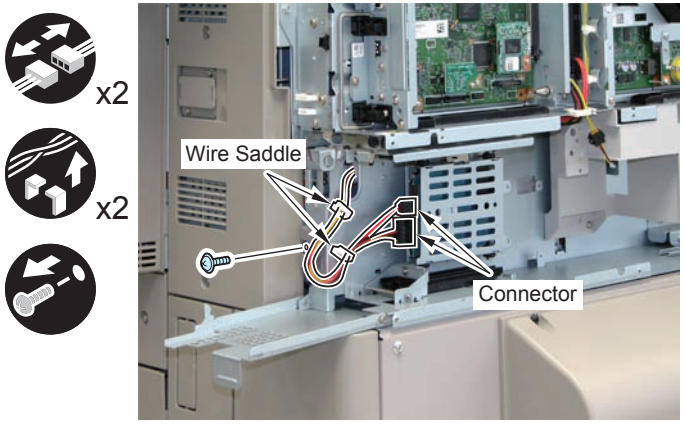
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw will not be used.)



F-9-772

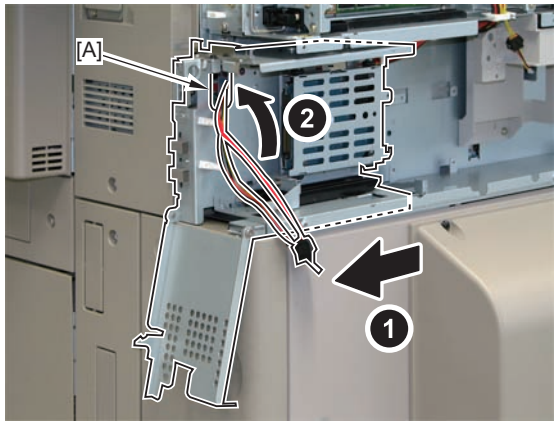
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 5.)



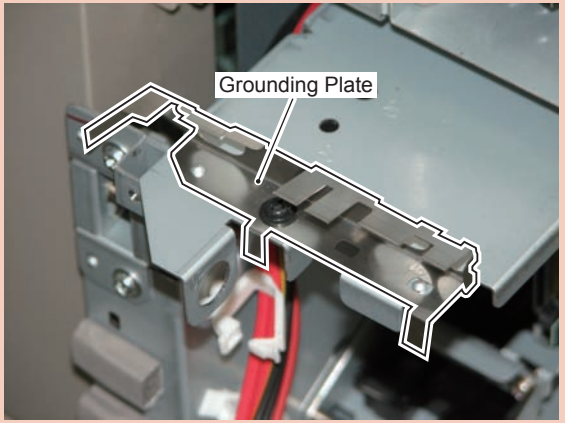
F-9-773

☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



F-9-774

CAUTION:
Be sure not to deform the Grounding Plate.



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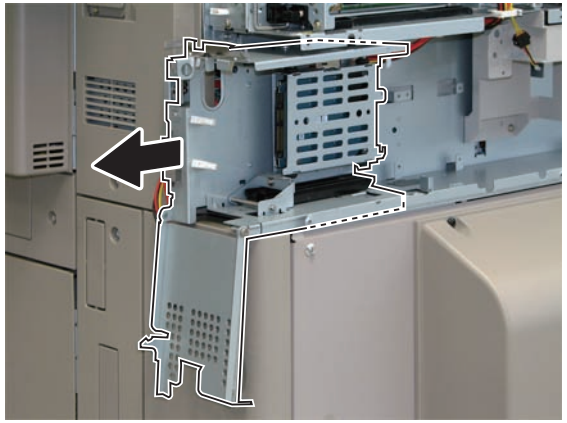
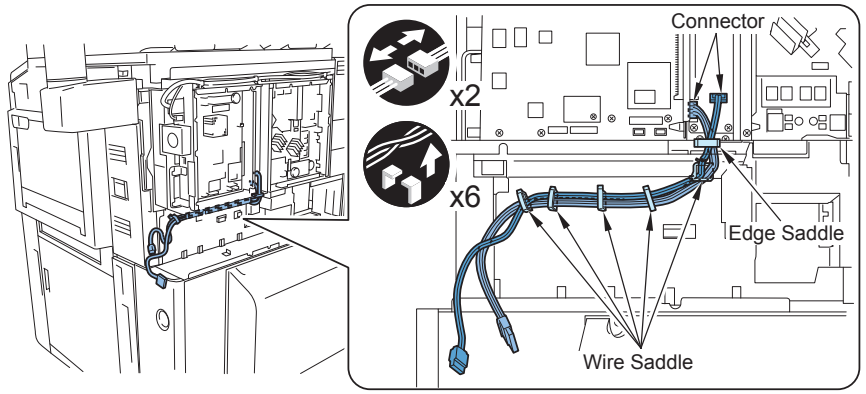
☐
10) Remove the HDD Unit from the host machine.



F-9-776

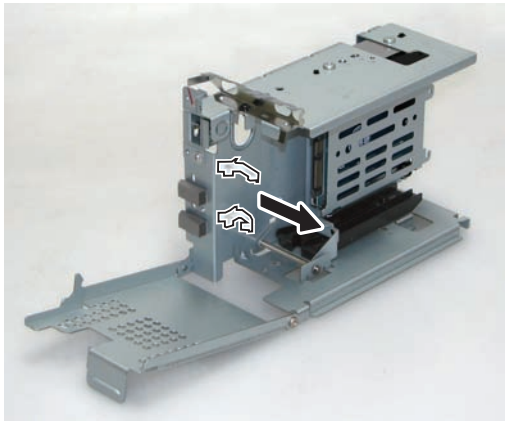
☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-777

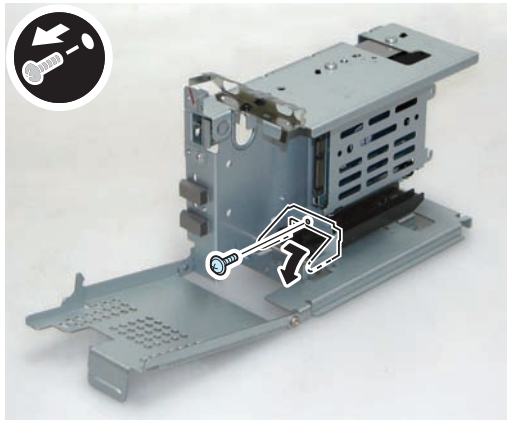
Changing Configuration inside of HDD Unit

☐
1) Remove the 2 wire saddles. (The removed wire saddles will not be used.)



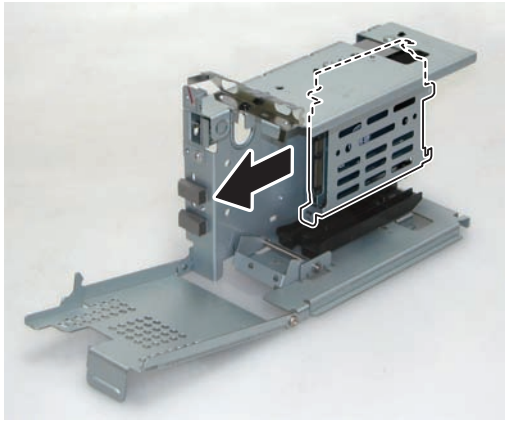
F-9-778

☐
2) Turn the HDD Fixation Plate toward the front.
- 1 Screw (The removed screw will not be used.)



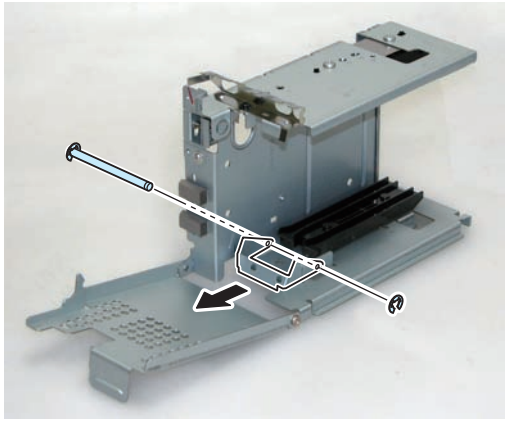
F-9-779

☐
3) Remove the HDD. (The removed HDD will not be used.)



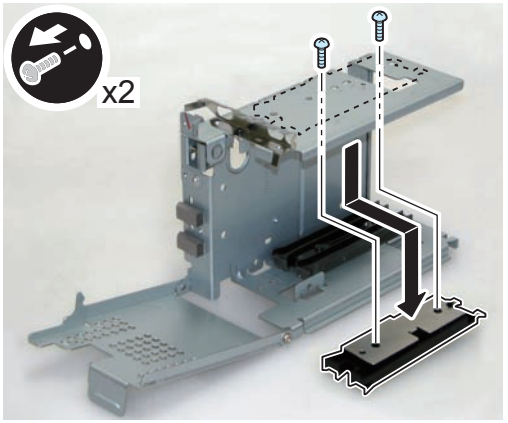
F-9-780

☐
4) Remove the E ring and the shaft from the HDD Unit, and remove the HDD Fixation Plate.
(The removed E ring, shaft and HDD Fixation Plate will not be used.)



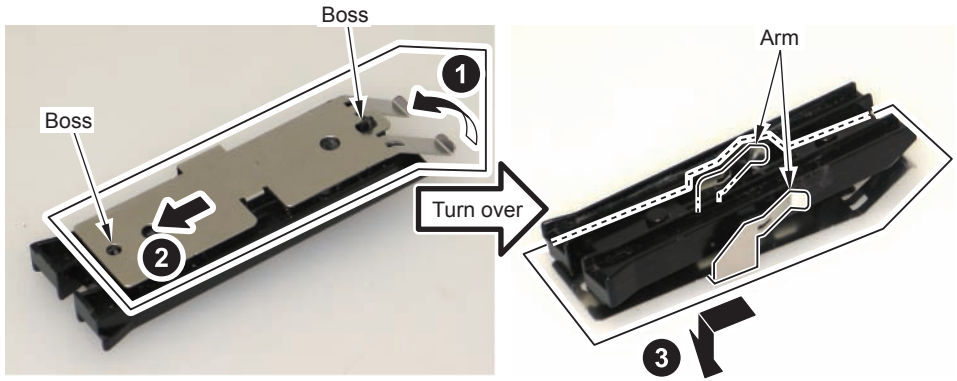
F-9-781

☐
5) Remove the Upper Rail from the HDD Unit.
• • Screws (The removed screws will be used in step 8.)



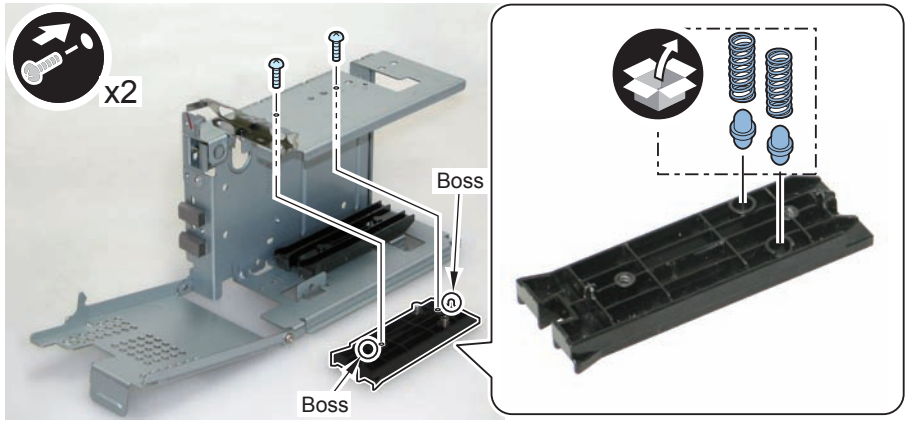
F-9-782

☐
6) Remove the Leaf Spring from the removed Upper Rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)
• 2 Bosses
• 2 Arms



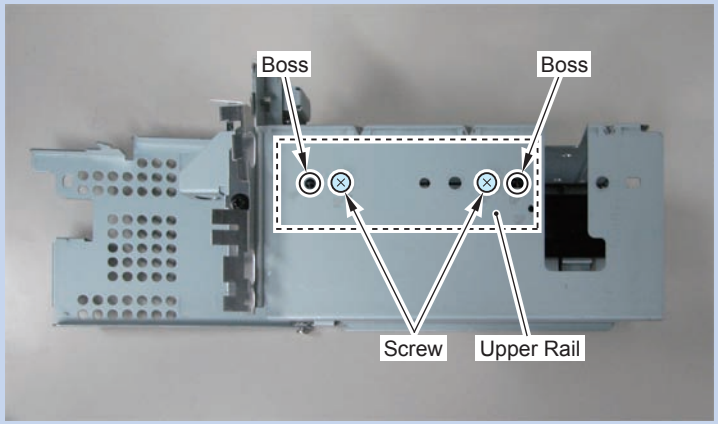
F-9-783

☐
7) Put the 2 HDD Lock Pins and 2 HDD Lock Springs into the holes of the Upper Rail.
8) Install the Upper Rail to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws (Use the screws removed in step 5.)



F-9-784

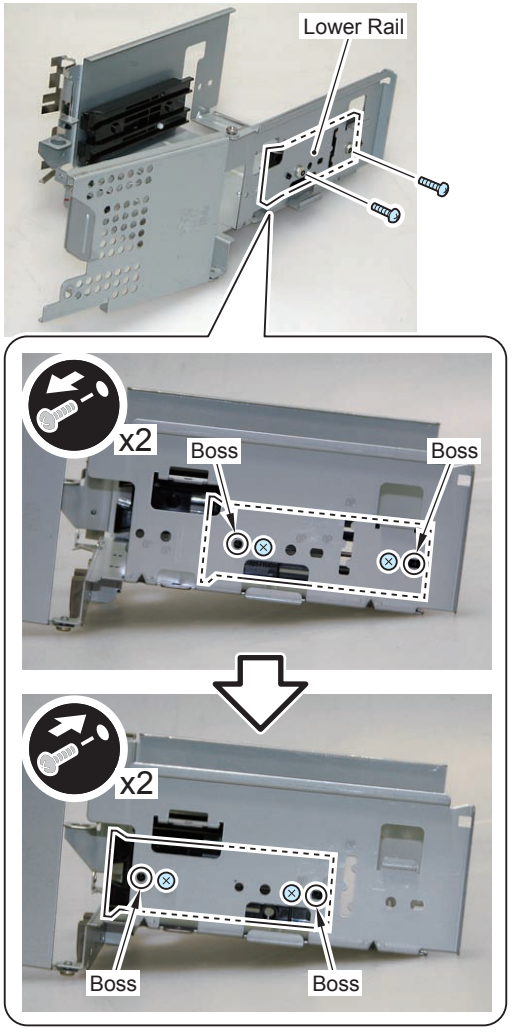
NOTE:
The position where the Upper Rail is to be installed is different from the position where it was originally installed. Be careful not to install it to the original position.



F-9-785

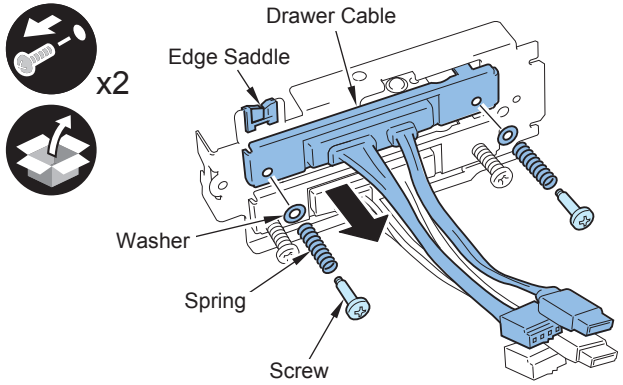
☐
9) Remove the Lower Rail, and then install it to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws

NOTE:
Perform this work with the HDD Unit placed on its side in order to prevent the Grounding Plate from being deformed.



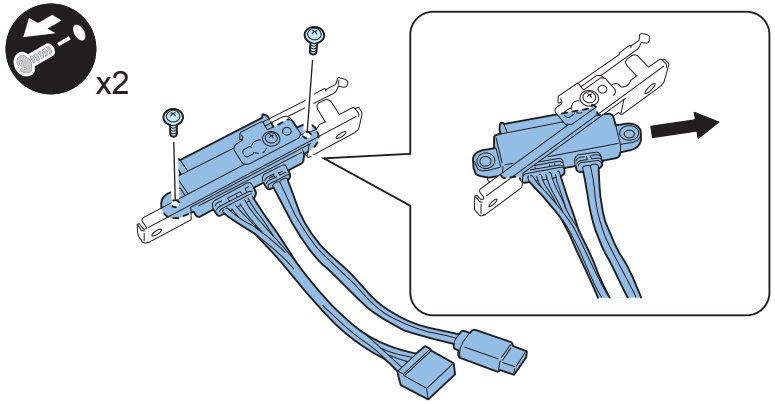
F-9-786

☐
10) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the Upper Drawer Cable (The Signal Cable Red side).
- 2 Screws
- 2 Springs
- 2 Washers (The removed springs and washers will be used in step 13.)



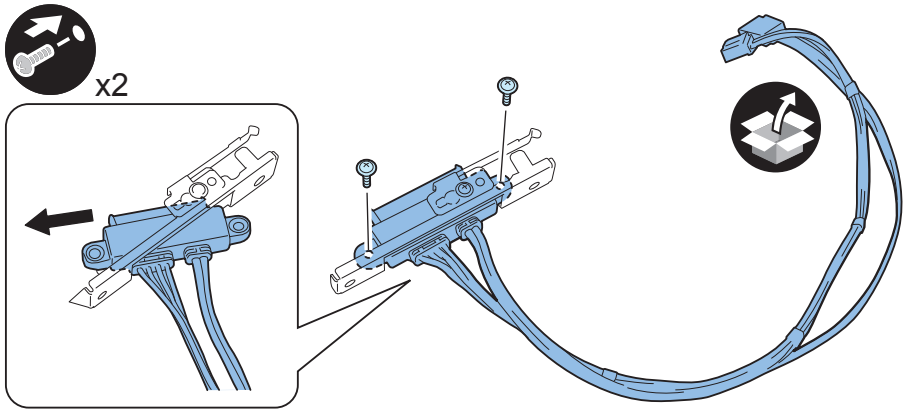
F-9-787

☐
11) Remove the Drawer Cable. (The removed Drawer Cable will not be used.)
- 2 Screws (Removed screw will be used in step 12.)



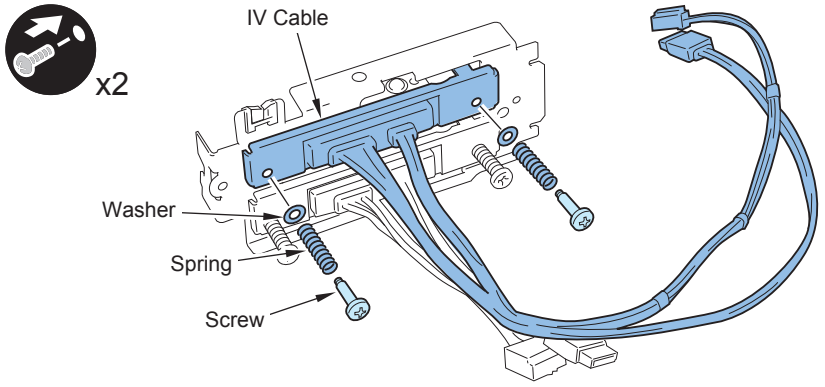
F-9-788

☐
12) Install the IV Cable.
- 2 Screws (Use the screws removed in step 11.)



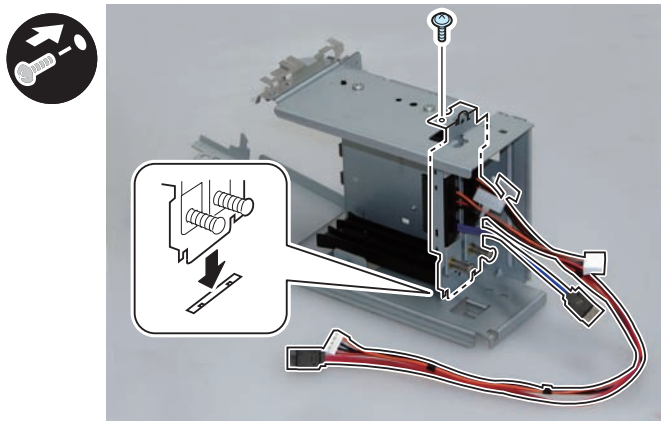
F-9-789

☐
13) Install the IV Cable of HDD Drawer Unit.
- 2 Screws
- 2 Springs
- 2 Washers (Use the parts removed in step 10.)



F-9-790

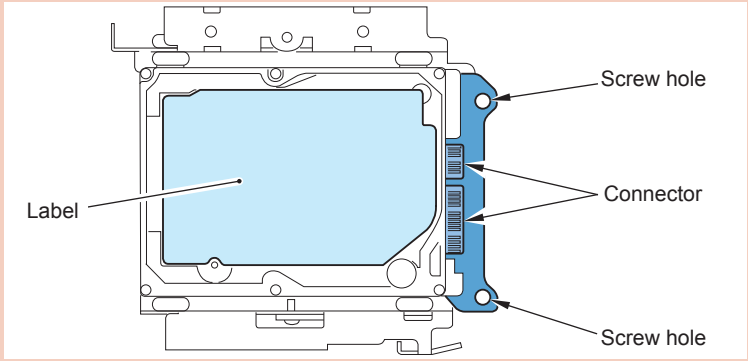
☐
14) Install the HDD Drawer Unit.
- 2 Screws (TP Round End; M3x6)



F-9-791

■ Assembling the Option HDD

CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate.

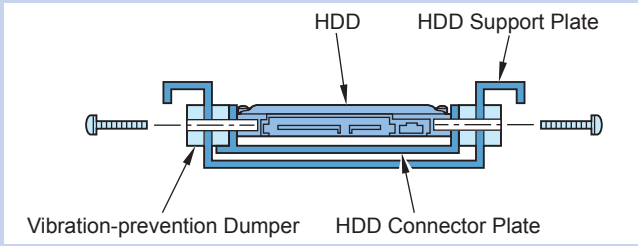


F-9-792

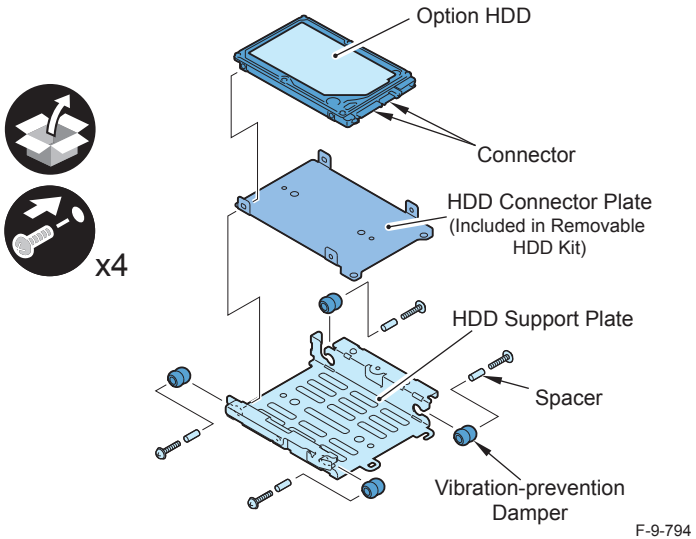
NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

☐
1) Assemble the Option HDD (1TB).
- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



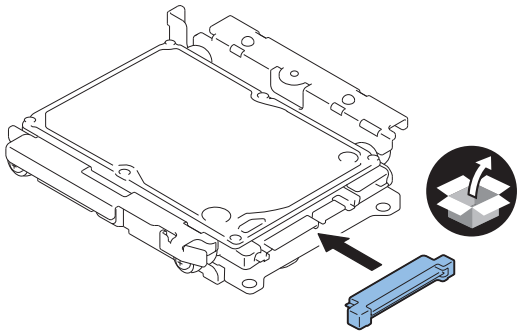
F-9-793



F-9-794

☐
2) Install the Conversion Connector.

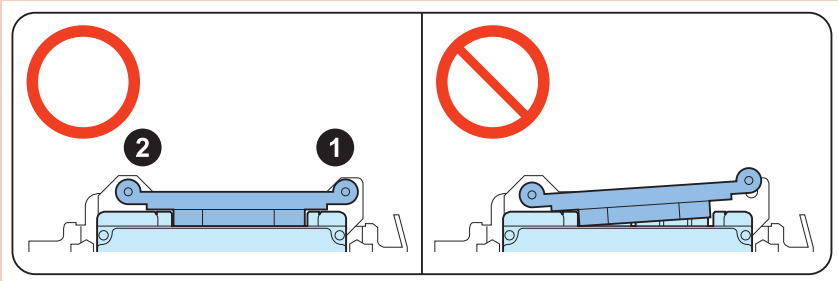
CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



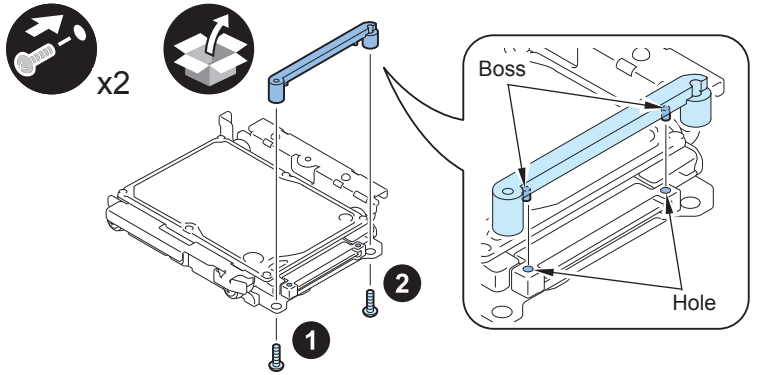
F-9-795

☐
3) Fit the 2 bosses of the Connector Fixing Block into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.
- 2 Screws (P tightening; M3x8)

CAUTION:
- Be sure to firmly hold the Connector Fixing Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



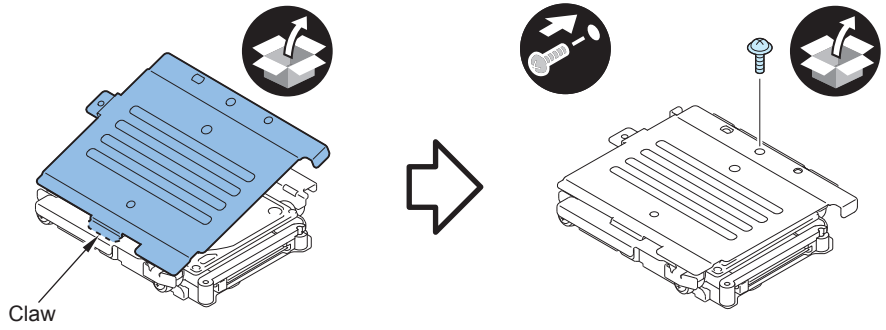
F-9-796



F-9-797

☐
4) Install the HDD Cover.
- 1 Claw
- 1 Screw (TP Round End; M3x6)

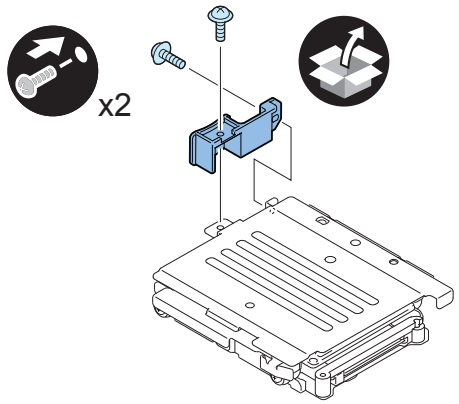
CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-798

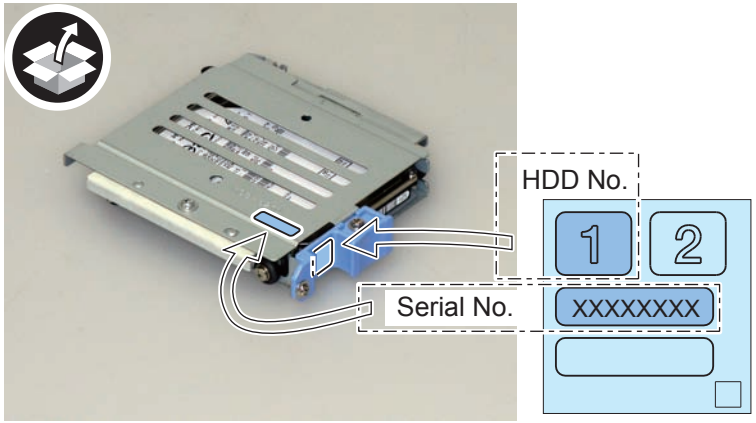
☐
5) Install the HDD Handle.
- 2 Screws (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-799

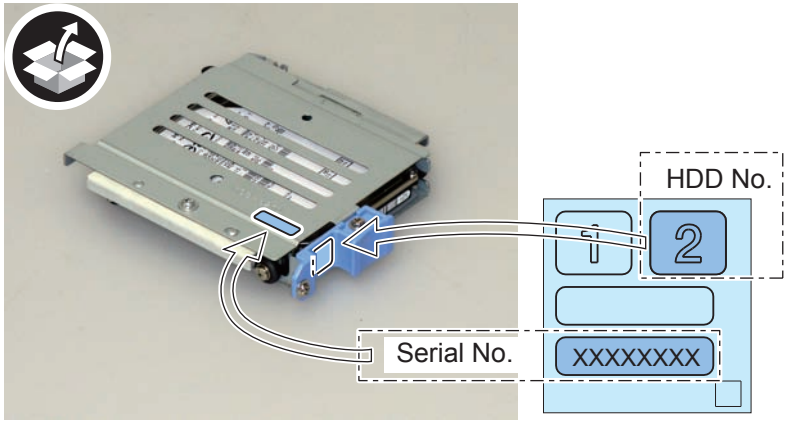
☐
6) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.
7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-800

☐
8) Assemble the other Option HDD (1TB) in the same way according to steps 1 to 5.

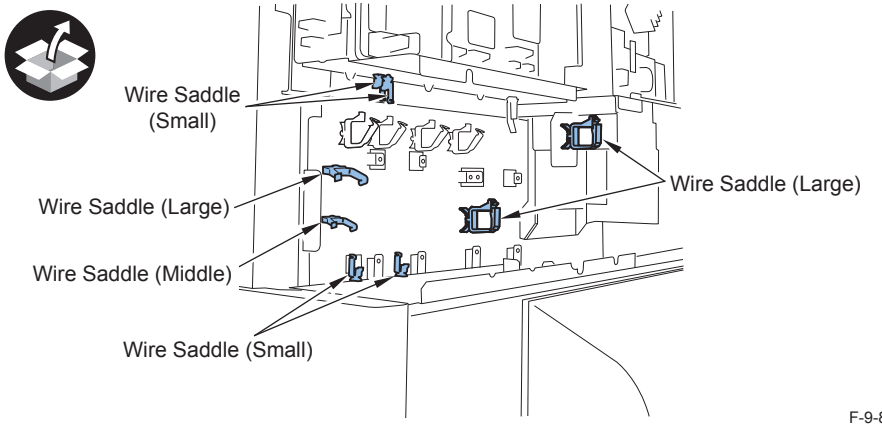
☐
9) Affix the HDD No.2 of the R-HDD Label to the handle of the Removable HDD.
10) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-801

Installing the Mirroring Board or Encryption Board

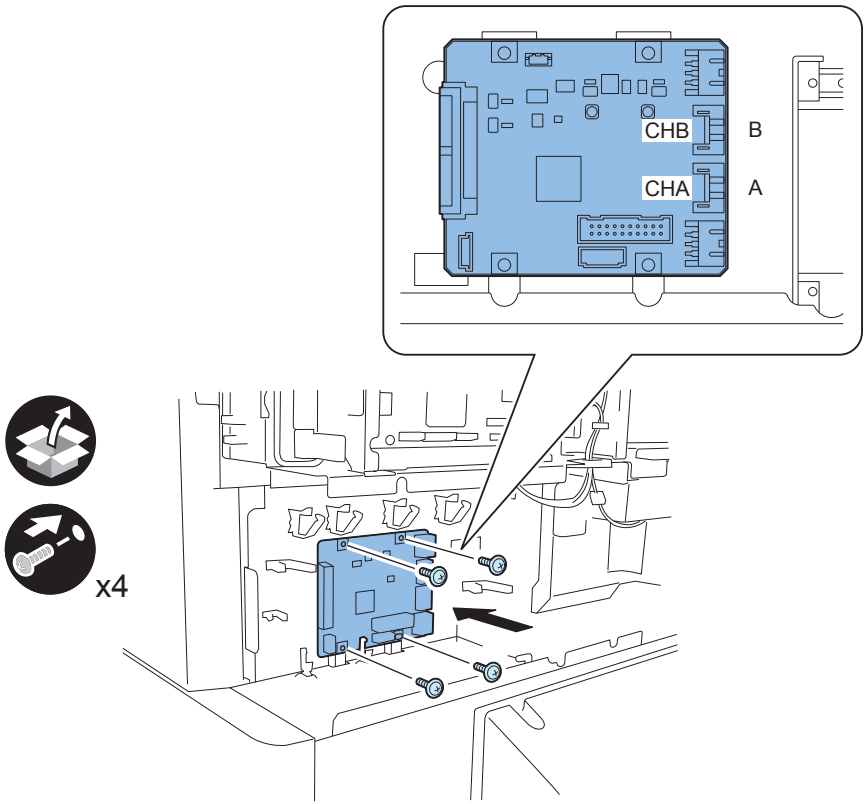
☐
1) Install the 3 wire saddles (Large) (one of them is included in the HDD Mirroring Kit or HDD Data Encryption & Mirroring Kit, and two of them are included in the Removable HDD Kit), 1 wire saddle (Medium), and 4 wire saddles (Small).



F-9-802

☐
2) Install the Mirroring Board or Encryption Board.
- 4 screws (TP; M3x6)

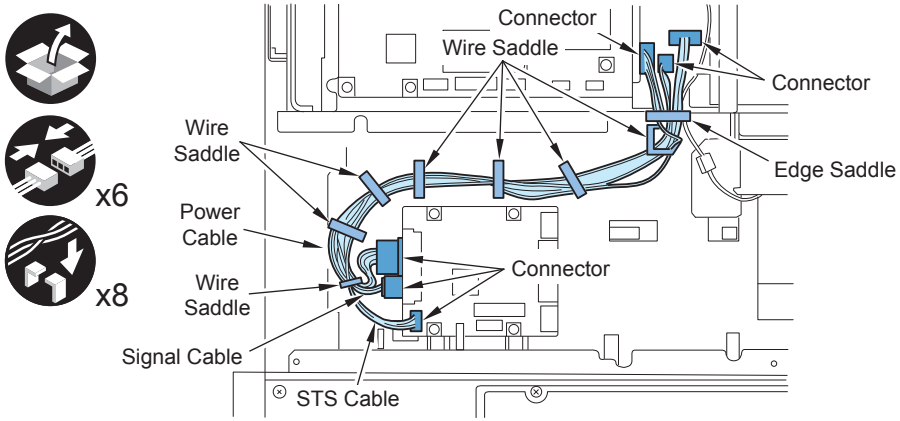
CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



F-9-803

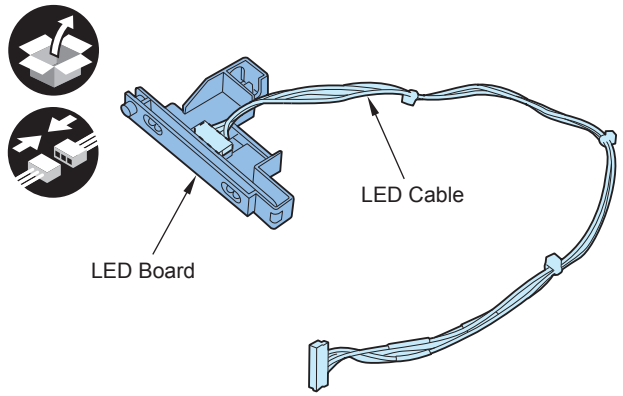
☐
3) Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435), the Power Cable (430mm; A:Cont-Pow or FK2-8463) and STS Cable (420mm (Light blue); A:STS-Sig or FM4-0843).
- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

CAUTION:
- Install the Signal Cable (450mm (Red); A:Cont-Sig or FK2-8435) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow or FK2-8463) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



F-9-804

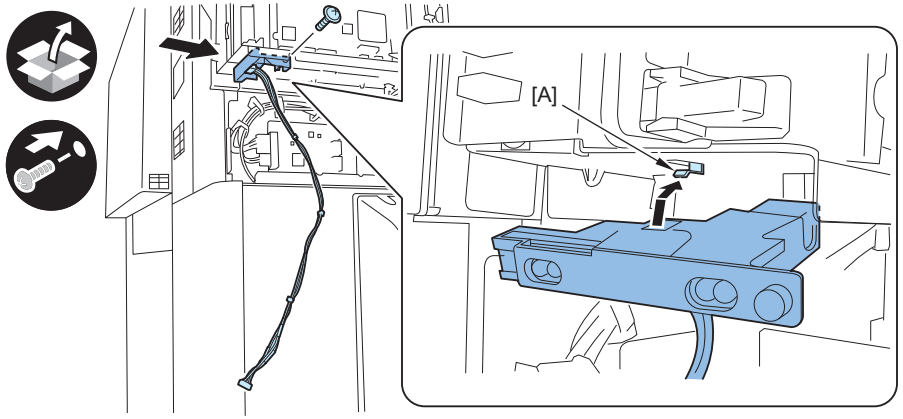
☐
4) Install the LED Cable (290mm; A:LED-Sig or FM4-0840) to the LED Board (Large).



F-9-805

☐
5) Insert the LED Board (Large) to the hook part [A] of the host machine to install.

- 1 Screw (TP; M3x6)

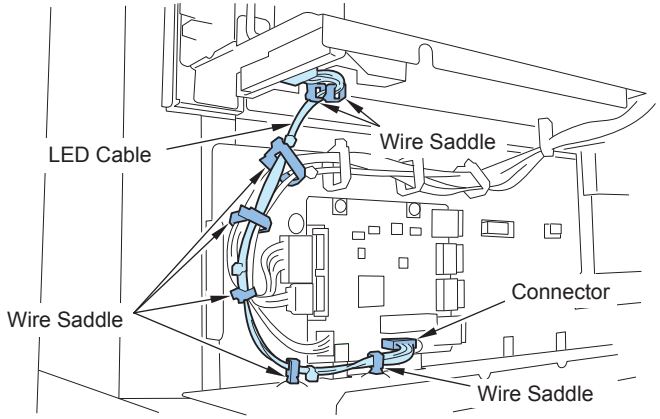


F-9-806

☐
6) Connect the LED Cable (290mm; A:LED-Sig or FM4-0840) to the Mirroring Board or Encryption Board.

- 1 Connector
- 7 Wire Saddles

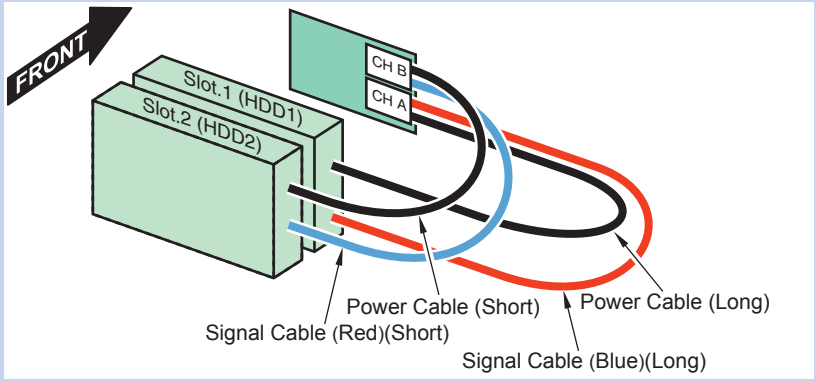
CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-807

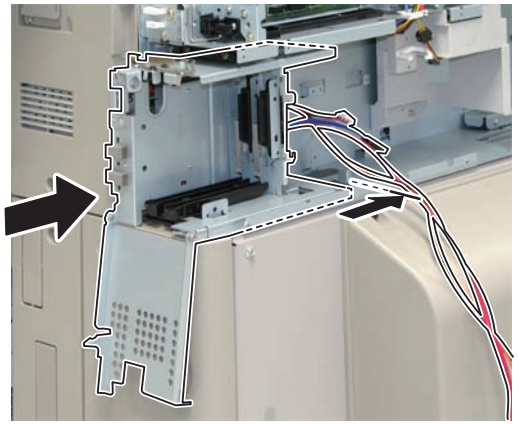
Installing the Removable HDD Unit

NOTE:
The following shows the combination of the HDD and the Mirroring Board or Encryption Board.
- Connect Slot.1 to “CH A” (New HDD)
- Connect Slot.2 to “CH B” (New HDD)



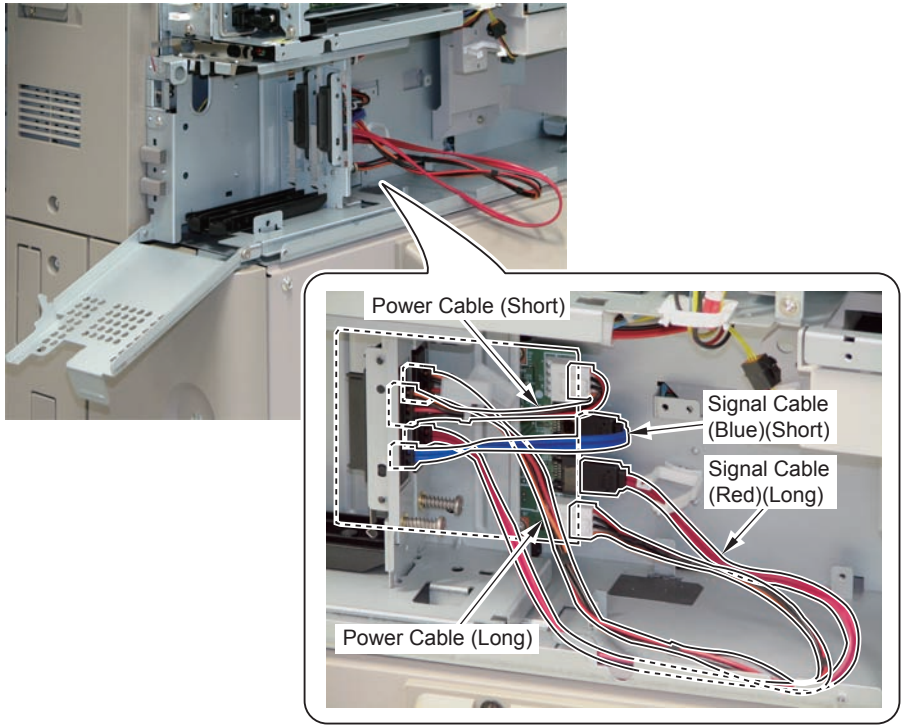
F-9-808

☐
1) Insert 2/3 of the HDD Unit along with the rail on the host machine.



F-9-809

☐
2) Connect the Signal Cable and the Power Cable to the Mirroring Board or Encryption Board.
- Connect the Power Cable (Long) and the Signal Cable (Red)(Long) of the Slot.1 (on the host machine side) to CH A.
- Connect the Power Cable (Short) and the Signal Cable (Blue)(Short) of the Slot.2 (on the rear side) to CH B.

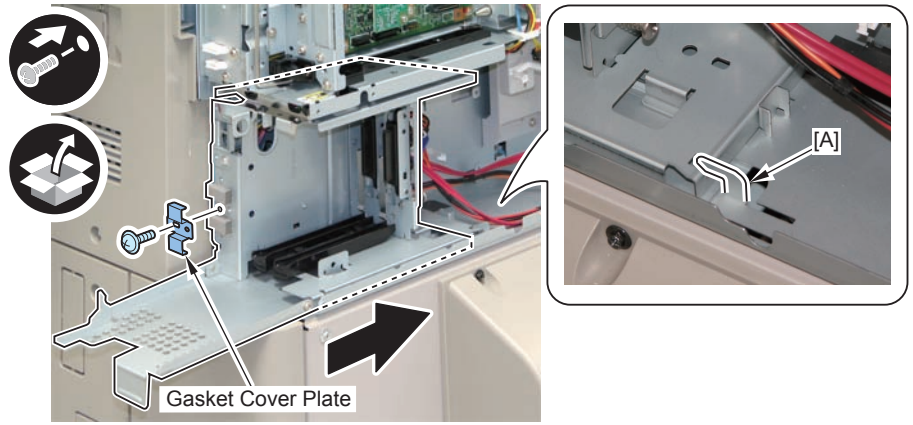


F-9-810

☐
3) Insert the HDD Unit until it stops.

NOTE:
The [A] part should be fitted in the cut-off.

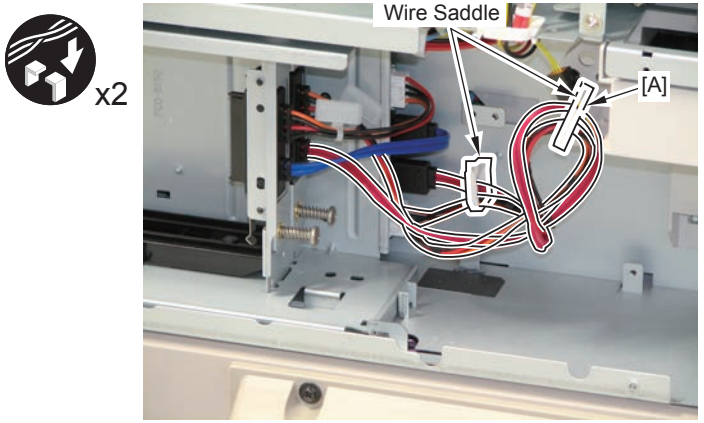
4) Install the Gasket Cover Plate on the Gasket.
5) Secure the HDD Unit.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)



F-9-811

☐
6) Secure the cables (Long) of the Slot.1 (on the host machine side) as shown in the figure.
- 2 Wire Saddles

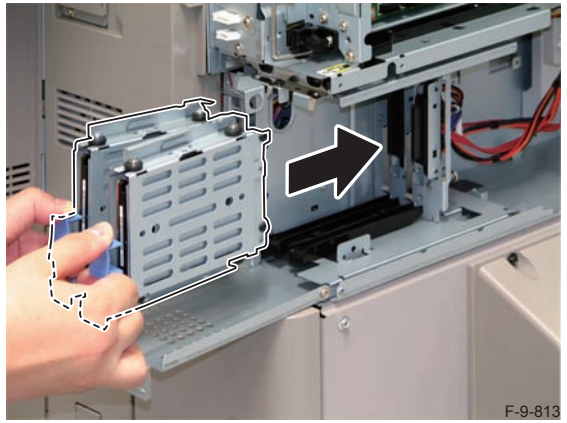
NOTE:
Secure the cables (Long) of the Slot.1 (on the host machine side) using the Wire Saddles [A] with the cables wound 1 time.



F-9-812

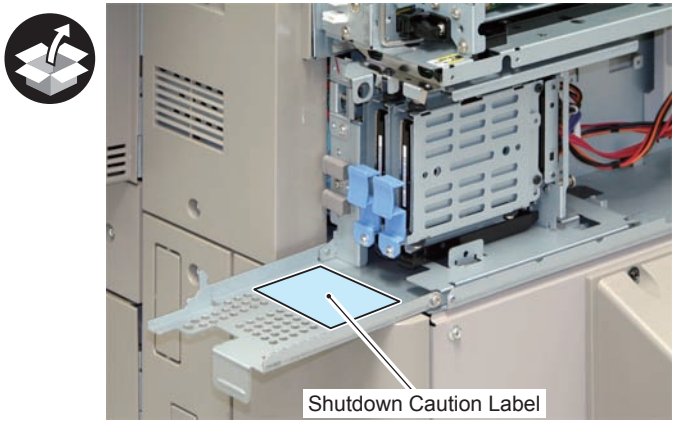
☐
7) Insert the removable HDD.

CAUTION:
Be sure to insert the HDD No. 1 to the Slot.1 (on the host machine side) and insert the HDD No. 2 to the Slot.2 (on the rear side).



F-9-813

☐
8) Affix the Shutdown Caution Label for applicable language to align with the ruled line on the HDD Lid.



F-9-814

☐
9) Close the HDD Lid.

10) Affix the Handle Label on the Handle part of the HDD Lid.

F-9-815

☐
11) Install the removed covers.

- Rear Upper Cover (9 Screws)

CAUTION:

When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:

When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
12) Insert the power plug to the outlet.

13) Turn ON the main power switch.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode

After Installing HDD Data Encryption & Mirroring Kit

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that ‘2.00’ or '2.01' is displayed in ‘Canon MFP Security Chip’ as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark () is displayed on the lower left corner of a panel screen.

Setting for Mirroring

1) Specify the setting for Mirroring.
- Service Mode > COPIER > OPTION > FNC-SW > W/RAID; select “1” for W/RAID.

2) Turn OFF/ON the main power switch to enable the setting value.
3) Check that the UI screen is started normally.
4) Open the HDD Cover, and check that the LED is flashing.
- The green LED of HDD1 (Slot.1) is flashing.
- The green and red LEDs of HDD2 (Slot.2) are flashing.

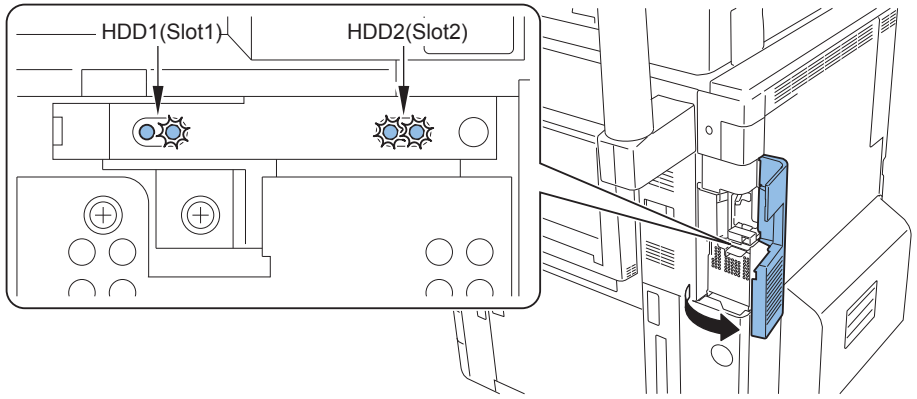
CAUTION:

Re-building process starts after setting W/RAID to “1”.

When the error indicating the message of “Need to replace Hard Disk (Contact with Service Technician)” on the UI occurs, re-execute the re-building process as follows;

1) Check the lighted Red LED is for the HDD2.
2) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to “0”.
3) Turn OFF/ON the main power switch of the host machine to enable the setting value.
4) Set Service mode > COPIER > OPTION > FNC-SW > W/RAID to “1”.
5) Turn OFF/ON e the main power switch of the host machine to enable the setting value.

The abovementioned procedure is limited only for the re-building process at the initial installation. The error occurred at re-building process during operation is not targeted.



F-9-816

Reporting to the System Administrator at the End of the Work (only when HDD Data Encryption & Mirroring Kit has been installed)

When you have completed all installation work, report to the system administrator for the following:

At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.

Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-10]

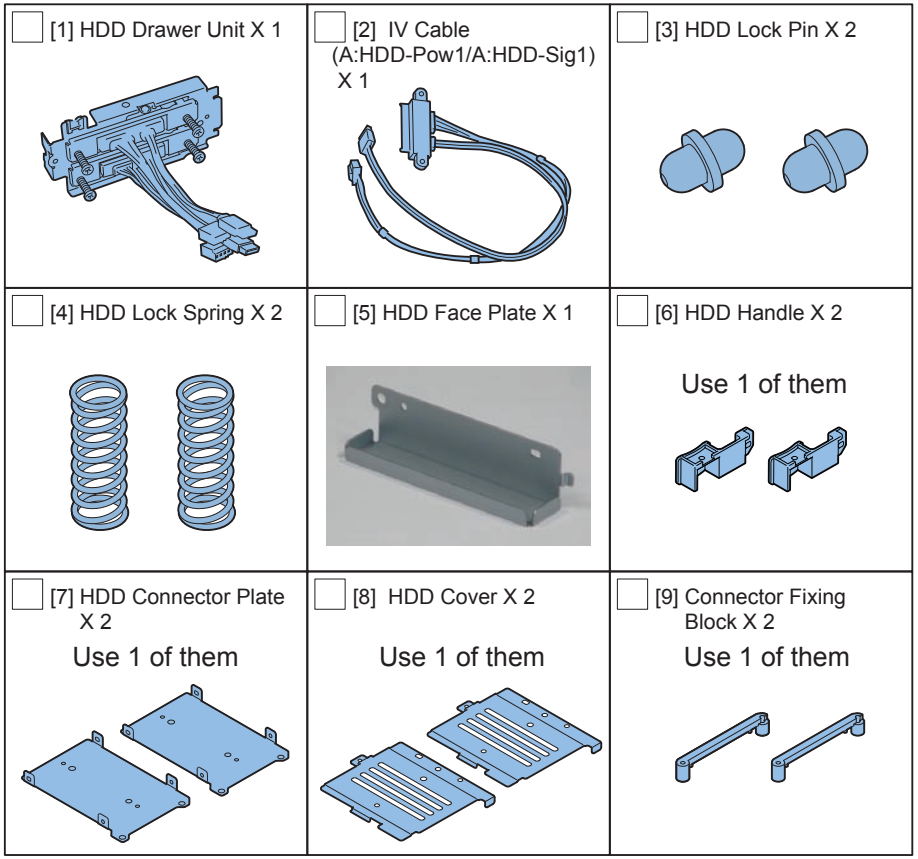
Standard HDD + Removable HDD Kit + HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

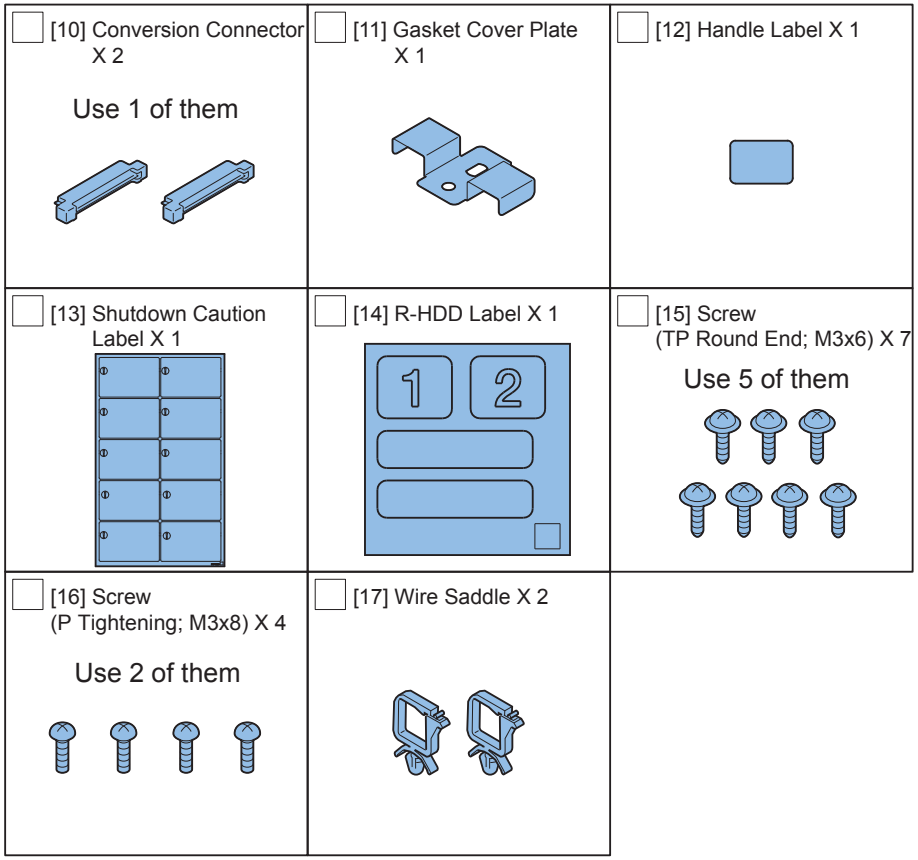
A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

Removable HDD Kit



F-9-817

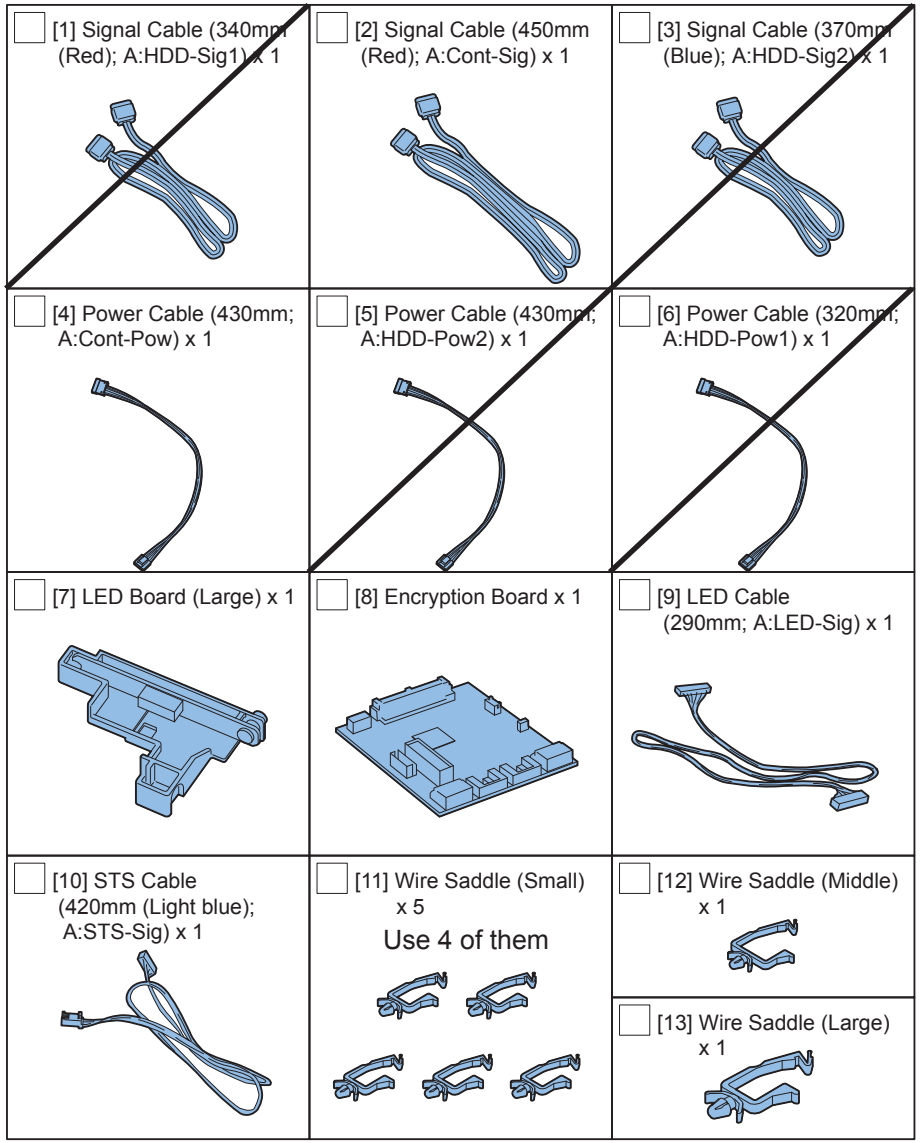


F-9-818

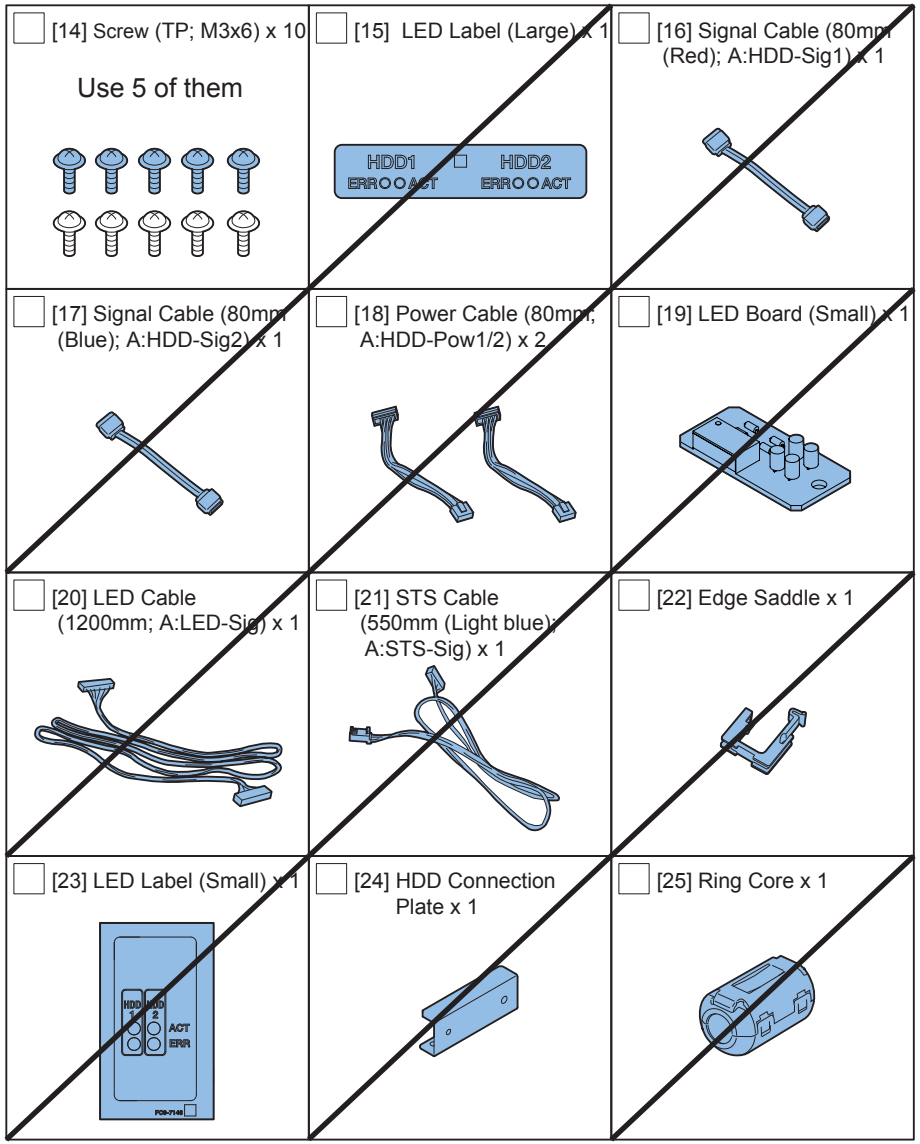
< CD/ Guides >

- FCC/IC Sheet

HDD Data Encryption & Mirroring Kit



F-9-819



F-9-820

< CD/Guides >

- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

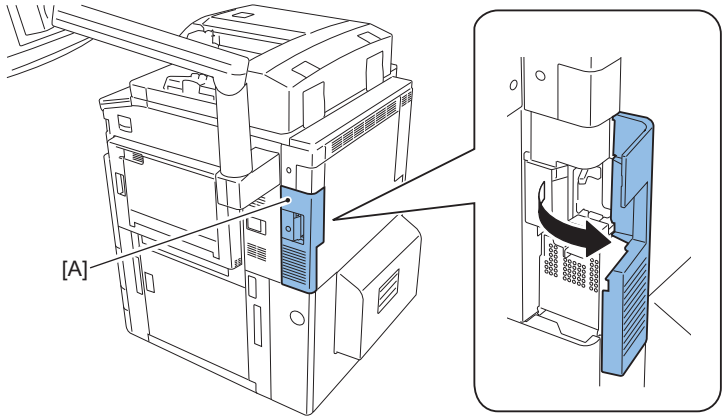
Check that the main power switch is OFF.

1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

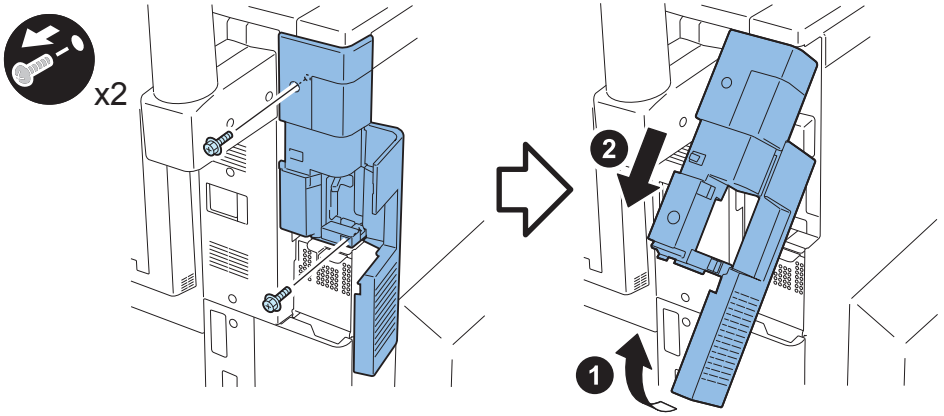
Removing the HDD Unit

☐
1) Push section [A] to open the HDD Cover.



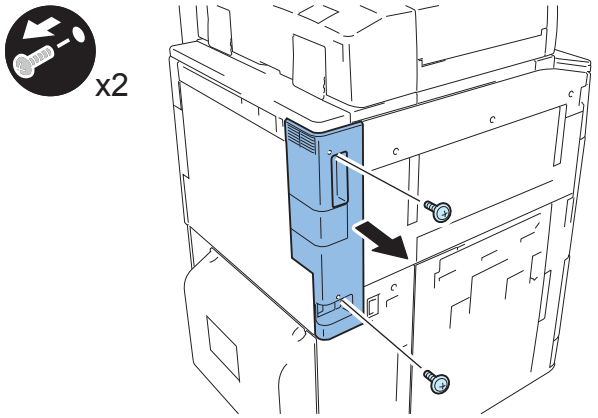
F-9-821

☐
2) Remove the Main Controller Right Cover Unit.
- 2 Screws



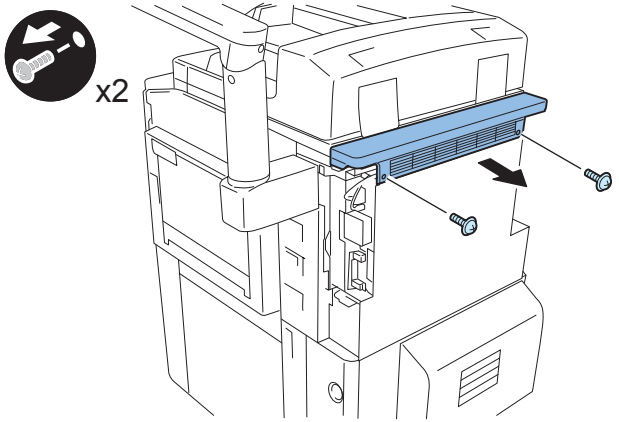
F-9-822

☐
3) Remove the Box Left Cover.
- 2 Screws



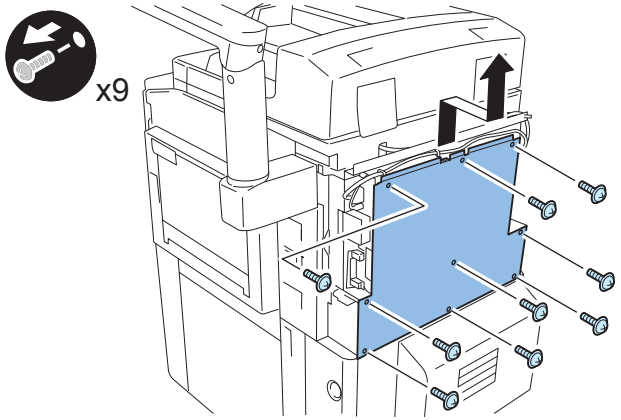
F-9-823

☐
4) Remove the Box Upper Cover.
- 2 Screws



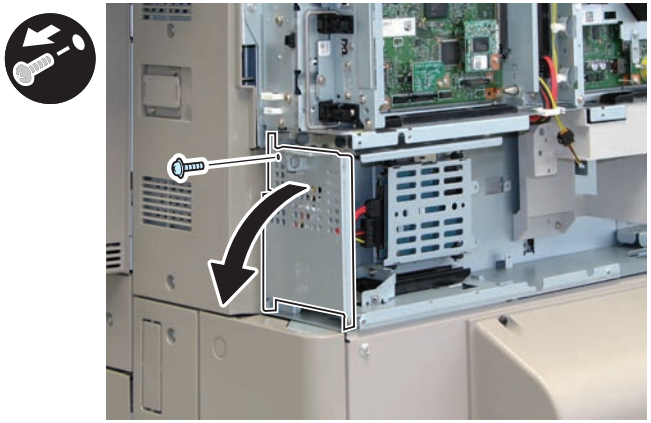
F-9-824

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-825

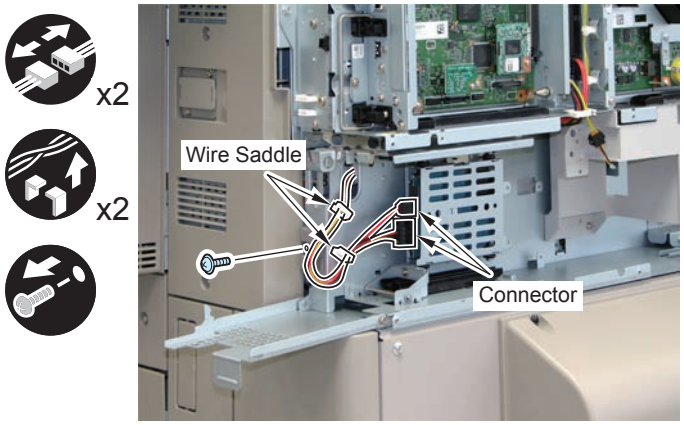
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw will not be used.)



F-9-826

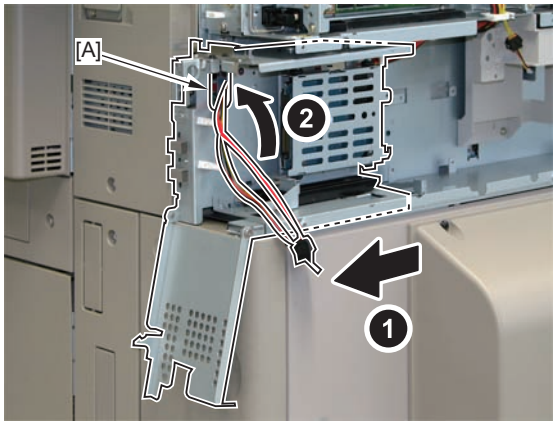
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 5.)



F-9-827

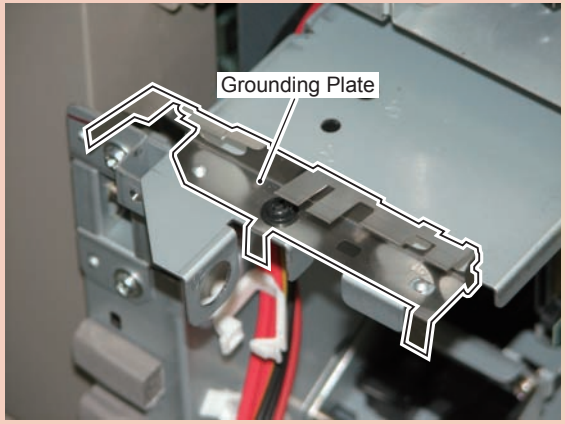
☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



F-9-828

CAUTION:

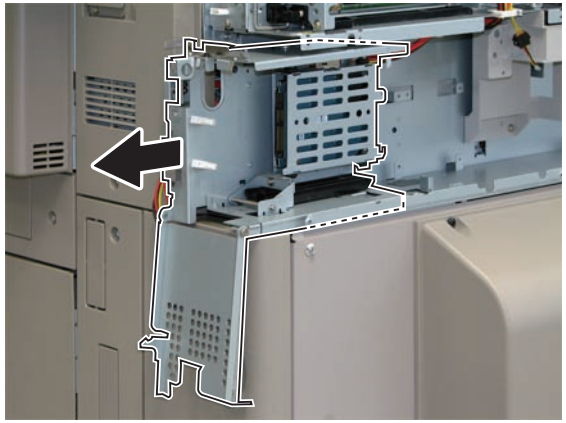
Be sure not to deform the Grounding Plate.



F-9-829

☐

10) Remove the HDD Unit from the host machine.

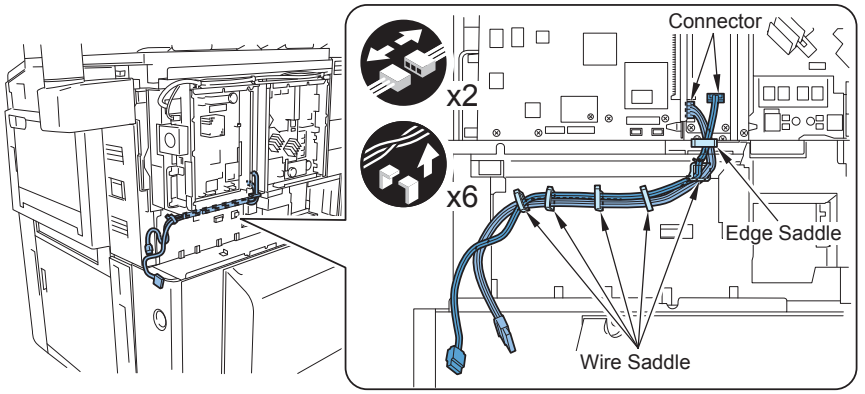


F-9-830

☐

11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)

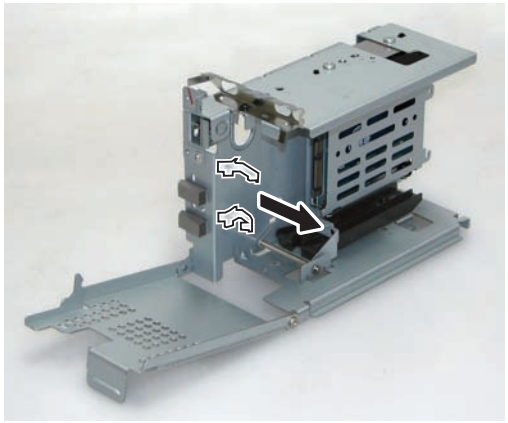
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-831

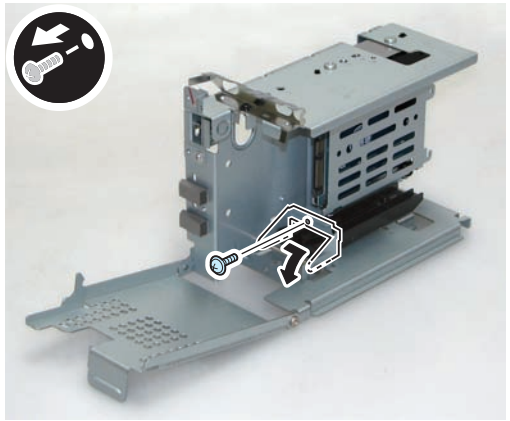
■ Changing Configuration inside of HDD Unit

☐
1) Remove the 2 wire saddles. (The removed wire saddles will not be used.)



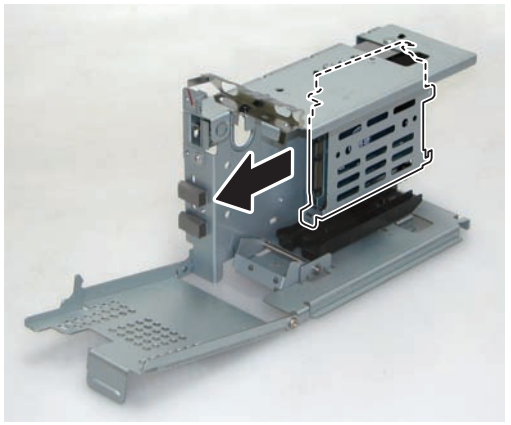
F-9-832

☐
2) Turn the HDD Fixation Plate toward the front.
- 1 Screw (The removed screw will not be used.)



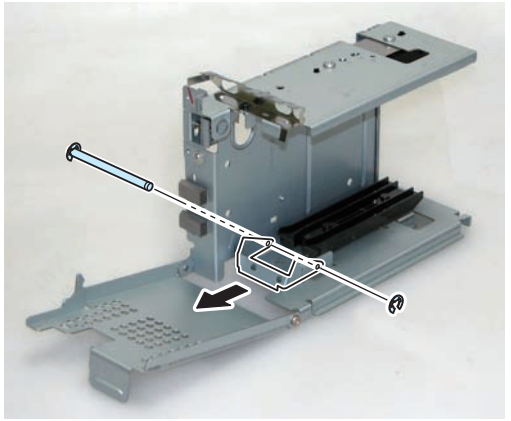
F-9-833

☐
3) Remove the HDD.



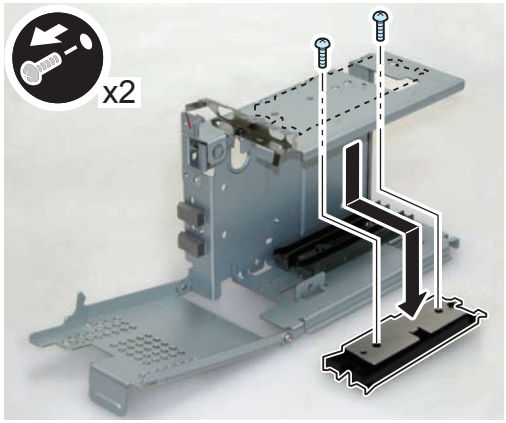
F-9-834

☐
4) Remove the E ring and the shaft from the HDD Unit, and remove the HDD Fixation Plate.
(The removed E ring, shaft and HDD Fixation Plate will not be used.)



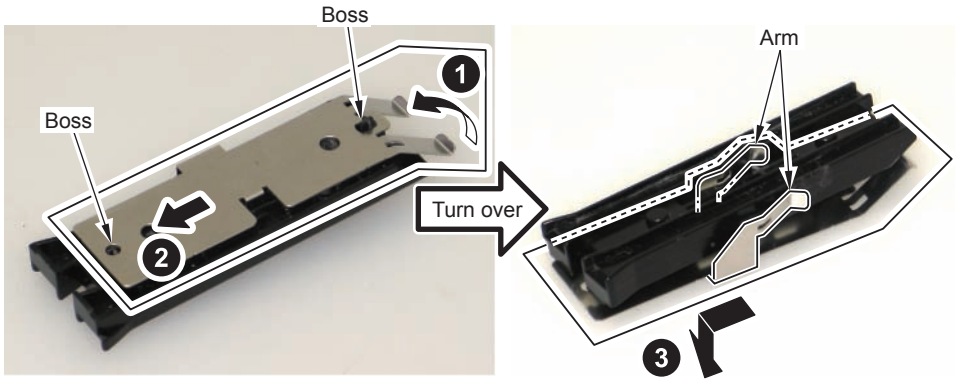
F-9-835

☐
5) Remove the Upper Rail from the HDD Unit.
- • Screws (The removed screws will be used in step 8.)



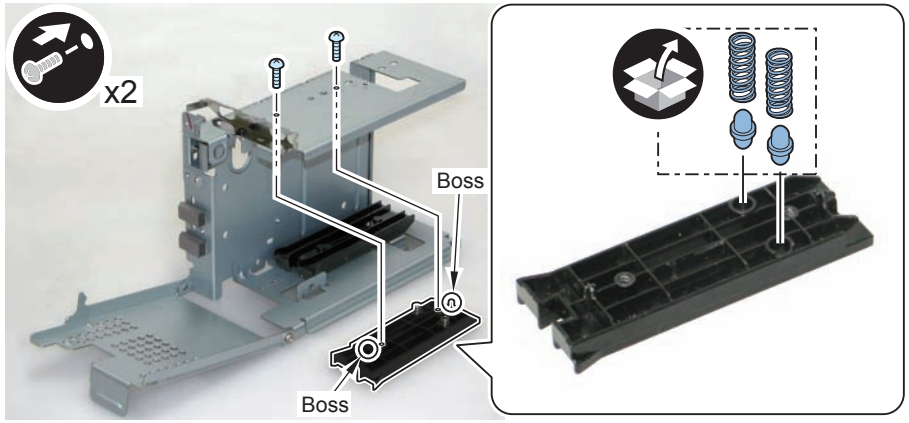
F-9-836

☐
6) Remove the Leaf Spring from the removed Upper Rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)
- 2 Bosses
- 2 Arms



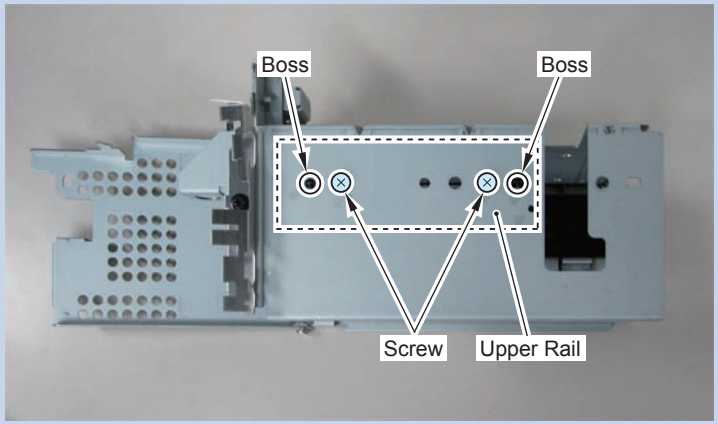
F-9-837

☐
7) Put the 2 HDD Lock Pins and 2 HDD Lock Springs into the holes of the Upper Rail.
8) Install the Upper Rail to a position shifted toward the HDD Cap.
2 Bosses
- 2 Screws (Use the screws removed in step 5.)



F-9-838

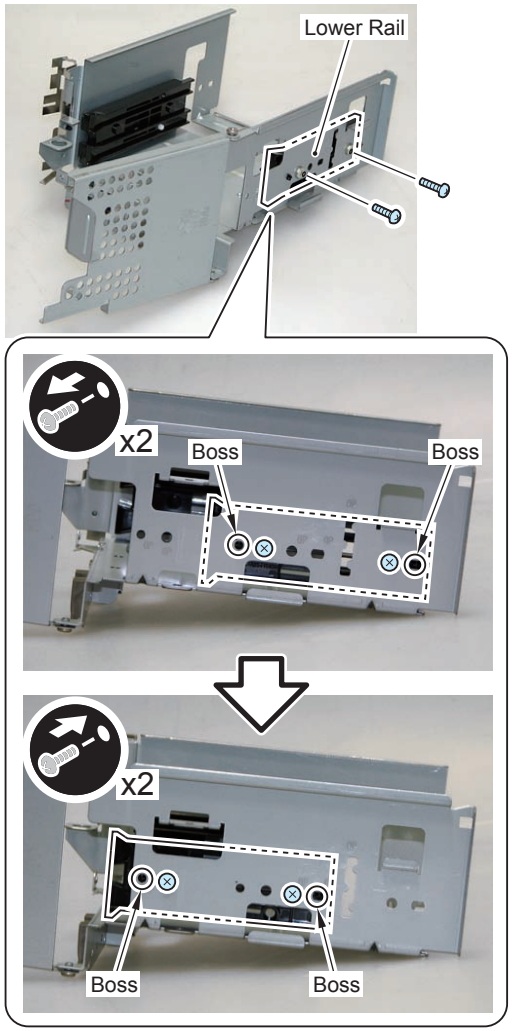
NOTE:
The position where the Upper Rail is to be installed is different from the position where it was originally installed. Be careful not to install it to the original position.



F-9-839

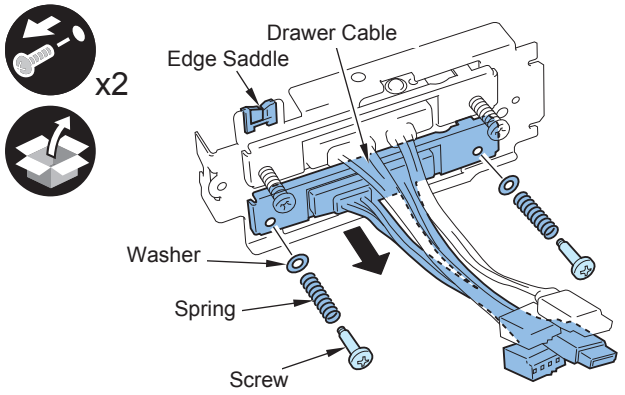
☐
9) Remove the Lower Rail, and then install it to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws

NOTE:
Perform this work with the HDD Unit placed on its side in order to prevent the Grounding Plate from being deformed.



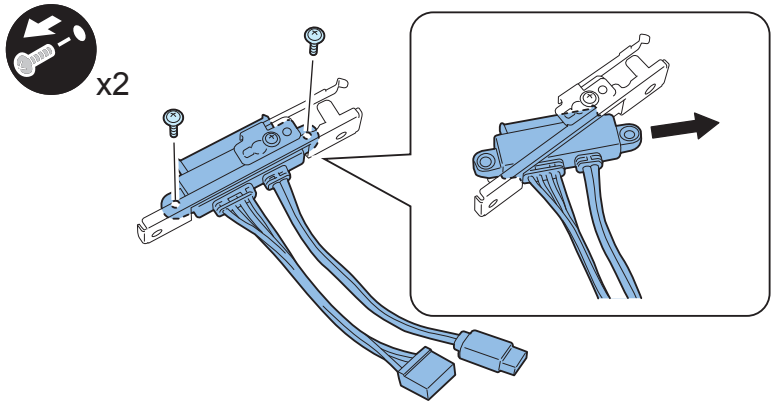
F-9-840

☐
10) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the Lower Drawer Cable (The Signal Cable Blue side).
- 2 Screws
- 2 Springs
- 2 Washers (The removed springs and washers will be used in step 13.)



F-9-841

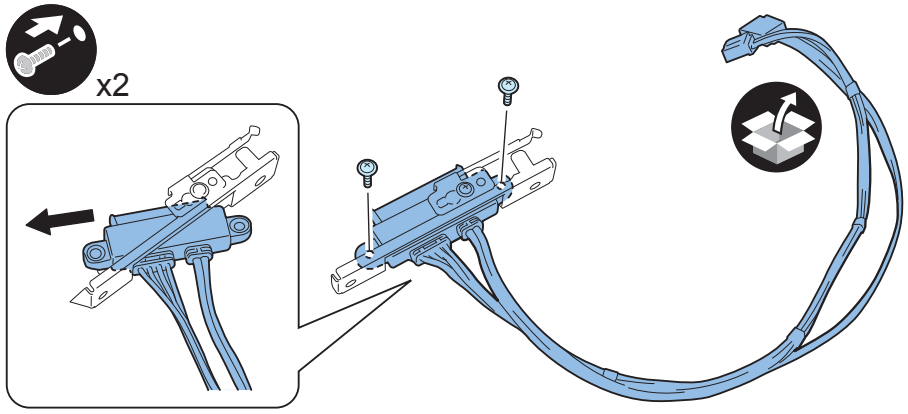
☐
11) Remove the Drawer Cable. (The removed Drawer Cable will not be used.)
- 2 Screws (Removed screw will be used in step 12.)



F-9-842

☐ 12) Install the IV Cable.

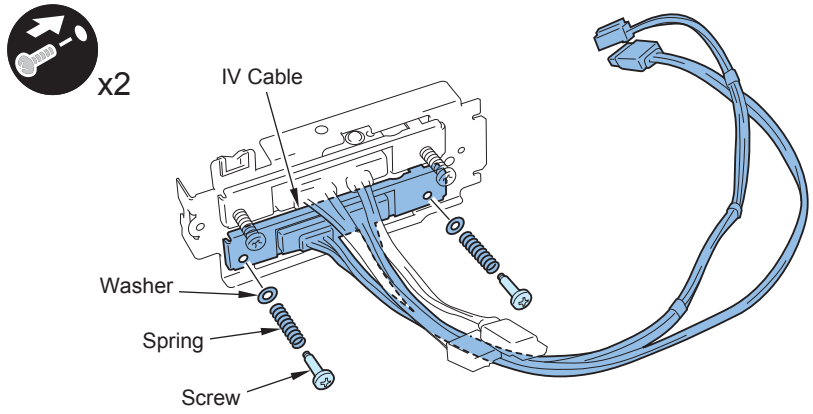
- 2 Screws (Use the screws removed in step 11.)



F-9-843

☐ 13) Install the IV Cable of HDD Drawer Unit.

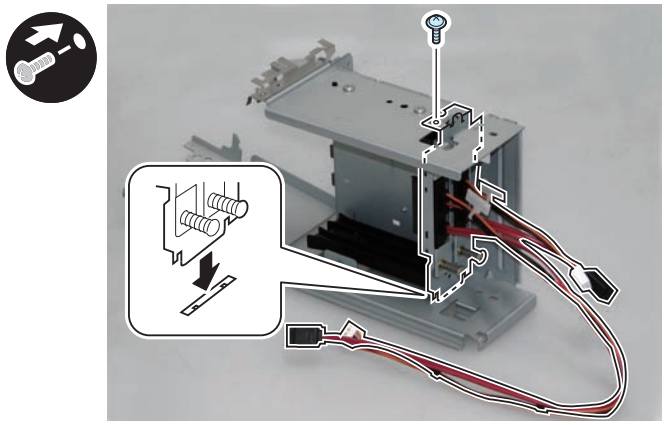
- 2 Screws
- 2 Springs
- 2 Washers (Use the parts removed in step 10.)



F-9-844

☐ 14) Install the HDD Drawer Unit.

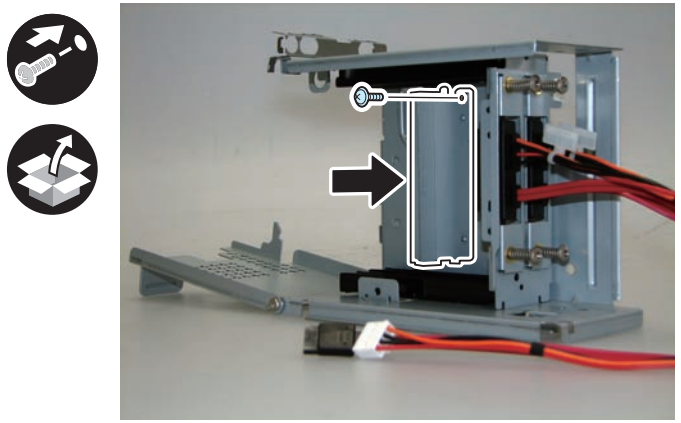
- 2 Screws (TP Round End; M3x6)



F-9-845

☐ 15) Install the HDD Face Plate.

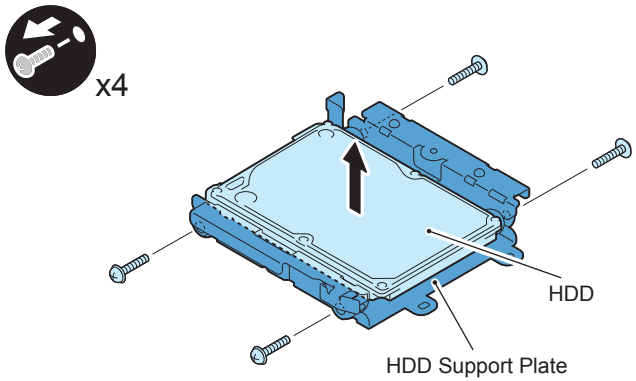
- 2 Screws (TP Round End; M3x6)



F-9-846

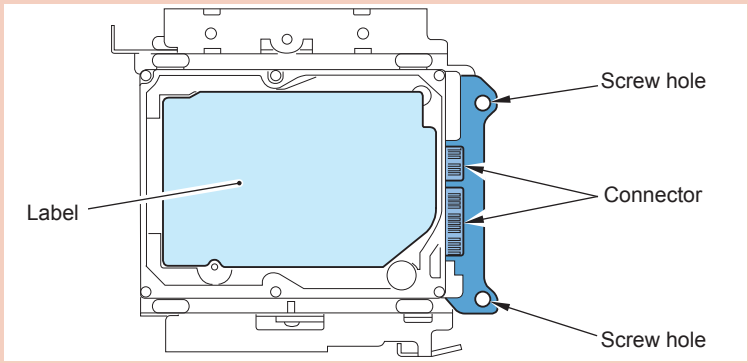
Disassembling and Assembling of the HDD Removed from the Host Machine

☐
1) Disassemble the removed HDD.
- 4 Screws (W Sems)
- 1 HDD Support Plate



F-9-847

CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate.

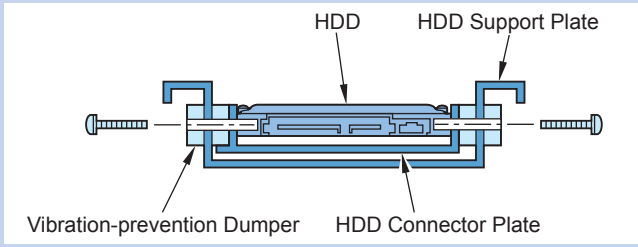


F-9-848

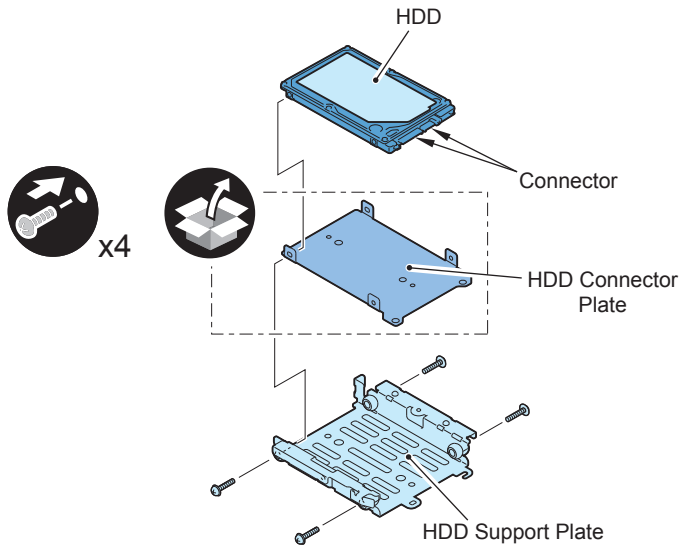
NOTE:
Use the parts disassembled in step 1 and parts included in the Removable HDD Kit.

☐
2) Assemble the HDD disassembled in step 1.
- 1 HDD Support Plate
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 HDD
- 4 Screws (W Sems)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



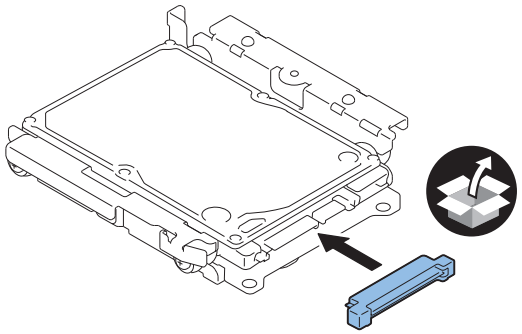
F-9-849



F-9-850

☐
3) Install the Conversion Connector.

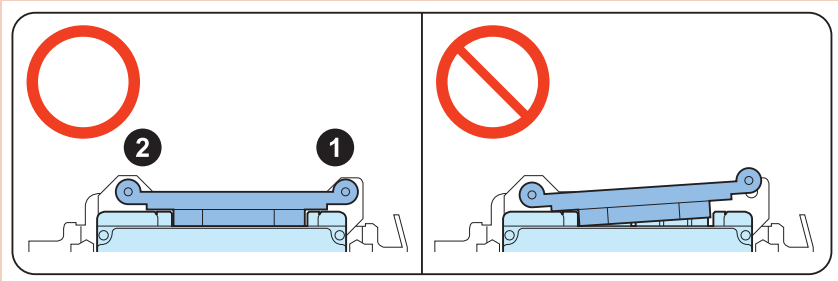
CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.



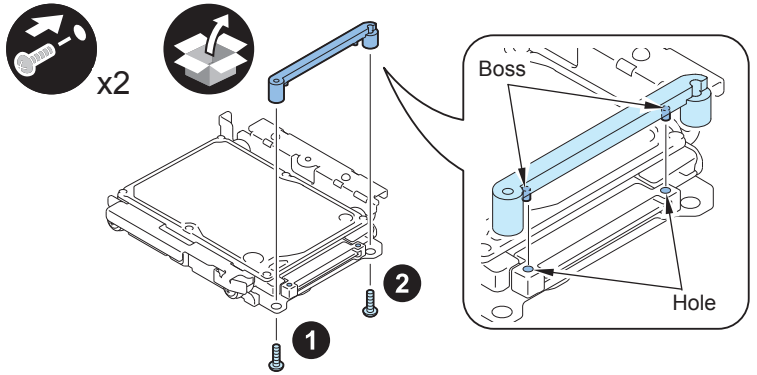
F-9-851

☐
4) Fit the 2 bosses of the Connector Fixing Block into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.
- 2 Screws (P tightening; M3x8)

CAUTION:
- Be sure to firmly hold the Connector Fixing Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



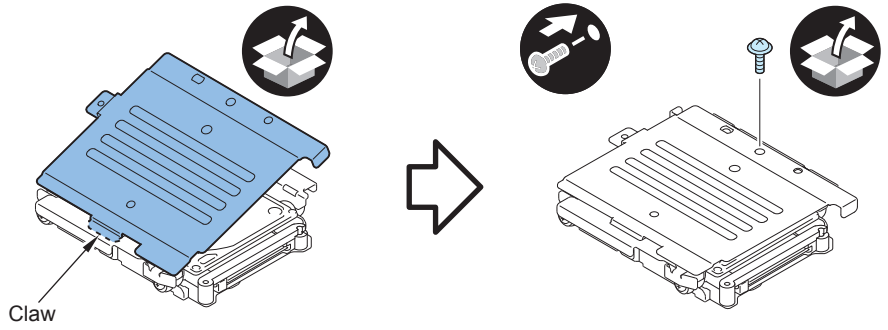
F-9-852



F-9-853

☐
5) Install the HDD Cover.
- 1 Claw
- 1 Screw (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-854

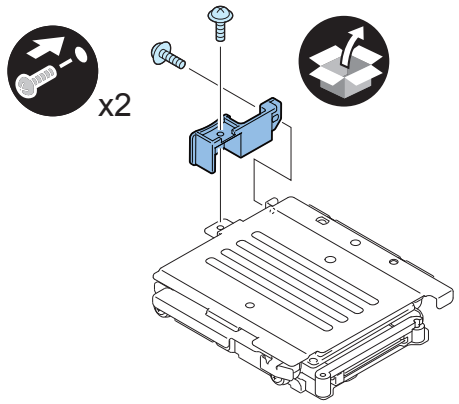
□

6) Install the HDD Handle.

- 2 Screws (TP Round End; M3x6)

CAUTION:

Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.

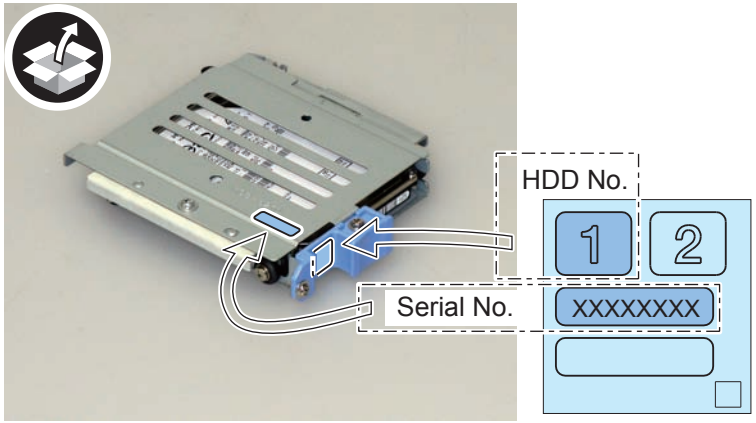


F-9-855

□

7) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.

8) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.

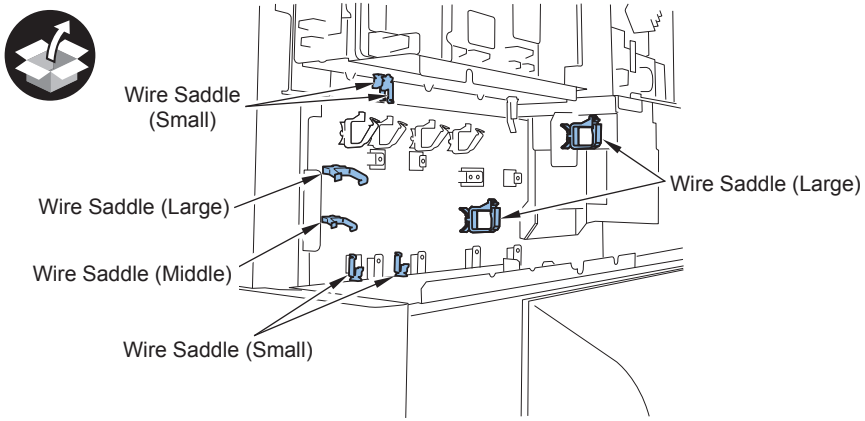


F-9-856

■ Installing the Encryption Board

□

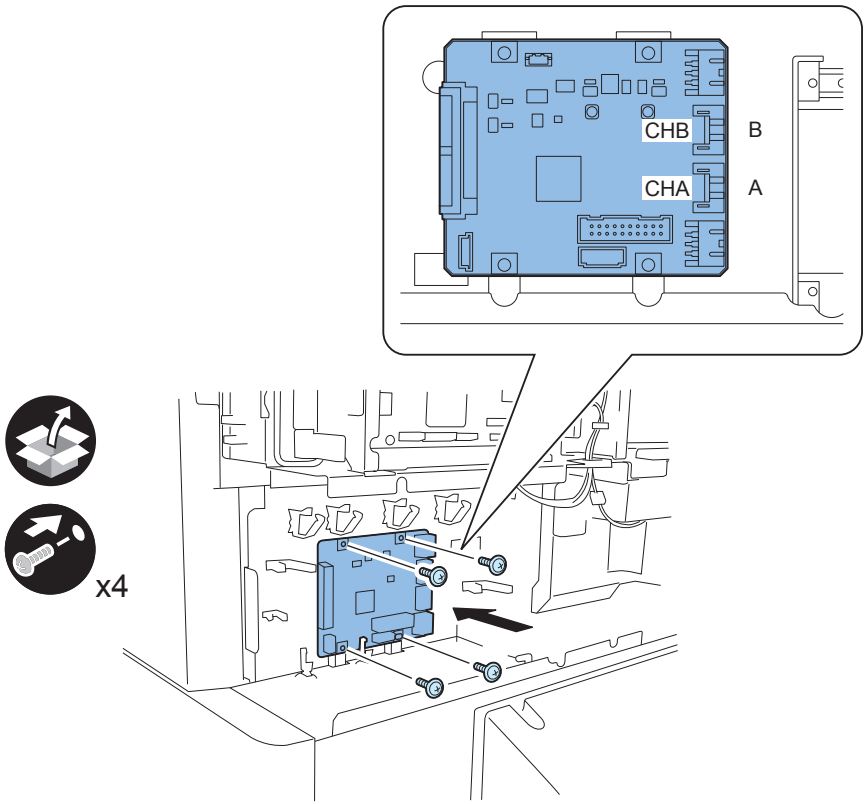
1) Install the 3 wire saddles (Large) (one of them is included in the HDD Data Encryption & Mirroring Kit, and two of them are included in the Removable HDD Kit), 1 wire saddle (Medium), and 4 wire saddles (Small).



F-9-857

☐
2) Install the Encryption Board.
- 4 screws (TP; M3x6)

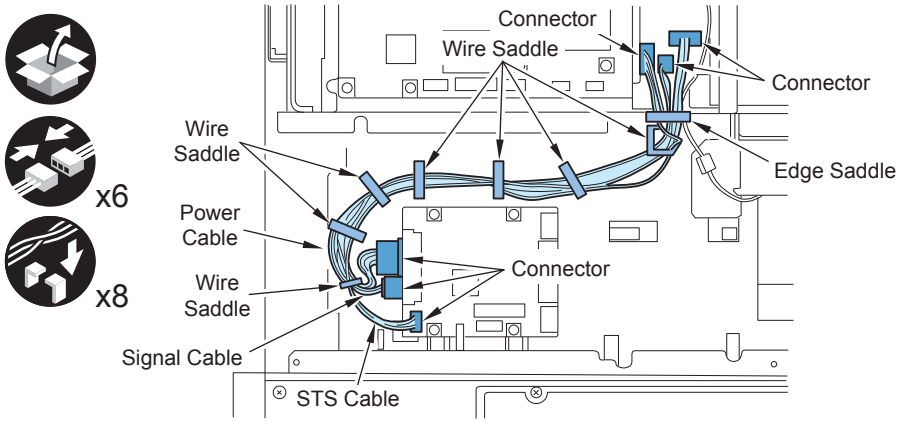
CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



F-9-858

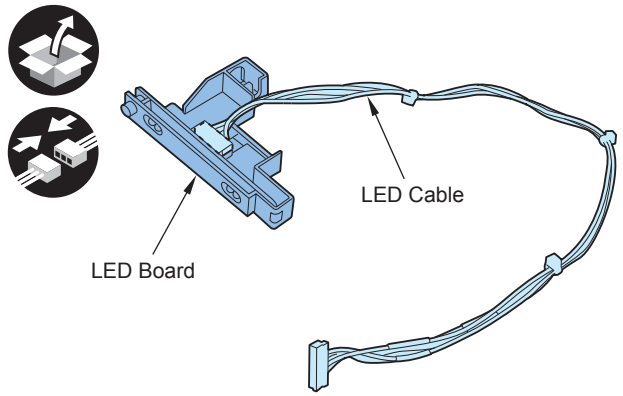
☐
3) Install the Signal Cable (450mm (Red); A:Cont-Sig), the Power Cable (430mm; A:Cont-Pow) and STS Cable (420mm (Light blue); A:STS-Sig).
- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

CAUTION:
- Install the Signal Cable (450mm (Red); A:Cont-Sig) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



F-9-859

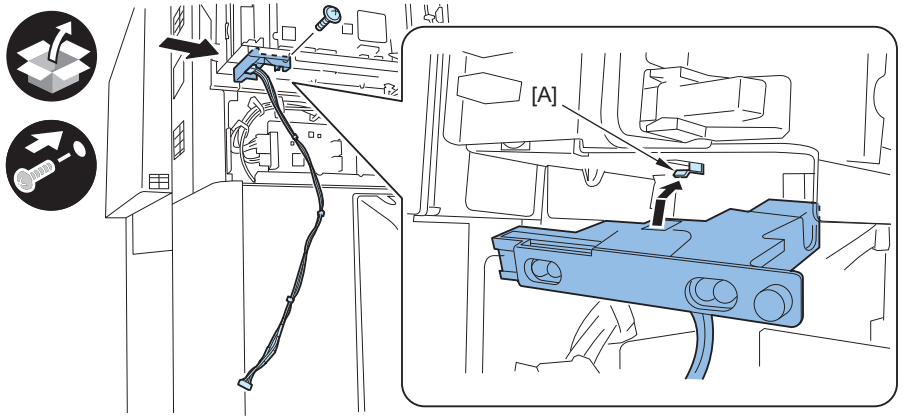
☐
4) Install the LED Cable (290mm; A:LED-Sig) to the LED Board (Large).



F-9-860

☐
5) Insert the LED Board (Large) to the hook part [A] of the host machine to install.

- 1 Screw (TP; M3x6)

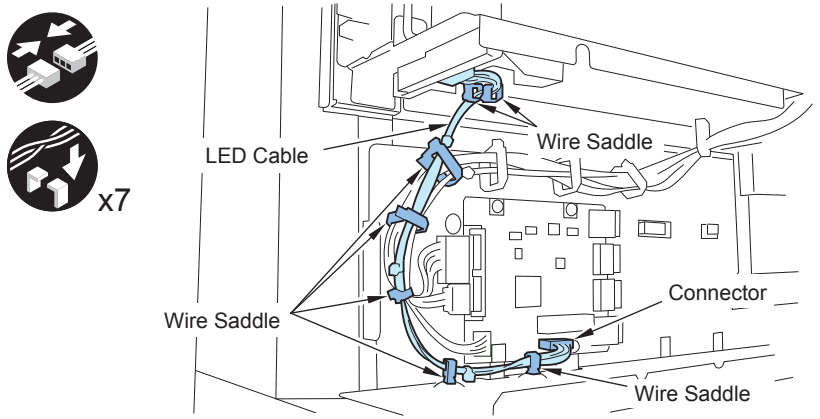


F-9-861

☐
6) Connect the LED Cable (290mm; A:LED-Sig) to the Encryption Board.

- 1 Connector
- 7 Wire Saddles

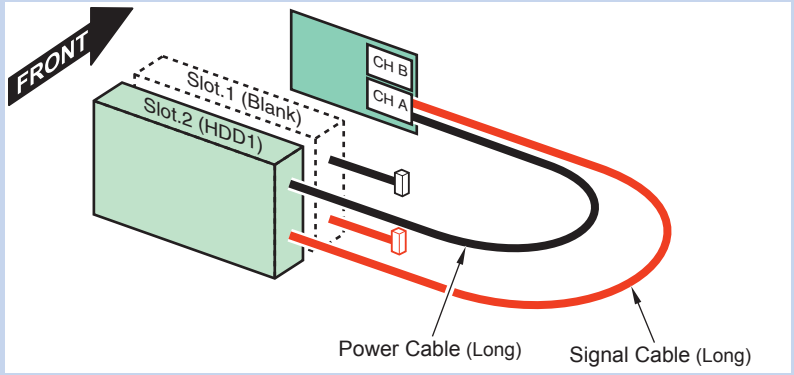
CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-862

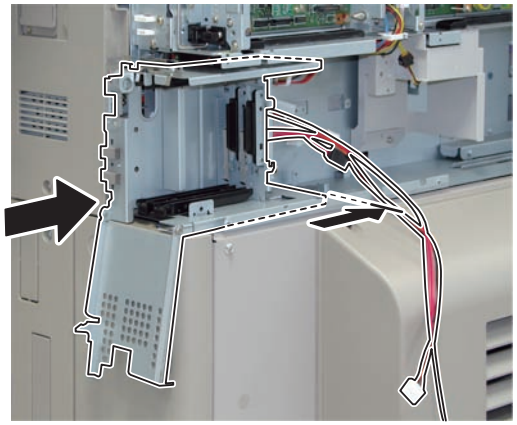
Installing the HDD Unit

NOTE:
The following shows the combination of the HDD and the Encryption Board.
- Connect Slot.2 to “CH A” (The HDD which originally mounted)
- No HDD to Slot.1



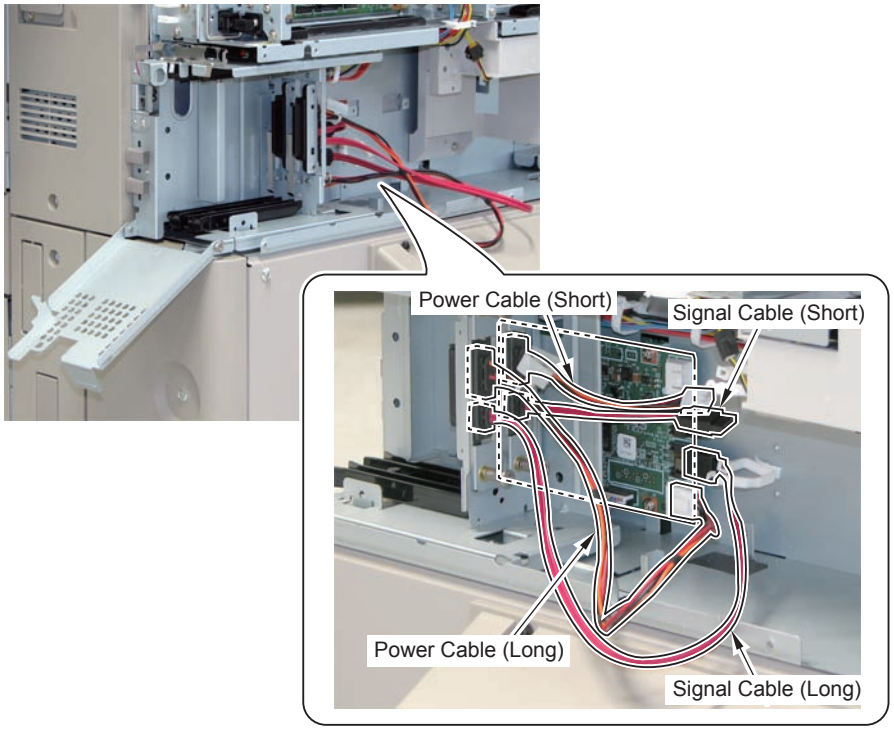
F-9-863

☐
1) Insert 2/3 of the HDD Unit along with the rail on the host machine.



F-9-864

☐
2) Connect the Power Cable (Long) and the Signal Cable (Long) of the Slot.2 (on the rear side) to CH A on the Encryption Board.

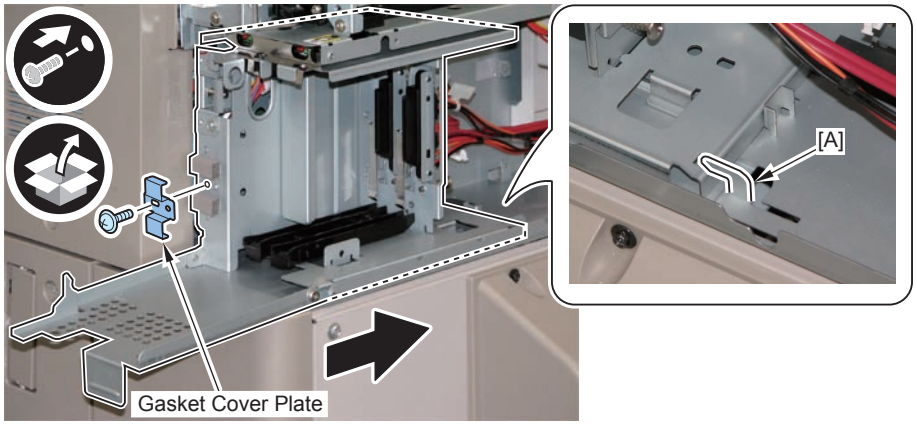


F-9-865

☐
3) Insert the HDD Unit until it stops.

NOTE:
The [A] part should be fitted in the cut-off.

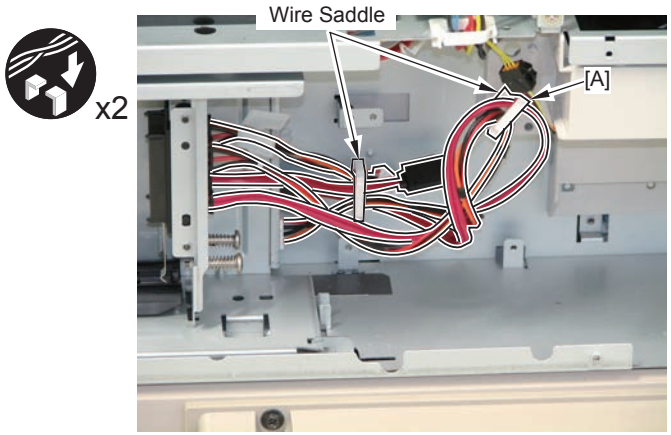
4) Install the Gasket Cover Plate on the Gasket.
5) Secure the HDD Unit.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)



F-9-866

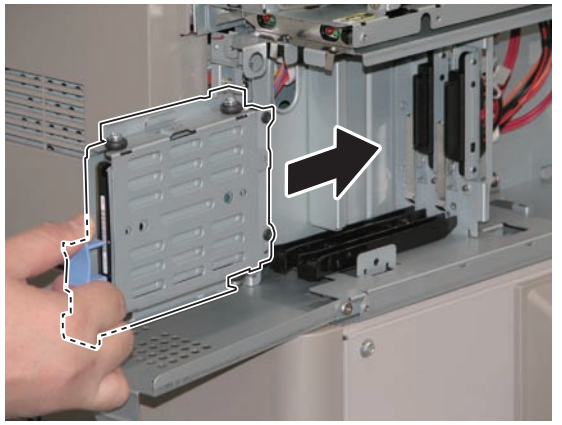
☐
6) Secure the cable (Short) of the Slot.1 (on the host machine side) in place using the Wire Saddle.
7) Secure the cable (Long) of the Slot.2 (on the rear side) as shown in the figure.
- 2 Wire Saddles

NOTE:
Secure the cable (Long) of the Slot.2 (on the rear side) using the Wire Saddle [A] with the cable wound 1 time.



F-9-867

☐
8) Insert the Removable HDD into the Slot.2 (on the rear side).



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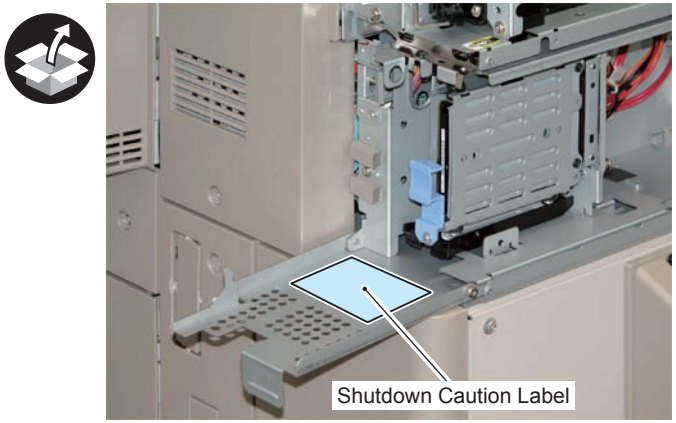
☐
9) Affix the Shutdown Caution Label for applicable language to align with the ruled line on the HDD Lid.



F-9-869

☐
10) Close the HDD Lid.

11) Affix the Handle Label on the Handle part of the HDD Lid.

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☐
12) Install the removed covers.

- Rear Upper Cover (9 Screws)

CAUTION:

When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:

When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
13) Insert the power plug to the outlet.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
   Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that ‘2.00’ or '2.01' is displayed in ‘Canon MFP Security Chip’ as version information of the security chip.
   When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:

The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

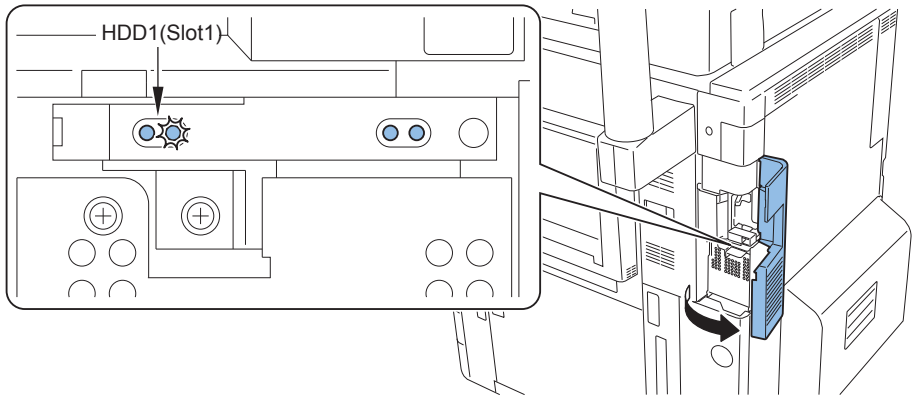
< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark () is displayed on the lower left corner of a panel screen.

Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.

- The green LED of HDD1 (Slot.1) is flashing.



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Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

[TYPE-11]

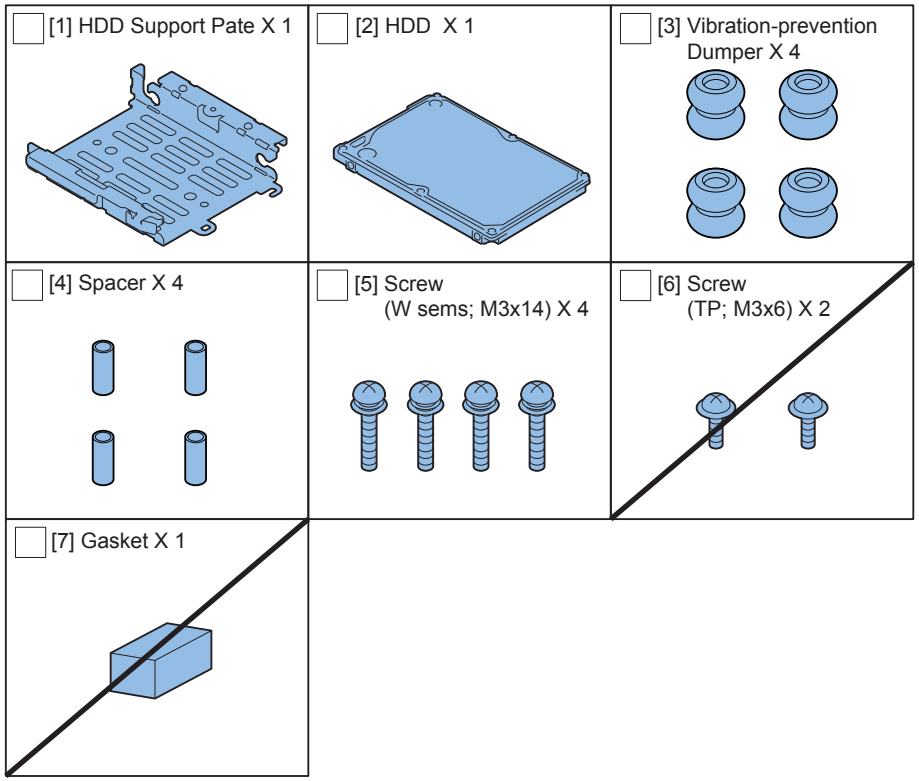
Option HDD (1TB) + Removable HDD Kit + HDD Data Encryption & Mirroring Kit

Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

A security sticker is attached to the kit package to indicate that the package has not been opened. Check to see that the package has not been opened in any way and the sticker is not torn.
If the package appears to have been opened or the sticker is torn, check to make sure that the user has done so intentionally.

Checking the Contents

Option HDD (1TB)



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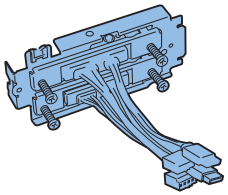
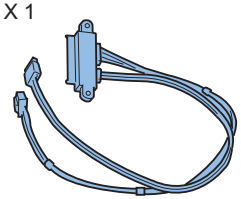
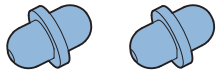
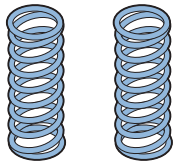
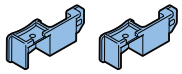
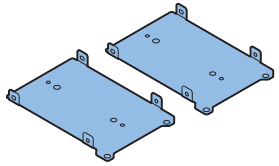
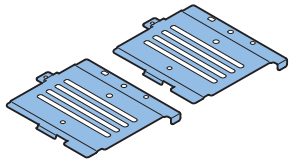
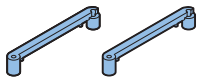
- FCC/IC Sheet

Removable HDD Kit

☐ [1] HDD Drawer Unit X 1 	☐ [2] IV Cable (A:HDD-Pow1/A:HDD-Sig1) X 1 	☐ [3] HDD Lock Pin X 2 
☐ [4] HDD Lock Spring X 2 	☐ [5] HDD Face Plate X 1 	☐ [6] HDD Handle X 2 Use 1 of them 
☐ [7] HDD Connector Plate X 2 Use 1 of them 	☐ [8] HDD Cover X 2 Use 1 of them 	☐ [9] Connector Fixing Block X 2 Use 1 of them 

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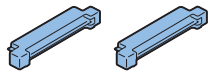
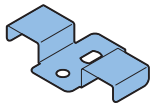
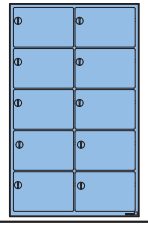
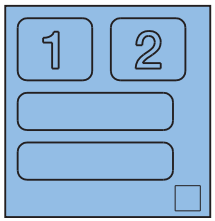
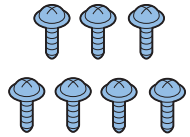
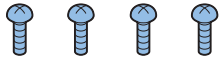
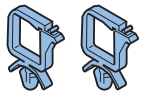
☐ [10] Conversion Connector X 2 Use 1 of them 	☐ [11] Gasket Cover Plate X 1 	☐ [12] Handle Label X 1 
☐ [13] Shutdown Caution Label X 1 	☐ [14] R-HDD Label X 1 	☐ [15] Screw (TP Round End; M3x6) X 7 Use 5 of them 
☐ [16] Screw (P Tightening; M3x8) X 4 Use 2 of them 	☐ [17] Wire Saddle X 2 	

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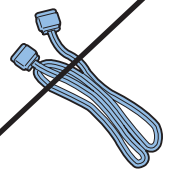
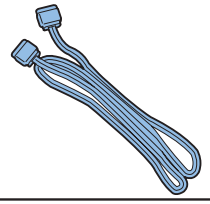
- FCC/IC Sheet

HDD Data Encryption & Mirroring Kit

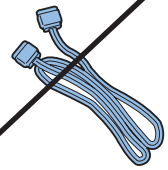
- [ ] [1] Signal Cable (340mm; A:HDD-Sig1) x 1



- [ ] [2] Signal Cable (450mm (Red); A:Cont-Sig) x 1

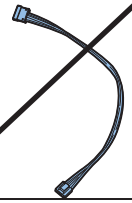


- [ ] [3] Signal Cable (370mm (Blue); A:HDD-Sig2) x 1



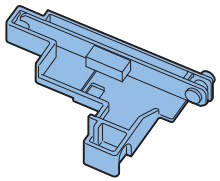
- [ ] [4] Power Cable (430mm; A:Cont-Pow) x 1

- [ ] [5] Power Cable (430mm; A:HDD-Pow2) x 1

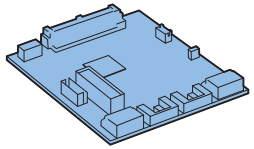


- [ ] [6] Power Cable (320mm; A:HDD-Pow1) x 1

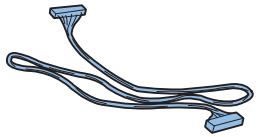
- [ ] [7] LED Board (Large) x 1



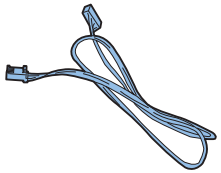
- [ ] [8] Encryption Board x 1



- [ ] [9] LED Cable (290mm; A:LED-Sig) x 1

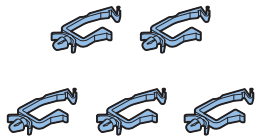


- [ ] [10] STS Cable (420mm (Light blue); A:STS-Sig) x 1



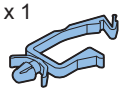
- [ ] [11] Wire Saddle (Small) x 5

Use 4 of them



- [ ] [12] Wire Saddle (Middle) x 1

- [ ] [13] Wire Saddle (Large) x 1



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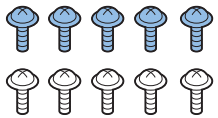
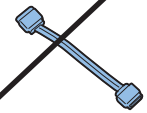
- [ ] [14] Screw (TP; M3x6) x 10

Use 5 of them

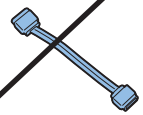


- [ ] [15] LED Label (Large) x 1

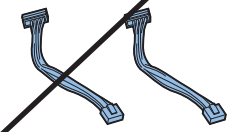
- [ ] [16] Signal Cable (80mm; (Red); A:HDD-Sig1) x 1



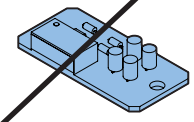
- [ ] [17] Signal Cable (80mm; (Blue); A:HDD-Sig2) x 1



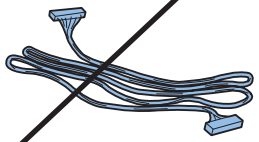
- [ ] [18] Power Cable (80mm; A:HDD-Pow1/2) x 2



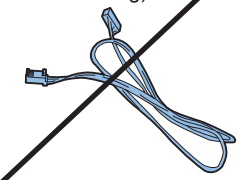
- [ ] [19] LED Board (Small) x 1



- [ ] [20] LED Cable (1200mm; A:LED-Sig) x 1

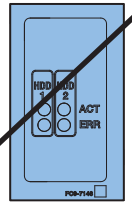


- [ ] [21] STS Cable (550mm (Light blue); A:STS-Sig) x 1

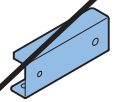


- [ ] [22] Edge Saddle x 1

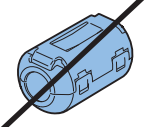
- [ ] [23] LED Label (Small) x 1



- [ ] [24] HDD Connection Plate x 1



- [ ] [25] Ring Core x 1



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< CD/Guides >
- HDD Data Encryption & Mirroring Kit-C Series User Documentation
- HDD Data Encryption Kit Notice
- FCC/IC Sheet
- Installation Procedure

Setting Before Turning OFF the Power

CAUTION:

Be sure to turn OFF the main power after executing this service mode setting.

Turning OFF the main power without executing service mode causes "E602-5001 (procedure error before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board.

When this error occurs, the machine needs to be returned again to the initial state in which no Encryption Board is installed.

☐

1) Execute the following service mode (level 1).
COPIER > FUNCTION > INSTALL > HD-CRYP

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

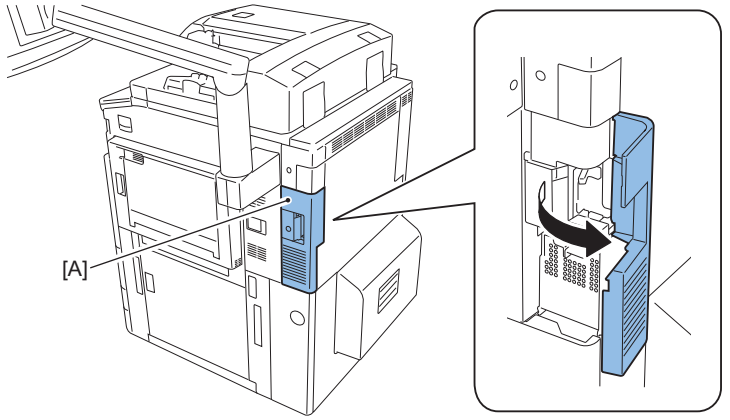
1) Turn OFF the main power switch.
2) Check that the Control Panel Display and the Main Power Lamp are turned OFF, and then disconnect the power plug.

Installation Procedure

Removing the HDD Unit

☐

1) Push section [A] to open the HDD Cover.



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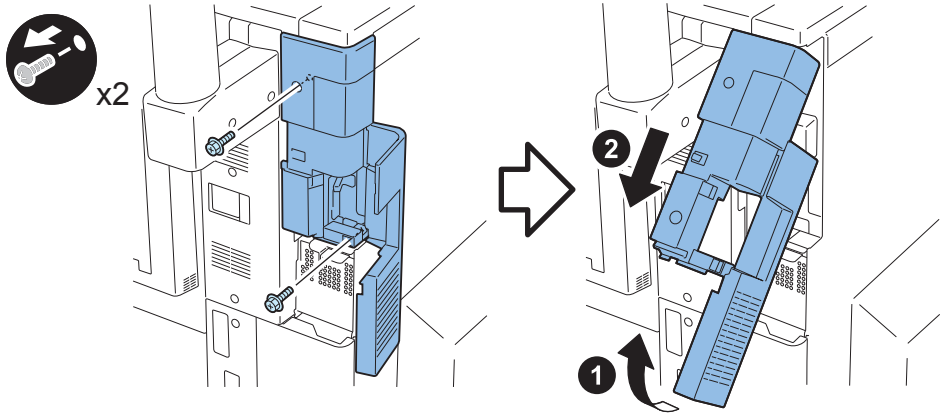
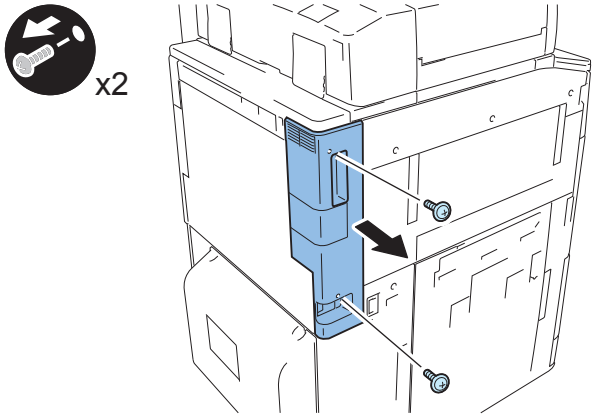
☐

2) Remove the Main Controller Right Cover Unit.
- 2 Screws



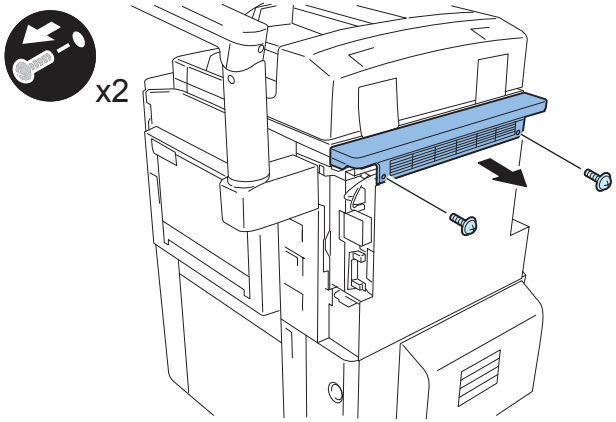
F-9-878

☐
3) Remove the Box Left Cover.
- 2 Screws



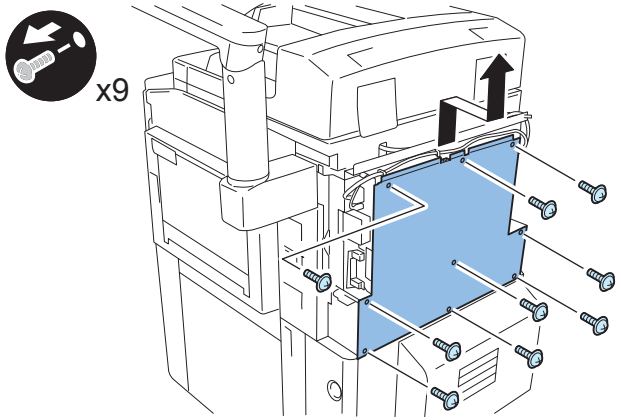
F-9-879

☐
4) Remove the Box Upper Cover.
- 2 Screws



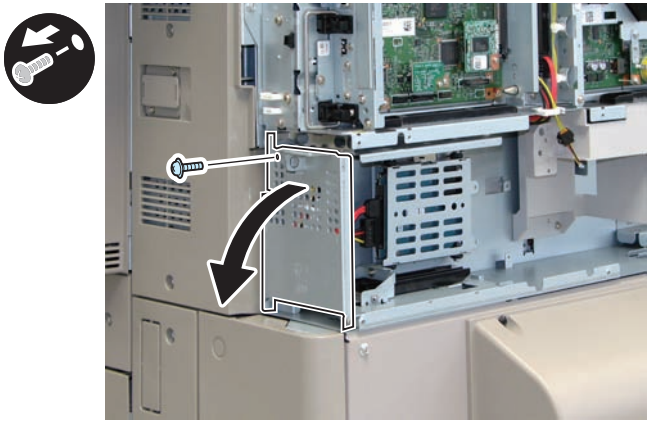
F-9-880

☐
5) Remove the Rear Upper Cover.
- 9 Screws



F-9-881

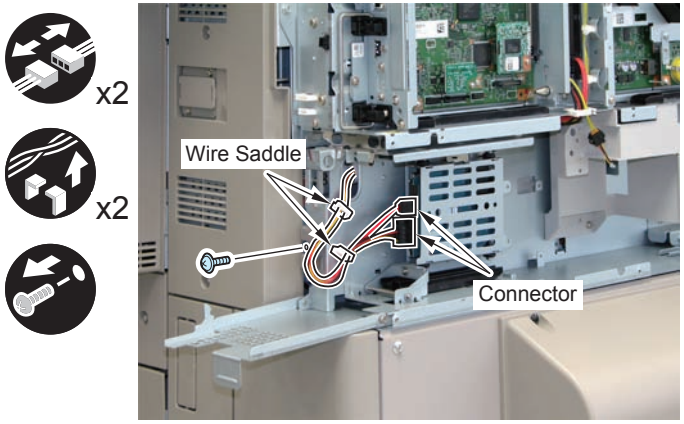
☐
6) Open the HDD Lid.
- 1 Screw (The removed screw will not be used.)



F-9-882

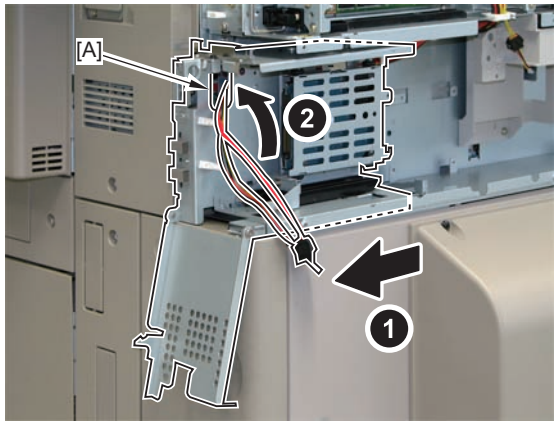
☐
7) Remove the Signal Cable and the Power Cable from the HDD.
- 2 Wire Saddles
- 2 Connectors

8) Remove 1 screw of the HDD Unit. (The removed screws will be used in “Installing the HDD Unit” step 5.)



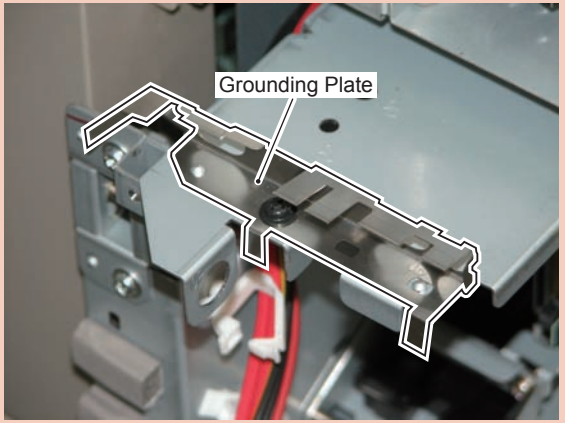
F-9-883

☐
9) Pull the HDD Unit a little from the host machine, and pull the cable out through the hole [A].



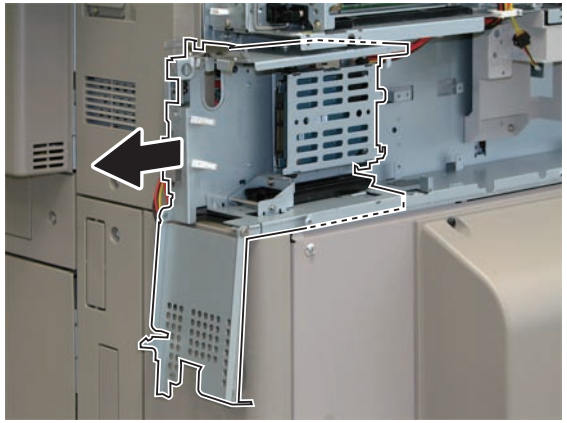
F-9-884

CAUTION:
Be sure not to deform the Grounding Plate.



F-9-885

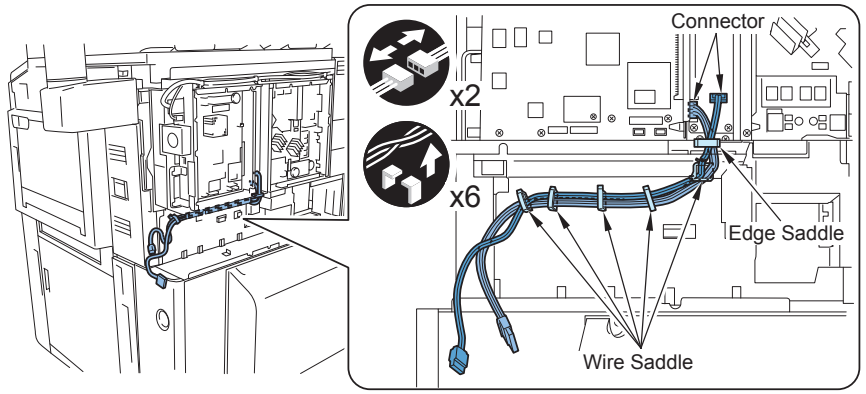
☐
10) Remove the HDD Unit from the host machine.



F-9-886

☐
11) Remove the Signal Cable and the Power Cable of the host machine. (The removed cables will not be used.)

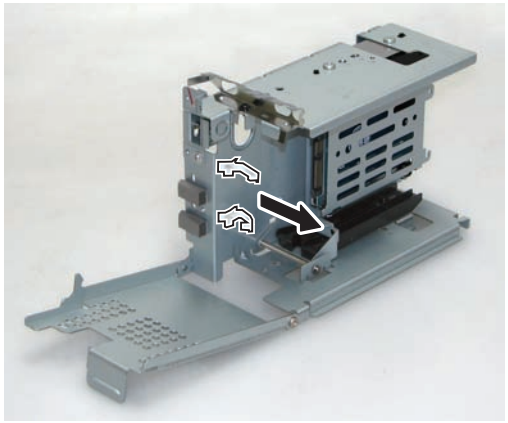
- 2 Connectors
- 1 Edge Saddle
- 5 Wire Saddles



F-9-887

Changing Configuration inside of HDD Unit

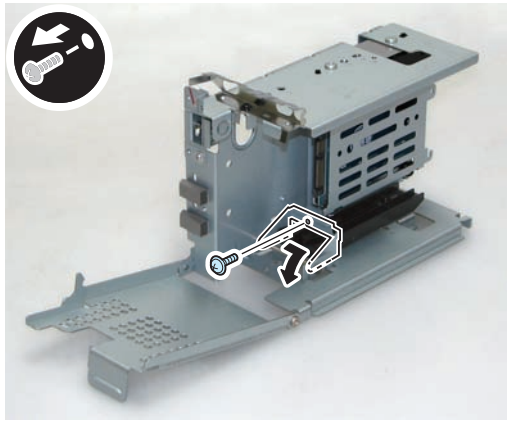
☐
1) Remove the 2 wire saddles. (The removed wire saddles will not be used.)



F-9-888

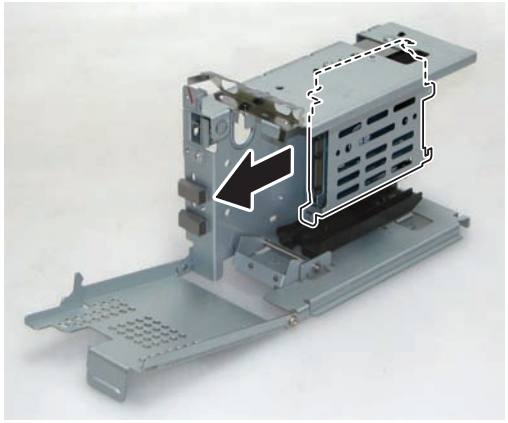
☐
2) Turn the HDD Fixation Plate toward the front.

- 1 Screw (The removed screw will not be used.)



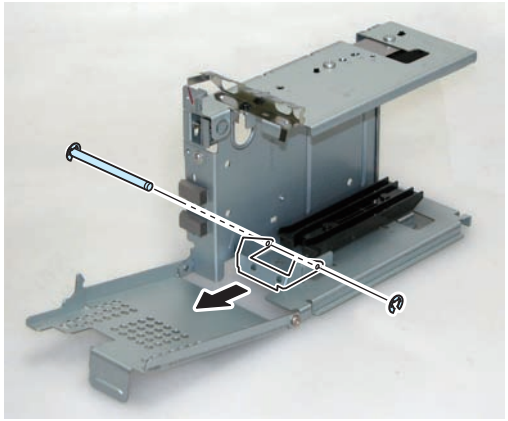
F-9-889

☐
3) Remove the HDD. (The removed HDD will not be used.)



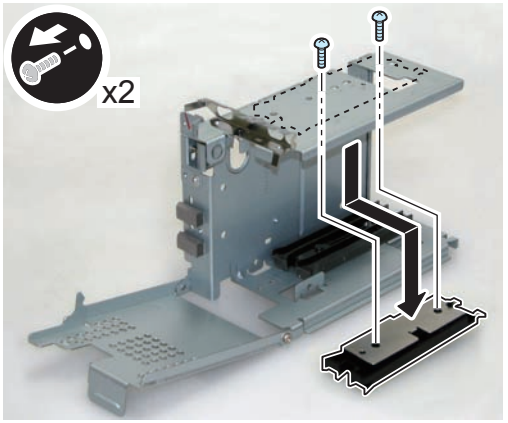
F-9-890

☐
4) Remove the E ring and the shaft from the HDD Unit, and remove the HDD Fixation Plate. (The removed E ring, shaft and HDD Fixation Plate will not be used.)



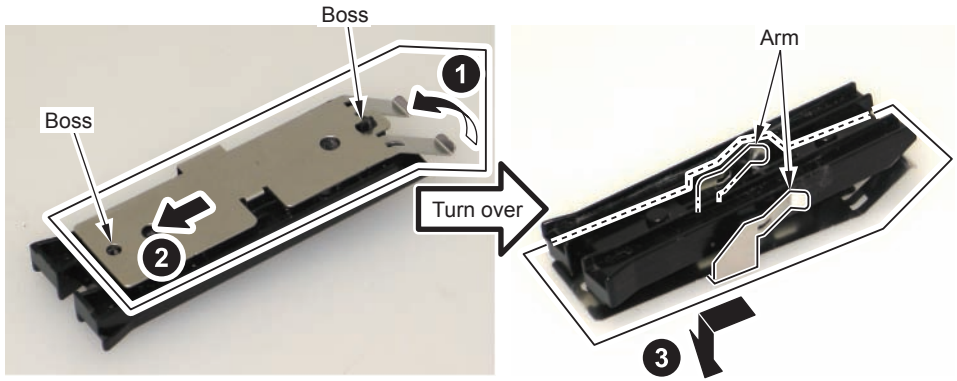
F-9-891

☐
5) Remove the Upper Rail from the HDD Unit.
- • Screws (The removed screws will be used in step 8.)



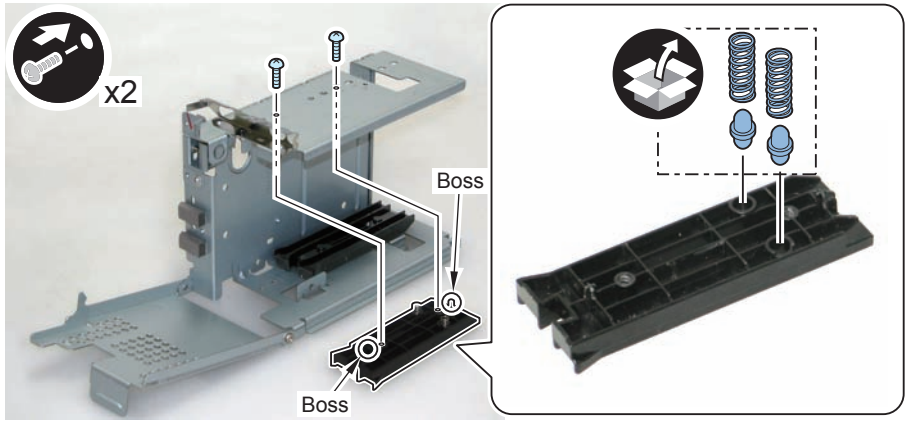
F-9-892

☐
6) Remove the Leaf Spring from the removed Upper Rail in the order of the arrows in the figure below. (The removed Leaf Spring will not be used.)
- 2 Bosses
- 2 Arms



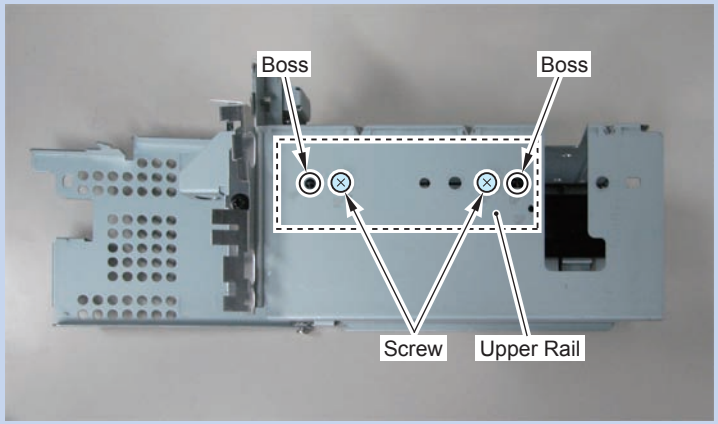
F-9-893

☐
7) Put the 2 HDD Lock Pins and 2 HDD Lock Springs into the holes of the Upper Rail.
8) Install the Upper Rail to a position shifted toward the HDD Cap.
2 Bosses
- 2 Screws (Use the screws removed in step 5.)



F-9-894

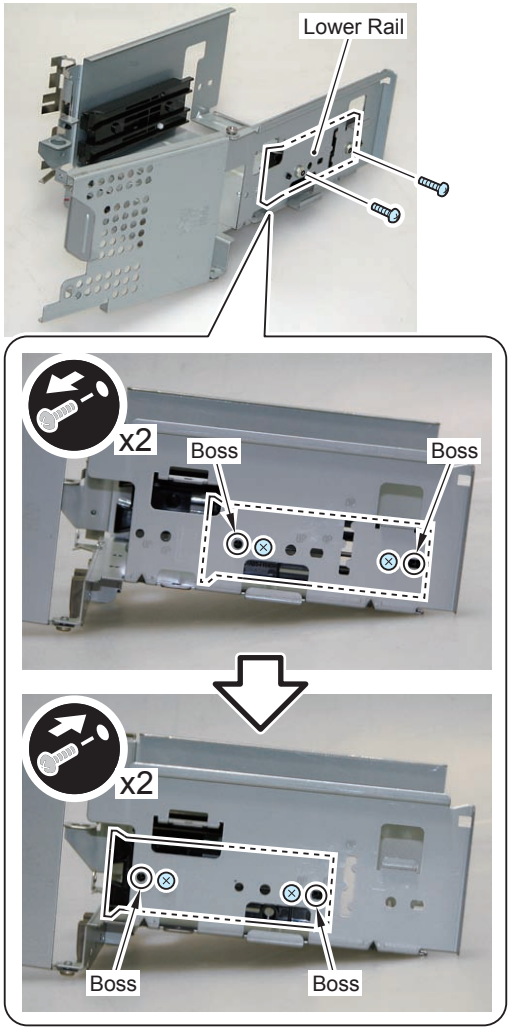
NOTE:
The position where the Upper Rail is to be installed is different from the position where it was originally installed. Be careful not to install it to the original position.



F-9-895

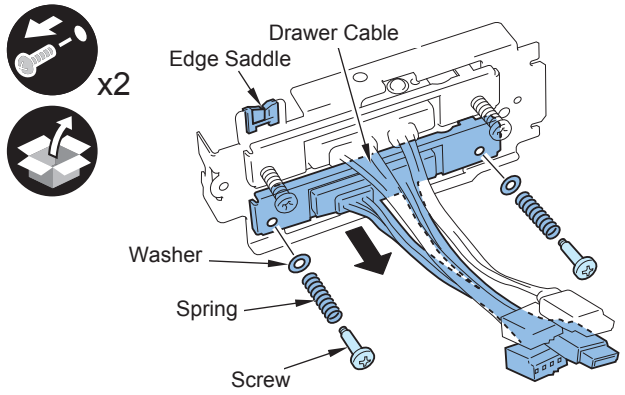
☐
9) Remove the Lower Rail, and then install it to a position shifted toward the HDD Cap.
- 2 Bosses
- 2 Screws

NOTE:
Perform this work with the HDD Unit placed on its side in order to prevent the Grounding Plate from being deformed.



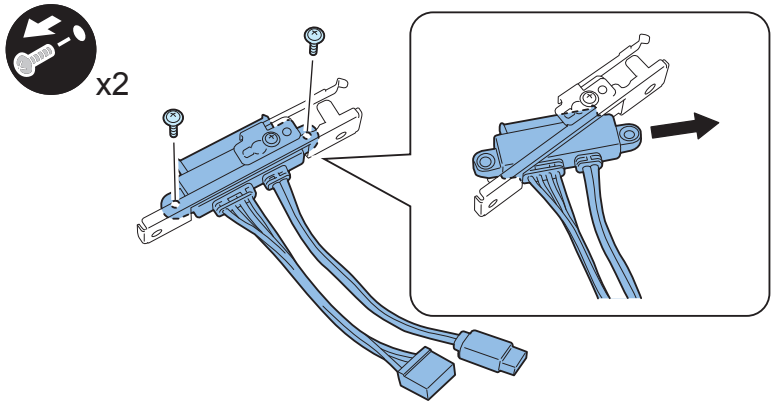
F-9-896

☐
10) Place it in the position where the edge saddle of HDD Drawer Unit is facing up, remove the Lower Drawer Cable (The Signal Cable Blue side).
- 2 Screws
- 2 Springs
- 2 Washers (The removed springs and washers will be used in step 13.)



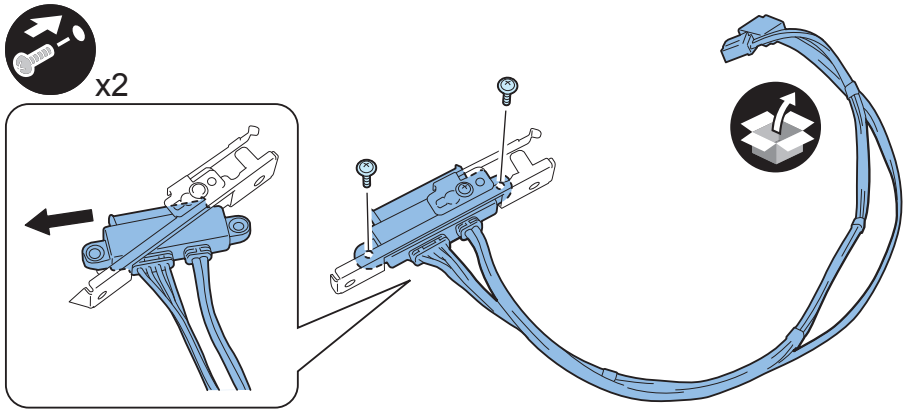
F-9-897

☐
11) Remove the Drawer Cable. (The removed Drawer Cable will not be used.)
- 2 Screws (Removed screw will be used in step 12.)



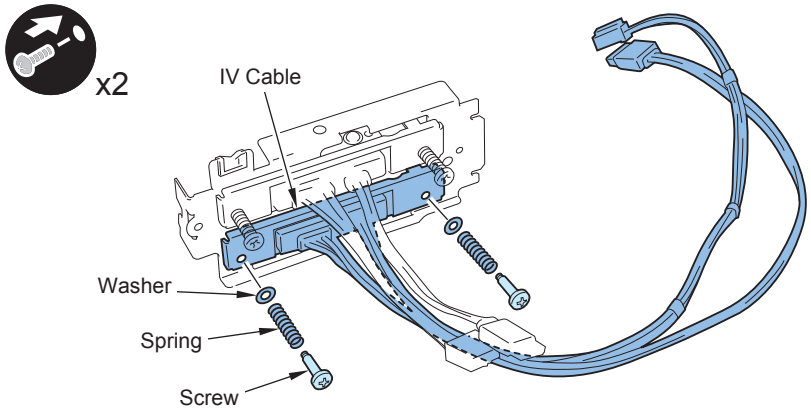
F-9-898

☐
12) Install the IV Cable.
- 2 Screws (Use the screws removed in step 11.)



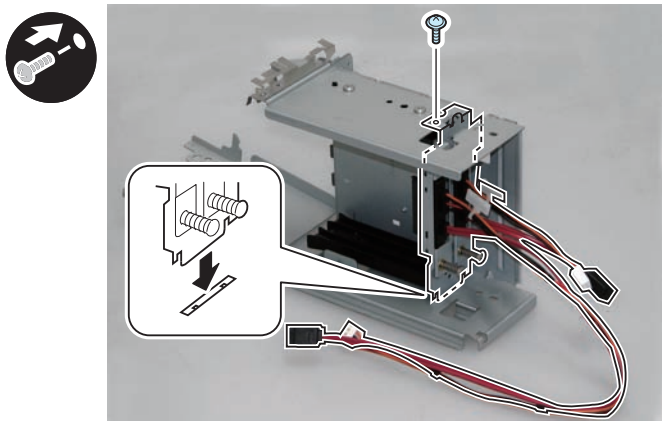
F-9-899

☐
13) Install the IV Cable of HDD Drawer Unit.
- 2 Screws
- 2 Springs
- 2 Washers (Use the parts removed in step 10.)



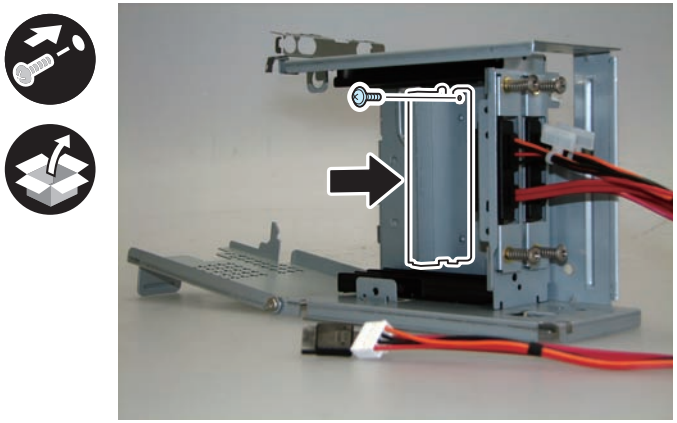
F-9-900

☐
14) Install the HDD Drawer Unit.
- 2 Screws (TP Round End; M3x6)



F-9-901

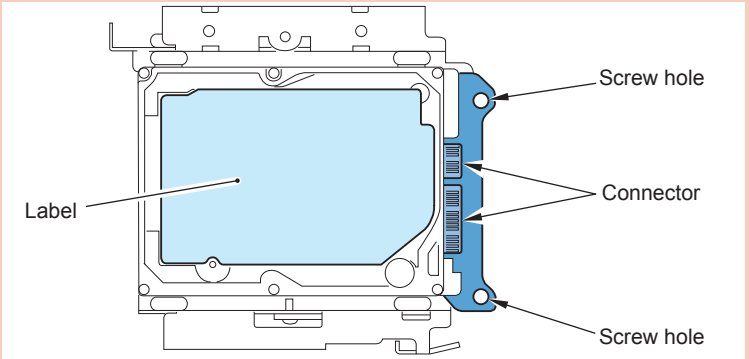
☐
15) Install the HDD Face Plate.
- 2 Screws (TP Round End; M3x6)



F-9-902

■ Assembling the Option HDD

CAUTION:
- Assembling the option HDD, be careful of the installation direction.
- Make sure that the label on the option HDD is facing up.
- Install it in the position where the HDD connector is placed in the side with screw hole of HDD Support Plate.



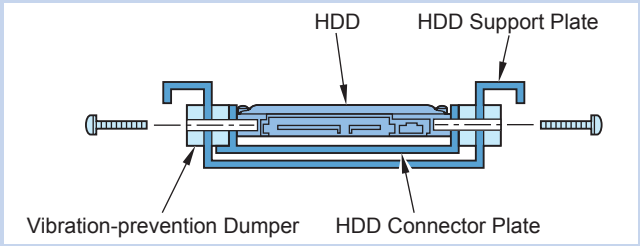
F-9-903

NOTE:
Use the parts included in the package of the Option HDD and the Removable HDD Kit.

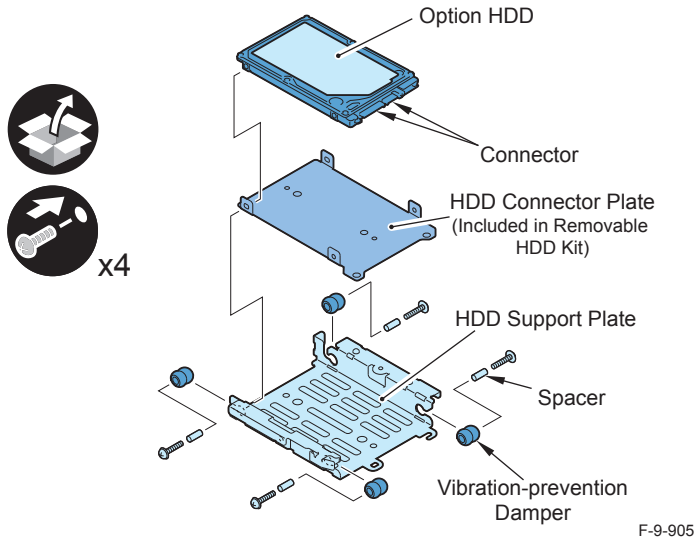
☐
1) Assemble the Option HDD (1TB).

- 1 HDD Support Plate
- 4 Vibration-prevention Dumpers
- 4 Spacers
- 1 HDD Connector Plate (Included in the Removable HDD Kit)
- 1 Option HDD
- 4 Screws (W Sems; M3x14)

NOTE:
When tightening the screen, be sure to align the screw holes by lifting the HDD Connector Plate and HDD.



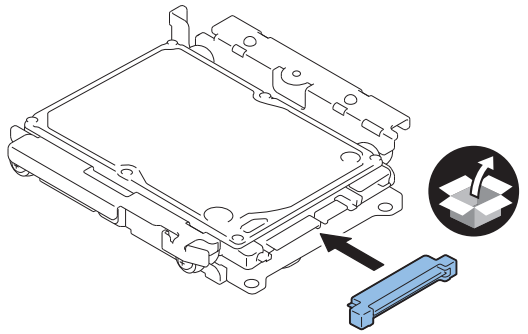
F-9-904



F-9-905

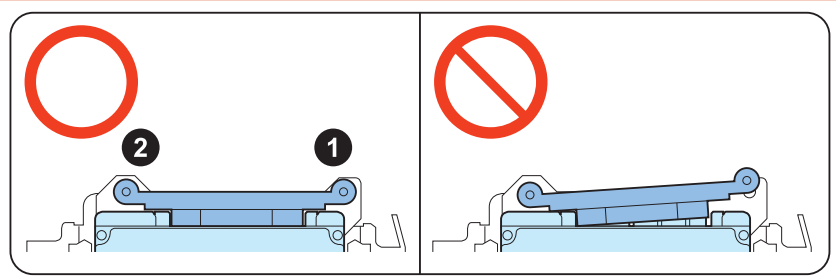
☐
2) Install the Conversion Connector.

CAUTION:
Be sure that there is no gap between the HDD Connector and the Conversion Connector.


F-9-906

☐
3) Fit the 2 bosses of the Connector Fixing Block into the holes of the Conversion Connector to install, and tighten the screws in the order specified below.
- 2 Screws (P tightening; M3x8)

CAUTION:
- Be sure to firmly hold the Connector Fixing Block when tightening the screws.
- Be sure to follow the correct order to tighten the screws, otherwise the Conversion Connector may not be connected properly, resulting in poor contact.



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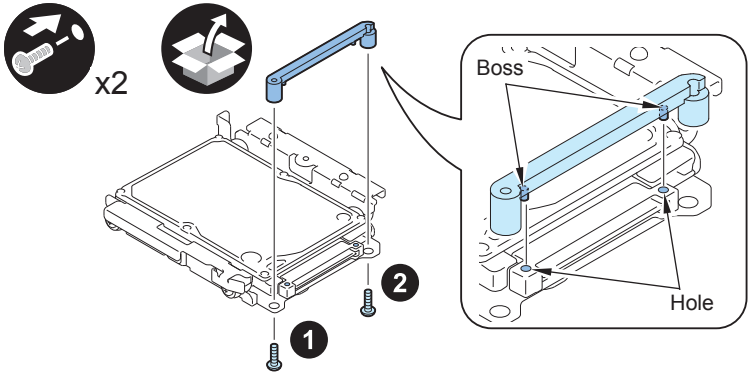
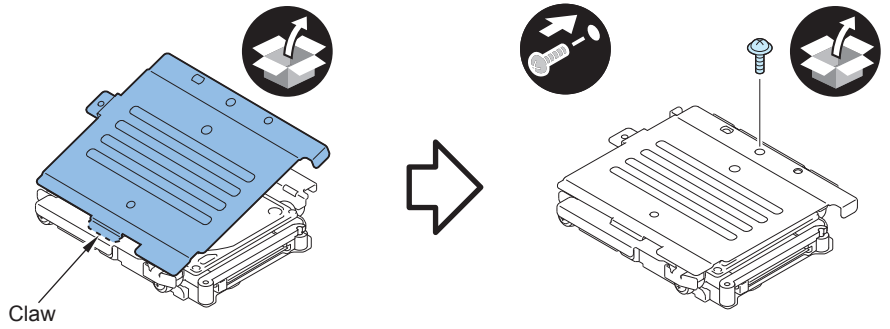


F-9-908

☐
4) Install the HDD Cover.
- 1 Claw
- 1 Screw (TP Round End; M3x6)

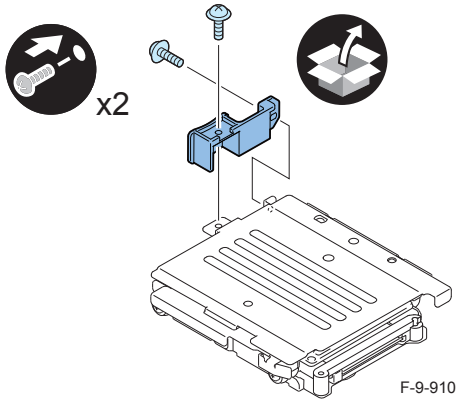
CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-909

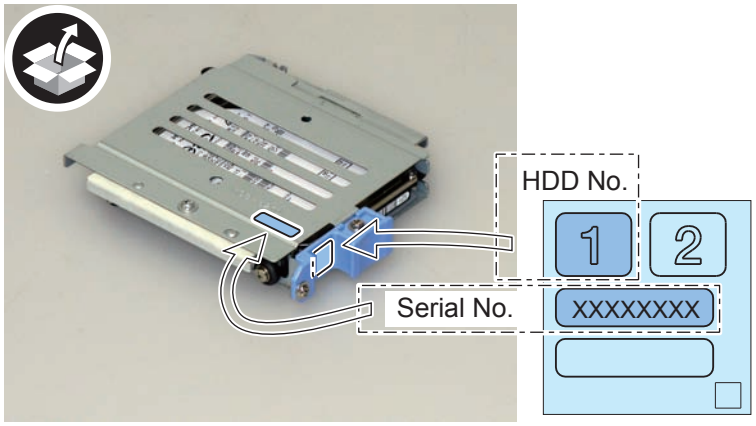
☐
5) Install the HDD Handle.
- 2 Screws (TP Round End; M3x6)

CAUTION:
Be sure to use the round end screw included in the Removable HDD Kit as the TP screw.



F-9-910

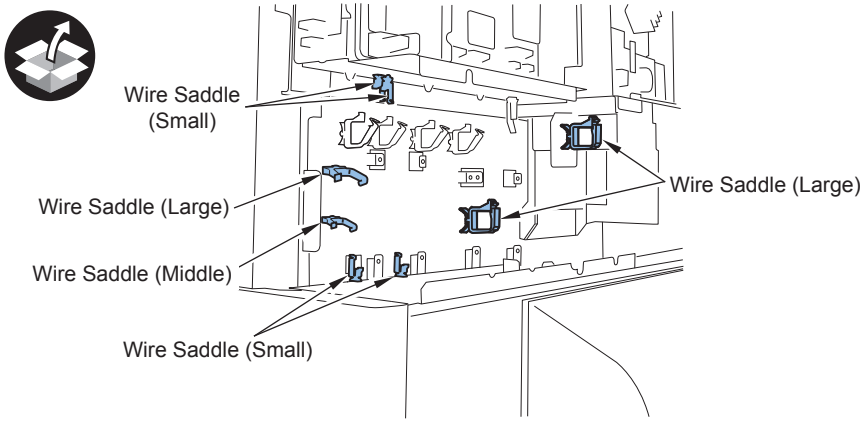
□
6) Affix the HDD No.1 of the R-HDD Label to the handle of the Removable HDD.
7) Write down the serial number of the host machine to the label for recording the number, and affix it to the area indicated in the figure.



F-9-911

■ Installing the Encryption Board

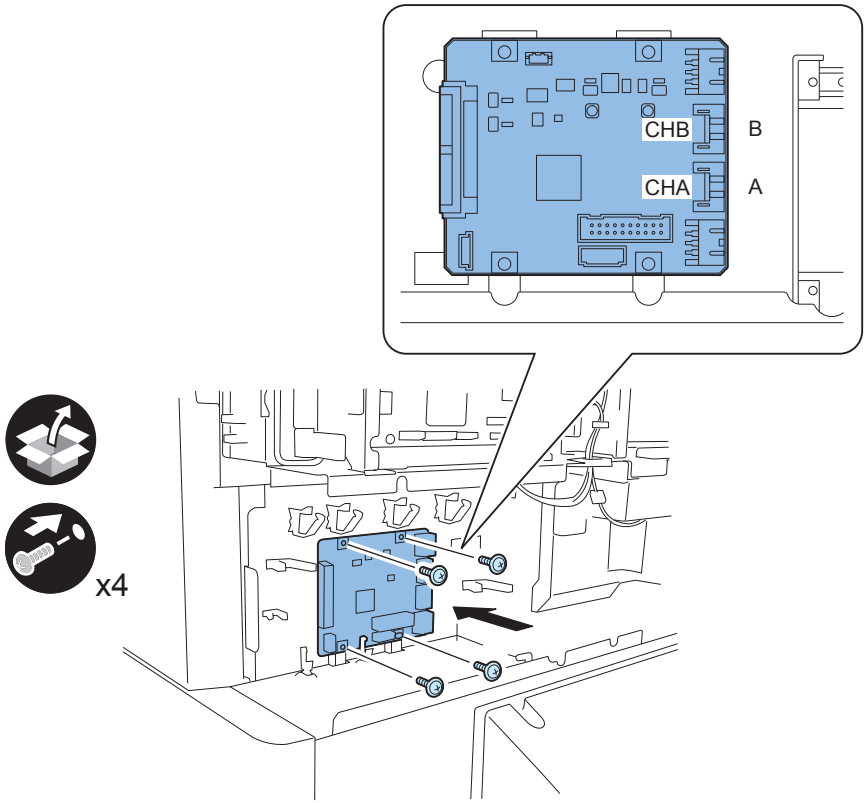
□
1) Install the 3 wire saddles (Large) (one of them is included in the HDD Data Encryption & Mirroring Kit, and two of them are included in the Removable HDD Kit), 1 wire saddle (Medium), and 4 wire saddles (Small).



F-9-912

□
2) Install the Encryption Board.
- 4 screws (TP; M3x6)

CAUTION:
The marks "CHA" and "CHB" on the PCB should be facing the engraved marks "A" and "B".



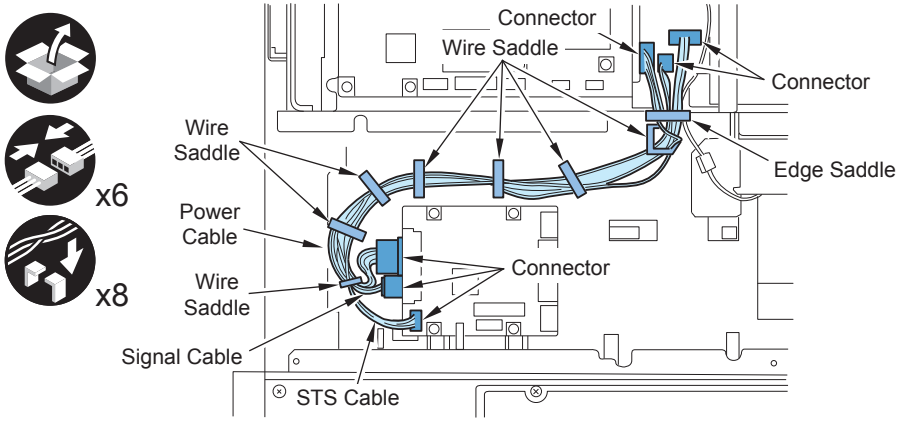
F-9-913

☐
3) Install the Signal Cable (450mm (Red); A:Cont-Sig), the Power Cable (430mm; A:Cont-Pow) and STS Cable (420mm (Light blue); A:STS-Sig).

- 6 Connectors
- 1 Edge Saddle
- 7 Wire Saddles

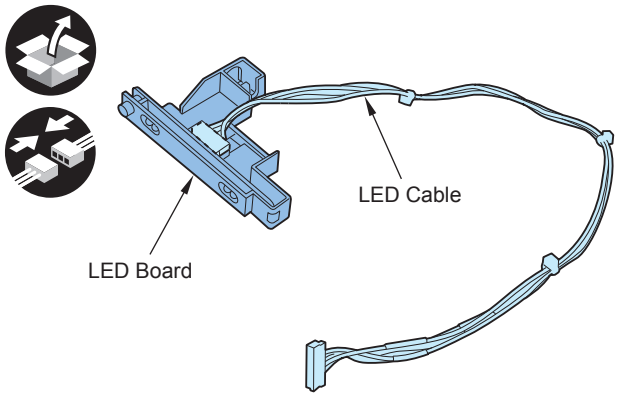
CAUTION:

- Install the Signal Cable (450mm (Red); A:Cont-Sig) so that the label faces up.
- Push the tag of the Power Cable (430mm; A:Cont-Pow) inward not to interfere other operations.
- Route cables equally to eliminate unnecessary slack.
- Since it can be operated without the STS Cable connection, check the connection at the installation.



F-9-914

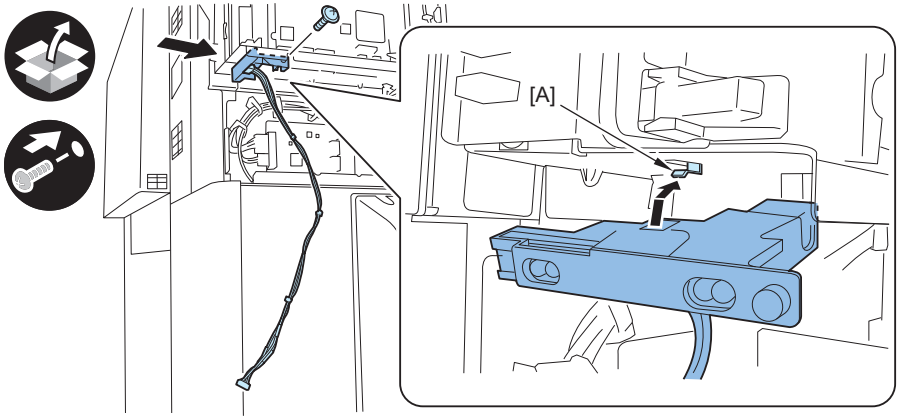
☐
4) Install the LED Cable (290mm; A:LED-Sig) to the LED Board (Large).



F-9-915

☐
5) Insert the LED Board (Large) to the hook part [A] of the host machine to install.

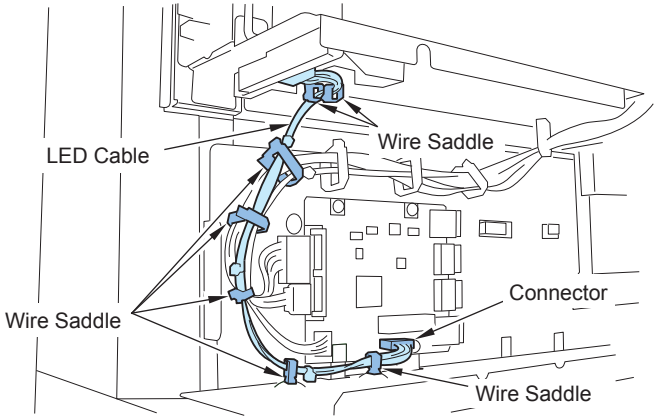
- 1 Screw (TP; M3x6)



F-9-916

☐
6) Connect the LED Cable (290mm; A:LED-Sig) to the Encryption Board.
- 1 Connector
- 7 Wire Saddles

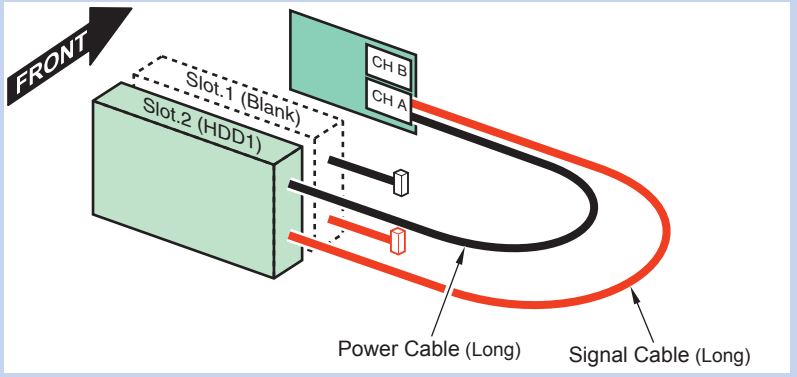
CAUTION:
Since it can be operated without the LED Cable connection, check the connection at the installation.



F-9-917

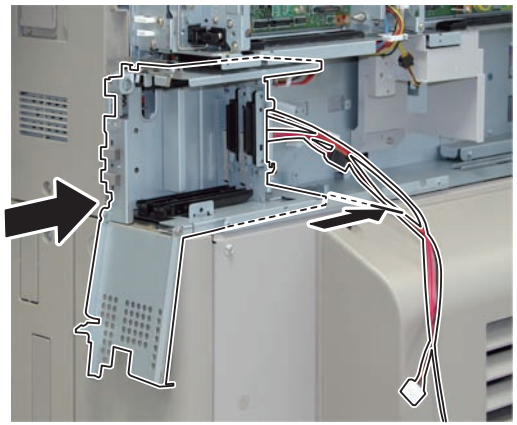
Installing the HDD Unit

NOTE:
The following shows the combination of the HDD and the Encryption Board.
- Connect Slot.2 to “CH A” (New HDD)
- No HDD to Slot.1



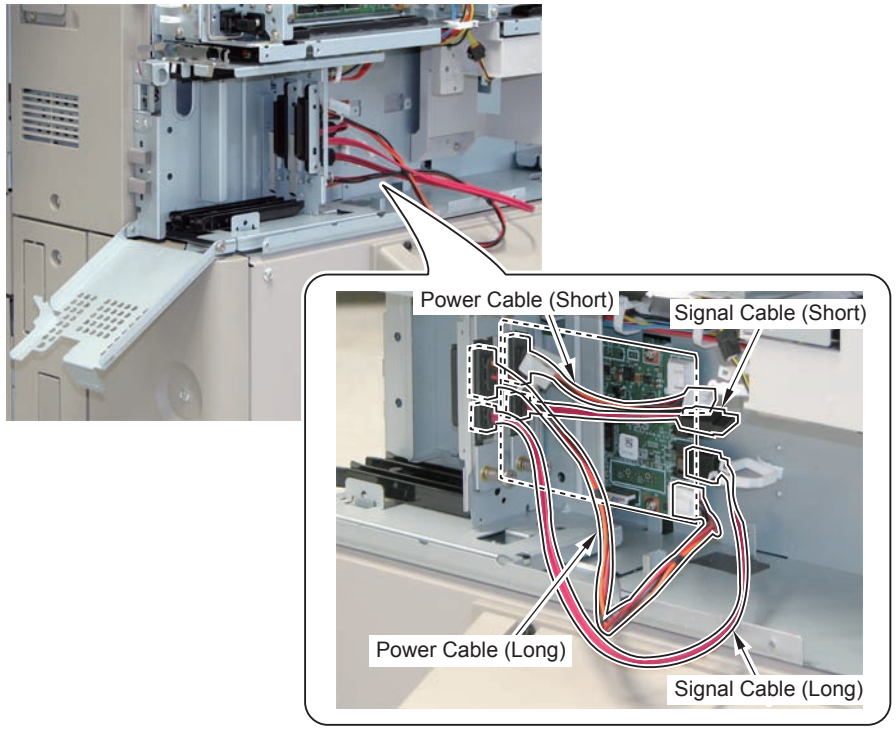
F-9-918

☐
1) Insert 2/3 of the HDD Unit along with the rail on the host machine.



F-9-919

☐
2) Connect the Power Cable (Long) and the Signal Cable (Long) of the Slot.2 (on the rear side) to CH A on the Encryption Board.

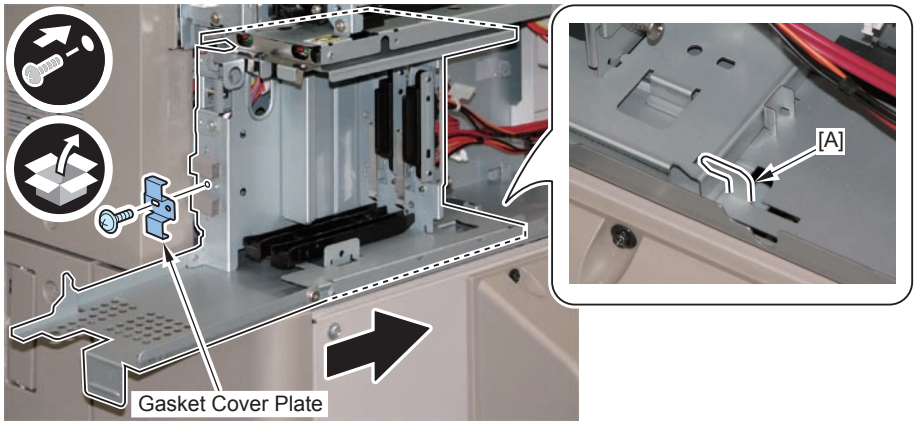


F-9-920

☐
3) Insert the HDD Unit until it stops.

NOTE:
The [A] part should be fitted in the cut-off.

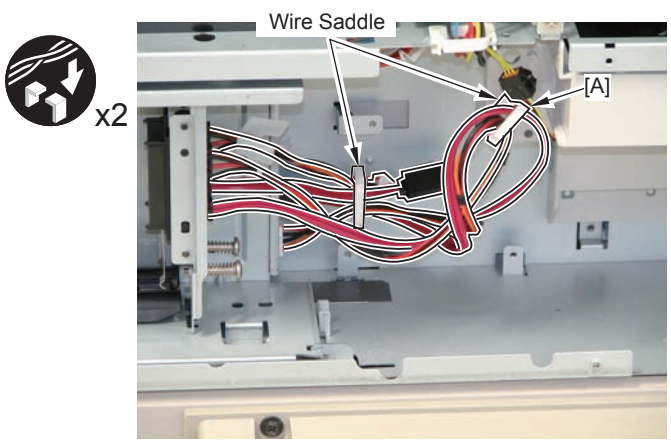
4) Install the Gasket Cover Plate on the Gasket.
5) Secure the HDD Unit.
- 1 Screw (use the screw removed at step 8 of the “Removing the HDD Unit”)



F-9-921

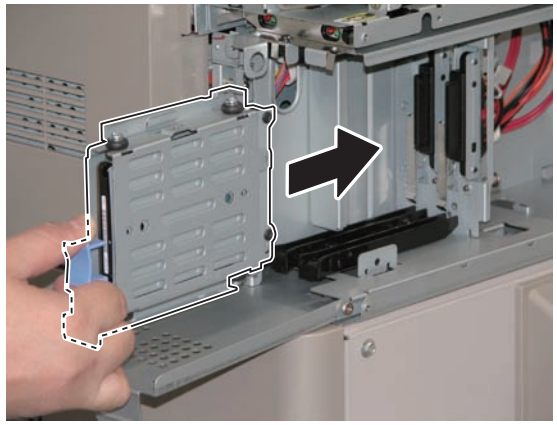
☐
6) Secure the cable (Short) of the Slot.1 (on the host machine side) in place using the Wire Saddle.
7) Secure the cable (Long) of the Slot.2 (on the rear side) as shown in the figure.
- 2 Wire Saddles

NOTE:
Secure the cable (Long) of the Slot.2 (on the rear side) using the Wire Saddle [A] with the cable wound 1 time.



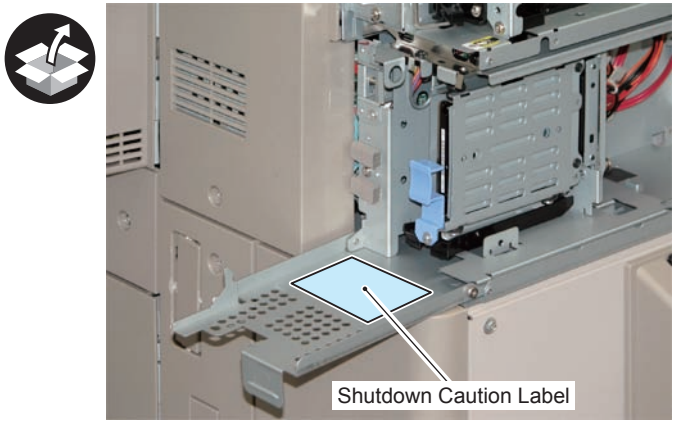
F-9-922

☐
8) Insert the Removable HDD into the Slot.2 (on the rear side).



F-9-923

☐
9) Affix the Shutdown Caution Label for applicable language to align with the ruled line on the HDD Lid.



F-9-924

☐
10) Close the HDD Lid.
11) Affix the Handle Label on the Handle part of the HDD Lid.

F-9-925

☐
12) Install the removed covers.

- Rear Upper Cover (9 Screws)

CAUTION:
When installing the Rear Upper Cover, tighten the screws while the Main Controller PCB is secured to the host machine.

- Box Upper Cover (2 Screws)
- Box Left Cover (2 Screws)

CAUTION:
When installing the Box Left Cover, be careful not to trap the cables.

- Main Controller Right Cover Unit (2 Screws)
- HDD Cover (Close)

☐
13) Insert the power plug to the outlet.

Installing the System Software Using the SST

The system data stored on the HDD and used to control the host machine will be lost when the machine is first started up after installing this product. It is important to install the system software used to control the host machine so that the machine may start up properly after installation of this product. Details follow.

1. Requirements

1) PC
Service support tool in the version that supports this host machine must be installed.
2) Cross Ethernet Cable

2. Preparing for the Installation of the System Software of Host machine

1) If both PC and the machine are on, turn them off.
2) Connect the PC and the machine using an Cross Ethernet cable.
3) Turn on the PC.
4) Start up the machine in download mode (safe mode).

3. Selecting the System Software

1) Set the CD containing the latest system software in the PC on which the SST is used.
2) Start up the SST.
3) Click ‘Register Firmware’.
4) Select the drive in which the System Software CD has been set, and click ‘SEARCH’.
5) Click ‘REGISTER’.
6) Click OK.

4. Downloading the System Software

1) Click "Start Assist Mode" and click "Initialize" according to the instruction on the screen.
2) When initialization is completed, the machine is automatically restarted and it enters download mode.
3) Select the version to be downloaded and click "Start".
4) When download is completed, the machine is automatically restarted.
5) When writing of the firmware is completed, the machine is automatically restarted.
6) Perform upgrading according to the instruction on the screen. When it is completed, it is automatically restarted.
7) Terminate the SST.
8) Check the version of the downloaded firmware in service mode.

Checking the Security Version

1) Press the Counter key (123 key) on the control panel.
2) Press the [Check Device Configuration] key appearing on the control panel.
3) Make sure that '2.00' or '2.01' is displayed in 'Canon MFP Security Chip' as version information of the security chip.
When several Encryption Boards are installed, multiple version information is displayed.

CAUTION:
The user will be able to make sure that the encryption board fitted with a security chip of the correct version with CC Certification is functioning normally by referring to the version information indicated for 'Canon MFP Security Chip'.

Checking the Security Mark

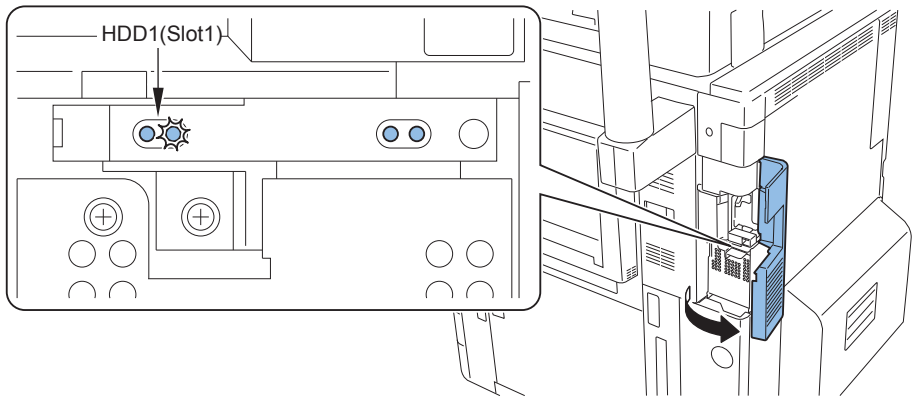
The user may check the security mark, appearing on the control panel when using the host machine to make sure that an appropriate level of security is being maintained. The mark appears when the machine is equipped with an Encryption Board and the board is operating correctly. The Users Guide provides the following description in connection with the security mark:

< Confirming the Security Mark >

When the HDD Data Encryption & Mirroring Kit is operating normally, a security mark ( ) is displayed on the lower left corner of a panel screen.

Checking after Installation

1) Open the HDD Cover, and check that the LED is flashing.
- The green LED of HDD1 (Slot.1) is flashing.



F-9-926

Reporting to the System Administrator at the End of the Work

When you have completed all installation work, report to the system administrator for the following:
At the point when installation is completed, make explanations about how to check that the appropriate security function has been added and enabled so that, when the function becomes uncontrolled, the system administrator can immediately detect the problem and request <Servicing work when a failure occurs>.

Completion of the Installation Work:

Ask the system administrator to make sure that ‘2.00’ or '2.01' is indicated for ‘Canon MFP Security Chip’ as the version information of the security chip by referring to the description of Checking the Security Version.

Maintenance of the Security Functions:

Ask the system administrator to check the security mark to make sure that the security functions are maintained each time the machine is started up by referring to the description of Checking the Security Mark.

Execution of Auto Gradation Adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation adjustment.
Therefore be sure to execute auto gradation adjustment (full adjust) after installing this kit.

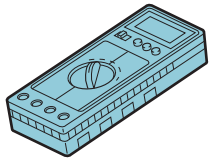
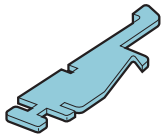
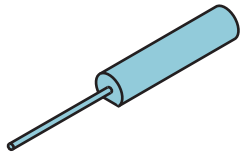
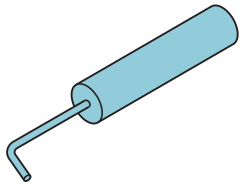
Appendix

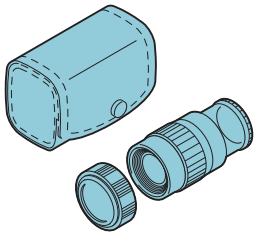
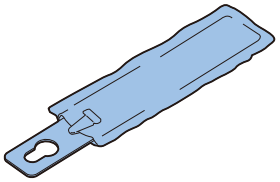
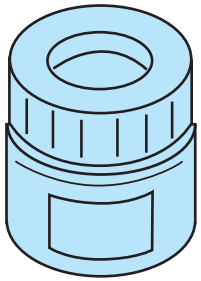
- Service Tools
- General Timing Chart
- General Circuit Diagram
- List of User Mode
- Backup Data
- Detail of HDD partition
- Soft Counter List
- Removal

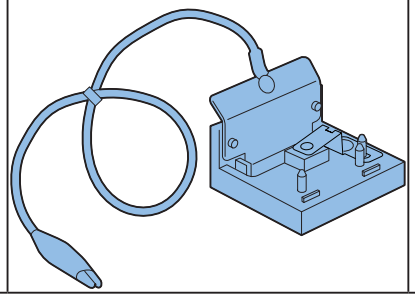
Service Tools

Special Tools

In addition to the standard tools set, the following special tools are required when servicing the machine:

Tool name	Tool No.	Ctgr	Appearance	Remarks
Digital multimeter	FY9-2002	A		Used as a probe extension when making electrical checks.
Door Switch	TKN-0093	A		
Tester extension pin	FY9-3038	A		
Tester extension pin (L-shaped)	FY9-3039	A		Use for electrical checks.

Tool name	Tool No.	Ctgr	Appearance	Remarks
CA-7 test Sheet	FY9-9323	A		Used for adjusting/checking images.
Loupe	CK-0056	B		Used for checking images.
Cleaning tool	-	A		To clean the feed guide- This is not a service tool.- 1 of this are enclosed at shipment of the host machine.
Tospearl 240	FY9-6007-000	B		ITB Cleaning Blade Lubricant.

Tool name	Tool No.	Ctgr	Appearance	Remarks
Electrode for checking potential sensor	FY9-3059	B		Surface potential sensor for zero-level check

T-10-1

Reference: Category

A: Must be kept by each service engineer.

B: Must be kept by each group of about five engineers.

C: Must be kept by each warkshop

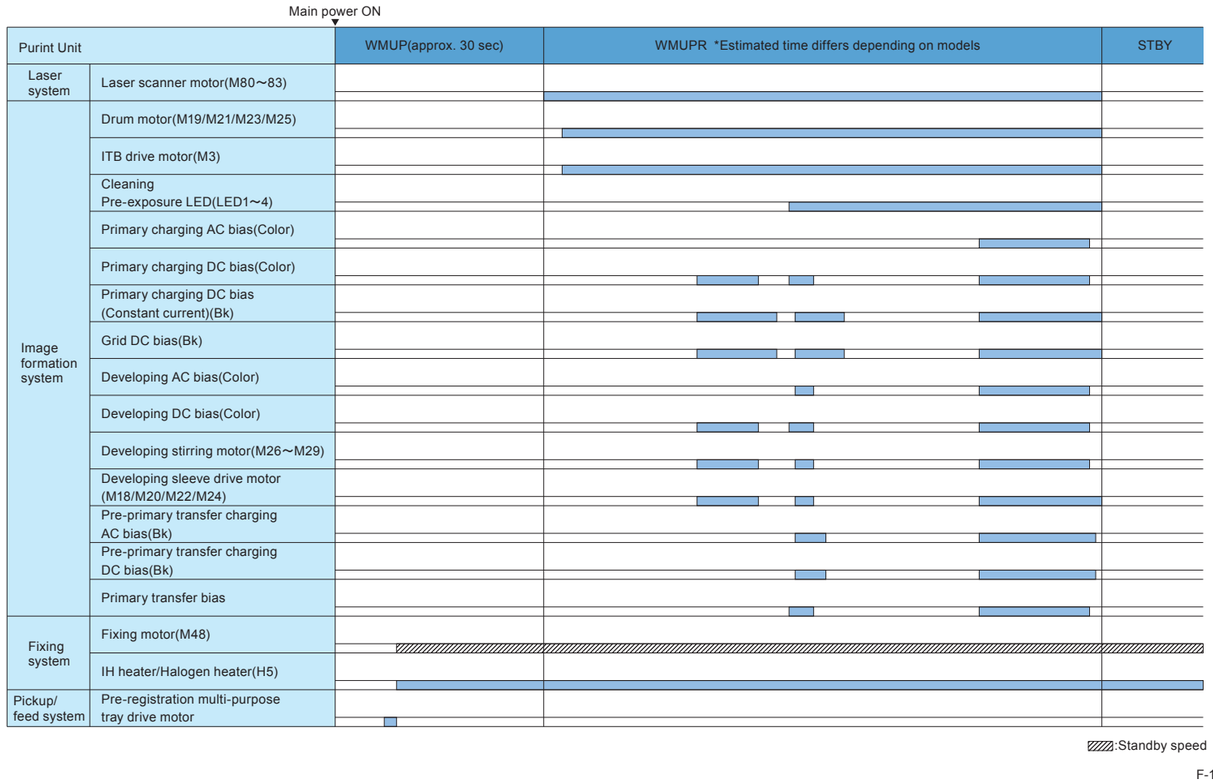
Solvents and Oils

Item	Uses	Composition	Remarks
Alcohol	Cleaning; e.g., glass, plastic, rubber; external covers.	• Fluoride-family hydrocarbon • Alcohol • Surface activating • Water	• Do not bring near fire. • Procure locally. • Substitute: IPA(isopropy alcohol)
Solvent	Cleaning; e.g., metal; oil or toner stain.	• Fluoride-family hydrocarbon • Chlorine-family hydrocarbon • Alcohol	• Do not bring near fire. • Procure locally. • Substitute:MEK
Heat-resisting grease	Lubrication; e.g., fixing drive areas.	• Mineral oil-family lithium soap • Molybdenum disulfide	• MO-138S • Tool No: CK-0427 (500 g/can)
Lubricating oil		Mineral oil (paraffin-family)	• Tool No: CK-0524 (100 cc)
Lubricating oil	Lubrication; e.g., drive areas, friction areas.	• Silicone oil	• Tool No: CK-0551 (20 g)
Lubricating oil (EM-50L)	Lubrication; e.g., gears.	• Special oil • Special solid lubricating agent • Lithium soap	• Tool No: HY9-0007
Lubricating oil	Lubrication; e.g., scanner rail.	• Synthetic oil	• Synthetic oil NTN Corporation EU-1 • Tool No. : FY9-6028 (50 cc)
Conducting grease	Lubrication; e.g., edge of secondary transfer outer roller, drum heater sliding area.	• Fluorine poly wthyl • Polytetra fluorune ethylene	• Tool No: FY9-6008
Conducting grease	Lubrication; e.g., edge of secondary transfer inner roller	• poly-α-olefin	• Tool No: FY9-6006

T-10-2

General Timing Chart

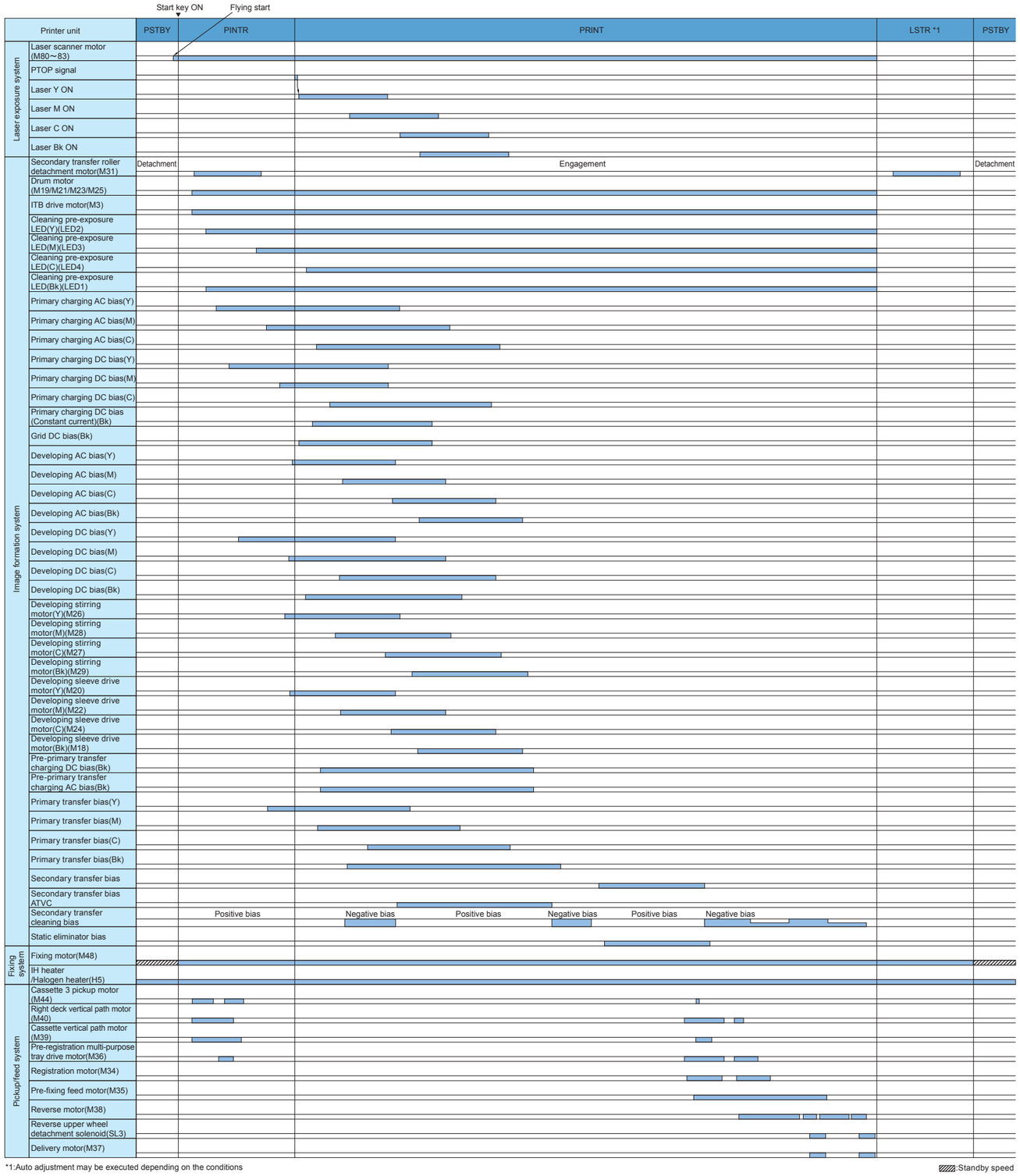
Basic sequence at power ON



F-10-1

Appendix > General Timing Chart > Basic sequence at power ON

Basic sequence at printing <Condition:Full color, Cassette 3, A4 1-sided (1 sheet)>



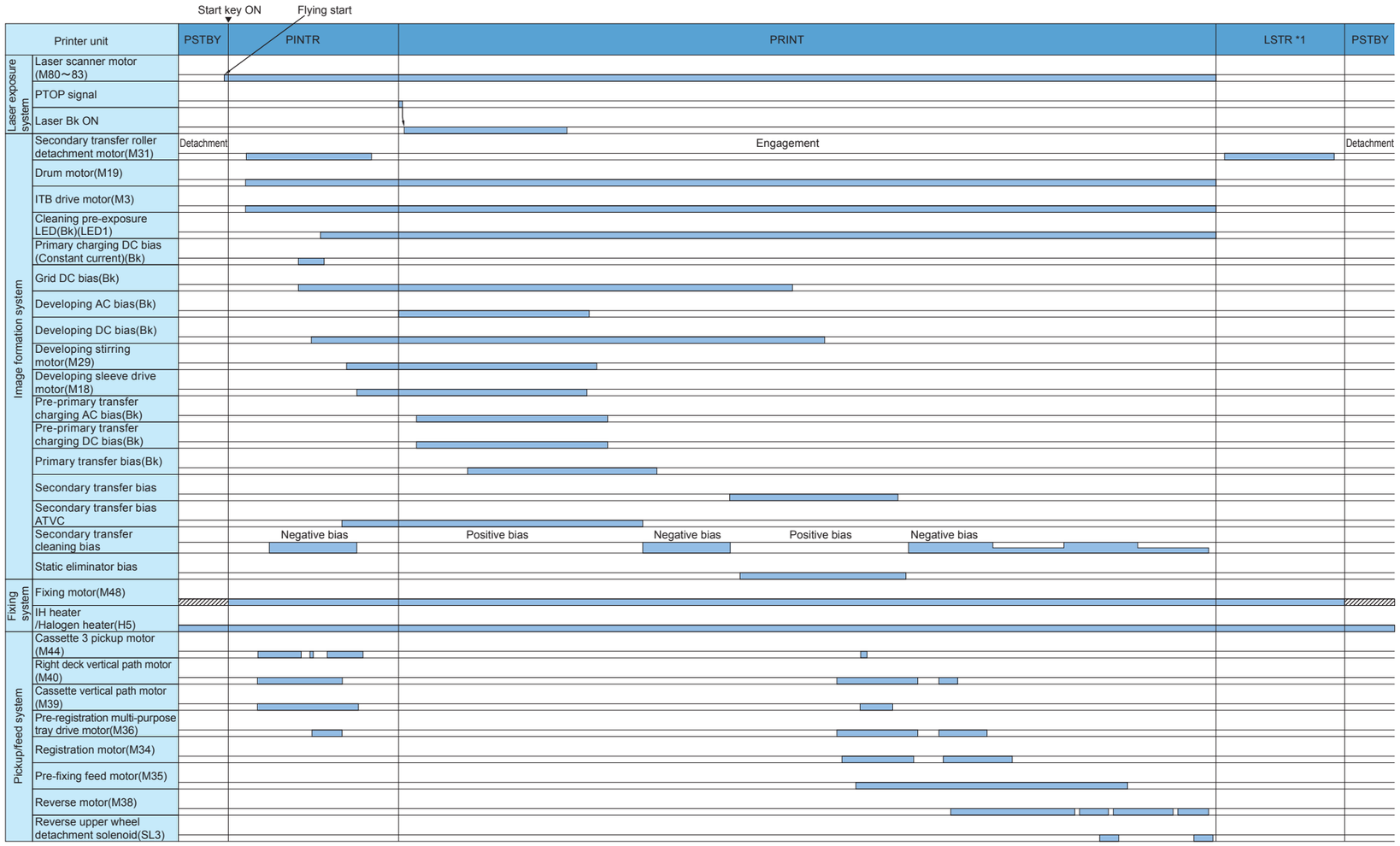
*1:Auto adjustment may be executed depending on the conditions

: Standby speed

F-10-2

Appendix > General Timing Chart > Basic sequence at printing <Condition:Full color, Cassette 3, A4 1-sided (1 sheet)>

Basic sequence at printing <Condition:Monochrome, Cassette 3, A4 1-sided (1 sheet)>



*1:Auto adjustment may be executed depending on the conditions

:Standby speed

F-10-3

Appendix > General Timing Chart > Basic sequence at printing <Condition:Monochrome, Cassette 3, A4 1-sided (1 sheet)>

General Circuit Diagram

Signal Input/Output List

Jack No.	Abbreviated Signal Name	Signal Name
J1210	E1_HOB_SERIAL_TX1-	Drum ITB High Speed Serial Communication Transmission Signal (Differential -)
	E1_HOB_SERIAL_TX1+	Drum ITB High Speed Serial Communication Transmission Signal (Differential +)
	E1_HOB_SERIAL_CLK1+	Drum ITB High Speed Serial Communication Clock Signal (Differential +)
	E1_HOB_SERIAL_CLK1-	Drum ITB High Speed Serial Communication Clock Signal (Differential -)
	E1_HOB_SERIAL_RX1-	Drum ITB High Speed Serial Communication Reception Signal (Differential -)
	E1_HOB_SERIAL_RX1+	Drum ITB High Speed Serial Communication Reception Signal (Differential +)
	DRUM_ITB_RESET	Drum ITB Reset
J1211	E2_EX_SERIAL_TX1	Buffer Driver High Speed Serial Transmission Signal
	E2_EX_SERIAL_RX1	Buffer Driver High Speed Serial Reception Signal
	E2_EX_SERIAL_CLK1	Buffer Driver Restraint Serial Clock Signal
	E2_STM_CLK1_BUF	Decurler Compression Distance Adjustment Motor 1 Clock
	E2_STM_CLK2_BUF	Decurler Compression Distance Adjustment Motor 2 Clock
	E2_STM_CLK3_BUF	Decurler Feed 1 Motor Clock
	E2_STM_CLK4_BUF	Decurler Feed 2 Motor Clock
	BUF_CNCT	Buffer Driver Connection Detection Signal
	BUF_RESET	Buffer Driver Reset Signal
	FIN_RMT	Finisher Remote
J1212	E2_EX_SERIAL_TX2-	Multi Deck High Speed Serial Transmission Signal 2 (Differential -)
	E2_EX_SERIAL_TX2+	Multi Deck High Speed Serial Transmission Signal 2 (Differential +)
	E2_EX_SERIAL_CLK2+	Multi Deck High Speed Serial Clock Signal 2 (Differential +)
	E2_EX_SERIAL_CLK2-	Multi Deck High Speed Serial Clock Signal 2 (Differential -)
	E2_EX_SERIAL_RX2-	Multi Deck High Speed Serial Reception Signal 2 (Differential -)
	E2_EX_SERIAL_RX2+	Multi Deck High Speed Serial Reception Signal 2 (Differential +)
	E2_EX_SERIAL_TX3-	Multi Deck High Speed Serial Transmission Signal 3 (Differential -)
	E2_EX_SERIAL_TX3+	Multi Deck High Speed Serial Transmission Signal 3 (Differential +)
	E2_EX_SERIAL_CLK3+	Multi Deck High Speed Serial Clock Signal 3 (Differential +)
	E2_EX_SERIAL_CLK3-	Multi Deck High Speed Serial Clock Signal 3 (Differential -)
	E2_EX_SERIAL_RX3-	Multi Deck High Speed Serial Reception Signal 3 (Differential -)
	E2_EX_SERIAL_RX3+	Multi Deck High Speed Serial Reception Signal 3 (Differential +)
	E2_EX_SERIAL_TX4-	Multi Deck High Speed Serial Transmission Signal 4 (Differential -)
	E2_EX_SERIAL_TX4+	Multi Deck High Speed Serial Transmission Signal 4 (Differential +)
	E2_EX_SERIAL_CLK4+	Multi Deck High Speed Serial Clock Signal 4 (Differential +)
	E2_EX_SERIAL_CLK4-	Multi Deck High Speed Serial Clock Signal 4 (Differential -)
	E2_EX_SERIAL_RX4-	Multi Deck High Speed Serial Reception Signal 4 (Differential -)
	E2_EX_SERIAL_RX4+	Multi Deck High Speed Serial Reception Signal 4 (Differential +)
	MDECK_RESET	Multi Deck Reset
	MDECK_REMOTE	Multi Deck Remote (Power Supply Remote)
	MDECK_AD_CS	Multi Deck A/D Chip Selection
	MDECK_EEP_ES	Multi Deck EEPROM Chip Selection
	MDECK_ADEEP_CLK	Multi Deck A/D, EEPROM Clock
	MDECK_ADEEP_DOUT	Multi Deck A/D, EEPROM Data Output (Multi Deck => DCON)
	MDECK_ADEEP_DIN	Multi Deck A/D, EEPROM Data Input (DCON => Multi Deck)
	MDECK_CNCT_IN	Multi Deck Connection Detection

Jack No.	Abbreviated Signal Name	Signal Name
J1213	DIFF_EX_SERIAL_TX	Hopper Driver High Speed Serial Communication Transmission Signal
	DIFF_EX_SERIAL_RX	Hopper Driver High Speed Serial Communication Reception Signal
	DIFF_EX_SERIAL_CLK	Hopper Driver High Speed Serial Communication Clock Signal
	HOPPER_RESET	Hopper Driver Reset Signal
J1214	E1_EX_SERIAL_RX0-	Fixing Feed Driver High Speed Serial Reception Signal 0 (Differential -)
	E1_EX_SERIAL_RX0+	Fixing Feed Driver High Speed Serial Reception Signal 0 (Differential +)
	E1_EX_SERIAL_TX0-	Fixing Feed Driver High Speed Serial Transmission Signal 0 (Differential -)
	E1_EX_SERIAL_TX0+	Fixing Feed Driver High Speed Serial Transmission Signal 0 (Differential +)
	E1_EX_SERIAL_CLK0+	Fixing Feed Driver High Speed Serial Clock Signal 0 (Differential -)
	E1_EX_SERIAL_CLK0-	Fixing Feed Driver High Speed Serial Clock Signal 0 (Differential +)
	UNDER_BLT_COOL_FAN_STS	Pressure Belt Cooling Fan (Front)/(Rear) Lower Belt Cooling Fan Status Signal
	3.3v_CONNECT_A_IN	Drawer A Connection Detection Signal
	E1_PWM0	Fixing Motor Clock Signal
	E1_EX_SERIAL_TX1	Fixing Feed Driver PCB/Fixing Feed Driver High Speed Serial Transmission Signal 1
	E1_EX_SERIAL_RX1	Fixing Feed Driver PCB/Fixing Feed Driver High Speed Serial Reception Signal 1
	E1_EX_SERIAL_CLK1	Fixing Feed Driver PCB/Fixing Feed Driver High Speed Serial Clock Signal 1
	OHP_SNS	OHP Sensor Detection Signal
	TEIHAN_RESET	Fixing Feed Driver PCB/Fixing Feed Driver Reset Signal
	FUSER_BELT_YORI_ERR	Fixing Belt Displacement Error Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1215	E1_EX_SERIAL_TX2	Pickup Driver High Speed Serial Transmission Signal 2
	E1_EX_SERIAL_RX2	Pickup Driver High Speed Serial Reception Signal 2
	E1_EX_SERIAL_CLK2	Pickup Driver High Speed Serial Clock Signal 2
	E1_EX_SERIAL_TX3	Pickup Driver High Speed Serial Transmission Signal 3
	E1_EX_SERIAL_RX3	Pickup Driver High Speed Serial Reception Signal 3
	E1_EX_SERIAL_CLK3	Pickup Driver High Speed Serial Clock Signal 3
	E1_STM_CLK0	Delivery Motor Clock
	E1_STM_CLK1	Reverse Motor Clock
	E1_STM_CLK2	Left Deck Pickup Motor Clock
	E1_STM_CLK3	Right Deck Pickup Motor Clock
	E1_STM_CLK4	Cassette 3 Pickup Motor Clock
	E1_STM_CLK5	Cassette 4 Pickup Motor Clock
	E1_STM_CLK6	Secondary Transfer Roller Disengagement Motor Clock
	E1_STM_CLK7	Pre-registration Multi-purpose Tray Drive Motor Clock
	E1_STM_CLK8	Cassette Vertical Path Motor Clock
	E1_STM_CLK9	Right Deck Vertical Path Motor Clock
	E1_STM_CLK10	Left Deck Vertical Path Motor Clock
	WIDTH_OF_PAPER_DTC	Multi-purpose Tray Paper Width Detection Signal
	MULTI_LAST_PAPER_DTC_SNS	Multi-purpose Tray Last Paper Sensor Detection
	FEED_RESET	Pickup Driver Reset Signal
	E1_PWM1	Delivery Flapper Solenoid PWM Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1220	MOTOR_ID	Motor ID
	Y_DEV_SLEEVE_MTR_CW	Developing Sleeve Drive Motor (Y) Rotation Direction Signal
	Y_DEV_SLEEVE_MTR_ACC	Developing Sleeve Drive Motor (Y) Acceleration Signal
	Y_DEV_SLEEVE_MTR_DEC	Developing Sleeve Drive Motor (Y) Deceleration Signal
	Y_DEV_SLEEVE_MTR_FG	Developing Sleeve Drive Motor (Y) FG Signal
	M_DEV_SLEEVE_MTR_CW	Developing Sleeve Drive Motor (M) Rotation Direction Signal
	M_DEV_SLEEVE_MTR_ACC	Developing Sleeve Drive Motor (M) Acceleration Signal
	M_DEV_SLEEVE_MTR_DEC	Developing Sleeve Drive Motor (M) Deceleration Signal
	M_DEV_SLEEVE_MTR_FG	Developing Sleeve Drive Motor (M) FG Signal
	C_DEV_SLEEVE_MTR_CW	Developing Sleeve Drive Motor (C) Rotation Direction Signal
	C_DEV_SLEEVE_MTR_ACC	Developing Sleeve Drive Motor (C) Acceleration Signal
	C_DEV_SLEEVE_MTR_DEC	Developing Sleeve Drive Motor (C) Deceleration Signal
	C_DEV_SLEEVE_MTR_FG	Developing Sleeve Drive Motor (C) FG Signal
J1223	12V-MONI	IH Power Supply 12V Monitor
	IH-ERROR	IH Power Supply Error Signal
	PWM1_OUT	IH Power Supply PWM Output 1
	PWM2_OUT	IH Power Supply PWM Output 2
	IH_RELAY_ON_2	IH Power Supply Relay ON 2
	IH_RELAY_ON_1	IH Power Supply Relay ON 1
	IH_VOLTAGE	IH Power Supply Voltage Monitor
	IH_CURRENT	IH Power Supply Current Monitor
	IH-ENB	IH Power Supply Enable
J1225	2ND_HEAT_CASE_THERM1	Pressure Main Thermistor Case 1 Signal
	2ND_HEAT_CASE_THERM2	Pressure Main Thermistor Case 2 Signal
	2ND_HEAT_FILM_THERM1	Pressure Main Thermistor Film 1 Signal
	2ND_HEAT_FILM_THERM2	Pressure Main Thermistor Film 2 Signal
	IH_MAIN_THERM	Fixing Main Thermistor Signal
	IH_SUB1_THERM	Fixing Sub Thermistor 1 Signal (Rear)
	IH_SUB2_THERM	Fixing Sub Thermistor 2 Signal (Front)
	IH_THERM_CNCT	Fixing Thermistor Connection Detection Signal
	UNDER_BELT_YORI_2	Pressure Belt Displacement 2 Detection Signal
	UNDER_BELT_YORI_1	Pressure Belt Displacement 1Detection Signal
	2ND_HEAT_SUB2_THERM	Pressure Sub Thermistor 2 Signal (Front)
	2ND_HEAT_SUB1_THERM	Pressure Sub Thermistor 1 Signal (Rear)
	2ND_HEAT_THERM_CNCT	Pressure Sub Thermistor Connection Detection

Jack No.	Abbreviated Signal Name	Signal Name
J1226	DRUM_SURF_TEMP_LIMIT	Drum Surface Temperature Limit Detection
	DRUM_SURF_THP	Drum Surface Temperature
	DRUM_HEATER_THM_S_50_LMT	Drum Heater (Bk) Thermistor 50 DegC Limit Detection
	DRUM_HEATER_THM_P_42_5_DTC	Drum Heater (Bk) Thermopile 42.5 DegC Detection
	DRUM_HEATER_THM_S_CNCT	Drum Heater (Bk) Thermistor Connection Detection
J1227	BK_DEV_SLEEVE_MTR_CW	Developing Sleeve Drive Motor (Bk) Rotation Direction Signal
	BK_DEV_SLEEVE_MTR_ACC	Developing Sleeve Drive Motor (Bk) Acceleration Signal
	BK_DEV_SLEEVE_MTR_DEC	Developing Sleeve Drive Motor (Bk) Deceleration Signal
	BK_DEV_SLEEVE_MTR_FG	Developing Sleeve Drive Motor (Bk) FG Signal
	CLN_DRIVE_MTR_CW	Drum Cleaning/Waste Toner Feed Drive Motor Rotation Direction Signal
	CLN_DRIVE_MTR_ACC	Drum Cleaning/Waste Toner Feed Drive Motor Acceleration Signal
	CLN_DRIVE_MTR_DEC	Drum Cleaning/Waste Toner Feed Drive Motor Deceleration Signal
	CLN_DRIVE_MTR_FG	Drum Cleaning/Waste Toner Feed Drive Motor FG Signal
J1230	GRID_CONT	Grid High Voltage Control
	BK_PRIM_CONT	Primary Charging Control (Bk)
	HV_PRIM_GRID_ON	Grid High Voltage ON
	HV_RMT_PRIM	Primary Charging High Voltage Remote

Jack No.	Abbreviated Signal Name	Signal Name
J1231	CMN_CK_25	Common Clock 25kHz
	PR_AC_CLK	Primary Charging AC Clock
	AC_VSNS_C	Primary Charging Voltage Monitor (C)
	AC_ISNS_C	Primary Charging Current Monitor (C)
	PR_AC_CONT_C	Primary Charging AC Control (C)
	PR_AC_CC_ON_C	Primary Charging Current Control ON (C)
	PR_AC_CV_ON_C	Primary Charging Constant Voltage Control ON (C)
	PR_DC_CONT_C	Primary Charging DC Control (C)
	PR_DC_ON_C	Primary Charging DC ON (C)
	AC_VSNS_M	Primary Charging Voltage Monitor (M)
	AC_ISNS_M	Primary Charging Current Monitor (M)
	PR_AC_CONT_M	Primary Charging AC Control (M)
	PR_AC_CC_ON_M	Primary Charging Current Control ON (M)
	PR_AC_CV_ON_M	Primary Charging Constant Voltage Control ON (M)
	PR_DC_CONT_M	Primary Charging DC Control (M)
	PR_DC_ON_M	Primary Charging DC ON (M)
	AC_VSNS_Y	Primary Charging Voltage Monitor (Y)
	AC_ISNS_Y	Primary Charging Current Monitor (Y)
	PR_AC_CONT_Y	Primary Charging AC Control (Y)
	PR_AC_CC_ON_Y	Primary Charging Current Control ON (Y)
	PR_AC_CV_ON_Y	Primary Charging Constant Voltage Control ON (Y)
	PR_DC_CONT_Y	Primary Charging DC Control (Y)
	PR_DC_ON_Y	Primary Charging DC ON (Y)
	HV_RMT_PRIM	Primary Charging High Voltage Remote
J1232	BK_DEV_AC_CONT	Developing High Voltage AC Control (Bk)
	BK_DEV_AC_ON	Developing High Voltage AC ON (Bk)
	BK_DEV_DC_CONT	Developing High Voltage DC Control (Bk)
	BK_DEV_DC_ON	Developing High Voltage DC ON (Bk)
J1233	DEV_CLK_B_TO_HV	Developing High Voltage Clock B
	DEV_CLK_A_TO_HV	Developing High Voltage Clock A
	Y_DEV_AC_CONT	Developing High Voltage AC Control (Y)
	Y_DEV_AC_ON	Developing High Voltage AC ON (Y)
	Y_DEV_DC_CONT	Developing High Voltage DC Control (Y)
	Y_DEV_DC_ON	Developing High Voltage DC ON (Y)
	HV_RMT_DEV	Developing High Voltage Remote
	M_DEV_AC_CONT	Developing High Voltage AC Control (M)
	M_DEV_AC_ON	Developing High Voltage AC ON (M)
	M_DEV_DC_CONT	Developing High Voltage DC Control (M)
	M_DEV_DC_ON	Developing High Voltage DC ON (M)
	C_DEV_AC_CONT	Developing High Voltage AC Control (C)
	C_DEV_AC_ON	Developing High Voltage AC ON (C)
	C_DEV_DC_CONT	Developing High Voltage DC Control (C)
	C_DEV_DC_ON	Developing High Voltage DC ON (C)

Jack No.	Abbreviated Signal Name	Signal Name
J1234	M_TR1_VOLTAGE	Primary Transfer Voltage Monitor (M)
	M_TR1_CURRENT	Primary Transfer Current Monitor (M)
	M_P_CC_CONT	Primary Transfer Constant Current Control (M)
	M_P_CV_CONT	Primary Transfer Constant Voltage Control (M)
	M_P_CC_ON	Primary Transfer Constant Current ON (M)
	M_P_CV_ON	Primary Transfer Constant Voltage ON (M)
	Y_TR1_VOLTAGE	Primary Transfer Voltage Monitor (Y)
	CMN_CK_70_TO_HV	Common Clock 70kHz
	Y_TR1_CURRENT	Primary Transfer Current Monitor (Y)
	Y_P_CC_CONT	Primary Transfer Constant Current Control (Y)
	Y_P_CV_CONT	Primary Transfer Constant Voltage Control (Y)
	Y_P_CC_ON	Primary Transfer Constant Current ON (Y)
	Y_P_CV_ON	Primary Transfer Constant Voltage ON (Y)
	HV_RMT_TR1	Primary Transfer High Voltage Remote
J1235	BK_TR1_VOLTAGE	Primary Transfer Voltage Monitor (Bk)
	BK_TR1_CURRENT	Primary Transfer Current Monitor (Bk)
	BK_TR1_CONT_N	Primary Transfer Minus Control (Bk)
	BK_TR1_CURRENT_CONT	Primary Transfer Current Control (Bk)
	BK_TR1_CONT_P	Primary Transfer Plus Control (Bk)
	BK_TR1_CURRENT_SET	Primary Transfer Current Set (Bk)
	BK_TR1_MINUS_SET	Primary Transfer Minus Set (Bk)
	BK_TR1_ON	Primary Transfer ON (Bk)
	C_TR1_VOLTAGE	Primary Transfer Voltage Monitor (C)
	C_TR1_CURRENT	Primary Transfer Current Monitor (C)
	C_P_CC_CONT	Primary Transfer Constant Current Control (C)
	C_P_CV_CONT	Primary Transfer Constant Voltage Control (C)
	C_P_CC_ON	Primary Transfer Constant Current ON (C)
	C_P_CV_ON	Primary Transfer Constant Voltage ON (C)
	HV_RMT_TR1	Primary Transfer High Voltage Remote
J1236	POST_AC_CLK_B_TO_HV	Pre-primary Transfer High Voltage Clock B
	POST_AC_CLK_A_TO_HV	Pre-primary Transfer High Voltage Clock A
	CMN_CK_25_1TO_HV	Common Clock 25kHz
	HV_DPOST_AC_ON	Drum Post High Voltage AC ON
	DPOST_DC_CONT	Drum Post DC Control
	HV_DPOST_DC_ON	Drum Post DC ON
	HV_RMT_POST	Drum Post High Voltage Remote

Jack No.	Abbreviated Signal Name	Signal Name
J1240	Y_PRE_EXP_LED_ON	Cleaning Pre-exposure LED (Y) LED ON
	Y_TONER_DENS_SNS_CTL	Toner Density Sensor Detection Signal (Y) Control
	Y_TONER_DENS_SNS_SIG	Toner Density Sensor Detection Signal (Y) Detection Signal
	M_PRE_EXP_LED_ON	Cleaning Pre-exposure LED (M) LED ON
	M_TONER_DENS_SNS_CTL	Toner Density Sensor Detection Signal (M) Control
	M_TONER_DENS_SNS_SIG	Toner Density Sensor Detection Signal (M) Detection Signal
	C_PRE_EXP_LED_ON	Cleaning Pre-exposure LED (C) LED ON
	C_TONER_DENS_SNS_CTL	Toner Density Sensor Detection Signal (C) Control
	C_TONER_DENS_SNS_SIG	Toner Density Sensor Detection Signal (C) Detection Signal
	BK_TONER_DENS_SNS_CTL	Toner Density Sensor Detection Signal (Bk) Control
	BK_TONER_DENS_SNS_SIG	Toner Density Sensor Detection Signal (Bk) Detection Signal
J1241	TR2_CONT_P	Secondary Transfer Plus Control
	TR2_CRNT_CONT	Secondary Transfer Current ON
	TR2_CONT_N	Secondary Transfer Minus Control
	TR2_REMOVE_DC_CONT	Secondary Transfer Static Elimination DC ON
	3.3v_CONNECT_B_IN	Secondary Transfer Static Elimination Connection Detection
	TR2_CURRENT	Secondary Transfer Current Monitor
	TR2_VOLTAGE	Secondary Transfer Voltage Monitor
	CMN_CK_25_1TO_HV	Secondary Transfer Static Elimination Clock 25kHz
J1242	R_LED_ON	Registration Patch Sensor Detection Signal (Front) Encoder LED ON
	FR_DETECT	Registration Patch Sensor Detection Signal (Front) Encoder Detection Signal (Front)
	R_RESET	Registration Patch Sensor Detection Signal (Front) Encoder Reset
	BR_DETECT	Registration Patch Sensor Detection Signal (Front) Encoder Detection Signal (Front)
	PATCH_LED_ON	Patch Sensor Detection Signal LED ON
	PATCH_P	Patch Sensor Detection Signal P Wave
	PATCH_S	Patch Sensor Detection Signal S Wave
	PATCH_REF	Patch Sensor Detection Signal Reference
	PATCH_SL_ON	Registration Patch Shutter Open/Close Solenoid ON
	BK_PRE_CLN_LED_ON	Cleaning Pre-exposure LED (Bk)/Bk Pre-exposure LED ON

Jack No.	Abbreviated Signal Name	Signal Name
J1243	HV_ON	Potential Sensor Remote
	+3.3V_ANALOG	3.3V Power Supply
	BK_POTENTOAL_SNS_ON	Potential Sensor ON
	BK_POTENTIAL_DETECT	Potential Sensor Detection Signal
	PRIM_IN_FAN_FULL/HALF	Primary Charging Suction Fan Full Speed/Half Speed
	PRIM_IN_FAN_LOCK	Full Speed/Half Speed Lock Signal
	HAND_PAPER_FEED_GATE_SNS	Multi-purpose Tray Cover Open/Close Sensor Detection Signal
	PRIM_WIRE_CLN_MTR_CW	Primary Charging Wire Cleaning Motor Clockwise
	PRIM_WIRE_CLN_MTR_CCW	Primary Charging Wire Cleaning Motor Counter Clockwise
	POST_WIRE_CLN_MTR_CW	Pre-primary Transfer Charging Wire Cleaning Motor Clockwise
	POST_WIRE_CLN_MTR_CCW	Pre-primary Transfer Charging Wire Cleaning Motor Counter Clockwise
J1244	TEIHAN_NOBU_SW	Fixing Feed Unit Open/Close Switch Signal
J1246	BK_DEV_SCREW_MTR_DEC	Developing Stirring Motor (Bk) Deceleration Signal
	BK_DEV_SCREW_MTR_ACC	Developing Stirring Motor (Bk) Acceleration Signal
	BK_DEV_SCREW_MTR_FG	Developing Stirring Motor (Bk) FG Signal
	BK_DEV_SCREW_MTR_CCW	Developing Stirring Motor (Bk) Rotation Direction Signal
	Y_DEV_SCREW_MTR_DEC	Developing Stirring Motor (Y) Deceleration Signal
	Y_DEV_SCREW_MTR_ACC	Developing Stirring Motor (Y) Acceleration Signal
	Y_DEV_SCREW_MTR_FG	Developing Stirring Motor (Y) FG Signal
	Y_DEV_SCREW_MTR_CCW	Developing Stirring Motor (Y) Rotation Direction Signal
	M_DEV_SCREW_MTR_DEC	Developing Stirring Motor (M) Deceleration Signal
	M_DEV_SCREW_MTR_ACC	Developing Stirring Motor (M) Acceleration Signal
	M_DEV_SCREW_MTR_FG	Developing Stirring Motor (M) FG Signal
	M_DEV_SCREW_MTR_CCW	Developing Stirring Motor (M) Rotation Direction Signal
	C_DEV_SCREW_MTR_DEC	Developing Stirring Motor (C) Deceleration Signal
	C_DEV_SCREW_MTR_ACC	Developing Stirring Motor (C) Acceleration Signal
	C_DEV_SCREW_MTR_FG	Developing Stirring Motor (C) FG Signal
	C_DEV_SCREW_MTR_CCW	Developing Stirring Motor (C) Rotation Direction Signal
J1247	1ST_TRANS_DESPORION_HP_SNS	Primary Transfer Roller Disengagement HP Sensor Detection Signal
	ITB_EDGE_ADC_DOUT2	ITB Displacement Sensor Detection Signal
	ITB_EDGE_ADC_DOUT1	ITB Displacement Sensor Detection Signal
	ITB_EDGE_SNS_ON	ITB Displacement Sensor Detection Signal
	ITB_STEERTNG_HP_SNS	ITB HP Sensor Detection Signal
	ITB_HP_SNS	ITB HP Sensor Detection Signal
	ITB_ROLLER_TEMP	ITB Roller Temperature (Not used)

Jack No.	Abbreviated Signal Name	Signal Name
J1248	ECO_DOUT	ECO ID Data Out
	ECO_DIN	ECO ID Data In
	ECO_SCK	ECO ID Serial Clock
	ECO_CS	ECO ID Chip Selection
	ECO_POW	ECO ID Power Supply
	ENV_TEMP	Environment Sensor Temperature
	ENV_HUM	Environment Sensor Humidity
J1249	1ST_TRANS_DESPORION_MTR_OUT_A	Primary Transfer Roller Disengagement Motor A
	1ST_TRANS_DESPORION_MTR_OUT_A*	Primary Transfer Roller Disengagement Motor A*
	1ST_TRANS_DESPORION_MTR_OUT_B	Primary Transfer Roller Disengagement Motor B
	1ST_TRANS_DESPORION_MTR_OUT_B*	Primary Transfer Roller Disengagement Motor B*
	STEERING_MTR_OUT_A	Steering Drive Motor
	STEERING_MTR_OUT_A*	Steering Drive Motor *
	STEERING_MTR_OUT_B	Steering Drive Motor B
	STEERING_MTR_OUT_B*	Steering Drive Motor B*
J1250	IPC_RXD	Finisher Communication Reception Signal
	IPC_TXD	Finisher Communication Transmission Signal
	FIN_MODE	Finisher Mode Signal
	FIN_RESET	Finisher Reset Signal
	FIN_DOWNLOAD	Finisher Download Signal
J1251	CHOUHI_CLK	Clock (Option Deck Communication IF)
	E1_STM_CLK11	Deck Pickup Motor Clock
	CHOUHI_TXEND	Transmission Completion (Option Deck Communication IF)
	CHOUHI_TXD	Reception Request Signal (Option Deck Communication IF)
	CHOUHI_RXLOAD	Reception Completion (Option Deck Communication IF)
	CHOUHI_RXD	Reception Signal (Option Deck Communication IF)
	CHOUHI_TXOUTEN	Output Enable (Option Deck Communication IF)
	HOPPER_COOL_ EX_FAN_FULL/HALF	Hopper Cooling Fan Full Speed/Half Speed
	HOPPER_COOL_ EX_FAN_LOCK	Hopper Cooling Fan Lock Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1260	DDI_DOWNLOAD	DDI Download Signal
	DDI_RESET	DDI Reset Signal
	DDI_PPRDY	DDI Printer Power Ready Signal
	DDI_CPRDY	DDI Controller Power Ready Signal
	DDI_LIVEWAKE	DDI Live Wake Mode Signal
	DDI_RXD	DDI Communication Reception Signal (Main Controller => DC Controller)
	DDI_TXD	DDI Communication Transmission Signal (DC Controller => Main Controller)
	PVREQ	PV Request
	REJI_ON_IRQ	Registration ON Interruption
	E2_HOB_SERIAL_CLK1	Laser Interface PCB High Speed Serial Communication Clock Signal 1
	E2_HOB_SERIAL_TX1	Laser Interface PCB High Speed Serial Communication Transmission Signal 1
	E2_HOB_SERIAL_RX1	Laser Interface PCB High Speed Serial Communication Reception Signal 1
	E2_HOB_SERIAL_CLK0	Laser Interface PCB High Speed Serial Communication Clock Signal 2
	E2_HOB_SERIAL_TX0	Laser Interface PCB High Speed Serial Communication Transmission Signal 2
	E2_HOB_SERIAL_RX0	Laser Interface PCB High Speed Serial Communication Reception Signal 2
J1261	W_TNR_FULL_DTC	Waste Toner Full Sensor Detection Signal Detection
J1262	DEV_AIR_TEMP1	Developing Assembly Inner Temperature Detection PCB (Y/M) Detection Signal
	DEV_AIR_TEMP2	Developing Assembly Inner Temperature Detection PCB (C/Bk) Detection Signal
	FRONT_DOOR_SNS	Front Cover Open/Close Sensor Detection Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1264	AC_RL_ON	AC Relay ON Signal
	SEESAW	Seesaw Signal
	R_PW_MONI	Reader Power Monitor
	RMT_RCON	RCON Remote
	RMT_DCON	DCON Remote
	RMT_CONT	Controller Remote
	RMT_SYS	System Remote
	ECO_DOUT	ECO ID Data Out
	ECO_DIN	ECO ID Data In
	ECO_SCK	ECO ID Serial Clock
	ECO_CS	ECO ID Chip Selection
	ECO_POW	ECO ID Power Supply
	KEY	Key Switch Signal
	POWER_FAN_OFF	Power Supply Fan OFF Signal
	POWER_FAN_LOCK	Power Supply Fan Lock Signal
	INT_DCON	DC Controller Initialization signal
	PRST	Controller Receivable Signal
	DCON_LIVE	DC Controller Live signal
	PCTS	Printer Receivable Signal
	C_THM	Scanner Unit (C) Thermistor Detection
	M_THM	Scanner Unit (M) Thermistor Detection
	Y_THM	Scanner Unit (Y) Thermistor Detection
	BK_THM	Scanner Unit (Bk) Thermistor Detection
	VIDEO_REDAY	Laser Interface PCB Ready Signal
	VIDEO_RESET	Laser Interface PCB Reset Signal
	ITOP	ITOP Signal
J1320	BK_DEV_POST_FAN_ON	Developing/Pre-transfer Charging Fan Full Speed/ Half Speed
	BK_DEV_POST_FAN_ERR	Developing/Pre-transfer Charging Fan Lock Signal
	CL_CLEANER_FAN_ON	Color Cleaning Fan Full Speed/Half Speed
	CL_CLEANER_FAN_ERR	Color Cleaning Fan Lock Signal
	PRE_FUSER_DELIVERY_FAN_ ON	Pre-fixing Feed Attraction Fan ON
	PRE_FUSER_DELIVERY_FAN_ ERR	Pre-fixing Feed Attraction Fan Lock Signal
J1330	FIX_EXHAUST_FAN_PWM	Fixing Heat Exhaust Fan PWM Signal
	FIX_EXHAUST_FAN_ERR	Fixing Heat Exhaust Fan Lock Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1340	PRIM_EXHAUST_FAN_ON	Primary Exhaust Fan Full Speed/Half Speed
	PRIM_EXHAUST_FAN_ERR	Primary Exhaust Fan Lock Signal
	BK_HOPPER_SCREW_M_DRIVE	Hopper/Stirring Supply Motor (Bk) Drive
	BK_HOPPER_TONER_SNS	Hopper Toner Level Sensor Detection Signal (Bk)
	BK_TONER_CRG_SLIDE_HP_ SNS	Release Holder Shift Cam HP Sensor Detection Signal (Bk)
	BK_SCREW_ROLL_DTC_SNS	Toner Feed Screw Rotation Detection
	WAIPER_VCC	Wiper Rotation Motor Power Supply
	BK_WAIPER_M_ON	Wiper Rotation Motor (Bk) ON
	Y_HOPPER_TONER_SNS	Hopper Toner Level Sensor Detection Signal (Y)
	Y_TONER_CRG_SLIDE_HP_SNS	Release Holder Shift Cam HP Sensor Detection Signal (Y)
	Y_SCREW_ROLL_DTC_SNS	Toner Feed Screw Rotation Detection (Y)
	Y_HOPPER_SCREW_M_DRIVE	Hopper/Stirring Supply Motor (Y) Drive
	Y_WAIPER_M_ON	Wiper Rotation Motor (Y) ON
J1350	M_HOPPER_TONER_SNS	Hopper Toner Level Sensor Detection Signal (M)
	M_TONER_CRG_SLIDE_HP_SNS	Release Holder Shift Cam HP Sensor Detection Signal (M)
	M_SCREW_ROLL_DTC_SNS	Toner Feed Screw Rotation Detection
	M_HOPPER_SCREW_M_DRIVE	Hopper/Stirring Supply Motor (M) Drive
	M_WAIPER_M_ON	Wiper Rotation Motor (M) ON
	C_HOPPER_TONER_SNS	Hopper Toner Level Sensor Detection Signal (C)
	C_TONER_CRG_SLIDE_HP_SNS	Release Holder Shift Cam HP Sensor Detection Signal (C)
	C_SCREW_ROLL_DTC_SNS	Toner Feed Screw Rotation Sensor Detection Signal (C)/C Screw Rotation Detection
	C_HOPPER_SCREW_M_DRIVE	Hopper/Stirring Supply Motor (M) Drive
	C_WAIPER_M_ON	Wiper Rotation Motor (C) ON
J1360	TONER_CRG_DOOR_SNS	Toner Supply Cover Open/Close Sensor Detection Signal
	BK_TONER_CRG_IN_DOOR_SNS	Toner Container Insertion Inlet Cover Open/Close Sensor Detection Signal (Bk)
	Y_TONER_CRG_IN_DOOR_SNS	Toner Container Insertion Inlet Cover Open/Close Sensor Detection Signal (Y)
	M_TONER_CRG_IN_DOOR_SNS	Toner Container Insertion Inlet Cover Open/Close Sensor Detection Signal (M)
	C_TONER_CRG_IN_DOOR_SNS	Toner Container Insertion Inlet Cover Open/Close Sensor Detection Signal (C)

Jack No.	Abbreviated Signal Name	Signal Name
J1370	Y_TONER_CRG_MTR_CW	Toner Container Drive Motor (Y) Clockwise
	Y_TONER_CRG_MTR_CCW	Toner Container Drive Motor (Y) Counter Clockwise
	M_TONER_CRG_MTR_CW	Toner Container Drive Motor (M) Clockwise
	M_TONER_CRG_MTR_CCW	Toner Container Drive Motor (M) Counter Clockwise
	C_TONER_CRG_MTR_CW	Toner Container Drive Motor (C) Clockwise
	C_TONER_CRG_MTR_CCW	Toner Container Drive Motor (C) Counter Clockwise
	BK_TONER_CRG_MTR_CW	Toner Container Drive Motor (Bk) Clockwise
	BK_TONER_CRG_MTR_CCW	Toner Container Drive Motor (Bk) Counter Clockwise
	BK_CAM_PHASE_DTC_SNS	Release Holder Shift Cam Phase Sensor Detection Signal (Bk)
J1390	HOPPER_COOL_IN_FAN_FULL/HALF	Hopper Cooling Fan Full Speed/Half Speed
	HOPPER_COOL_IN_FAN_LOCK	Hopper Cooling Fan Lock Signal
	C_CAM_PHASE_DTC_SNS	Release Holder Shift Cam Phase Sensor Detection Signal (C)
	M_CAM_PHASE_DTC_SNS	Release Holder Shift Cam Phase Sensor Detection Signal (M)
	Y_CAM_PHASE_DTC_SNS	Release Holder Shift Cam Phase Sensor Detection Signal (Y)
J1402	HANTEN_SNS	Reverse Sensor Detection Signal
	HANTEN_TATE_PASS1_SNS	Reverse Vertical Path Sensor 1 Detection Signal
	HANTEN_TATE_PASS2_SNS	Reverse Vertical Path Sensor 2 Detection Signal
	LEFTDOWN_DOOR_OPEN_SNS	Left Lower Cover Open/Close Sensor Detection Signal
	SOTO_HAISHI_SNS	Outer Delivery Sensor Detection Signal
	HAISHI_SL	Delivery Flapper Solenoid
	HAISHI_SETTYAKU_FAN1_ON	Delivery Heat Exhaust Fan 1 Drive
	HAISHI_SETTYAKU_FAN1_ERR	Delivery Heat Exhaust Fan 1 Lock Signal
	HAISHI_SETTYAKU_FAN2_ON	Delivery Heat Exhaust Fan 2 Drive
	HAISHI_SETTYAKU_FAN2_ERR	Delivery Heat Exhaust Fan 2 Lock Signal
J1403	UPPER_CST_SIZE2_SW4	Cassette 3 Size Detection 2 Switch 4
	UPPER_CST_SIZE2_SW3	Cassette 3 Size Detection 2 Switch 3
	UPPER_CST_SIZE2_SW2	Cassette 3 Size Detection 2 Switch 2
	UPPER_CST_SIZE2_SW1	Cassette 3 Size Detection 2 Switch 1
	DOWN_CST_SIZE2_SW4	Cassette 4 Size Detection 2 Switch 4
	DOWN_CST_SIZE2_SW3	Cassette 4 Size Detection 2 Switch 3
	DOWN_CST_SIZE2_SW2	Cassette 4 Size Detection 2 Switch 2
	DOWN_CST_SIZE2_SW1	Cassette 4 Size Detection 2 Switch 1

Jack No.	Abbreviated Signal Name	Signal Name
J1404	UPPER_CST_SIZE1_SW4	Cassette 3 Size Detection Switch 4
	UPPER_CST_SIZE1_SW3	Cassette 3 Size Detection Switch 3
	UPPER_CST_SIZE1_SW2	Cassette 3 Size Detection Switch 2
	UPPER_CST_SIZE1_SW1	Cassette 3 Size Detection Switch 1
	CASET3_ZANKEN_1_SNS	Cassette 3 Paper Level Sensor 1 Detection Signal
	CASET3_ZANKEN_2_SNS	Cassette 3 Paper Level Sensor 2 Detection Signal
	DOWN_CST_SIZE1_SW4	Cassette 4 Size Detection Switch 4
	DOWN_CST_SIZE1_SW3	Cassette 4 Size Detection Switch 3
	DOWN_CST_SIZE1_SW2	Cassette 4 Size Detection Switch 2
	DOWN_CST_SIZE1_SW1	Cassette 4 Size Detection Switch 1
	CASET4_ZANKEN_1_SNS	Cassette 4 Paper Level Sensor 1 Detection Signal
	CASET4_ZANKEN_2_SNS	Cassette 4 Paper Level Sensor 2 Detection Signal
J1405	HANTEN_TATE_PASS3_SNS	Reverse Vertical Path Sensor 3 Detection Signal
	TATE_PASS2_SNS	Vertical Path Sensor 2 Detection Signal
	RIGHTDOWN_DOOR_OPEN_SNS	Right Lower Cover Open/Close Sensor Detection Signal
J1406	RIGHT_DECK_ZANKEN_1_SNS	Right Deck Paper Level Sensor 1 Detection Signal
	RIGHT_DECK_ZANKEN_2_SNS	Right Deck Paper Level Sensor 2 Detection Signal
	LEFT_DECK_ZANKEN_1_SNS	Left Deck Paper Level Sensor 1 Detection Signal
	LEFT_DECK_ZANKEN_2_SNS	Left Deck Paper Level Sensor 2 Detection Signal
J1407	LEFT_DECK_PICK_UP_ON	Left Deck Pickup Solenoid ON
	LEFT_DECK_KYUSHI_SNS	Left Deck Pickup Sensor Detection Signal
	LEFT_LIMIT_SNS	Left Deck Upper Limit Sensor Detection Signal
	LEFT_DECK_PAPER_SNS	Left Deck Paper Sensor Detection Signal
	LEFT_DECK_H_PAPER_SNS	Left Deck Paper Surface Height Sensor Detection Signal
	LEFT_DECK_PICK_UP_SNS	Left Deck Pullout Sensor Detection Signal
J1408	CST3_DECK_PICK_UP_MTR_B	Cassette 3 Pickup Motor B
	CST3_DECK_PICK_UP_MTR_B*	Cassette 3 Pickup Motor B*
	CST3_DECK_PICK_UP_MTR_A*	Cassette 3 Pickup Motor A*
	CST3_DECK_PICK_UP_MTR_A	Cassette 3 Pickup Motor A
	CST4_DECK_PICK_UP_MTR_B	Cassette 4 Pickup Motor B
	CST4_DECK_PICK_UP_MTR_B*	Cassette 4 Pickup Motor B*
	CST4_DECK_PICK_UP_MTR_A*	Cassette 4 Pickup Motor A*
	CST4_DECK_PICK_UP_MTR_A	Cassette 4 Pickup Motor A

Jack No.	Abbreviated Signal Name	Signal Name
J1409	2ND_TRANS_DESPRTION_MTR_B	Secondary Transfer Roller Disengagement Motor B
	2ND_TRANS_DESPRTION_MTR_B*	Secondary Transfer Roller Disengagement Motor B*
	2ND_TRANS_DESPRTION_MTR_A*	Secondary Transfer Roller Disengagement Motor A*
	2ND_TRANS_DESPRTION_MTR_A	Secondary Transfer Roller Disengagement Motor A
	RIGHT_DECK_PICK_UP_MTR_B	Right Deck Pickup Motor B
	RIGHT_DECK_PICK_UP_MTR_B*	Right Deck Pickup Motor B*
	RIGHT_DECK_PICK_UP_MTR_A*	Right Deck Pickup Motor A*
	RIGHT_DECK_PICK_UP_MTR_A	Right Deck Pickup Motor A
	LEFT_DECK_PICK_UP_MTR_B	Left Deck Pickup Motor B
	LEFT_DECK_PICK_UP_MTR_B*	Left Deck Pickup Motor B*
	LEFT_DECK_PICK_UP_MTR_A*	Left Deck Pickup Motor A*
	LEFT_DECK_PICK_UP_MTR_A	Left Deck Pickup Motor A
J1410	RIGHT_TATEPASS_MTR_A	Right Deck Vertical Path Motor A
	RIGHT_TATEPASS_MTR_ACOM	Right Deck Vertical Path Motor ACOM
	RIGHT_TATEPASS_MTR_A*	Right Deck Vertical Path Motor A*
	RIGHT_TATEPASS_MTR_B	Right Deck Vertical Path Motor B
	RIGHT_TATEPASS_MTR_BCOM	Right Deck Vertical Path Motor BCOM
	RIGHT_TATEPASS_MTR_B*	Right Deck Vertical Path Motor B*
	LEFT_TATEPASS_MTR_A	Left Deck Vertical Path Motor A
	LEFT_TATEPASS_MTR_ACOM	Left Deck Vertical Path Motor ACOM
	LEFT_TATEPASS_MTR_A*	Left Deck Vertical Path Motor A*
	LEFT_TATEPASS_MTR_B	Left Deck Vertical Path Motor B
	LEFT_TATEPASS_MTR_BCOM	Left Deck Vertical Path Motor BCOM
	LEFT_TATEPASS_MTR_B*	Left Deck Vertical Path Motor B*
J1411	CST_TATEPASS_MTR_A	Cassette Vertical Path Motor A
	CST_TATEPASS_MTR_ACOM	Cassette Vertical Path Motor ACOM
	CST_TATEPASS_MTR_A*	Cassette Vertical Path Motor A*
	CST_TATEPASS_MTR_B	Cassette Vertical Path Motor B
	CST_TATEPASS_MTR_BCOM	Cassette Vertical Path Motor BCOM
	CST_TATEPASS_MTR_B*	Cassette Vertical Path Motor B*

Jack No.	Abbreviated Signal Name	Signal Name
J1412	HANTEN_ROLLER_RIKAN_SL	Reverse Upper Roller Disengagement Solenoid ON
	HANTEN_MTR_A	Reverse Motor A
	HANTEN_MTR_ACOM	Reverse Motor ACOM
	HANTEN_MTR_A*	Reverse Motor A*
	HANTEN_MTR_B	Reverse Motor B
	HANTEN_MTR_BCOM	Reverse Motor BCOM
	HANTEN_MTR_B*	Reverse Motor B*
	HAISHI_MTR_A	Delivery Motor A
	HAISHI_MTR_ACOM	Delivery Motor ACOM
	HAISHI_MTR_A*	Delivery Motor A*
	HAISHI_MTR_B	Delivery Motor B
	HAISHI_MTR_BCOM	Delivery Motor BCOM
	HAISHI_MTR_B*	Delivery Motor B*
J1413	REJIMAE_MULTI_MTR_A	Pre-registration Multi-purpose Tray Drive Motor A
	REJIMAE_MULTI_MTR_ACOM	Pre-registration Multi-purpose Tray Drive Motor ACOM
	REJIMAE_MULTI_MTR_A*	Pre-registration Multi-purpose Tray Drive Motor A*
	REJIMAE_MULTI_MTR_B	Pre-registration Multi-purpose Tray Drive Motor B
	REJIMAE_MULTI_MTR_BCOM	Pre-registration Multi-purpose Tray Drive Motor BCOM
	REJIMAE_MULTI_MTR_B*	Pre-registration Multi-purpose Tray Drive Motor B*
J1414	RIGHT_DECK_PICK_UP_ON	Right Deck Pickup Solenoid ON
	RIGHT_DECK_KYUSHI_SNS	Right Deck Pickup Sensor Detection Signal
	RIGHT_LIMIT_SNS	Right Deck Upper Limit Sensor Detection Signal
	RIGHT_DECK_PAPER_SNS	Right Deck Paper Sensor Detection Signal
	RIGHT_DECK_H_PAPER_SNS	Right Deck Paper Surface Height Sensor Detection Signal
	TATE_PASS1_SNS	Vertical Path Sensor 1 Detection Signal
J1415	MULTI_PAPER_SNS	Multi-purpose Tray Paper Sensor Detection Signal/ Multi-purpose Tray Paper Detection Sensor
	MULTI_NAKAITA_SL	Multi-purpose Tray Pickup Solenoid ON
	MULTI_LAST_PAPER_SNS	Multi-purpose Tray Last Paper Sensor Detection Signal/Multi-purpose Tray Last Paper Sensor
	WIDTH_OF_PAPER_DTC	Multi-purpose Tray Paper Width Detection PCB Detection Signal
J1416	HAI_TRN_ROCK_SW	Waste Toner Screw Lock Detection Switch/Waste Toner Lock Switch
J1417	CST3_PICK_UP_ON	Cassette 3 Pickup Solenoid ON
	CST3_KYUSHI_SNS	Cassette 3 Pickup Sensor Detection Signal
	CST3_LIMIT_SNS	Cassette 3 Upper Limit Sensor Detection Signal
	CST3_PAPER_SNS	Cassette 3 Paper Sensor Detection Signal
	CST3_H_PAPER_SNS	Cassette 3 Paper Surface Height Sensor Detection Signal
	CST3_TATE_PASS_SNS	Vertical Path Sensor 3 Detection Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1418	CST4_PICK_UP_ON	Cassette 4 Pickup Solenoid ON
	CST4_KYUSHI_SNS	Cassette 4 Pickup Sensor Detection Signal
	CST4_LIMIT_SNS	Cassette 4 Upper Limit Sensor Detection Signal
	CST4_PAPER_SNS	Cassette 4 Paper Sensor Detection Signal
	CST4_H_PAPER_SNS	Cassette 4 Paper Surface Height Sensor Detection Signal
	TATE_PASS_SNS	Vertical Path Sensor 4 Detection Signal
J1419	HAISHI_SETTYAKU_FAN3_ON	Delivery Heat Exhaust Fan 3 Drive
	HAISHI_SETTYAKU_FAN3_ERR	Delivery Heat Exhaust Fan 3 Lock Signal
	HAISHI_SETTYAKU_FAN4_ON	Delivery Heat Exhaust Fan 4 Drive
	HAISHI_SETTYAKU_FAN4_ERR	Delivery Heat Exhaust Fan 4 Lock Signal
	OPTION_COOL_FAN1_ON	Anti-adhesion Fan 1 Drive
	OPTION_COOL_FAN1_ERR	Anti-adhesion Fan 1 Signal
	OPTION_COOL_FAN2_ON	Anti-adhesion Fan 2 Drive
	OPTION_COOL_FAN2_ERR	Anti-adhesion Fan 2 Lock Signal
	OPTION_FAN_CNCT	Anti-adhesion Fan 1 Connection Detection Signal
J1503	REVERSE_LEFT_MTR_B	Duplex Left Motor B
	REVERSE_LEFT_MTR_B*	Duplex Left Motor B*
	REVERSE_LEFT_MTR_A*	Duplex Left Motor A*
	REVERSE_LEFT_MTR_A	Duplex Left Motor A
	FUSER_BELT_DESPORTION_MTR_OUT_B*	Fixing Pressure Release Motor B*
	FUSER_BELT_DESPORTION_MTR_OUT_B	Fixing Pressure Release Motor B
	FUSER_BELT_DESPORTION_MTR_OUT_A*	Fixing Pressure Release Motor A*
	FUSER_BELT_DESPORTION_MTR_OUT_A	Fixing Pressure Release Motor A*
	PRE_FUSER_DELIVERY_MTR_OUT_B	Pre-fixing Feed Motor B
	PRE_FUSER_DELIVERY_MTR_OUT_B*	Pre-fixing Feed Motor B*
	PRE_FUSER_DELIVERY_MTR_OUT_A*	Pre-fixing Feed Motor A*
	PRE_FUSER_DELIVERY_MTR_OUT_A	Pre-fixing Feed Motor A
	UNDER_BELT_COOL_FAN1_FULL/HALF	Pressure Belt Cooling Fan (Front) Full Speed/Half Speed
	UNDER_BELT_COOL_FAN1_LOCK	Pressure Belt Cooling Fan (Front) Lock Signal
	UNDER_BELT_COOL_FAN2_FULL/HALF	Pressure Belt Cooling Fan (Rear) Full Speed/Half Speed
	UNDER_BELT_COOL_FAN2_LOCK	Pressure Belt Cooling Fan (Rear) Lock Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1504	REVERSE_RIGHT_MTR_A	Duplex Right Motor A
	REVERSE_RIGHT_MTR_ACOM	Duplex Right Motor ACOM
	REVERSE_RIGHT_MTR_A*	Duplex Right Motor A*
	REVERSE_RIGHT_MTR_B	Duplex Right Motor B
	REVERSE_RIGHT_MTR_BCOM	Duplex Right Motor BCOM
	REVERSE_RIGHT_MTR_B*	Duplex Right Motor/Duplex Right Motor B*
	REGIST_MTR_A	Registration Motor A
	REGIST_MTR_ACOM	Registration Motor ACOM
	REGIST_MTR_A*	Registration Motor A*
	REGIST_MTR_B	Registration Motor B
	REGIST_MTR_BCOM	Registration Motor BCOM
	REGIST_MTR_B*	Registration Motor B*
J1505	FUSER_MTR_GAIN_YOBI	Fixing Motor Gain Signal (Spare)
	FUSER_MTR_FG	Fixing Motor FG Signal
	FUSER_MTR_CLK	Fixing Motor Clock Signal
	FUSER_MTR_GAIN	Fixing Motor Gain Signal
	FUSER_MTR_LOCK	Fixing Motor Lock Signal
	FUSER_MTR_ON	Fixing Motor ON Signal
	FUSER_MTR_BRAKE	Fixing Motor Brake Signal
J1507	UNDER_FUSER_BELT_ALIGHNMENT_MTR_B*	Fixing Belt Displacement Control Motor B*
	UNDER_FUSER_BELT_ALIGHNMENT_MTR_B	Fixing Belt Displacement Control Motor B
	UNDER_FUSER_BELT_ALIGHNMENT_MTR_A*	Fixing Belt Displacement Control Motor A*
	UNDER_FUSER_BELT_ALIGHNMENT_MTR_A	Fixing Belt Displacement Control Motor A
	UNDER_FUSER_BELT_ALIGHNMENT_MTR_HP_SNS	Fixing Belt HP Sensor Detection Signal
	FUSER_ENTRANCE_SNS	Fixing Inlet Sensor Detection Signal
	FUSER_BELT_DESPORTION_SNS	Fixing Pressure Release Sensor Detection Signal
	FUSER_EXIT_SNS	Fixing Wrap Sensor Detection Signal
	INNER_EXIT_SNS	Fixing Inner Delivery Sensor Detection Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1508	UPPER_FUSER_BELT_ ALIGHNMENT_MTR_B*	Fixing Belt Displacement Control Motor B*
	UPPER_FUSER_BELT_ ALIGHNMENT_MTR_B	Fixing Belt Displacement Control Motor B
	UPPER_FUSER_BELT_ ALIGHNMENT_MTR_A*	Fixing Belt Displacement Control Motor A*
	UPPER_FUSER_BELT_ ALIGHNMENT_MTR_A	Fixing Belt Displacement Control Motor A
	UPPER_FUSER_BELT_ ALIGHNMENT_MTR_HP_SNS	Fixing Belt HP Sensor Detection Signal
	UPPER_FUSER_BELT_ ALIGHNMENT_SNS1	Fixing Belt Position Sensor 1 Detection Signal
	UPPER_FUSER_BELT_ ALIGHNMENT_SNS2	Fixing Belt Position Sensor 2 Detection Signal
J1509	2ND_TRANS_DESPORTION_HP_ SNS	Secondary Transfer Roller Disengagement HP Sensor Detection Signal
	2ND_TRANS_END_SNS	Post-secondary Transfer Sensor Detection Signal
J1511	OHP_SNS_LED_ON	OHP LED ON
	OHP_SNS	OHP Sensor Detection Signal
	REGI_SNS	Registration Sensor Detection Signal
	VPASS_JOINT_SNS	Vertical Path Merging Sensor Detection Signal
J1512	J3062_CNCT_RTN	Secondary Transfer High Voltage Connection Detection
	TR2_VOLT_DETECT	Secondary Transfer Voltage Monitor
	TR2_CURRENT_DETECT	Secondary Transfer Current Monitor
	DA_TR2_CONT_N	Secondary Transfer Minus Control
	DA_TR2_CONT_CURRENT	Secondary Transfer Current Control
	DA_TR2_CONT_P	Secondary Transfer Plus Controller
	TR2_CRNT_ON	Secondary Transfer Current ON
	TR2_MINUS_ON	Secondary Transfer Minus ON
	TR2_CV_ON	Secondary Transfer Constant Voltage ON
	HV_RMT	High Voltage Remote
	TR2_24V_RDY	Secondary Transfer 24V Ready
	J3540_CNCT_RTN	Secondary Transfer Static Elimination Connection Detection
	TR2_REMOVE_CK_25	Secondary Transfer Static Elimination Clock 25kHz
	DA_TR2_REMOVE_CONT	Secondary Transfer Static Elimination Control
	TR2_REMOVE_DC_ON	Secondary Transfer Static Elimination DC ON
	HV_RMT	High Voltage Remote
	TR2_REMOVE_24V_RDY	Secondary Transfer Static Elimination 24V Ready
J1514	REVERSE_LEFT_SNS	Duplex Sensor 1 Detection Signal
	REVERSE_CENTER_SNS	Duplex Sensor 2 Detection Signal
	REVERSE_RIGHT_SNS	Duplex Sensor 3 Detection Signal
	REVERSE_VPASS_SNS	Duplex Sensor 4 Detection Signal

Jack No.	Abbreviated Signal Name	Signal Name
J1805	IL_LOOP_DTC	Interlock Arch Detection Signal
	IL_ERR_DTC	Interlock Error Detection Signal (Not used)
	TEIHAN_POWER_RMT	Fixing Feed 24V Power Supply Remote
	IH_POWER_RMT	IH Power Supply Power Supply Remote
	FUSER_M_I_MONITOR	Fixing Motor Current Monitor Signal
	AC_RL_ON	AC Relay ON Signal
	SEESAW	Seesaw Signal
	R_PW_MONI	Reader Controller Power Supply Monitor Signal
	RMT_RCON	Reader Controller Power Supply Remote
	RMT_DCON	DC Controller Power Supply Remote (Printer Power Supply Remote)
	RMT_CONT	Controller Power Supply Remote
	RMT_SYS	System Remote (12V Power Supply Remote)
	IH_POWER_FAN_LOCK	IH Power Supply Cooling Fan Lock Signal
	38V_P_COOL_FAN_LOCK	Power Supply Cooling Fan (38V) Lock Signal
	POWER12V_FAN_LOCK	Power Supply Fan 1 Lock Signal
	POWER24V_FAN_LOCK	Power Supply Fan 2 Lock Signal
	38V_P_COOL_FAN_HALF	Power Supply Cooling Fan (38V) Half Speed Signal
	38V_P_COOL_FAN_FULL	Power Supply Cooling Fan (38V) Full Speed Signal
	IH_POWER_FAN_HALF	IH Power Supply Fan Half Speed Signal
	IH_POWER_FAN_FULL	IH Power Supply Cooling Fan Full Speed Signal
	POWER12V_FAN_HALF	Power Supply Fan 1 Half Speed Signal
	POWER12V_FAN_FULL	Power Supply Fan 1 Full Speed Signal
	POWER24V_FAN_HALF	Power Supply Fan 2 Half Speed Signal
	POWER24V_FAN_FULL	Power Supply Fan 2 Full Speed Signal
J1806	AC_DR_ID_BIT1	AC Driver PCB ID Bit 1
	AC_DR_ID_BIT0	AC Driver PCB ID Bit 0
	DRUM_HEAT_TR_ON	Drum Heater Triac ON Signal
	CST_HEAT_TR_ON	Cassette Heater Triac ON Signal
	SUB_TR_ERR_ASIC	Pressure Heater Triac Error Signal
	SUB_TR_ON	Pressure Heater Triac ON Signal
	HEATER_ZERO_CROSS	Zero Cross Signal
	RMT_D0	Option Power Supply Remote
	24VB_RMT	24VB Power Supply Remote
	24VA_RMT	24VA Power Supply Remote

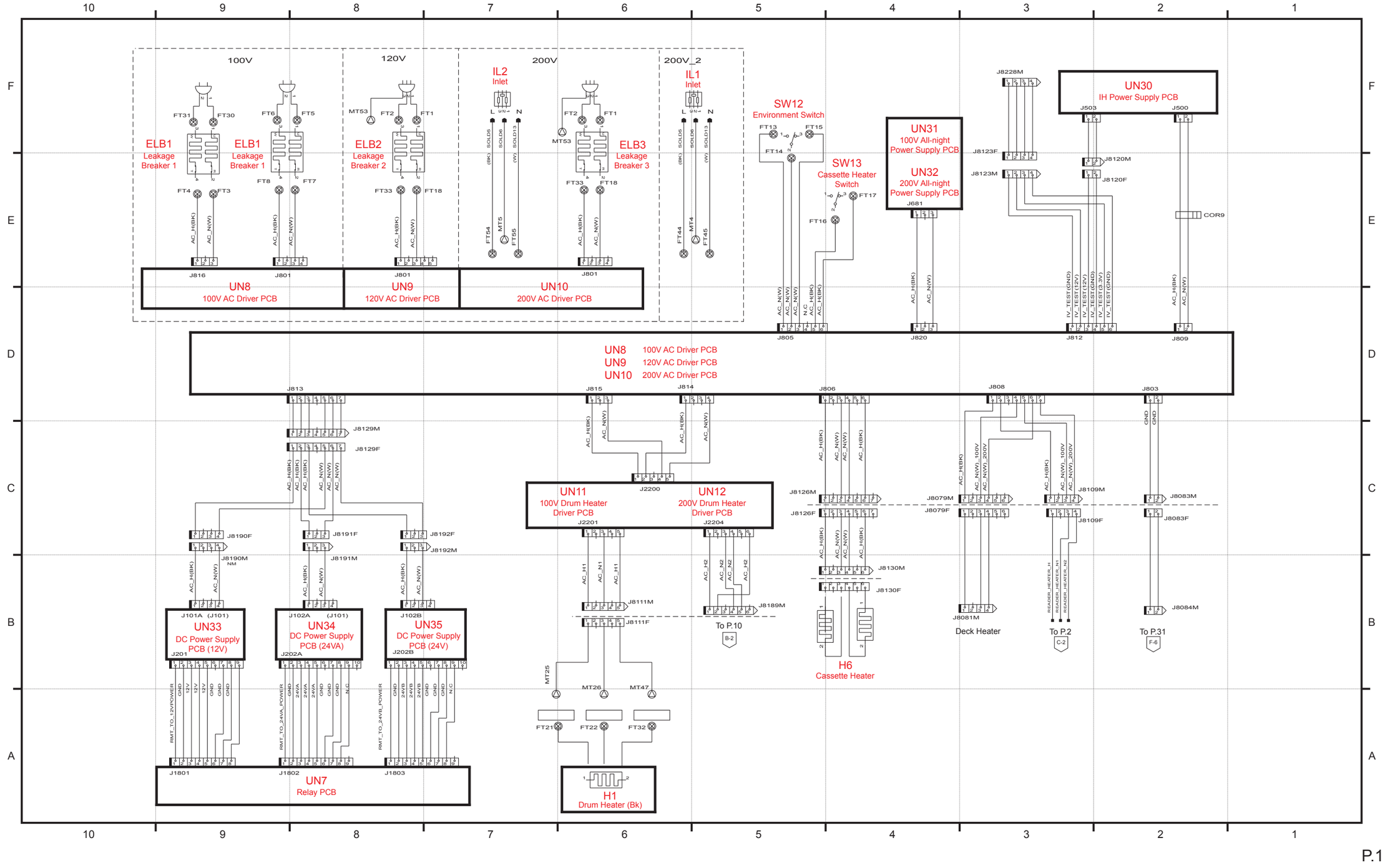
Jack No.	Abbreviated Signal Name	Signal Name
J1807	DRUM_HEAT_TR_ON	Drum Heater ON Signal
	CST_HEAT_TR_ON	Cassette Heater Triac ON Signal
	SUB_TR_ERR	Pressure Heater Triac Error Signal
	SUB_TR_ON	Pressure Heater Triac ON Signal
	SUB_HEAT_RL_ON	Pressure Heater Relay ON Signal
	ZERO_CROSS	Zero Cross Signal
	+3.3V_HIJYOYA	3.3V Non-all-night Power Supply
	AC_DR_ID_BIT0	AC Driver PCB ID Bit 0
	AC_DR_ID_BIT1	AC Driver PCB ID Bit 1
	RMT_SYS	12V Power Supply AC OFF Signal
	12V_SEESAW	12V Seesaw Signal
	SHUT_OFF	Shut OFF Signal
	3.3VR_JYOYA	3.3V All-night Power Supply
J1812	IH_POWER_FAN_LOCK	IH Power Supply Fan Lock Signal
	IH_POWER_FAN_FULL/HALF	IH Power Supply Fan Full Speed/Half Speed
	12V_TEIHAN	12V Power Supply
	12V_SW_IH	12V Power Supply (via Fuse PCB)
J1830	POWER12V_FAN_FULL/OFF	Power Supply Fan 1 Drive Signal
	POWER12V_FAN_LOCK	Power Supply Fan 1 Lock Signal
	POWER24V_FAN_FULL/HALF	Power Supply Fan 2 Drive Signal
	POWER24V_FAN_LOCK	Power Supply Fan 2 Lock Signal
	38V_P_COOL_FAN_FULL/HALF	Power Supply Cooling Fan (38V) Drive Signal
	38V_P_COOL_FAN_LOCK	Power Supply Cooling Fan (38V) Lock Signal
J1910	DRM_ENC1_Y	Y Drum Encoder Signal 1
	DRM_ENC2_Y	Y Drum Encoder Signal 2
	DRM_ENC1_M	M Drum Encoder Signal 1
	DRM_ENC2_M	M Drum Encoder Signal 2
	DRM_ENC1_C	C Drum Encoder Signal 1
	DRM_ENC2_C	C Drum Encoder Signal 2
J1911	DRM_ENC1_K	Bk Drum Encoder Signal 1
	DRM_ENC2_K	Bk Drum Encoder Signal 2

Jack No.	Abbreviated Signal Name	Signal Name
J1920	DRM_DIR_Y_BUF	Drum Motor (Y) Rotation Direction Signal
	DRM_ON_Y_BUF	Drum Motor (Y) ON Signal
	DRM_BREAK_Y_BUF	Drum Motor (Y) Brake Signal
	DRM_FG_Y	Drum Motor (Y) FG Signal
	DRM_PWM_Y_BUF	Drum Motor (Y) PWM Signal
	DRM_DIR_M_BUF	Drum Motor (M) Rotation Direction Signal
	DRM_ON_M_BUF	Drum Motor (M) ON Signal
	DRM_BREAK_M_BUF	Drum Motor (M) Brake Signal
	DRM_FG_M	Drum Motor (M) FG Signal
	DRM_PWM_M_BUF	Drum Motor (M) PWM Signal
	DRM_DIR_C_BUF	Drum Motor (C) Rotation Direction Signal
	DRM_ON_C_BUF	Drum Motor (C) ON Signal
	DRM_BREAK_C_BUF	Drum Motor (C) Brake Signal
	DRM_FG_C	Drum Motor (C) FG Signal
	DRM_PWM_C_BUF	Drum Motor (C) PWM Signal
J1921	DRM_DIR_K_BUF	Drum Motor (Bk) Rotation Direction Signal
	DRM_ON_K_BUF	Drum Motor (Bk) ON Signal
	DRM_BREAK_K_BUF	Drum Motor (Bk) Brake Signal
	DRM_FG_K	Drum Motor (Bk) FG Signal
	DRM_PWM_K_BUF	Drum Motor (Bk) PWM Signal
J1922	ITB_DIR_BUF	ITB Drive Motor Rotation Direction Signal
	ITB_ON_BUF	ITB Drive Motor ON Signal
	ITB_BREAK_BUF	ITB Drive Motor Brake Signal
	ITB_FG_IN	ITB Drive Motor FG Signal
	ITB_PWM_BUF	ITB Drive Motor PWM Signal
	ITB_ENC1	ITB Encoder Signal 1
	ITB_ENC2	ITB Encoder Signal 2
J2202	THM_S_CNT	Drum Heater (Bk) Thermistor Connection Detection
	THM_P_42_5_DTC	Drum Heater (Bk) Thermopile 42.5 DegC Detection
	THM_S_50_LMT	Drum Heater (Bk) Thermistor 50 DegC Limit Detection
	TH_P	Drum Surface Temperature Limit Detection
	TH_S	Drum Surface Temperature
	THM_P_42_5_DTC	Drum Heater (Bk) Thermopile 42.5 DegC Detection

T-10-3

General Circuit Diagram

General Circuit Diagram (1/31)



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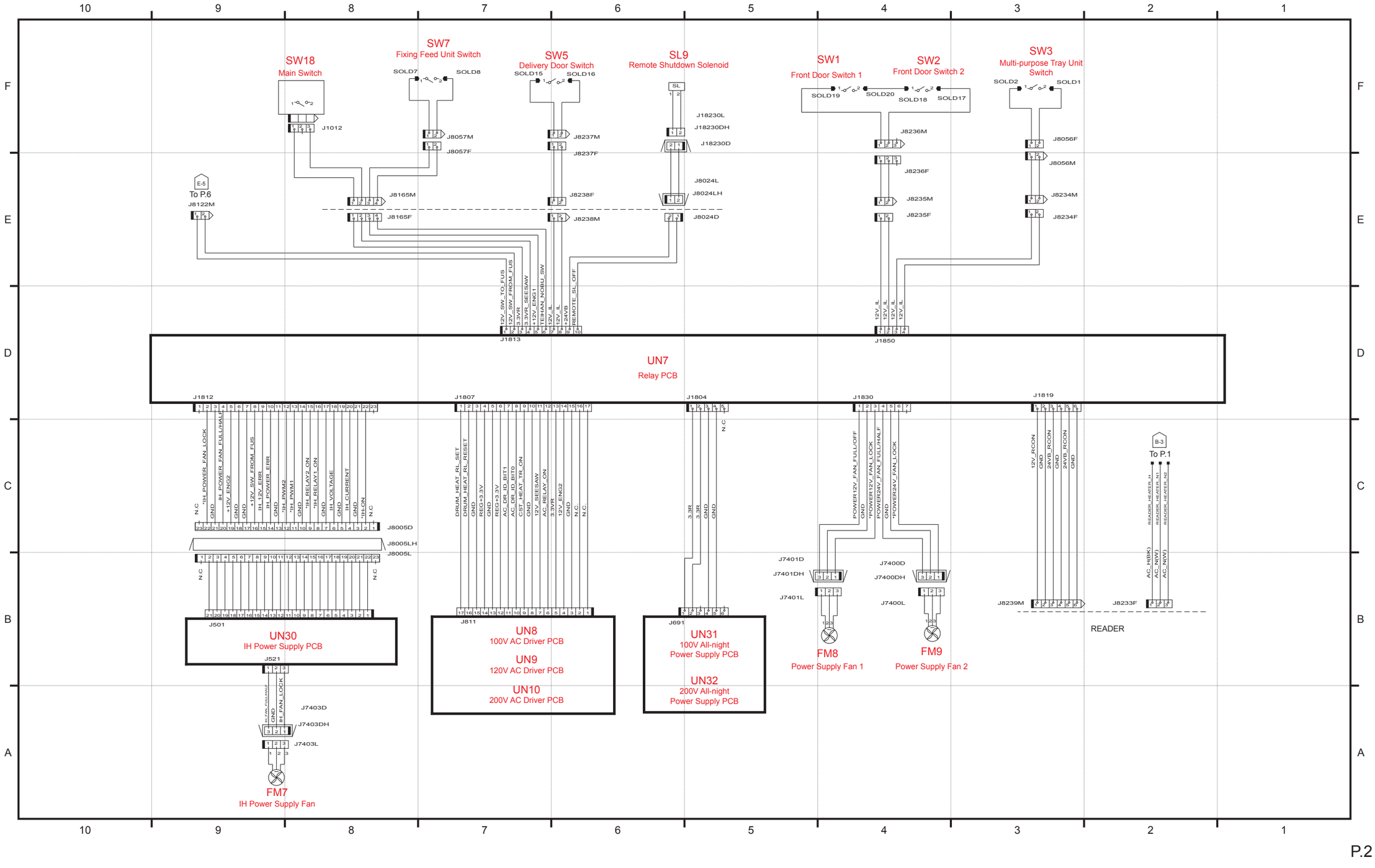
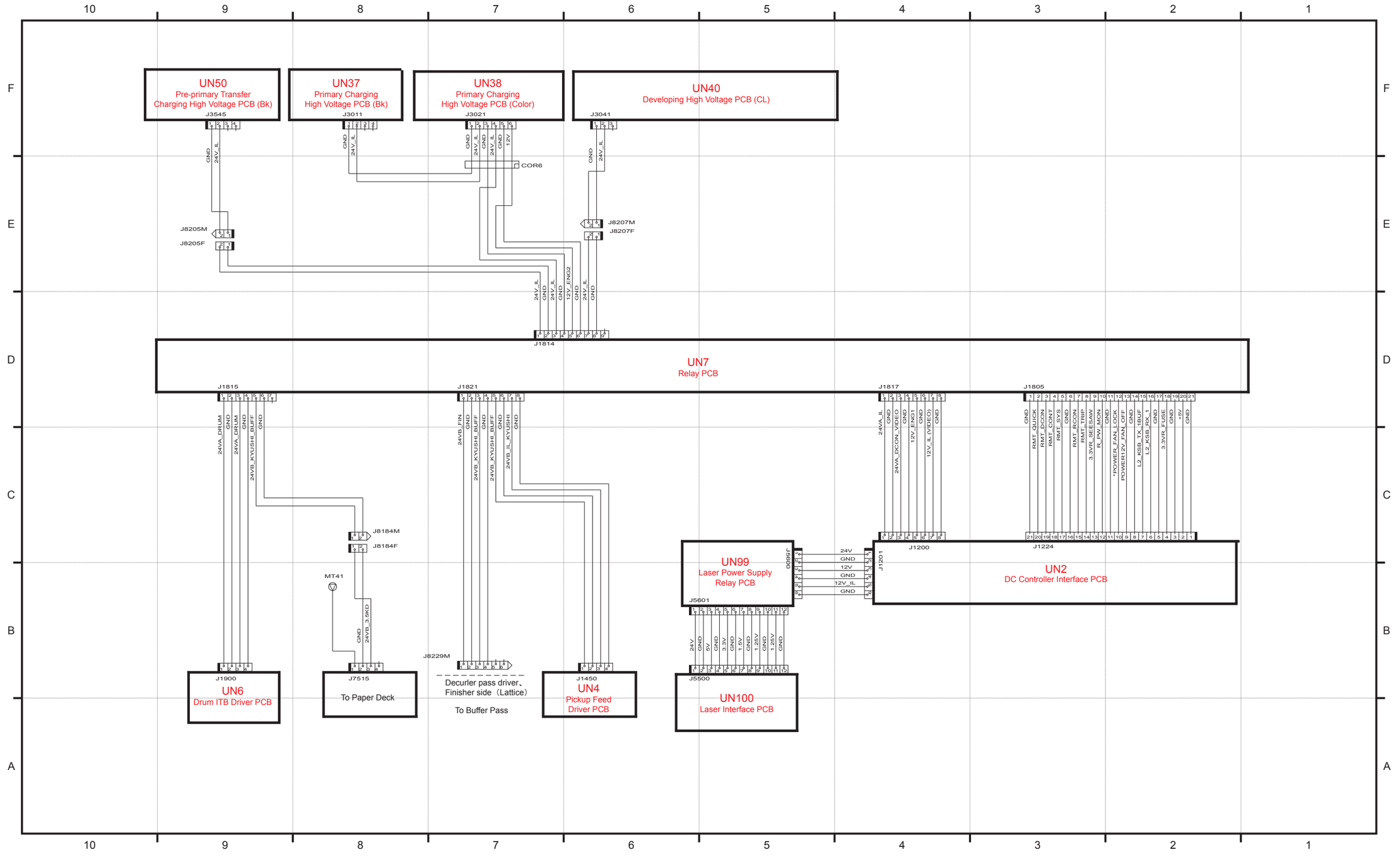
General Circuit Diagram (2/31)



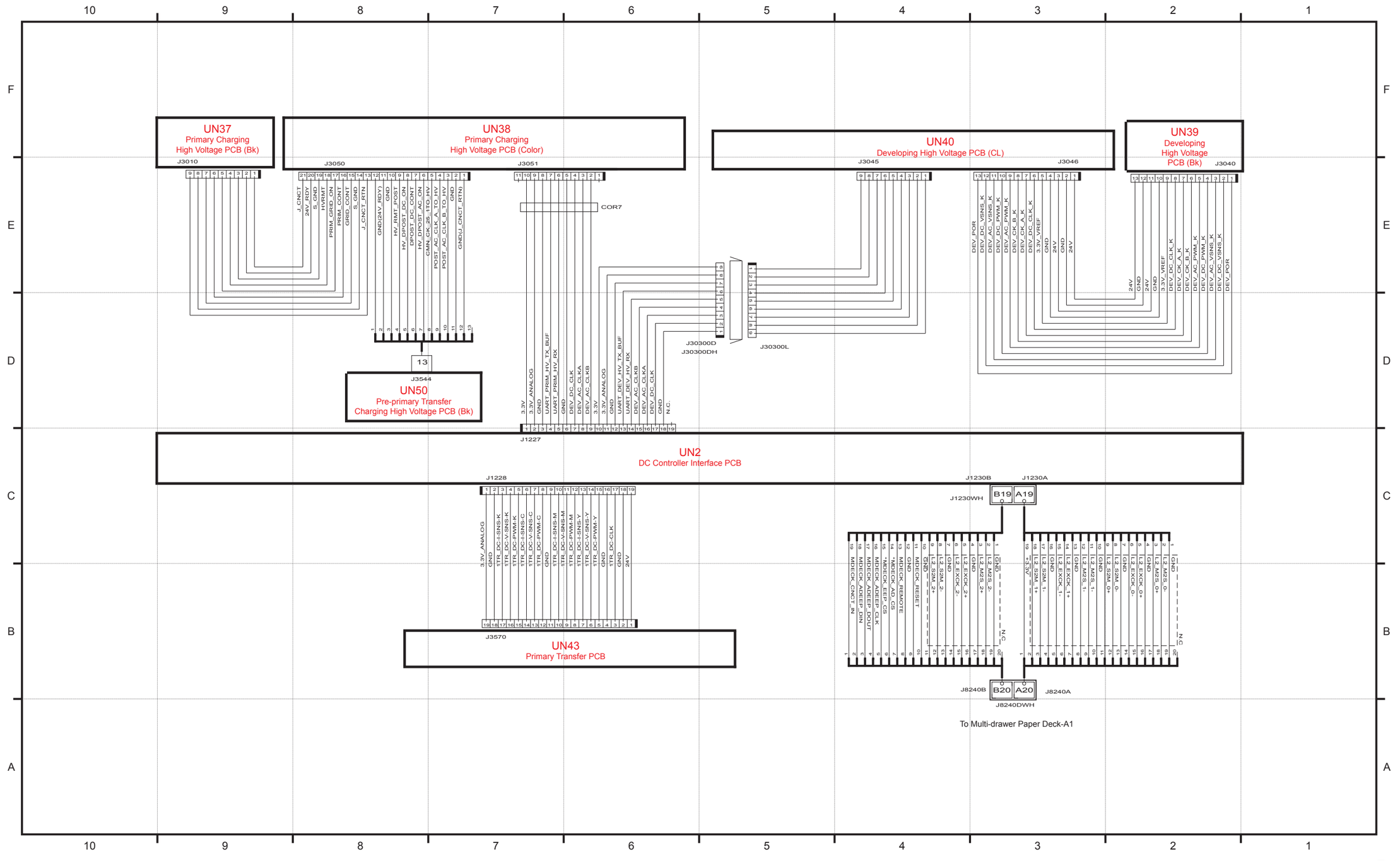
Appendix > General Circuit Diagram > General Circuit Diagram (2/31)

General Circuit Diagram (3/31)



F-10-6

General Circuit Diagram (4/31)



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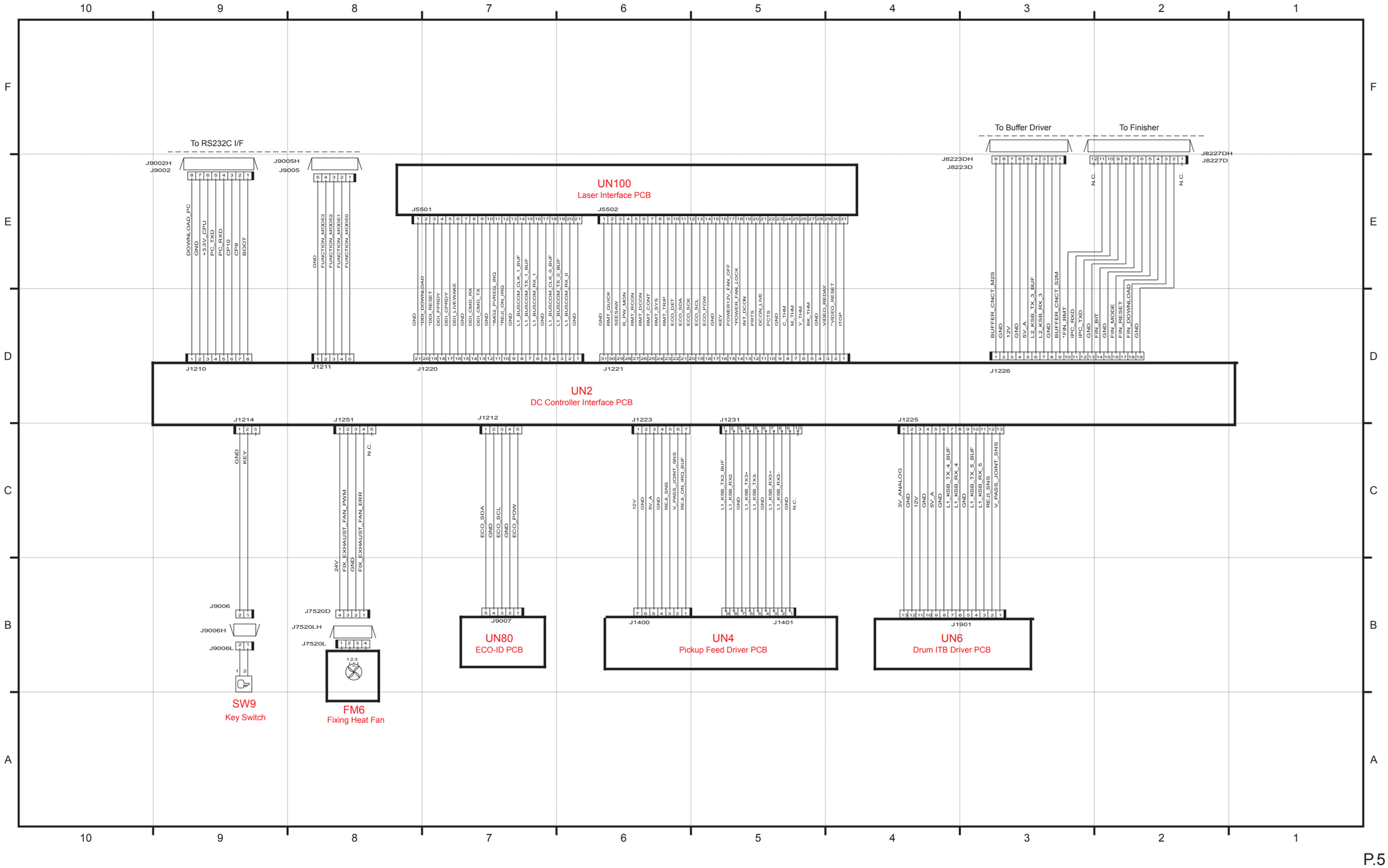
F-10-7

General Circuit Diagram (5/31)



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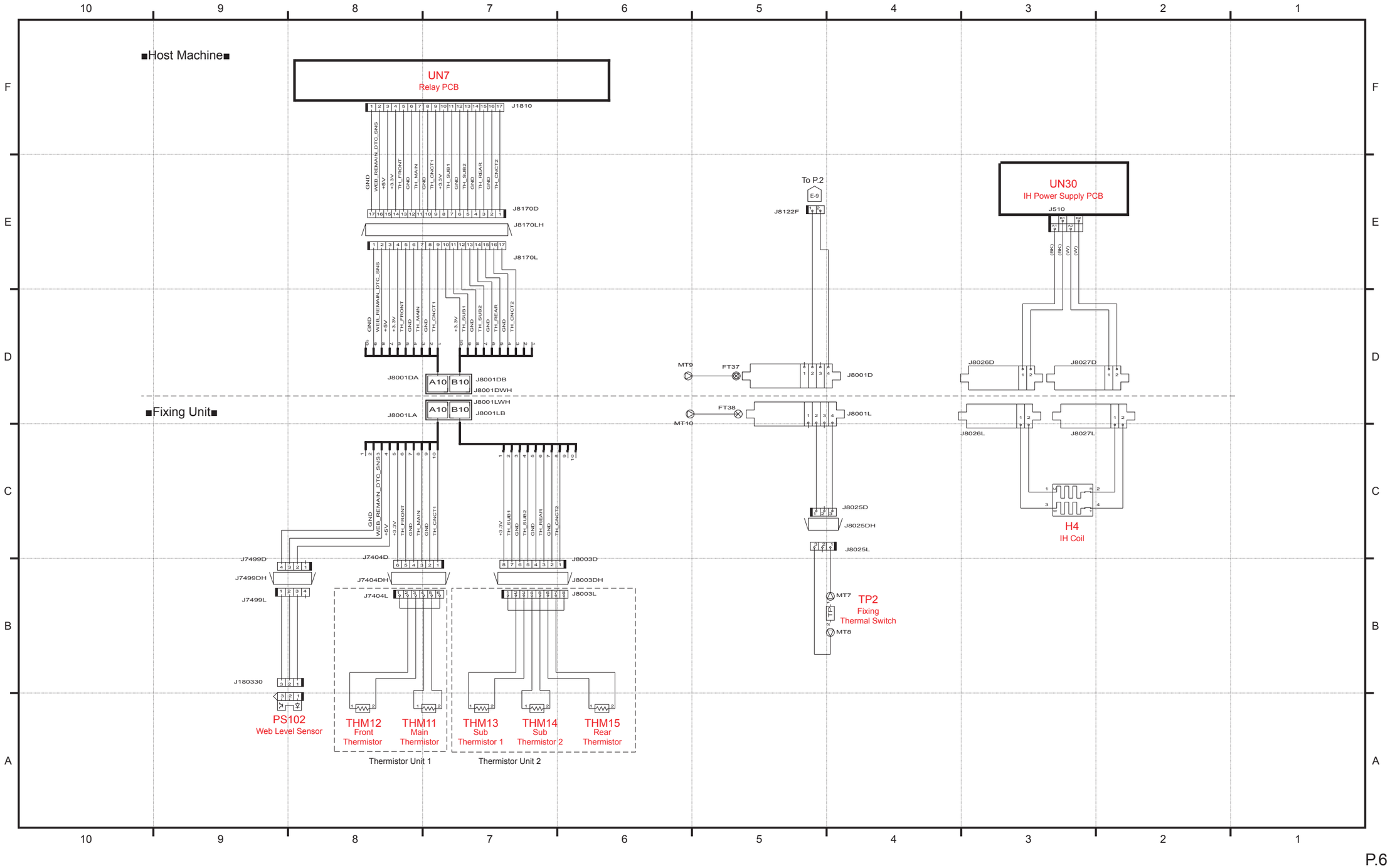
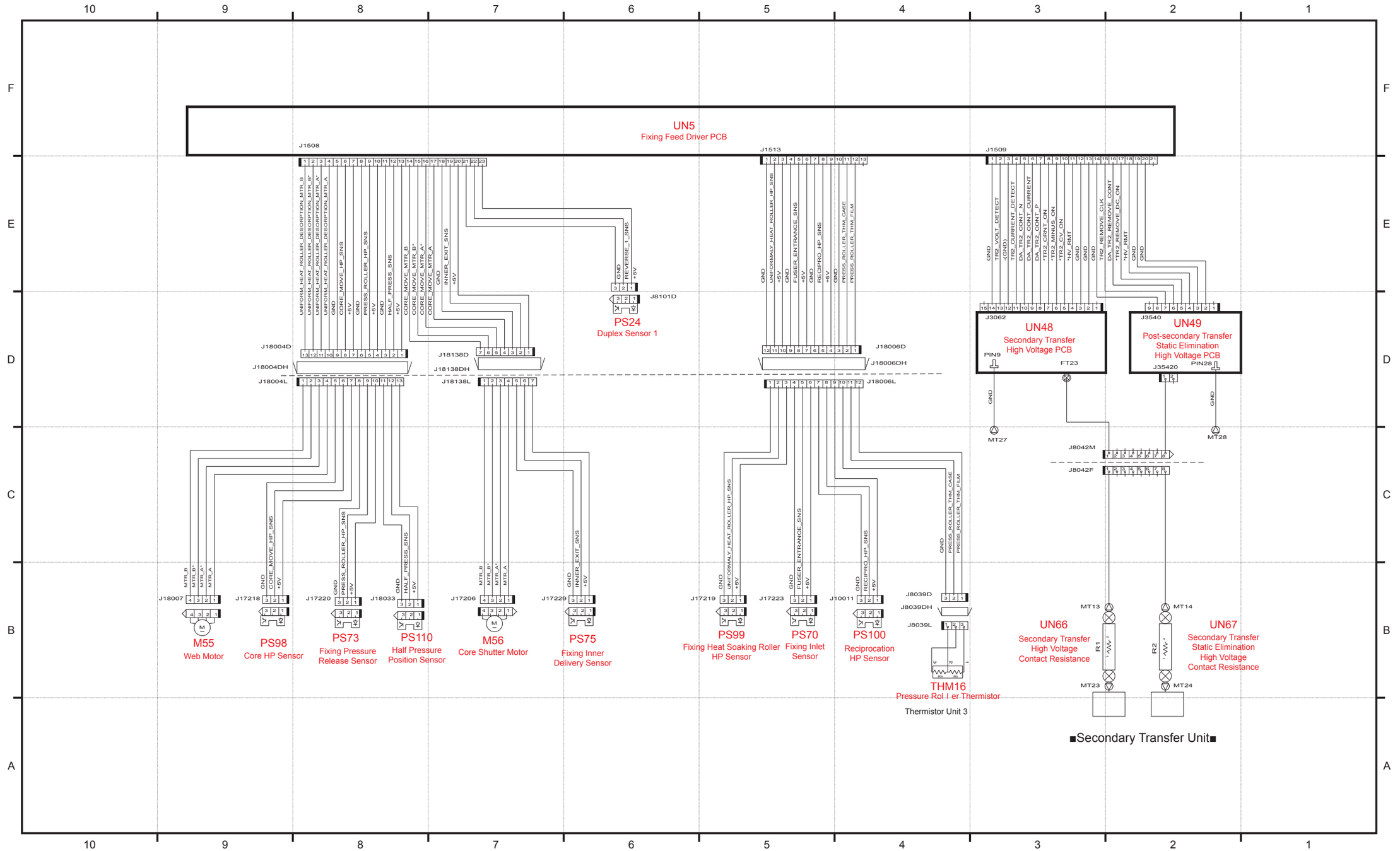
F-10-8

General Circuit Diagram (6/31)



F-10-9

General Circuit Diagram (7/31)



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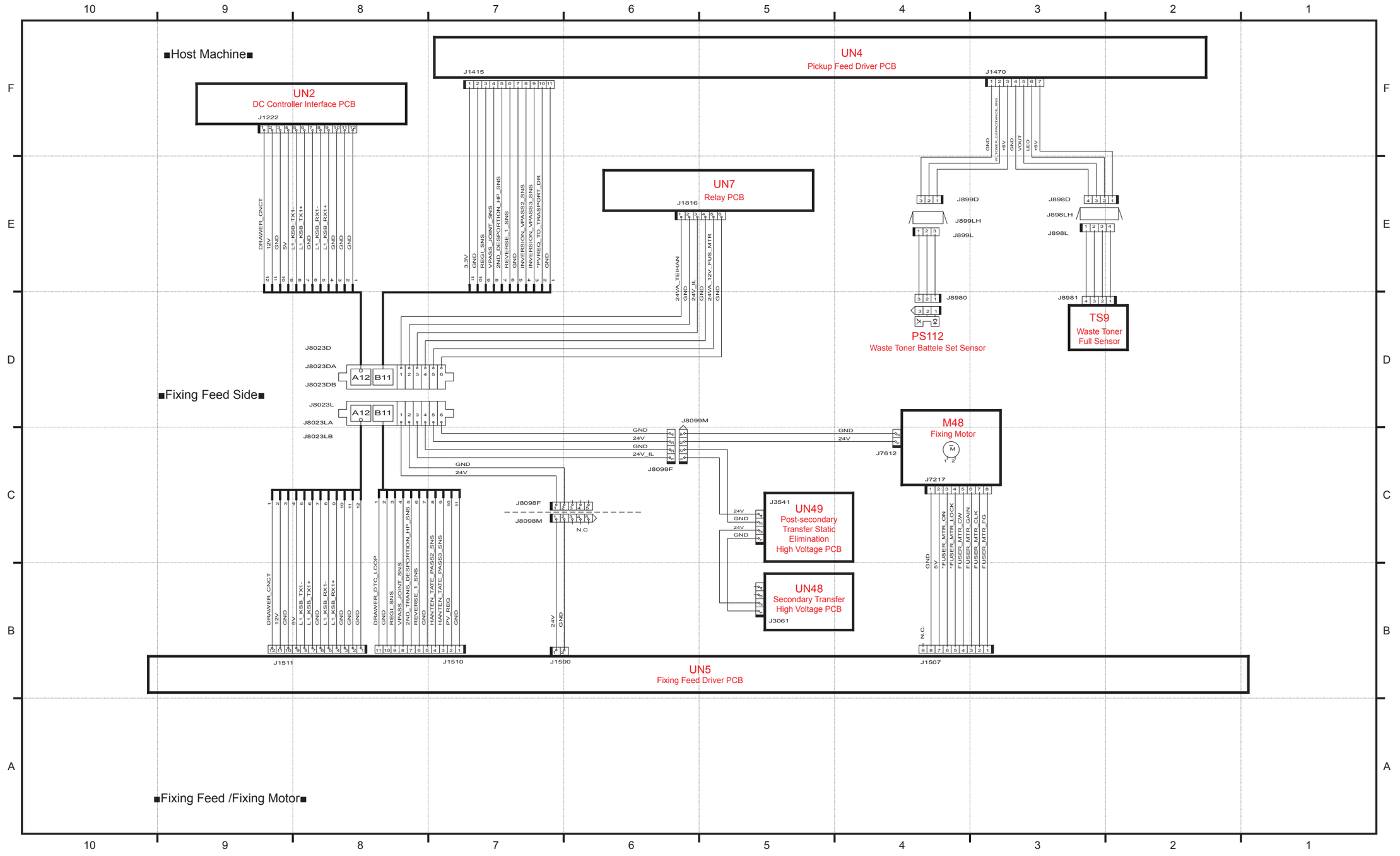
Appendix > General Circuit Diagram > General Circuit Diagram (7/31)

General Circuit Diagram (8/31)



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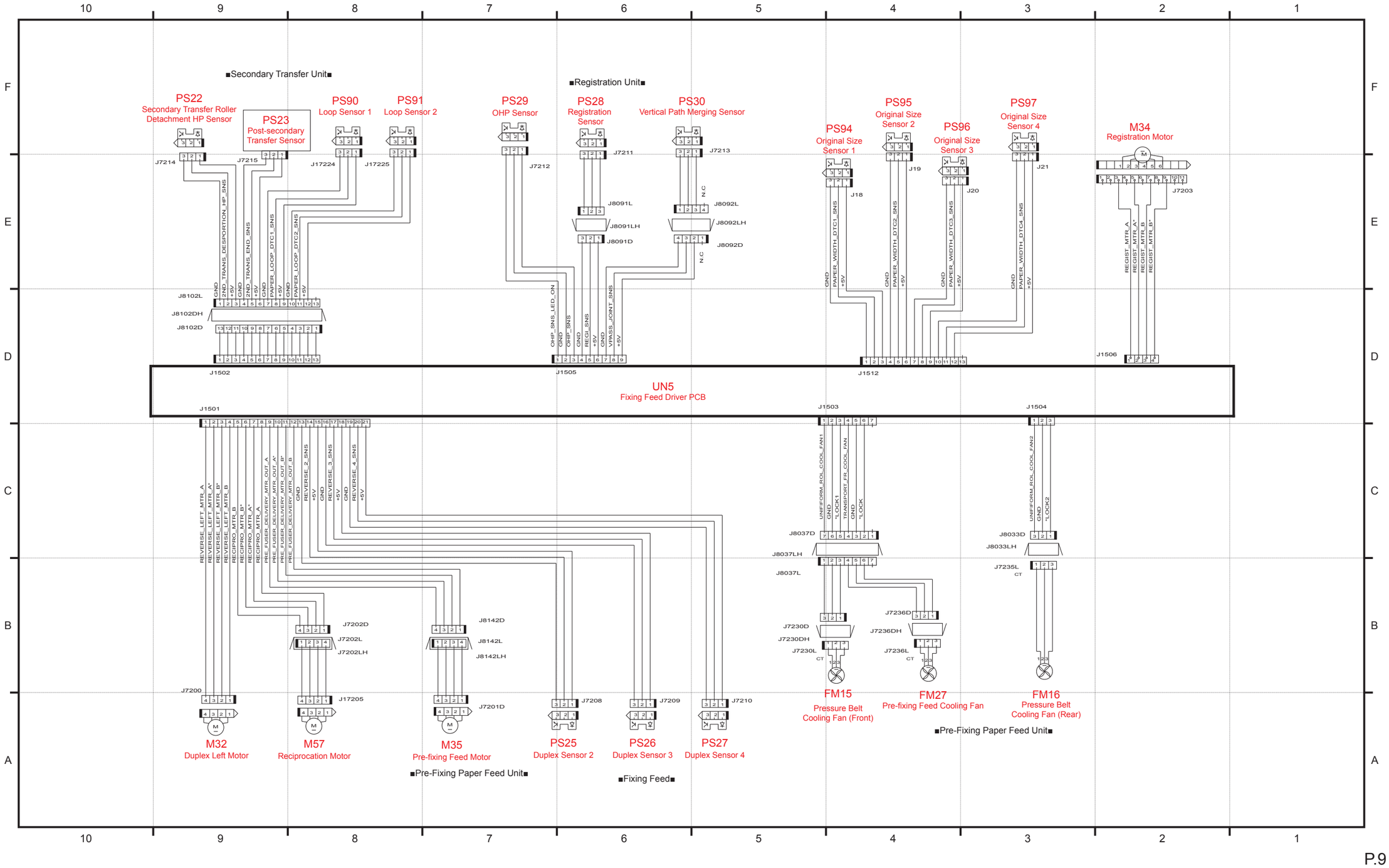
Appendix > General Circuit Diagram > General Circuit Diagram (8/31)

General Circuit Diagram (9/31)



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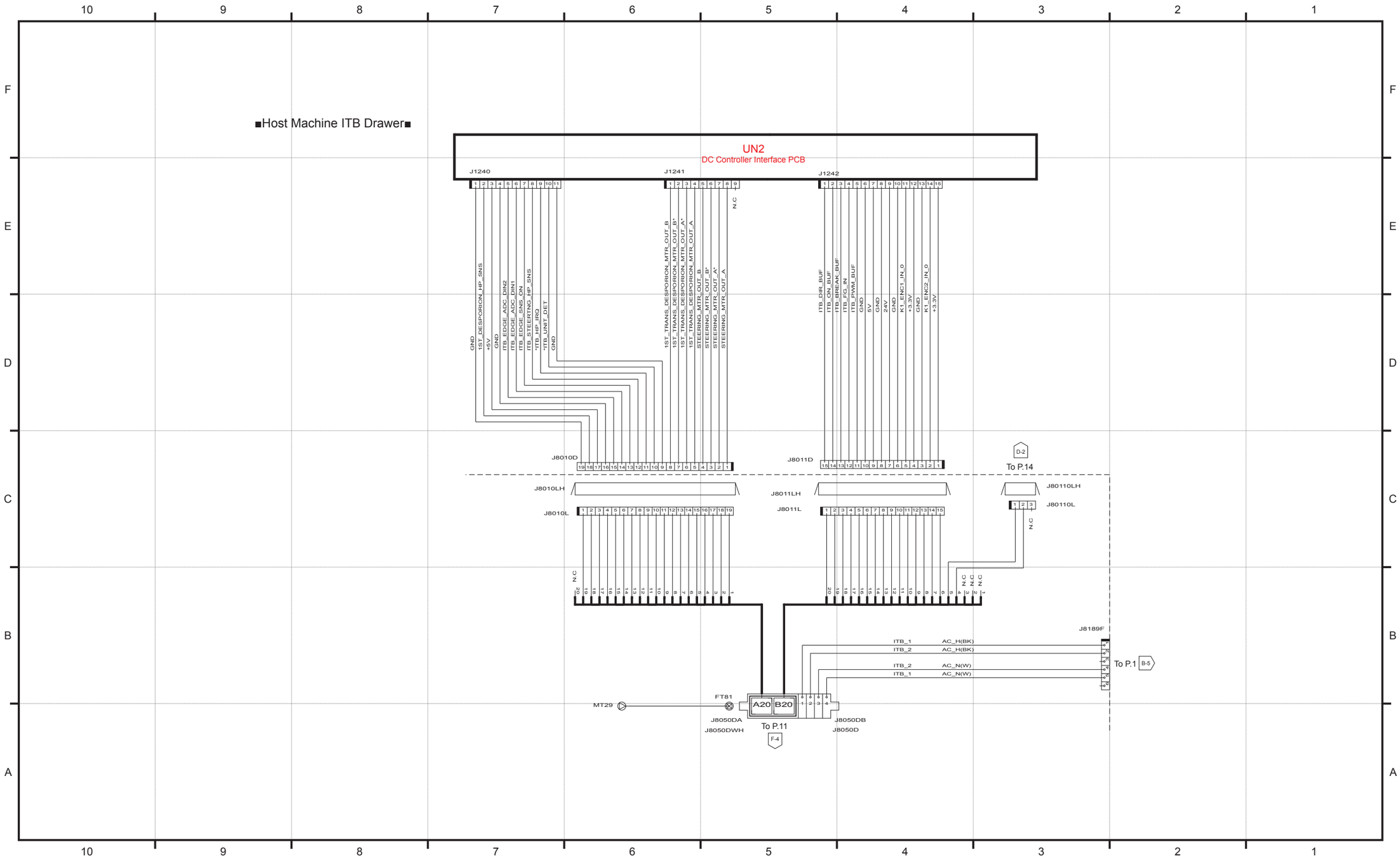
Appendix > General Circuit Diagram > General Circuit Diagram (9/31)

General Circuit Diagram (10/31)



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Appendix > General Circuit Diagram > General Circuit Diagram (10/31)

General Circuit Diagram (11/31)

■ITB Unit■

■Primary Transfer High Voltage Contact■

MT19 R3 MT16 MT15
UN62 Primary Transfer High Voltage Contact Resistance (Y)

MT17 R4 MT20 MT18
UN63 Primary Transfer High Voltage Contact Resistance (M)

MT58 R5 MT21 MT22
UN64 Primary Transfer High Voltage Contact Resistance (C)

MT61 R6 MT59 MT60
UN65 Primary Transfer High Voltage Contact Resistance (Bk)

VR1
ITB Unit Varistor

MT11 FT80 J8050LA
A-5 To P.10
A20 B20
J8050L J8050LWH J8050LB

J2700
N.C GND 1ST_TRANS_DESPORION_HP_SNS +5V GND ITB_EDGE_ADC_DOUT2 ITB_EDGE_ADC_DOUT1 ITB_EDGE_SNS_ON ITB_STEERING_HP_SNS ITB_HP_SNS ITB_ROLLER_TEMP GND 1ST_TRANS_DESPORION_MTR_OUT_B 1ST_TRANS_DESPORION_MTR_OUT_B* 1ST_TRANS_DESPORION_MTR_OUT_A* 1ST_TRANS_DESPORION_MTR_OUT_A STEERING_MTR_OUT_A* STEERING_MTR_OUT_A STEERING_MTR_OUT_B STEERING_MTR_OUT_B* N.C

J8051M J8051F H_(BK) N_(W)
H2 Drum Heater (Y)

J8052M J8052F H_(BK) N_(W)
H3 Drum Heater (M)

UN28
ITB Relay PCB

J2703 J2702 J2701 J2704

GND ITB_EDGE_ADC_DOUT2 ITB_EDGE_ADC_DOUT1 5V ITB_EDGE_SNS_ON

GND 1ST_TRANS_DESPORION_HP_SNS 5V GND ITB_STEERING_HP_SNS +5V 1ST_TRANS_DESPORION_MTR_OUT_B 1ST_TRANS_DESPORION_MTR_OUT_B* 1ST_TRANS_DESPORION_MTR_OUT_A* 1ST_TRANS_DESPORION_MTR_OUT_A STEERING_MTR_OUT_A* STEERING_MTR_OUT_A STEERING_MTR_OUT_B STEERING_MTR_OUT_B*

5V ITB_HP_SNS GND

J8046D J8046LH J8046L
J8047D J8047LH J8047L
J8052D J8052DH J8052L

ITB_DIR_BUF ITB_ON_BUF ITB_BREAK_BUF ITB_PWM_BUF GND 5V GND 24V

GND ITB_ENC1 +3.3V
GND ITB_ENC2 +3.3V

J8045D J8045LH J8045L
J7114D J7114LH J7114L
J8044D J8044LH J8044L

J7528 J7518 J7318 J7319

J7415 J7113 J7416 J7114 J7414

PS2 ITB Displacement Sensor
PS4 Primary Transfer Roller Detachment HP Sensor
PS3 Steering Drive HP Sensor
M5 Primary Transfer Roller Detachment Motor
M4 Steering Drive Motor
PS5 ITB HP Sensor
M3 ITB Drive Motor
UN16 ITB Drive Roller Speed Detection PCB 1
UN17 ITB Drive Roller Speed Detection PCB 2
THM ITB Heater control thermistor

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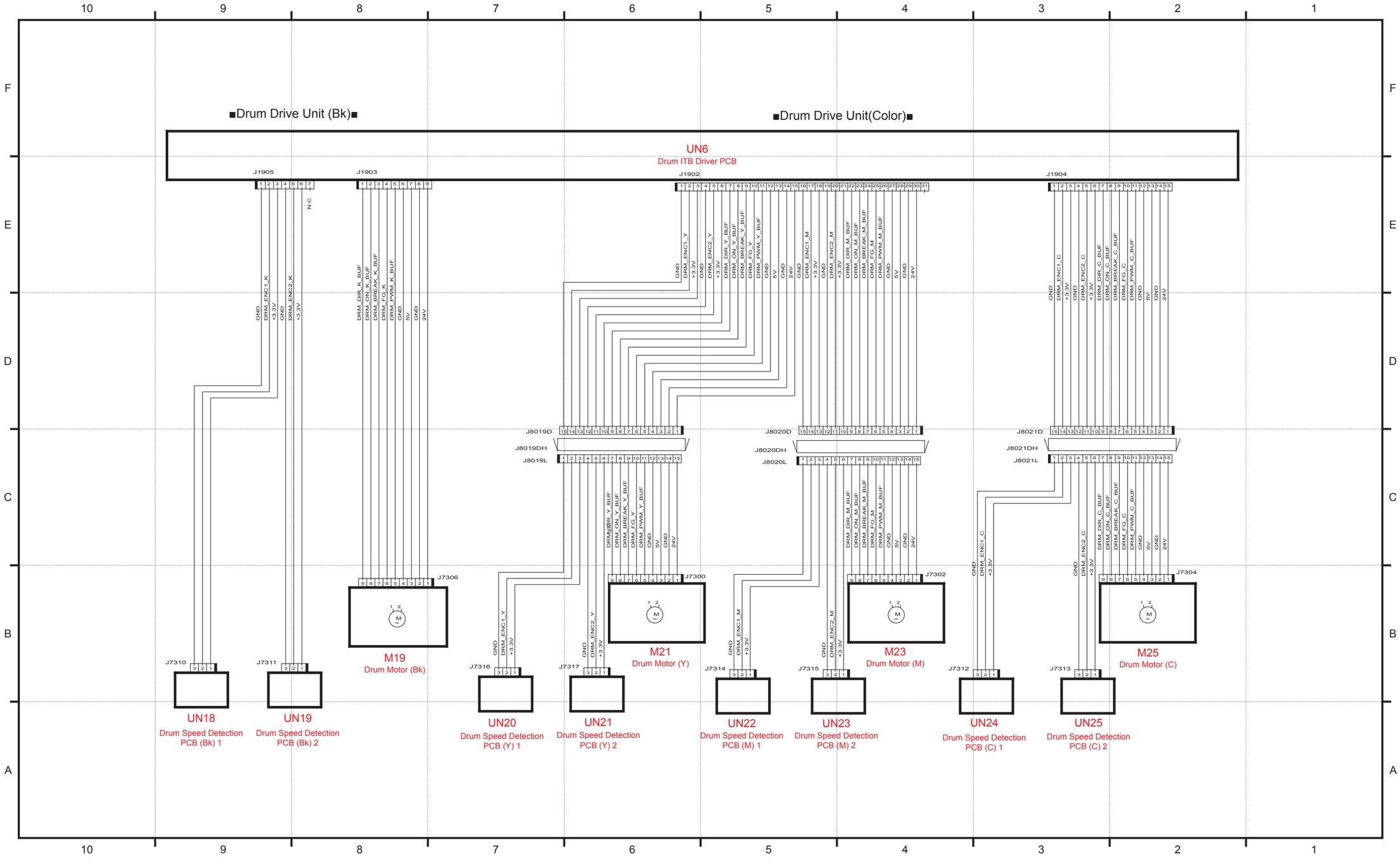
Appendix > General Circuit Diagram > General Circuit Diagram (11/31)

General Circuit Diagram (12/31)



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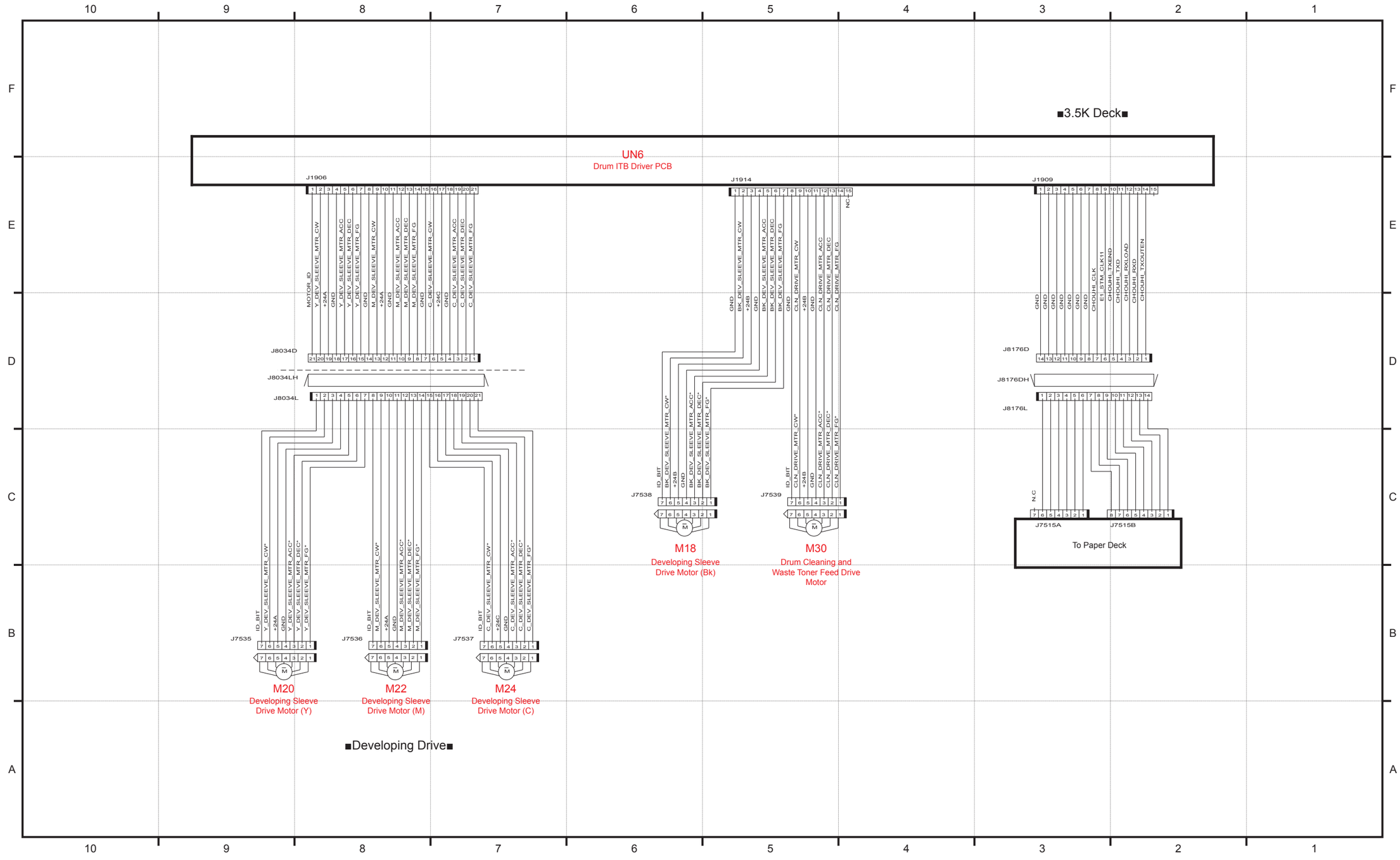
General Circuit Diagram (13/31)



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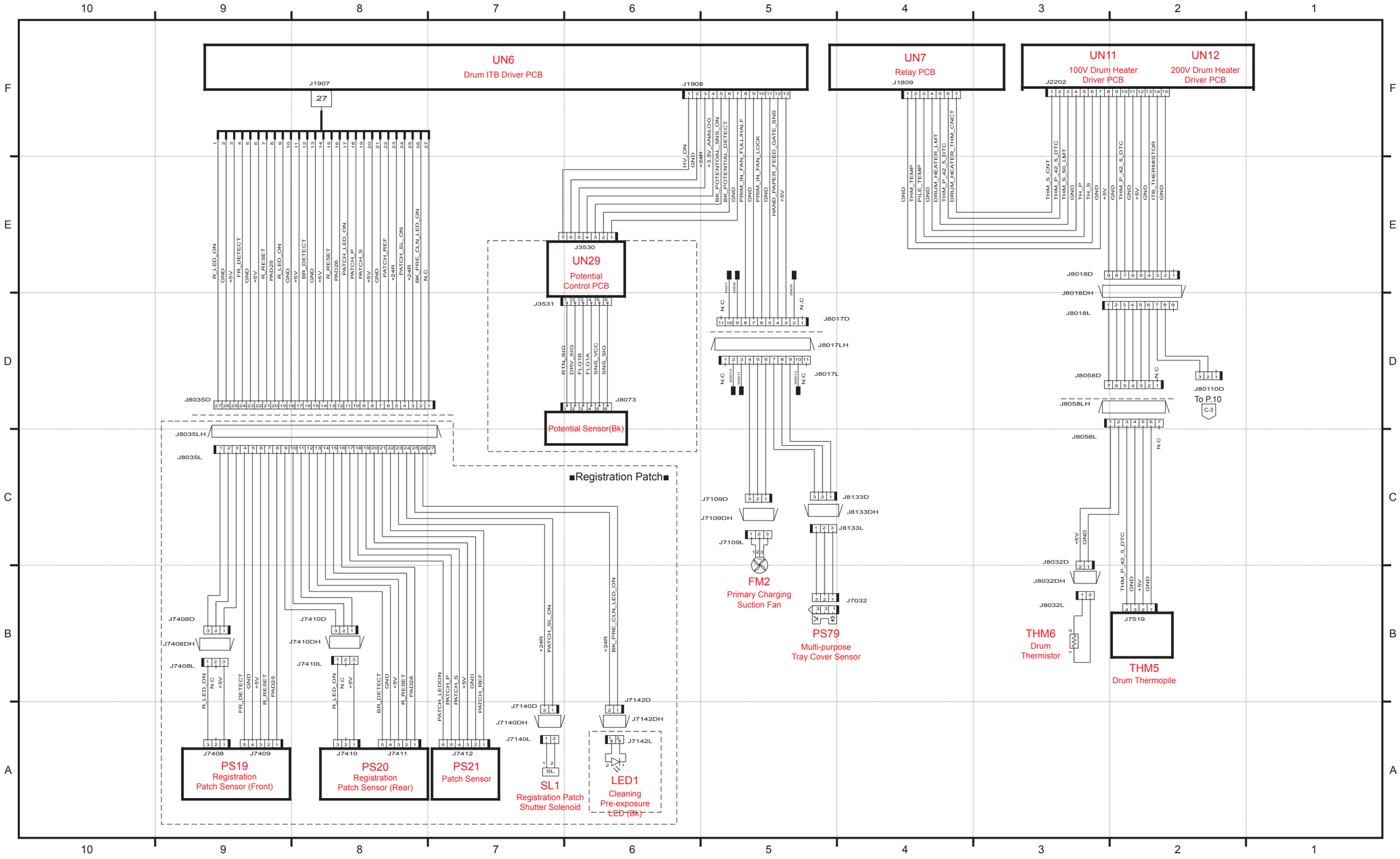
Appendix > General Circuit Diagram > General Circuit Diagram (13/31)

General Circuit Diagram (14/31)



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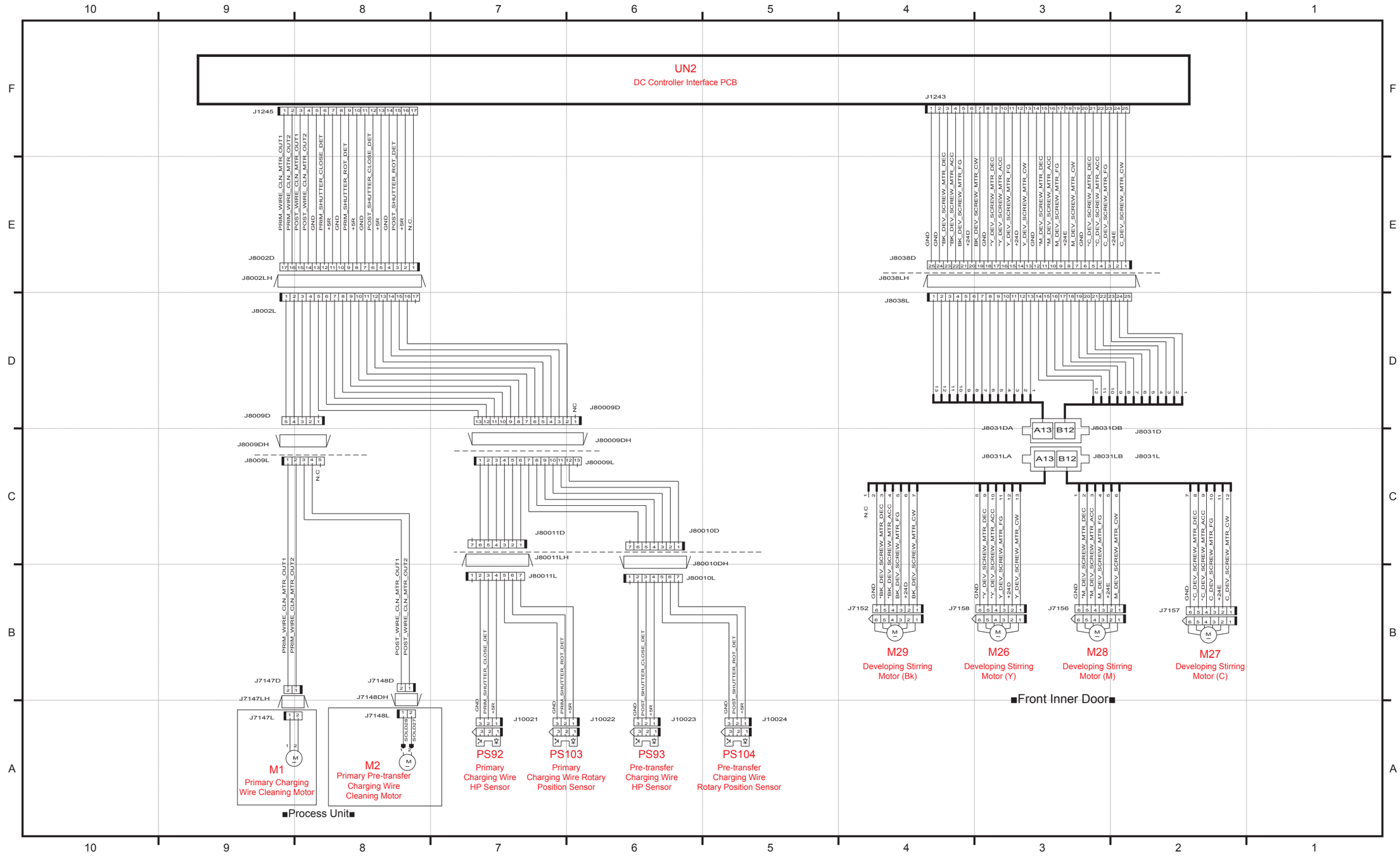
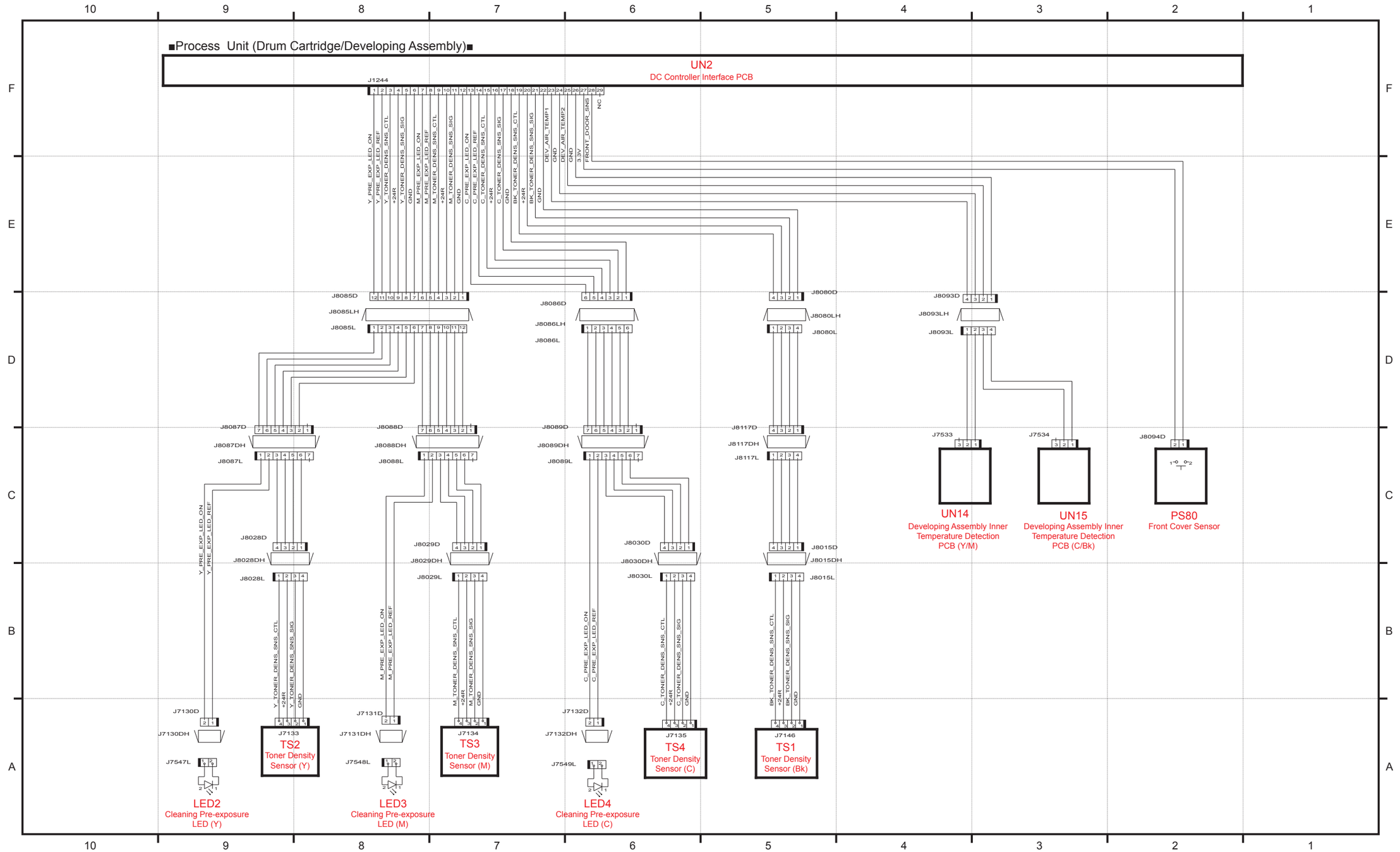
General Circuit Diagram (15/31)



Appendix > General Circuit Diagram > General Circuit Diagram (15/31)

General Circuit Diagram (16/31)



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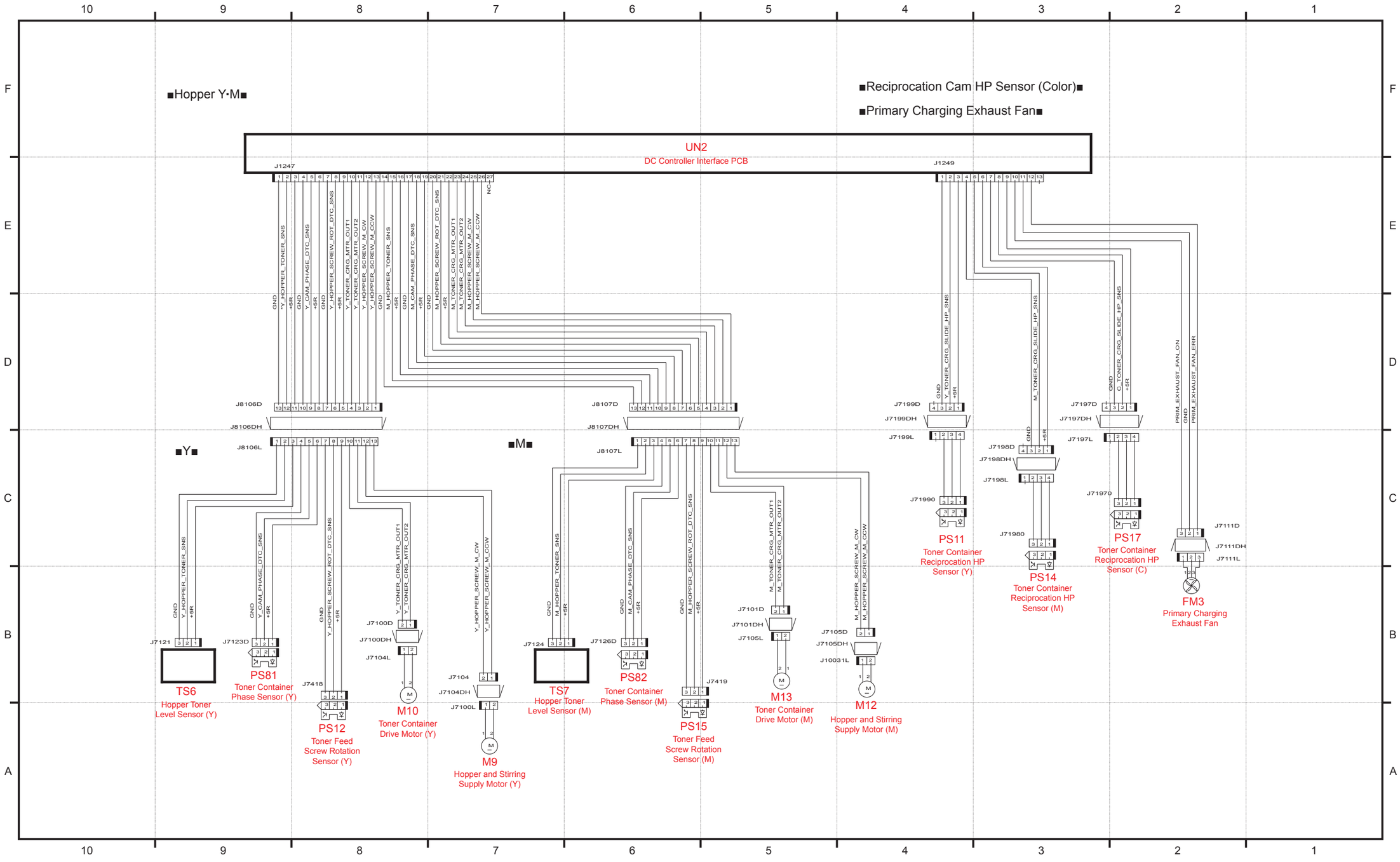
General Circuit Diagram (17/31)



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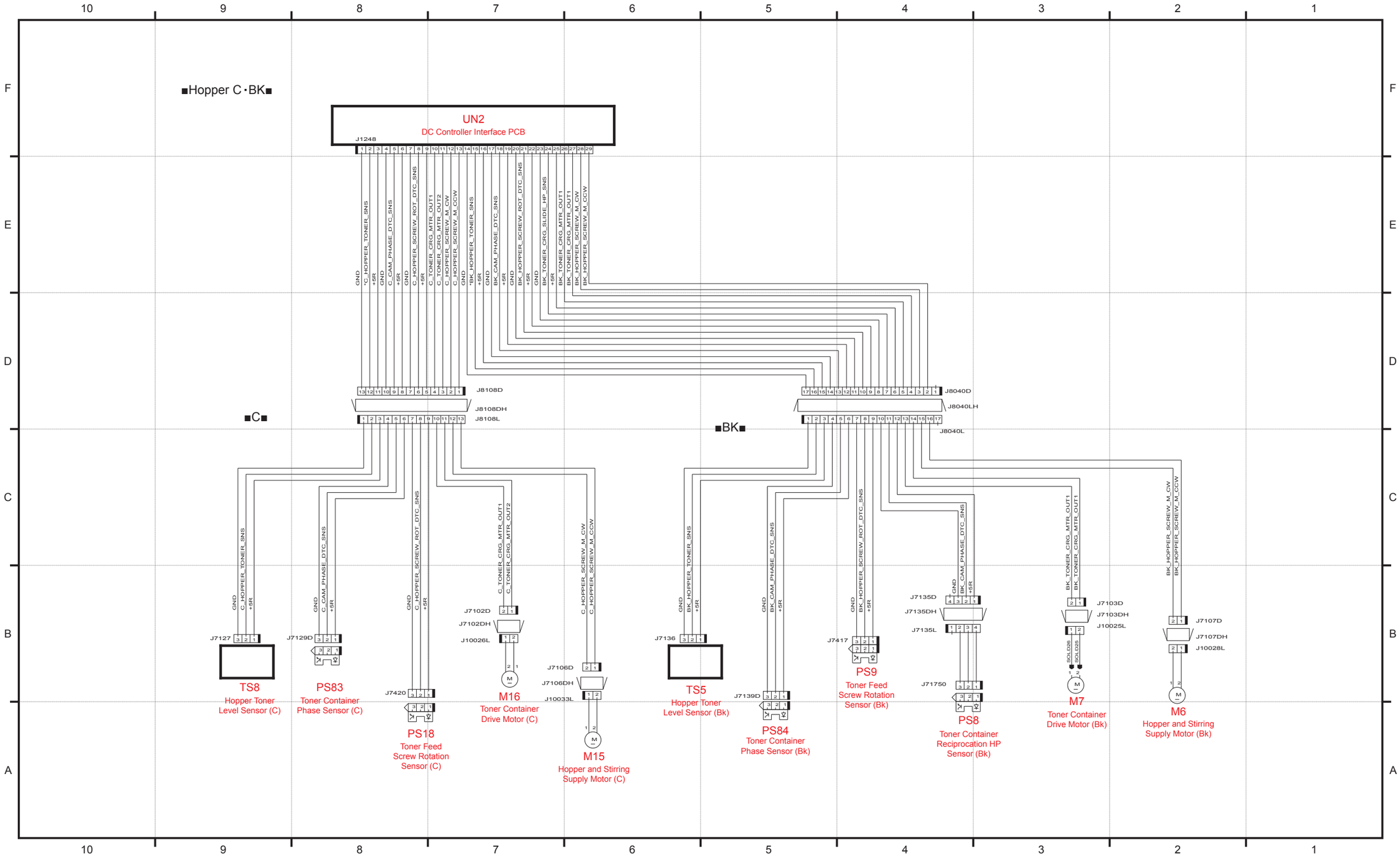
Appendix > General Circuit Diagram > General Circuit Diagram (17/31)

General Circuit Diagram (18/31)



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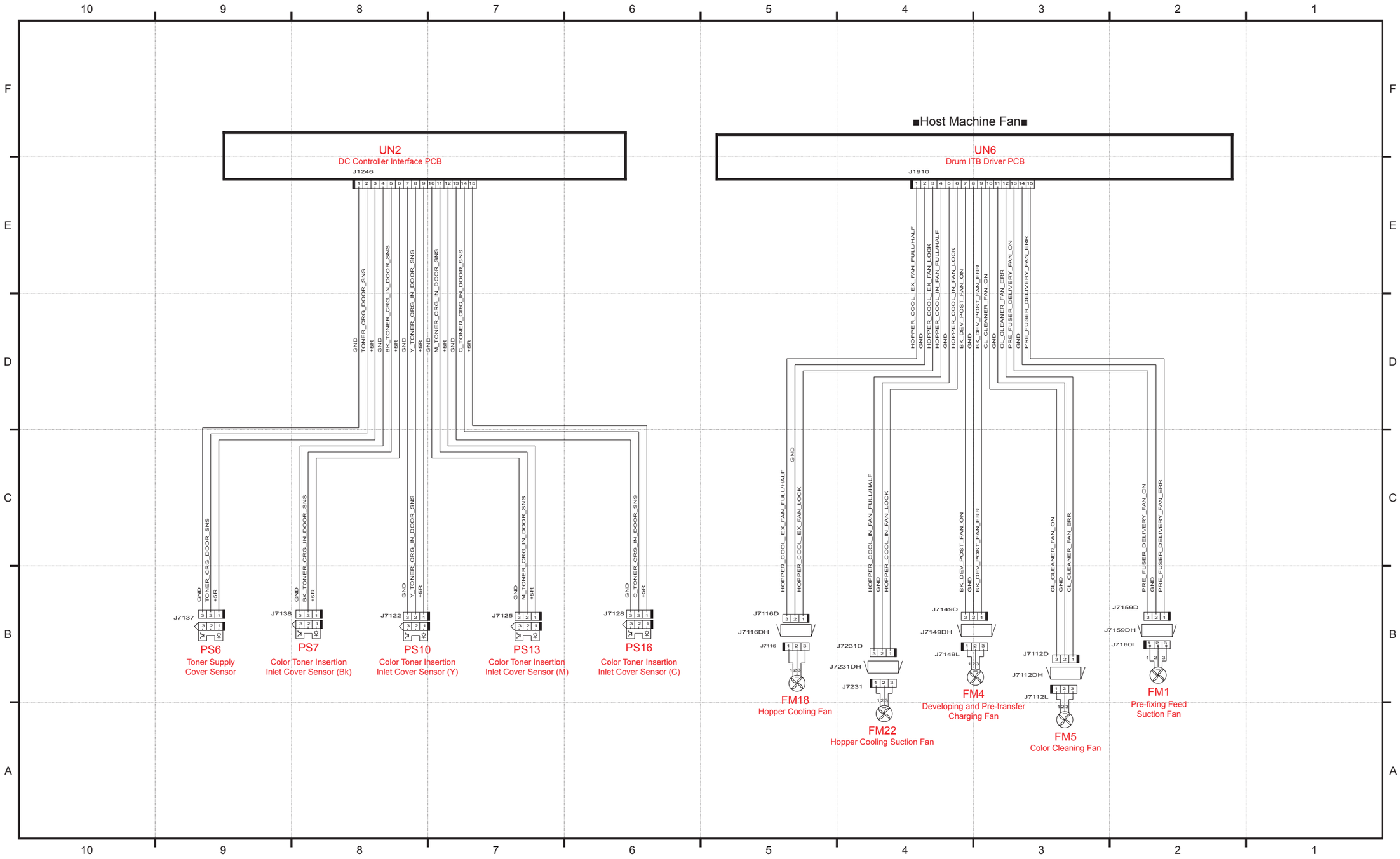
Appendix > General Circuit Diagram > General Circuit Diagram (18/31)

General Circuit Diagram (19/31)



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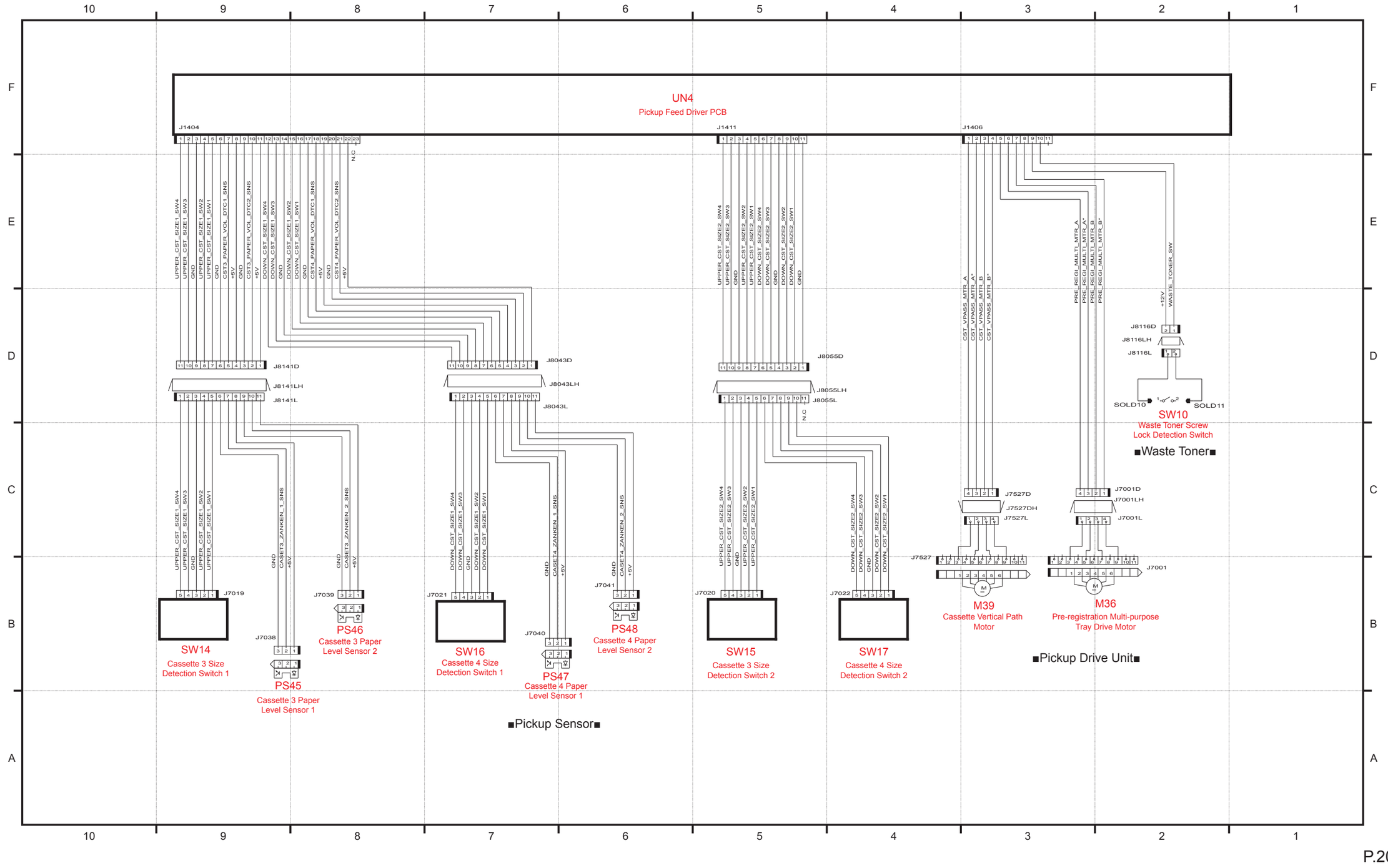
Appendix > General Circuit Diagram > General Circuit Diagram (19/31)

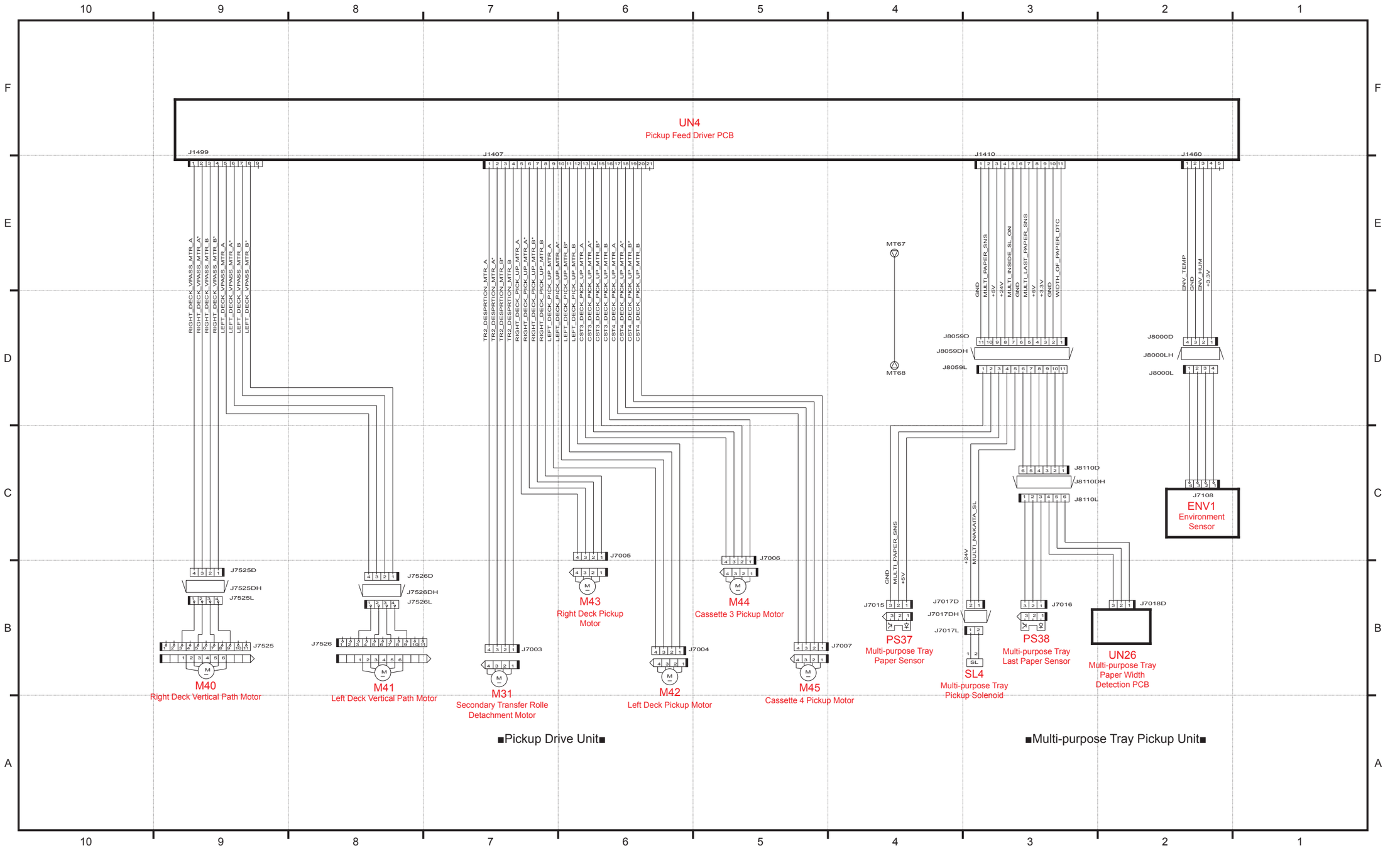
General Circuit Diagram (20/31)



F-10-23

Appendix > General Circuit Diagram > General Circuit Diagram (20/31)

General Circuit Diagram (21/31)



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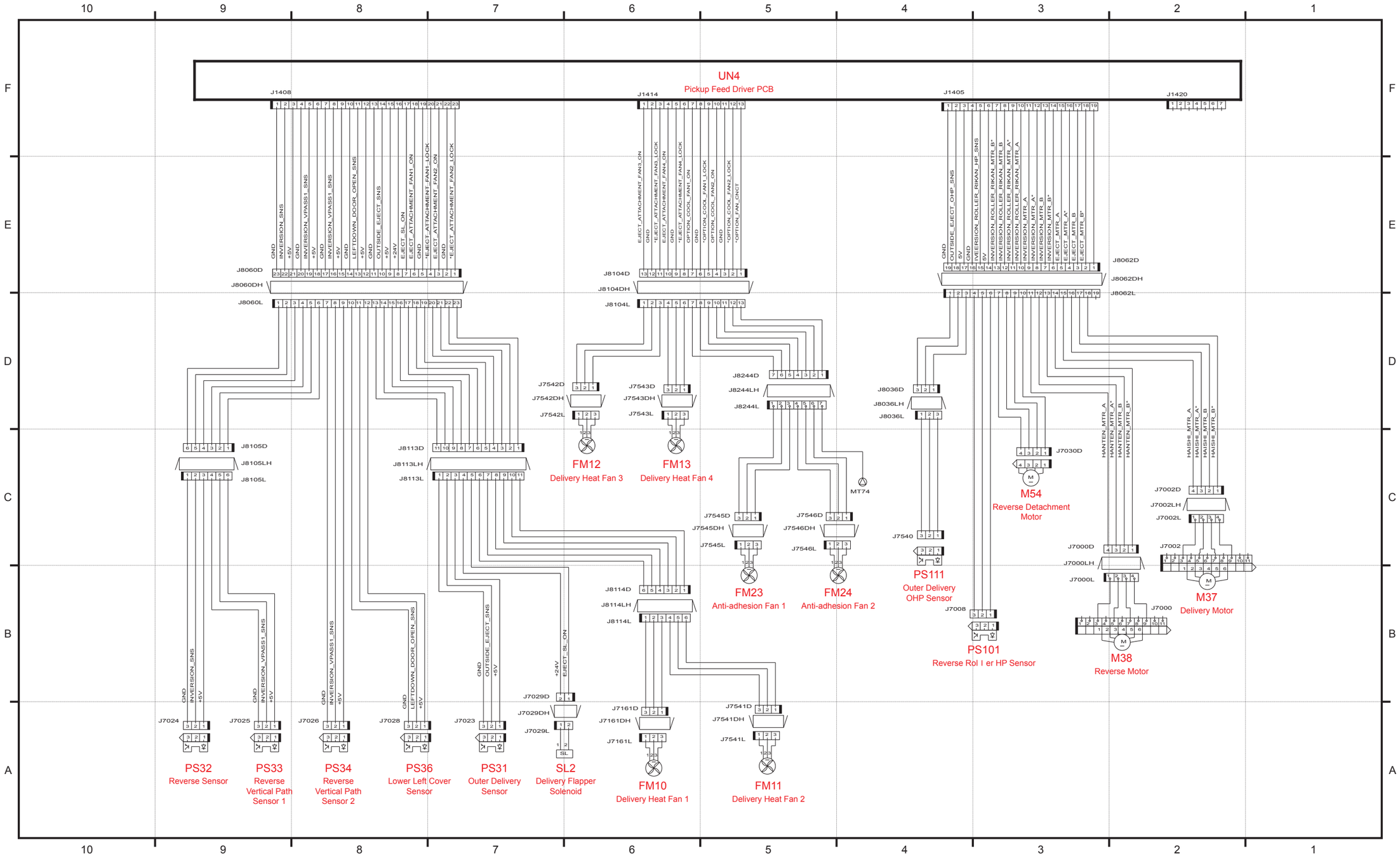
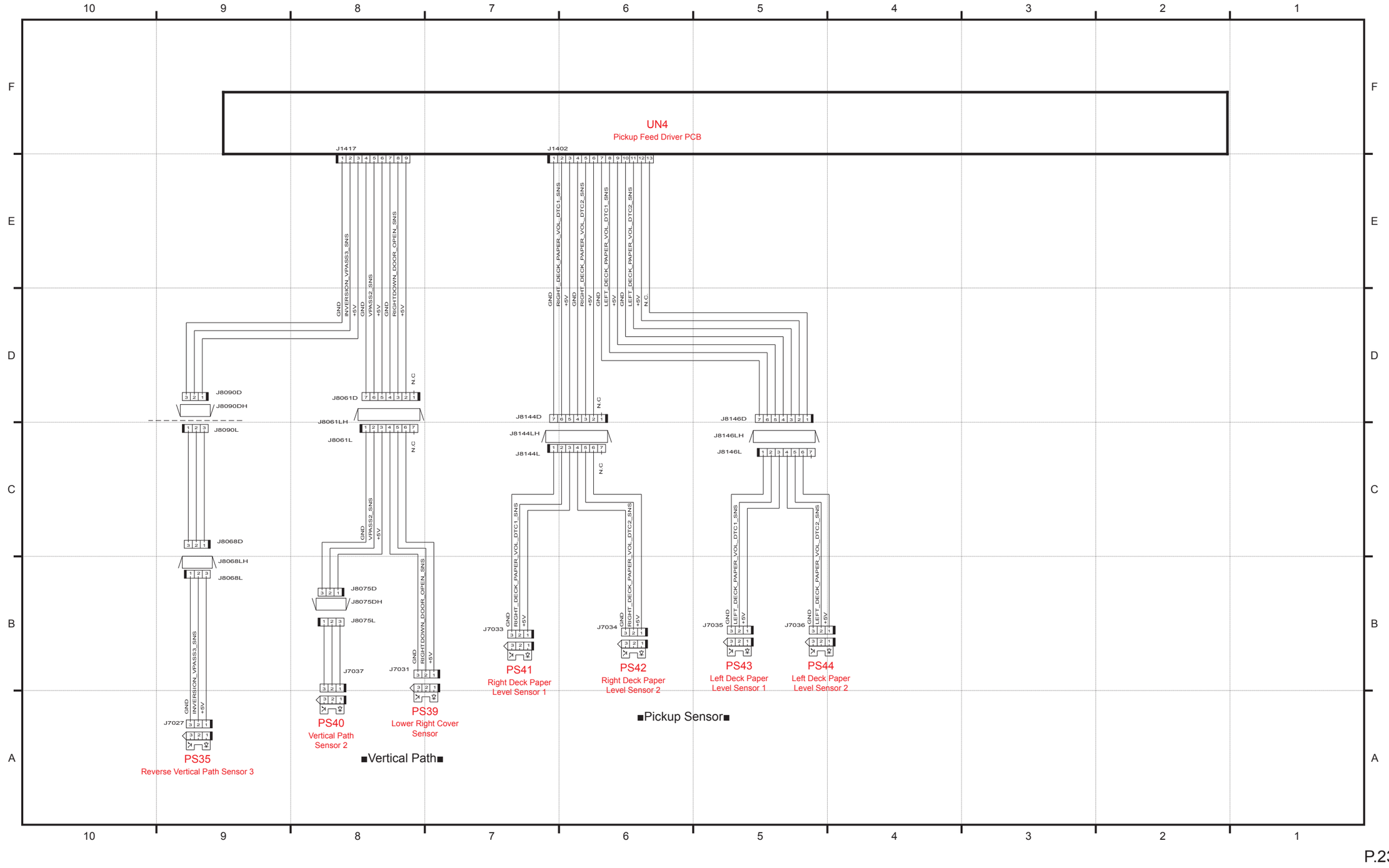
General Circuit Diagram (22/31)



General Circuit Diagram (23/31)



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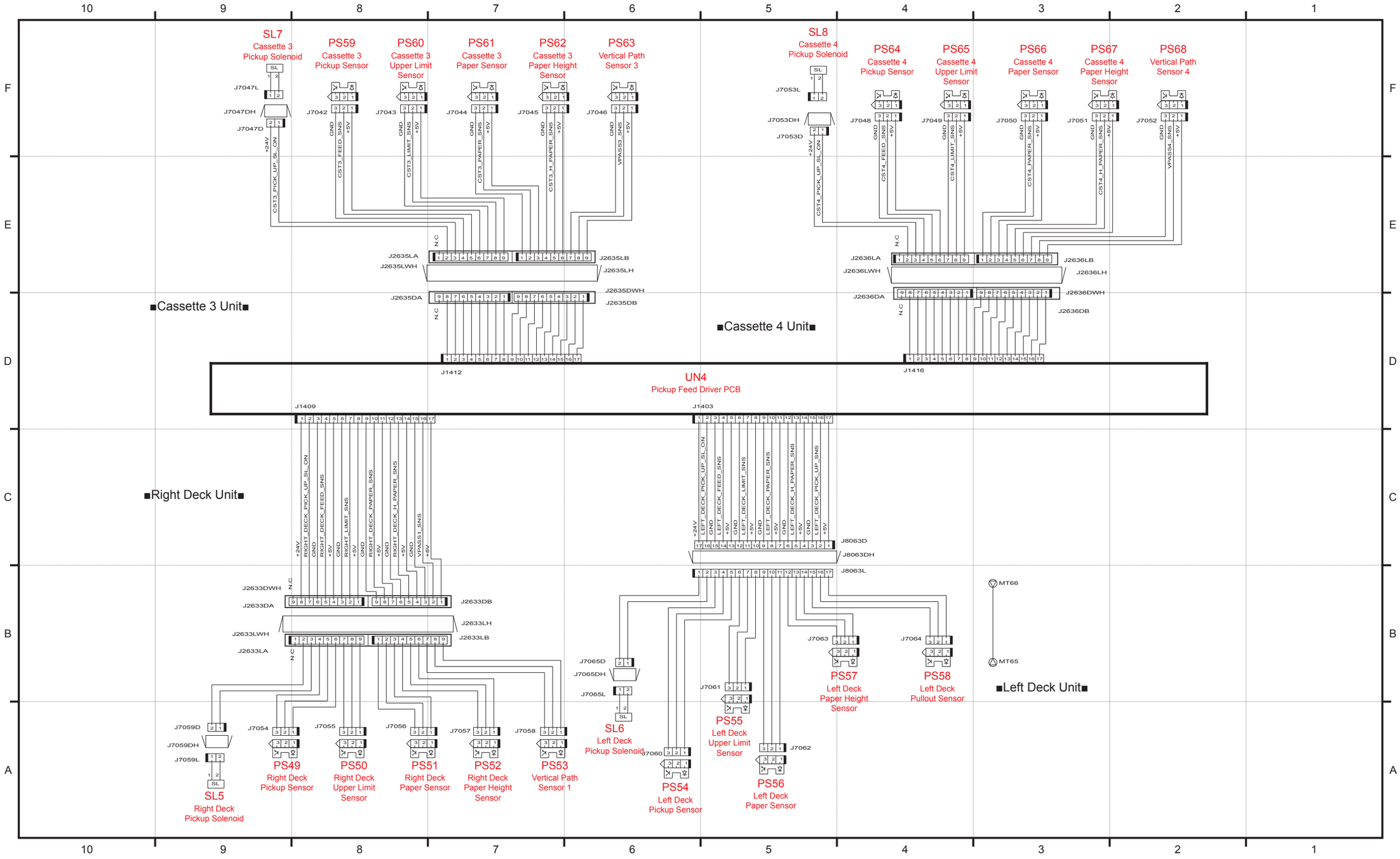
General Circuit Diagram (24/31)



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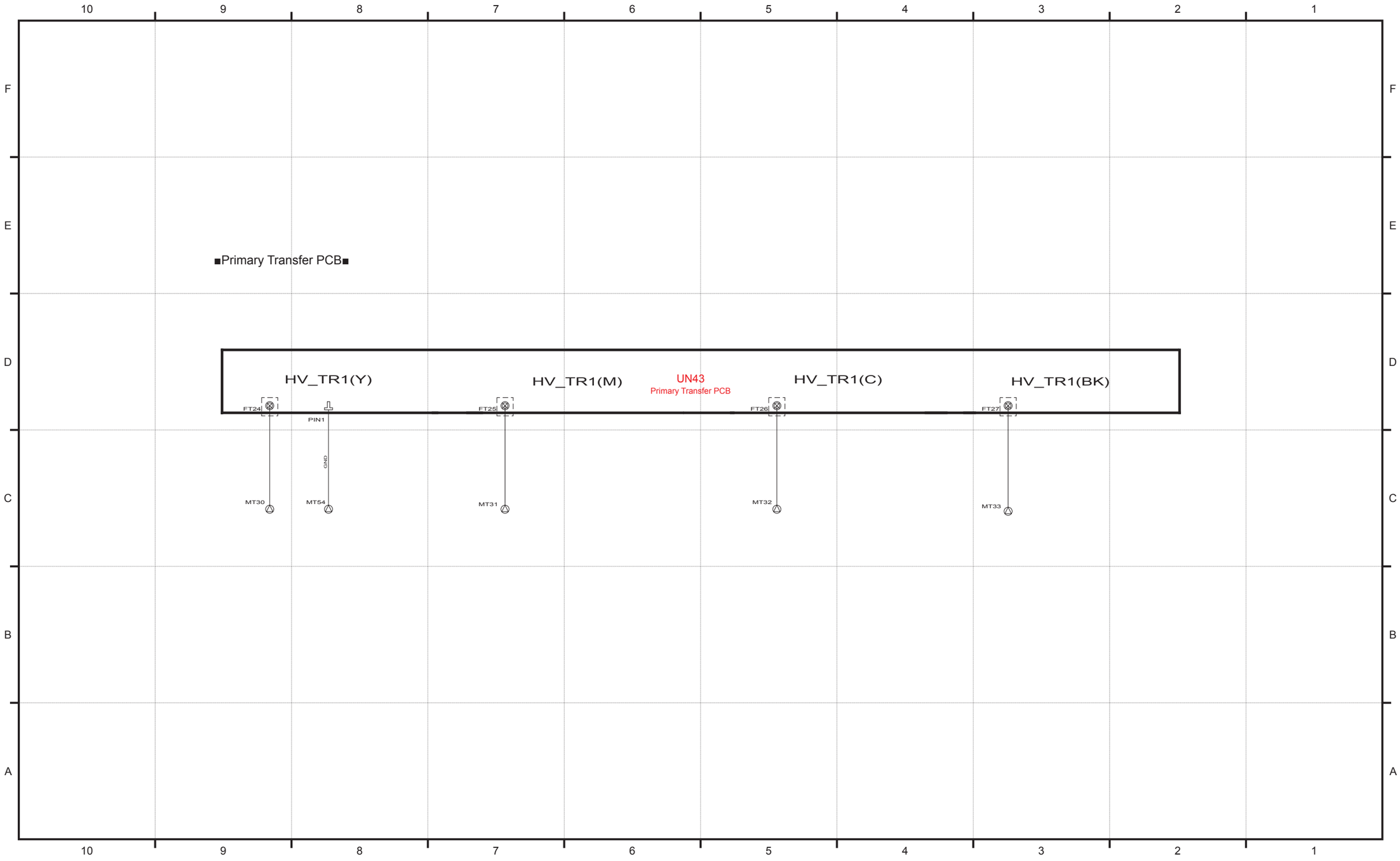
General Circuit Diagram (25/31)



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Appendix > General Circuit Diagram > General Circuit Diagram (25/31)

General Circuit Diagram (26/31)

■Developing/Charging/Pre-transfer Charging/Developing Toner Collection High Voltage■

UN37 Primary Charging High Voltage PCB (Bk)
UN38 Primary Charging High Voltage PCB (Color)
UN39 Developing High Voltage PCB (Bk)
UN42 Developing High Voltage PCB (C)
UN41 Developing High Voltage PCB (M)
UN40 Developing High Voltage PCB (Y)
UN61 Primary Charging High Voltage Contact Resistance (C)
UN60 Primary Charging High Voltage Contact Resistance (M)
UN59 Primary Charging High Voltage Contact Resistance (Y)
UN55 Developing Toner Collection High Voltage Contact Resistance (Bk)
UN58 Developing Toner Collection High Voltage Contact Resistance (C)
UN57 Developing Toner Collection High Voltage Contact Resistance (M)
UN56 Developing Toner Collection High Voltage Contact Resistance (Y)
UN50 Pre-primary Transfer Charging High Voltage PCB (Bk)
UN54 Developing Toner Collection High Voltage PCB (C)
UN53 Developing Toner Collection High Voltage PCB (M)
UN52 Developing Toner Collection High Voltage PCB (Y)
UN51 Developing Toner Collection High Voltage PCB (Bk)
Post Charging Transformer
High Voltage Contact

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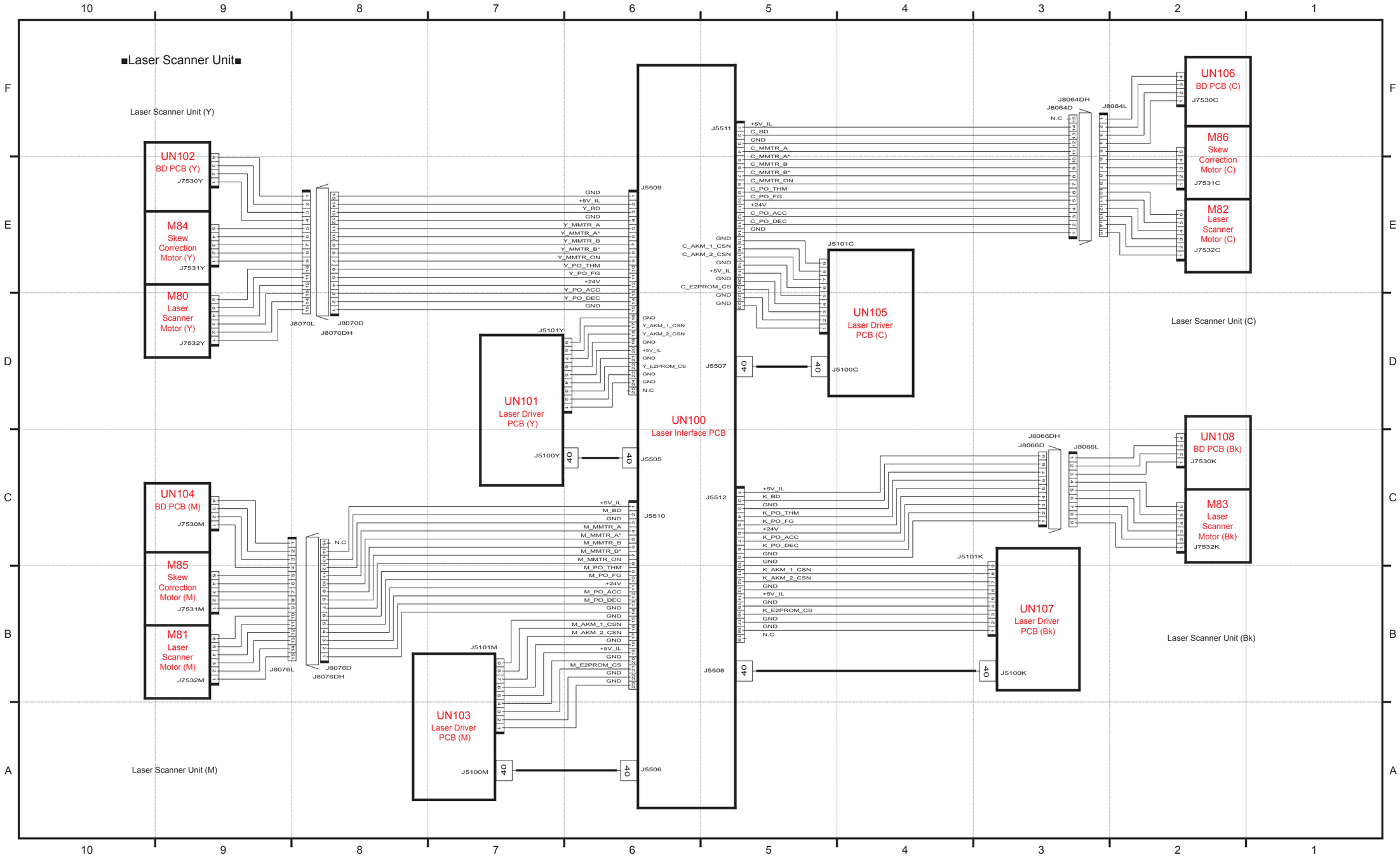
General Circuit Diagram (27/31)



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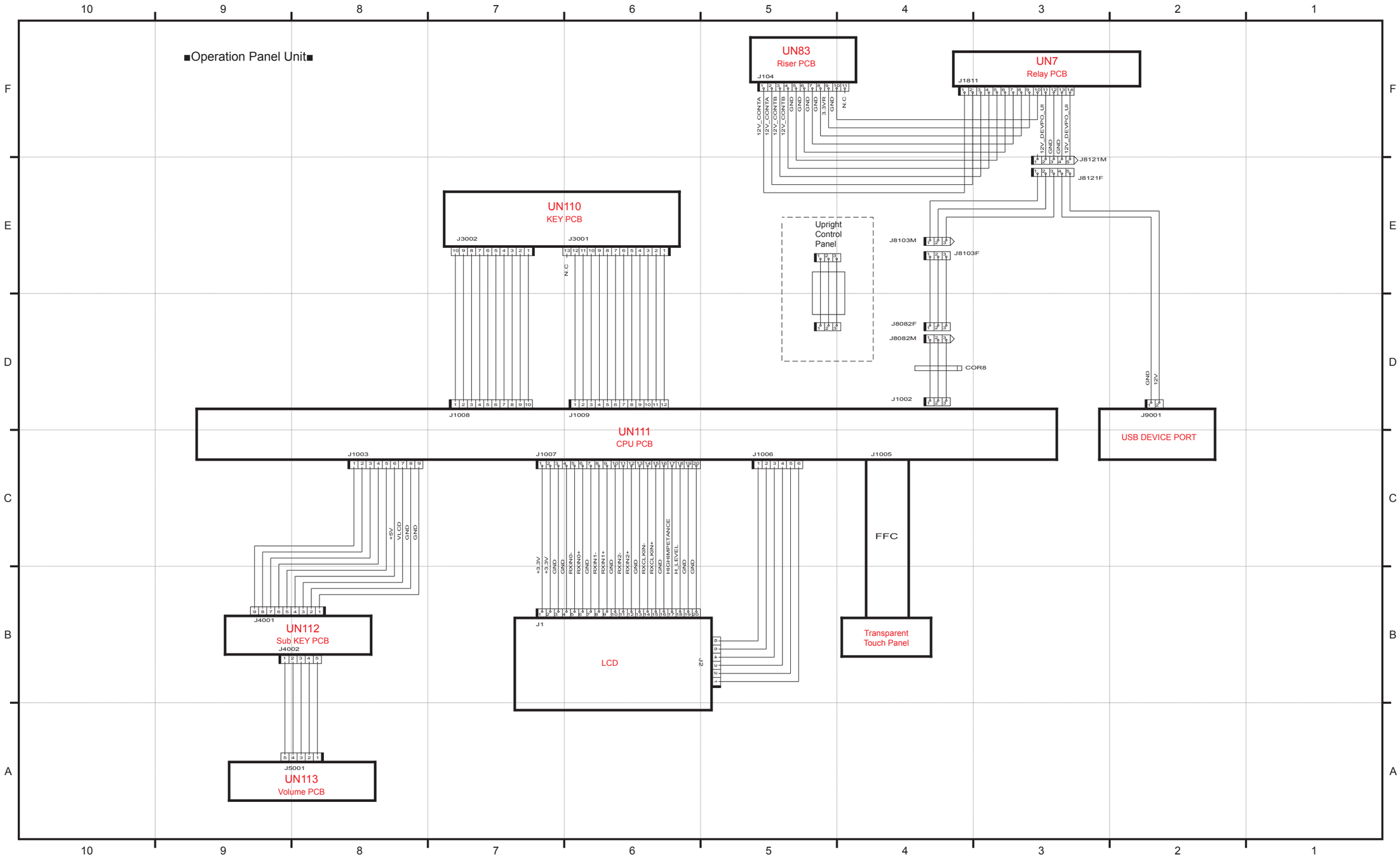
General Circuit Diagram (28/31)



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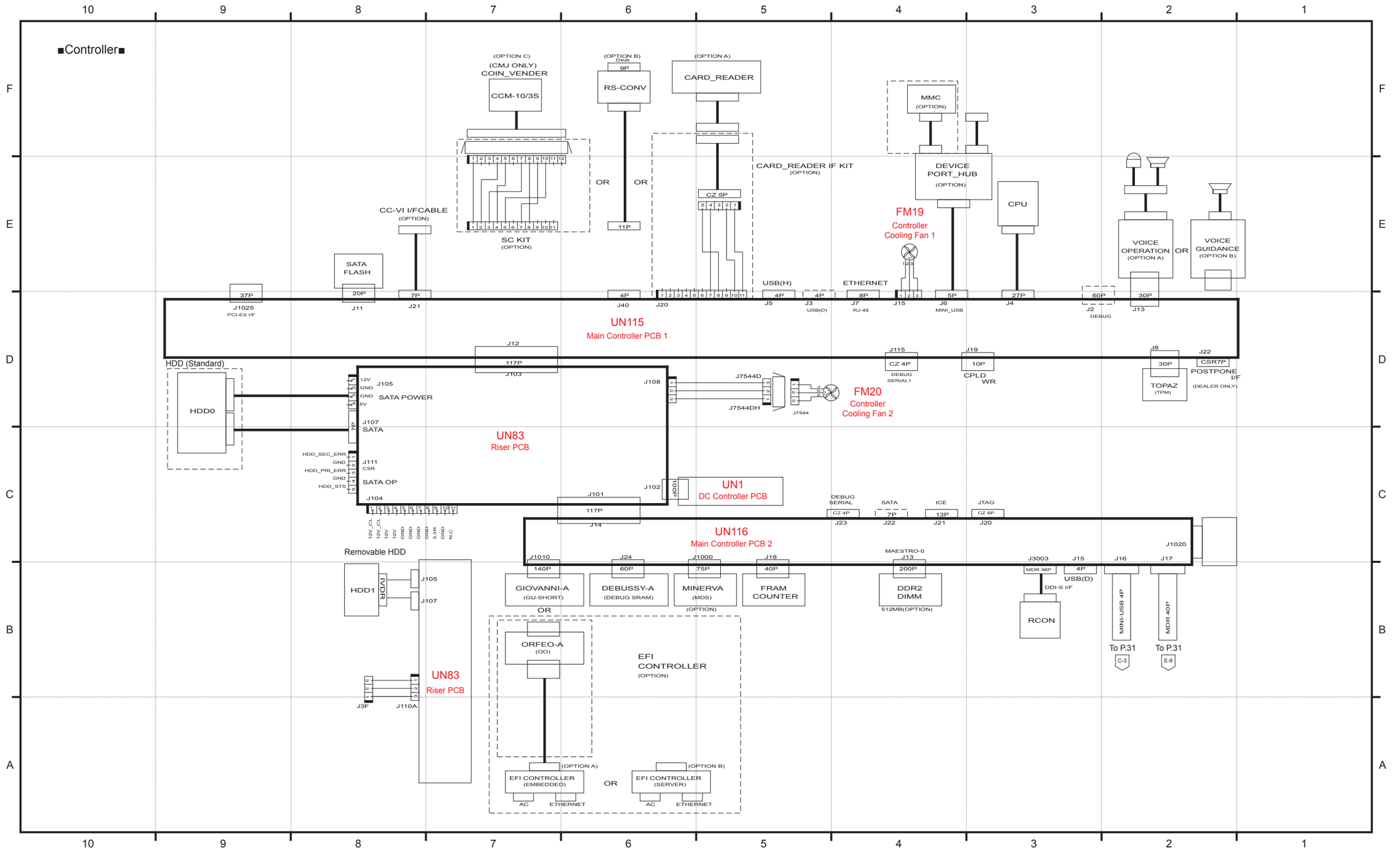
General Circuit Diagram (29/31)



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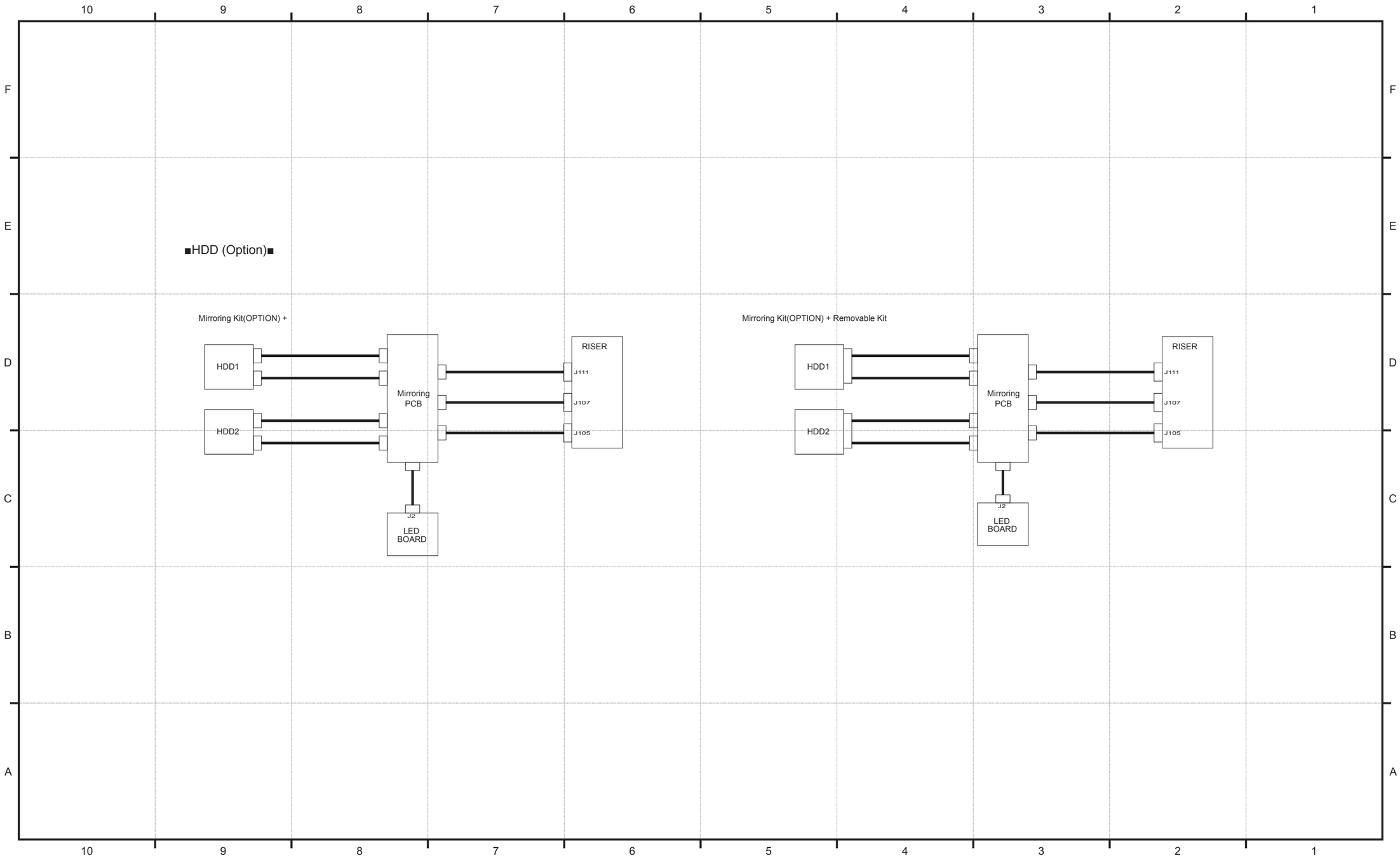
Appendix > General Circuit Diagram > General Circuit Diagram (29/31)

General Circuit Diagram (30/31)



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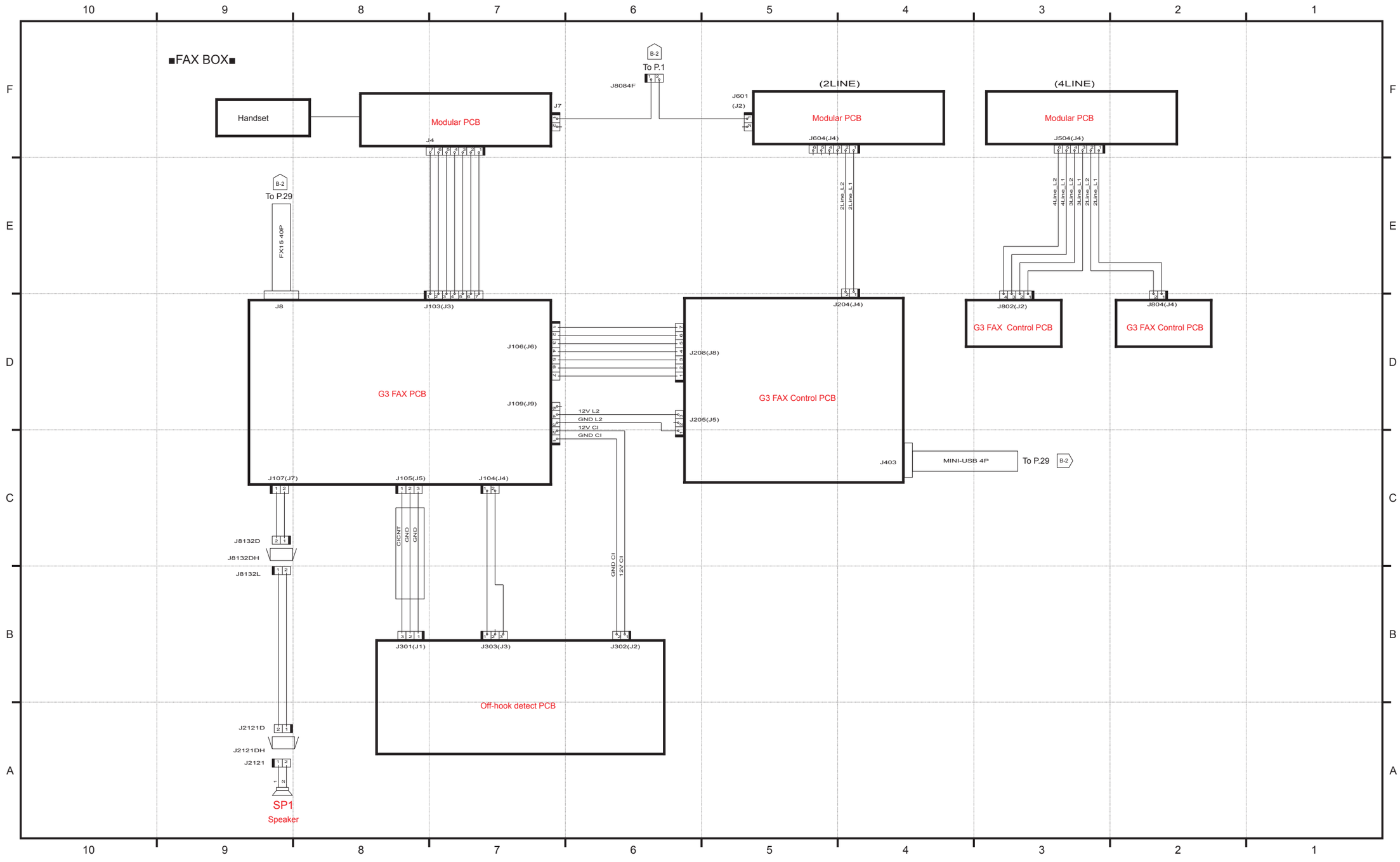
Appendix > General Circuit Diagram > General Circuit Diagram (30/31)

General Circuit Diagram (31/31)



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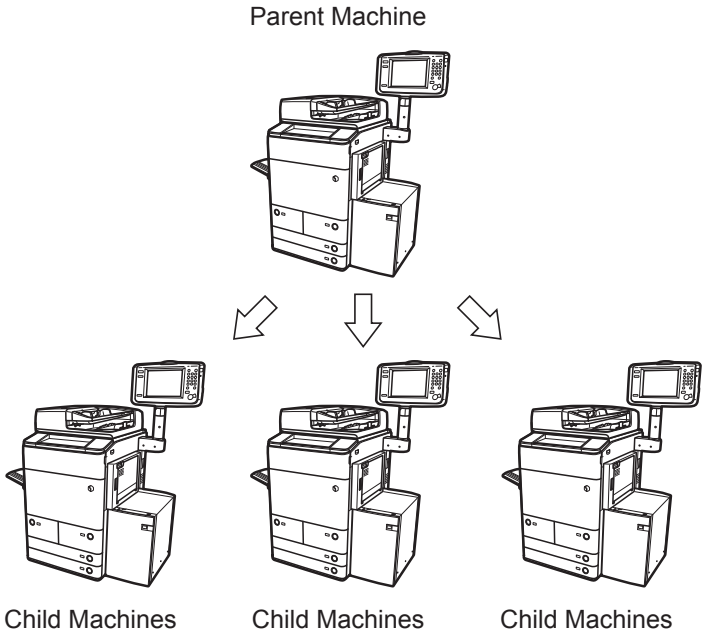
List of User Mode

Device Information Delivery Settings

Registering device information in your machine enables you to set the machine to deliver the same device information to other machines that are connected to the same network. This enables you to easily manage multiple machines at the same time.
Your machine is capable of both sending and receiving device information, which can be delivered manually and automatically.



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Environment Settings

Paper Settings

* Default Settings

Item	Setting Description	Can be set in Remote UI	Device Information DeliveryAvailable
Paper Settings	Paper Source Set:Thin, Plain 1*, Plain 2, Heavy 1, Heavy 2, Color, Recycled 1, Recycled 2, Pre-Punched, Transparency, Tab 1, Tab 2, Bond, Letterhead	Yes	No
A5R/STMTR Paper Selection	A5R, STMTR*	No	No
B5/EXEC Paper Selection	B5, EXEC*	No	No
Paper Type Management Settings	Details/Edit Name, Category, Basis Weight, Finish, Type, Color, Adjust Creep Correction, Curl Correction Level, Adjust Image Position, Adj. Secondary Transfer Volt.	Yes	No
	Duplicate, Delete	Yes	No
Register Multi-Purpose Tray Defaults	On, Off* Register(Paper Size/Paper Type)	No	No
Register Custom Size	S1 to S5: Register/Edit, Rename	No	Yes
	Delete	No	No

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■ Display Settings

* Default Settings

*1 Indicates items that appear only when the appropriate optional product is available for use.

Item	Setting Description	Can be set in Remote UI	Device Information DeliveryAvailable
Default Screen after Startup/Restoration	Main Menu*, Quick Menu, Copy*1, Scan and Send, Fax*1, Scan and Store*1, Access Stored Files, Fax/I-Fax Inbox, Hold, Secure Print, Web Access*1, Workflow Composer*1, Scanner, Print Server*1, Scan Lock Analyzer*1, Tutorial, WSD Scan	No	No
	Open Status Monitor/Cancel: On, Off*	No	No
Default Screen (Status Monitor/Cancel)	Default Status Type: Copy*1/Print*, Send, Receive, Store, Consmbls./Others	No	No
	Status/Log: Job Status*, Log	No	No
	Details (Copy*1/Print, Job Status): Copy, Print	No	No
	Details (Send, Job Status): Send, Fax*1	No	No
	Details (Receive, Job Status): Fax*1, Forward	No	No
	Details (Copy*1/Print, Log): Copy, Printer, Local Print, Received Job Print, Print Report	No	No
	Details (Send, Log): Send, Fax*1	No	No
	Details (Receive, Log): Receive, Fax*1	No	No
Copy Screen Display Settings*1	Regular Copy*, Express Copy	No	No
Display Fax Function*1	On*, Off	No	No
	Enable Fax in Scan and Send Function*1: On*, Off	No	No
Store Location Display Settings	Mail Box: On*, Off	No	No
	Advanced Box/Network: On*, Off	No	No
	Memory Media: On, Off*	No	No
Language/Keyboard Switch On/Off	On, Off*	No	No
Language/Keyboard Switch	Language, Keyboard Layout	No	No
Use Keyboard Shift Lock Feature	On, Off*	No	Yes
Display Remaining Paper Message	On*, Off	No	No
No. of Copies/Job Duration Status	On*, Off	No	No
Display Original Scanning Cleaning Area	On*, Off	No	No
Select Paper Screen Priority	Simple*, Detailed	No	No
mm/Inch Entry Switch	mm, Inch*	No	Yes
ID/User Name Display On/Off	On*, Off	No	No
Display Remaining Toner Error Message	On, Off*	No	No
Delete Remaining Toner Error	Yes, No	No	No
Edit Puncher Unit Die Name*1	Edit	No	No

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Timer/Energy Settings

* Default Settings

*1 It is recommended that you use the default setting for this item.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Adjust Time	00:00 to 23:59, in one minute increments	No	No
Date/Time Settings	Date and Time Setting (12 digit number)	Yes	No
	Time Zone: GMT-12:00 to GMT+12:00 (GMT -05:00*)	Yes	No
	Daylight Saving Time: On, Off*	Yes	No
	Start Date (Month/Day/Time (0 to 23)) (March, 2nd, Sunday, 2:00*)	Yes	No
	End Date (Month/Day/Time (0 to 23)) (November, 1st, Sunday, 2:00)	Yes	No
Time Format	24 Hour, 12 Hour*	Yes	No
Quick Startup Settings for Main Power	On*, Off	Yes	Yes
Auto Reset Time	0 min=Off, 10 to 50 seconds in 10 second increments, 1 to 9 minutes in one minute increments (2 mins*)	Yes	Yes
Restrict Auto Reset Time	On, Off*	Yes	Yes
Function After Auto Reset	Initial Function*, Selected Function	Yes	Yes
Auto Sleep Time	5, 10, 15, 20, 30, 40, 50 mins, 1 hr, 90 mins, 2, 3, 4 hrs (5 mins*1)	Yes	Yes
Sleep Mode Energy Use	Low*, High	Yes	Yes
Auto Sleep Weekly Timer]	Sun to Sat, 00:00 to 23:59, in one minute increments	Yes	Yes
Sleep Mode Exit Time Settings	00:00 to 23:59, in one minute increments	Yes	Yes

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Network

If you are configuring the settings for the first time in "Interface Settings," "TCP/IPv4 Settings," "TCP/IPv6 Settings," or "Settings Common to TCP/IPv4 and TCP/IPv6," use the control panel of the machine. After configuring the TCP/IP settings, you can change them using the Remote UI.
If you are using a NetWare or AppleTalk network, you must use the TCP/IP protocol if you want to specify settings using software other than the control panel of the machine.

* Default Settings

*1 Indicates items that appear only when the appropriate optional product is available for use.

*2 Indicates items that appear only when the PS Printer Kit is activated.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Output Report]	Yes, No	Yes	No
Confirm Network Connection Set. Changes	On, Off*	No	Yes
TCP/IP Settings			
IPv4 Settings			
Use IPv4	On*, Off	Yes	No
IP Address Settings	IP Address: 0.0.0.0*	Yes	No
	Subnet Mask: 0.0.0.0*	Yes	No
	Gateway Address: 0.0.0.0*	Yes	No
	DHCP: On, Off*	Yes	Yes
	RARP: On, Off*	Yes	Yes
	BOOTP: On, Off*	Yes	Yes
DHCP Option Settings	Acquire Host Name: On*, Off	Yes	No
	DNS Dynamic Update: On, Off*	Yes	No
PING Command	IP Adress: 0.0.0.0*	No	No
IPv6 Settings			
Use IPv6	On, Off*	Yes	No
Stateless Address Settings	Use Stateless Address: On*, Off	Yes	No
Manual Address Settings	Use Manual Address: On, Off*	Yes	No
	Manual Address: IPv6 Address (39characters maximum)	Yes	No
	Prefix Length: 0 to 128 (64*)	Yes	No
	Default Router Address (39 characters maximum)	Yes	No
Use DHCPv6	On, Off*	Yes	Yes
PING Command	IPv6 Address: (39characters maximum)	Yes	No
	Host Name	Yes	No
DNS Settings			
DNS Server Address Settings			
IPv4	Primary DNS Server: IP Address:0.0.0.0*	Yes	No
	Secondary DNS Server: IP Address:0.0.0.0*	Yes	No
IPv6	Primary DNS Server: IPv6 Address (39 characters maximum)	Yes	No
	Secondary DNS Server: IPv6 Address (39 characters maximum)	Yes	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
DNS Host/Domain Name Settings		Yes	No
IPv4	Host Name: Canon****** ("******" represents the last six digits of a MAC address.)	Yes	No
	Domain Name: (NULL*)	Yes	No
IPv6	Use Same Host Name/Domain Name as IPv4:On, Off*	Yes	No
	Host Name: Canon****** ("******" represents the last six digits of a MAC address.)		
	Domain Name:	Yes	No
DNS Dynamic Update Settings			
IPv4	DNS Dynamic Update: On, Off*	Yes	No
IPv6	DNS Dynamic Update: On, Off*	Yes	No
	Register Stateless Address: On, Off*	Yes	No
	Register Manual Address: On, Off*	Yes	No
	Register Stateless Address: On, Off*	Yes	No
WINS Settings			
WINS Resolution	On, Off*	Yes	No
WINS Server Address	IP Address: 0.0.0.0*	Yes	No
Node Type	Auto (display only)	No	No
Scope ID	(NULL*)	Yes	No
LPD Print Settings			
LPD Print Settings	On*, Off	Yes	Yes
LPD Banner Page[*1]	On, Off*	Yes	Yes
RAW Print Settings			
RAW Print Settings	On*, Off	Yes	Yes
Bidirectional Communication	On, Off*	Yes	Yes
SNTP Settings			
Use SNTP	On, Off*	Yes	No
Polling Interval	Interval for performing time synchronization (1 to 48 hours) (24hours*)	Yes	No
NTP Server Address	IP address or host name (NULL*)	Yes	No
Check NTP Server	-	Yes	No
FTP Print Settings			
Use FTP printing	On, Off*	Yes	Yes
User Name	guest*	Yes	No
Password	7654321*	Yes	No
WSD Print Settings			
Use WSD	On, Off*	Yes	Yes
Use WSD Browsing	On, Off*	Yes	Yes
Use Multicast Discovery	On, Off*	Yes	Yes
Use FTP PASV Mode			
Use FTP PASV Mode	On, Off*	Yes	Yes
IPP Print Settings			
IPP Print Settings	On, Off*	Yes	Yes
Use SSL	On, Off*	Yes	No
Use Authentication	On, Off*	Yes	No
User Name	guest*	Yes	No
Password	7654321*	Yes	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Multicast Discovery Settings			
Response	On* Off	Yes	Yes
Scope name	default*	Yes	No
Use HTTP	On* Off	Yes	Yes
Use WebDAV Server	On, Off*	Yes	Yes
SSL Settings	Settings that use SSL	Yes	No
Key and Certificate			
Set as the Default Key	-	Yes	No
Certificate Details	Version, Serial Number, Signature Algorithm, Issue Destination, Validity Start Date, Validity End Date, Issuer, Public Key, Certificate Thumbprint, Verify Cert.	Yes	No
Display Use Location	Key and Certificate	Yes	No
Proxy Settings			
Use proxy	On, Off*	Yes	No
Server Address	IP address or FQDN (NULL*)	Yes	No
Port Number	1to 65535 (80*)	Yes	No
Use Proxy within the Same Domain	On, Off*	Yes	No
Set Authentication			
Use Proxy Auth.	On, Off*	Yes	No
User Name	(NULL*)	Yes	No
Password	(NULL*)	Yes	No
Confirm Dept. ID PIN	On, Off*	Yes	No
IPSec Settings			
Use IPSec	On, Off*	Yes	No
Receive Non-policy Packets	Allow*/Reject	Yes	No
Policy On, Off	On*, Off	Yes	No
Reg.			
Policy Name	24 characters maximum (NULL*)	Yes	No
Selector Settings	Local Address: All IP Addresses*/IPv4 Address/IPv6 Address/IPv4 Manual Settings/IPv6 Manual Settings	Yes	No
	Remort Address: All IP Addresses*, All IPv4Address, All IPv6Address, IPv4Manual Settings, IPv6 Manual Settings	Yes	No
	Port: Specify by Port Number*/Specify by Service Name	Yes	No
IKE Settings	IKE mode : Main*/Aggressive	Yes	No
	Authentication Method : Pre-Shared Key Method*/Digital sig. Method	Yes	No
	Auth./Encryption Algorithm : Auto*/Manual Settings	Yes	No
IPSec Network Settings	Validity : Time (1to65535minuites) (480minuites*)	Yes	No
	Validity : Size (1to65535 MB) (0 MB*)	Yes	No
	PFS : On, Off*	Yes	No
	Auth./Encryption Algorithm : Auto*/Manual Settings	Yes	No
	Connect. Mode : Transport, display only	-	No
Edit		Yes	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Delete		Yes	No
Print List	Yes, No	Yes	No
NetWare Settings			
Use NetWare	On, Off*	Yes	Yes
Frame Type	Auto Detect*/Ethernet II/Ethernet 802.2/Ethernet 802.3/Ethernet SNAP	Yes	No
IPX External Network Number	Auto (display only)	No	No
Node Number	Auto (display only)	No	No
Print Service	Bindery PServer, R Printer, NDS Pserver*, NPrinter	Yes	No
Bindery PServer			
Print Server Name	(NULL*)	Yes	No
File Server Name	(NULL*)	Yes	No
Print Server Password	(NULL*)	Yes	No
Printer Number	0 to 15 (0*)	Yes	No
Polling Interval	1 to 15seconds (5seconds*)	Yes	No
Printer Form	0 to 255 (0*)	Yes	No
Buffer Size	1 to 20 KB (20KB*)	Yes	No
Service Mode	Minimize form changes within print queues*, Minimize form changes across print queues, Change forms as needed, Service only currently mounted form	Yes	No
RPrinter			
Print Server Name	(NULL*)	Yes	No
File Server Name	(NULL*)	Yes	No
Printer Number	0 to 15 (0*)	Yes	No
NDS PServer			
Print Server Name	(NULL*)	Yes	No
Tree Name	(NULL*)	Yes	No
Context Name	(NULL*)	Yes	No
Print Server Password	(NULL*)	Yes	No
Printer Number	0 to 254 (0*)	Yes	No
Polling Interval	1 to 255seconds (5seconds*)	Yes	No
Printer Form	0 to 255 (0*)	Yes	No
Buffer Size	3 to 20KB (20KB*)	Yes	No
Service Mode	Minimize form changes within print queues*, Minimize form changes across print queues, Change forms as needed, Service only currently mounted form	Yes	No
NPrinter			
Print Server Name	(NULL*)	Yes	No
Tree Name	(NULL*)	Yes	No
Context Name	(NULL*)	Yes	No
Printer Number	0 to 254 (0*)	Yes	No
Packet Signature	Auto (display only)	No	No
Apple Talk Settings			
Use Apple Talk	On, Off*	Yes	Yes
Phase	Phase 2 (display only)	No	No
Service Name	Name (Device Name*)	Yes	No
Zone	Zone	Yes	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Print Mode*2	Both*, Spool, Direct	Yes	No
SMB Server Settings			
Use SMB Server	On, Off*	Yes	No
Server Name	Servwr Name : Canon****** ("******" represents the last six digits of a MAC address.)	Yes	No
Workgroup Name	Workgroup Name : (WORKGROUP*)	Yes	No
Comment	Comment : (NULL*)	Yes	No
LM Announce	On, Off*	Yes	No
Set SMB Printer			
Use SMB	On, Off*	Yes	No
Printer Name	(PRINTER*)	Yes	No
SMB Auth. Settings			
Use SMB Authentication	On, Off*	Yes	No
Authentication Type	• NTLMv1 : On, Off* • NTLMv2 : On, Off*	Yes	No
SNMP Settings			
Use SNMP v. 1	On*, Off	Yes	Yes
Dedicated Comm. Settings			
Dedicated Community	On*, Off	Yes	No
MIB Access Permission	Read/Write, Read Only*	Yes	No
Set Community Name 1			
Community Name 1	On*, Off	Yes	No
MIB Access Permission	Read/Write, Read Only*	Yes	No
Community Name	(public*)	Yes	No
Set Community Name 2			
Community Name 2	On, Off*	Yes	No
MIB Access Permission	Read/Write, Read Only*	Yes	No
Community Name	(public2*)	Yes	No
Use SNMP v. 3	On, Off*	Yes	No
User Settings			
User On, Off	On*, Off	Yes	No
Register	User Name, MIB Access Permis. (Read/Write, Read Only), Security Settings (Auth. Yes/Encry. Yes, Auth. Yes/Encry. No, Auth. No/Encrypt. No), Authent. Algorithm (MD5, SHA1), Authent. Password, Encryption Algorithm (DES, AES), Encryption Password	Yes	No
Details/Edit	User Name, MIB Access Permis. (Read/Write, Read Only), Security Settings (Auth. Yes/Encry. Yes, Auth. Yes/Encry. No, Auth. No/Encrypt. No), Authent. Algorithm (MD5, SHA1), Authent. Password, Encryption Algorithm (DES, AES), Encryption Password	Yes	No
Delete	-	Yes	No
Context Settings			
Register	Context Name	Yes	No
Edit	Context Name	Yes	No
Delete		Yes	No
Get Printer Mgmt Info from Host	On, Off*	Yes	Yes
Dedicated Port Settings			
Dedicated Port Settings	On*, Off	Yes	Yes

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Use Spool Function			
Use Spool Function	On, Off*	Yes	Yes
Startup Settings			
Startup Settings	0 to 300seconds (30seconds*)	Yes	No
Ethernet Driver Settings			
Auto Detect	On*, Off	Yes	No
Communication Mode	Half Duplex*/Full Duplex	Yes	No
Ethernet Type	10 Base-T*, 100 Base-TX, 1000 Base-T	Yes	No
MAC Address	Display only	Yes	No
IEEE802.1X Settings			
Use IEEE802.1X	On, Off*	Yes	No
Login Name	(NULL*)	Yes	No
Use TLS	On, Off*	Yes	No
Key and Certificate			
Set as the Default Key	Set as the Default Key	Yes	No
Certificate Details	Version, Serial Number, Signature Algorithm, Issue Destination, Validity Start Date, Validity End Date, Issuer, Public Key, Certificate Thumbprint, Verify Cert.	Yes	No
Display Use Location	Key and Certificate	Yes	No
Use TTLS	On, Off*	Yes	No
TTLS Settings	MSCHAPv2*, PAP	Yes	No
Use PEAP	On, Off*	Yes	No
User Name	(NULL*)	Yes	No
Password	(NULL*)	Yes	No
Same User Name as Login Name	On*, Off	Yes	No
Firewall Settings			
IPv4 Address Filter			
TX Filter			
Use Filter	On, Off*	Yes	No
Default Policy	Allow*, Reject	Yes	No
IPv4 Address	Register (Up to 16 IPv4 addresses), Edit, Delete	Yes	No
Prefix Length (0 to 32)	-	Yes	No
RX Filter			
Use Filter	On, Off*	Yes	No
Default Policy	Allow*, Reject	Yes	No
IPv4 Address	Register (Up to 16 IPv4 addresses), Details/Edit, Delete	Yes	No
Prefix Length (0 to 32)	-	Yes	No
IPv6 Address Filter			
TX Filter			
Use Filter	On, Off*	Yes	No
Default Policy	Allow*, Reject	Yes	No
IPv6Address	Register (Up to 16 IPv4 addresses), Edit, Delete	Yes	No
Prefix Length (0 to 128)	-	Yes	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
RX Filter			
Use Filter	On, Off*	Yes	No
Default Policy	Allow*, Reject	Yes	No
IPv6Address	Register (Up to 16 IPv4 addresses), Details/Edit, Delete	Yes	No
Prefix Length (0 to 128)	-	Yes	No
MACAddressFilter			
TX Filter			
Use Filter	On, Off*	Yes	No
Default Policy	Allow*, Reject	Yes	No
MACAddress	Register (Up to 100 Mac addresses), Edit, Delete	Yes	No
RX Filter			
Use Filter	On, Off*	Yes	No
Default Policy	Allow*, Reject	Yes	No
MACAddress	Register (Up to 100 Mac addresses), Edit, Delete	Yes	No
IP Address Block Log	Time, Type, IP Address, Port Number, Result	Yes	No

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External Interface

* Default Settings

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
USB Settings				
	Use as USB Device	On*, Off	Yes	Yes
	Use MEAP Driver for USB Input Device	On, Off*	Yes	Yes
	Use MEAP Driver for External USB Device	On, Off*	Yes	Yes

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Accessibility

* Default Settings

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Key Repetition Settings	Standard*, Slightly Slow, Slow	No	No
Reversed Display (Color)	On, Off*	No	No

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Adjustment/Maintenance

Adjust Image Quality

* Default Settings

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Auto Adjust Gradation	Full Adjust (Automatic after the machine prints and scans three sets of test pages): Press [Start Printing] Quick Adjust: Press [Start]	No	No
Correct Density	Black Scan for Copy/Scan and Store (Mail Box), Black Scan for Send/Scan and Store (Other Than Mail Box), Color Scan for Send/Scan and Store: 9 levels each (5 levels*)	No	No
Correct Shading	Densitometer Correction, Visual Correction	No	No
Auto Correct Color Mismatch	Press [Start]	No	No
Full Color Printing Vividness Settings	Standard*, Level 1, Level 2	No	No
Fine Adjust Zoom	X:- 1.0 % to+ 1.0 % (0.1 % increments) (0%*) Y:- 1.0 % to+ 1.0 % (0.1 % increments) (0%*)	No	No
Dither Pattern Settings	Pattern 1*, Pattern 2	No	No

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Adjust Action

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is available for use.

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
Saddle Stitcher Staple Repositioning*1		Press [Start]	No	No
Change Fold/Stitch Position*1		-2.0 mm to +2.0 mm, in 0.25 mm increments (0.00 mm*)	No	No
Adjust Saddle Stitch Fold Position*1		-2.0 mm to +2.0 mm, in 0.25 mm increments (0.00 mm*)	No	No
Adjust Double Staple Width*1		4 3/4", 5 11/16"*	No	No
Finisher Puncher Switch*1		Speed Priority, Precision Priority	No	No
Adjust Trim Width*1		-2.0 mm to +20.0 mm, in 0.1 mm increments (2.0 mm*)	No	No
Color/Black Priority for First Print Time		Color Priority, Black Priority*	No	No
Adjust Fold Position*1				
	Adjust Z-Fold Position	-2.0 mm to +1.5 mm, 0.5 increments (0.0 mm*)	No	No
	Adjust C-Fold Position	When the Paper Folding Unit-G1 is attached: -7.0 mm to +5.0 mm, in 0.5 mm increments (-1.0 mm*)	No	No
		When the Document Insertion/Folding Unit-G1 is attached: A: 0.0 mm to +6.0 mm, 0.5 mm increments (0.0 mm*) B: 0.0 mm to 3.0 mm, 0.5 mm increments (0.0 mm*)	No	No
	Adjust Accordion Z-Fold Position	-7.0 mm to +5.0 mm, 0.5 increments (-1.0 mm*)	No	No
	Adjust Double Parallel Fold Position	A: -2.0 mm to +5.0 mm, 0.5 increments (-1.0 mm*) B: 0.0 mm to +5.0 mm, 0.5 mm increments (1.0 mm*)	No	No
	Adjust Half Fold Position	-2.0 mm to +2.0 mm, 0.5 increments (0.0 mm*)	No	No
	Adjust Saddle Fold Position	-2.00 mm to +2.00 mm, 0.25 increments (0.00 mm*)	No	No
	Adjust Paper Deck Plates*1	Press [Start]	No	No
Correct Curl for Each Paper Drawer*1		Face Up Output (Reverse): -10 to +10 (0*) Face Down Output (Normal): -10 to +10 (0*)	No	No

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Maintenance

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is available for use.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Clean Feeder*1	Press [Start]	No	No
Clean Wire	Press [Start]	No	No
Clean Roller	Press [Start]	No	No
Clean Drum	Press [Start]	No	No
Original Scanning Area Cleaning Method*1	Displaying cleaning method	No	No

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Function Settings

Common

* Default Settings

[*1] Indicates items that appear only when the appropriate optional product is available for use.

[*2] Indicates information that is delivered only if the number of output trays is the same for the machine that is sending device information and the device receiving the information.

[*3] Indicates items with no serial number or ID/user name.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Paper Feed Settings			
Paper Drawer Auto Selection On/Off	Copy[*1], Printer, Access Stored File, Receive/Fax[*1], Other	Yes	No
Optimal Productivity	On*, Off	Yes	No
MP Tray	On, Off*	Yes	No
Other	On*, Off	Yes	No
Copy[*1]	Consider Paper Type : On*, Off	Yes	No
	Consider Color: On, Off*	Yes	No
Paper Drawer Auto Selection Based on Color	Color*, Black	Yes	No
Suspended Job Timeout On	On, Off*	Yes	Yes
	0 to 999 min. (5mins*)	Yes	Yes
Paper Output Settings			
Output Tray Settings[*1]			
If the Staple Finisher -K1/Booklet Finisher-K1 is attached			
Tray A	Copy*, Access Stored Files*, Printer*, Receive, Fax, Other	Yes	No[*2]
Tray B	Copy, Access Stored Files, Printer, Receive*, Fax*, Other*	Yes	No[*2]
Tray C	Copy*, Access Stored Files*, Printer*, Receive, Fax, Other	Yes	No[*2]
If the Staple Finisher- L1/Booklet Finisher-L1 is attached			
Tray A	Copy, Access Stored Files, Printer, Receive*, Fax*, Other*	Yes	No[*2]
Tray B	Copy*, Access Stored Files*, Printer*, Receive, Fax, Other	Yes	No[*2]
Tray C	Copy*, Access Stored Files*, Printer*, Receive, Fax, Other	Yes	No[*2]
Tray Home Position	Tray A*, Tray B, Tray C, Off	Yes	No[*2]
Offset Jobs[*1]	On*, Off	Yes	Yes
Job Separator Between Jobs	On, Off*	Yes	Yes
	Change (Select Paper Source)	Yes	Yes
Job Separator Between Copies	On, Off*	Yes	No
	Copies (1 to 9999) (10*), Change (Select Paper Source)	Yes	No
Different Paper Sizes for the Output Tray[*1]	On*, Off	Yes	No
Unfinished Tab Paper Forced Output	On, Off*	Yes	Yes
Print Settings			
Print Priority			
Copy[*1]	1*, 2, 3	Yes	Yes
Printer	1, 2*, 3	Yes	Yes
Access Stored File, Receive/Fax[*1], Other	1, 2, 3*	Yes	Yes
Coated Productivity/Image Quality Priority	Productivity Priority, Quality Priority*	Yes	Yes
Text/Photo Priority When ACS Is Set to Black	Text Priority*, Photo Priority	Yes	Yes

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Local Print Default Settings			
Select Paper	Auto*, Select Paper Source	Yes	No
No. of Prints	1 to 9,999 sets (1set*)	Yes	No
Finishing[*1]		Yes	No
If no finisher is attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Rotate 90 Degrees, Face Up/Face Down	Yes	No
If the Staple Finisher-K1 is attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down	Yes	No
If the Booklet Finisher-K1 is attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Saddle Fold, Adjust Fold Position	Yes	No
If the Staple Finisher-K1 and puncher unit are attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Hole Punch	Yes	No
If the Staple Finisher- K1/Booklet Finisher-K1 and Paper Folding Unit-G1 are attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Fold, Adjust Fold Position	Yes	No
If the Staple Finisher- K1/Booklet Finisher-K1, puncher unit, and Paper Folding Unit-G1 are attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Hole Punch, Fold, Adjust Fold Position	Yes	No
If the Staple Finisher-L1 is attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down	Yes	No
If the Booklet Finisher-L1 is attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Saddle Fold, Adjust Fold Position	Yes	No
If the Staple Finisher-L1 and external puncher are attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Hole Punch	Yes	No
If the Staple Finisher- L1/Booklet Finisher-L1, and Document Insertion/Folding Unit-G1 are attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Fold, Adjust Fold Position	Yes	No
If the Staple Finisher- L1/Booklet Finisher-L1, external puncher, and Document Insertion/ Folding Unit-G1 are attached.	Do Not Collate, Collate (Page Order)*, Group (Same Pages), Staple (Corner: Top Left, Bottom Left, Top Right, Bottom Right) (Double: Left, Right), Offset*, Face Up/Face Down, Hole Punch, Fold, Adjust Fold Position	Yes	No
2-Sided Printing	On, Off*	Yes	No
	On: Book Type*, Calendar Type	Yes	No
Delete File After Printing	On, Off*	Yes	No
Merge and Print	On, Off*	Yes	No
Output Report Default Settings			
2-Sided Printing	On, Off*	Yes	Yes
Register Form	Register, Delete, Check Print, Details	Yes	Yes
Superimpose Image Quality Priority	Auto*, Original Priority, Form Priority	Yes	Yes
Register Characters for Page No./Watermark	Register, Edit, Delete	Yes	Yes

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Copy Set Numbering Option Settings	On, Off*	Yes	Yes
Select Option			
ID/User Name	On, Off*	Yes	Yes
Date	On, Off*	Yes	Yes
Text	On, Off*	Yes	Yes
Copy Set Numbering Option Settings	Date Settings (mm/dd/yyyy, yyyy/mm/dd, dd/mm/yyyy, yyyy.mm.dd, mm.dd.yyyy, dd.mm.yyyy*)	Yes	Yes
Set Characters		Yes	Yes
Alignment Settings	Align Left*, Align Center, Align Right	Yes	Yes
Secure Watermark/Document Scan Lock*1			
Forced Secure Watermark/Doc. Scan Lock			
When Using TL Code:	Copy*1 : Do Not Set*, Force Secure Watermark, Forced Doc. Scan Lock	Yes	Yes*3
	Access Stored Files : Do Not Set*, Force Secure Watermark, Forced Doc. Scan Lock	Yes	Yes*3
	Printer : Do Not Set*, Force Secure Watermark, Forced Doc. Scan Lock	Yes	Yes*3
When Using QR Code:	Copy*1 : Do Not Set*, Force Secure Watermark, Forced Doc. Scan Lock, Sec. Water. + Scan Lock	Yes	Yes*3
	Access Stored Files : Do Not Set*, Force Secure Watermark, Forced Doc. Scan Lock, Sec. Water. + Scan Lock	Yes	Yes*3
	Printer : Do Not Set*, Force Secure Watermark, Forced Doc. Scan Lock, Sec. Water. + Scan Lock	Yes	Yes*3
Printer Driver Watermark/Doc. Scan Lock			
When Using TL Code:	Do Not Set*, Driver Secure Watermark, Driver Doc. Scan Lock	Yes	Yes*3
When Using QR Code:	Do Not Set*, Driver Secure Watermark, Driver Doc. Scan Lock, Sec. Water. + Scan Lock	Yes	Yes*3
Adjust Background/Character Contrast	Black, Cyan, Magenta	No	No
Sample Print	-	No	No
Relative Contrast	-7 to +7 (imageRUNNER ADVANCE C9280 PRO) Black : 0*, Cyan : 2*, Magenta : 0* -7 to +7 (imageRUNNER ADVANCE C9270 PRO/C7270/C7260) Black : 1*, Cyan : -1*, Magenta : 1*	No	No
Print Settings	-	No	No
Initialize	-	No	No
Standard Value Set	1 to 64 (imageRUNNER ADVANCE C9280 PRO) Black : 16*, Cyan : 16*, Magenta : 16* 1 to 64 (imageRUNNER ADVANCE C9270 PRO/C7270/C7260) Black : 12*, Cyan : 16*, Magenta : 12*	No	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Latent Area Density	1 to 36 (imageRUNNER ADVANCE C9280 PRO) Black : 8*, Cyan : 10*, Magenta : 11* 1 to 36 (imageRUNNER ADVANCE C9270 PRO/C7270/C7260) Black : 7*, Cyan : 9*, Magenta : 10*	No	No
Adjust TL Code	Color: Magenta, Black*	No	Yes
Dot Size	1 to 7 (imageRUNNER ADVANCE C9280 PRO) Black : 4*, Magenta : 4* 1 to 7 (imageRUNNER ADVANCE C9270 PRO/C7270/C7260) Black : 4*, Magenta : 3*	No	Yes
Dot Density	Standard*, Rough	No	Yes
Initialize	-	No	No
QR Code Print Position	Top Left, Bottom Left, Top Right*, Bottom Right	No	Yes
Scan Settings[*1]			
Timing to Raise Feeder Tray[*1]	When Start Is Pressed*, When Panel Is Touched	Yes	Yes
Feeder Jam Recovery Method[*1]	From 1st Page*, From Stopped Original	Yes	Yes
Scanner Noise Settings[*1]	Speed Priority*, Quiet	Yes	Yes
Streak Prevention	On*, Off	Yes	Yes
Black Scan Speed/Image Quality Priority[*1]	Speed Priority*, Quality Priority	Yes	Yes
LTRR/STMT Original Detection	Select Manually, Use LTRR Format*, Use STMT Format	Yes	Yes
Remote Scan Gamma Value	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes	Yes
Auto Online	On, Off*	No	Yes
Auto Online	On, Off*	No	Yes
Generate File			
High Compression Image Quality Level	Data Size Priority, Normal*, Quality Priority	Yes	Yes
Compact PDF Settings for Text Original	On, Off*	Yes	Yes
Resolution	100x100 dpi, 200x200 dpi, 300x300 dpi*	Yes	Yes
OCR (Text Searchable) Settings			
Smart Scan	On*, Off	Yes	Yes
No. of OCR File Name Characters	1 to 24 (24 Char*)	Yes	Yes
Trace & Smooth Settings[*1]			
Outline Graphics	On*, Off	Yes	Yes
Graphics Recognition Level	Normal*, Moderate, High	Yes	Yes
Background Image Level	Data Size Priority, Normal*, Quality Priority	Yes	Yes
OOXML Settings			
Background Image Level	Quality Priority, standarad*, Data Size Priority	Yes	Yes
Color Image Recognition Level	High, Standard*, Do Not Recognize	Yes	Yes
Color Image Line Width Recognition	On*, Off	Yes	Yes
Include Background Images in Word File[*1]	On*, Off	Yes	Yes
Specify Minimum PDF Version	Do Not Specify*, 1.5, 1.6, 1.7	Yes	Yes

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
	Format PDF to PDF/A	On, Off*	Yes	Yes
	Optimize PDF for Web	On, Off*	Yes	Yes
	256-bit AES Settings for Encrypted PDF*1	Acrobat 9.0 or Equivalent, Acrobat 10.0 or Equivalent*	Yes	Yes
	Rights Management Server Settings	Server URL : (NULL*)	Yes	No
		User Name : (NULL*)	Yes	No
		Password : (NULL*)	Yes	No
		Always Show Auth. Screen: On, Off*	Yes	No
Document Scan Lock Operational Settings*1				
	Use Document Scan Lock	Use TL Code*, Use QR Code, Do not use	Yes	Yes
	Document Scan Lock TL Code Settings	Scan Job Restriction : On*, Off	Yes	Yes
		Multiple Embedded Information Action : Continue Job, Cancel Job*	Yes	Yes
		Restrict Functions Affecting Doc. Scan Lock : On, Off*	Yes	Yes
	Document Scan Lock QR Code Settings	Scan Job Restriction : A Mode (Standard)*, B Mode (Secured), Off	Yes	Yes
		Restrict Functions Affecting Doc. Scan Lock : On, Off*	Yes	Yes
Set Authentication Method				
	Info. Used for LDAP Server Authentication	Device Settings*, Device Login Auth. Info., Regist. Info. for Each User	Yes	No
	Info. Used for Rights Mgmt. Server Auth.	Device Settings*, Regist. Info. for Each User	Yes	No
	Info. Used for SMTP Server Authentication	Device Settings, Regist. Info. for Each User*	Yes	No
	Info. Used for File TX/Browsing Auth.	Standard*, Device Login Auth. Info., Regist. Info. for Each User	Yes	No

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Copy

* Default Settings

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
Register/Edit Favorite Settings		M1 to M9 : Register, Rename, Delete, Check Content	No	No
Change Default Settings		Register, Initialize	No	No
Register Options Shortcuts				
	Shortcut 1	Finishing*, Unassigned	No	No
	Shortcut 2	2-Sided*, Unassigned	No	No
	Shortcut 3	Density* Unassigned	No	No
	Shortcut 4	Original Type*, Unassigned	No	No
	Shortcut 5	Unassigned*	No	No
Register Options Shortcuts (Express Copy)				
	Shortcut 1	No Settings*, Each mode	No	No
	Shortcut 2	No Settings*, Each mode	No	No
	Shortcut 3	No Settings*, Each mode	No	No
	Shortcut 4	No Settings*, Each mode	No	No
	Shortcut 5	No Settings*, Each mode	No	No
	Shortcut 6	No Settings*, Each mode	No	No
Auto Collate		On*, Off	No	Yes
Image Orientation Priority		On, Off*	No	Yes
Auto Orientation		On*, Off	No	Yes
Select Color Settings for Copy				
	Use Auto (Color/Black)	On*, Off	Yes	Yes
	Use Full Color	On*, Off	Yes	Yes

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Printer

* Default Settings

*1 Indicates items that appear only when the appropriate optional product is available for use or the appropriate setting is specified.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Print Report			
PCL*1			
Configuration Page	Yes, No	No	No
Font List	Yes, No	No	No
PS		No	No
Configuration Page	Yes, No	No	No
Font List	Yes, No	No	No
RGB Test Print	Yes, No	No	No
CMY Test Print	Yes, No	No	No
RGB Color Chart	Yes, No	No	No
CMYK Color Chart	Yes, No	No	No
Printer Settings	Setting the Machine (PS/PCL/UFR II Printer)	Yes	Yes
Restrict Printer Jobs	On, Off*	Yes	Yes
When On is selected	Select Jobs to Allow: Rsrvd Jobs*, Rsrvd Jobs + Secure Print	Yes	Yes
PDL Selection (Plug-n-play)	UFR II*, PCL5c*1, PCL6*1, PS3*1, Fax*1, UFR II (XPS)	Yes	No

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Send

* Default Settings

[*1] Indicates items that appear only when the appropriate optional products are available for use.

[*2] Indicates item that is not delivered as device information.

Details/Edit, Delete

[*3] Indicates items with setting range and default setting that may differ, depending on the region.

[*4] Indicates items that may not be displayed on the Settings/Registration screen or that may have different default setting, depending on the region.

[*5] Displays according to the number of lines set in [No. of TX Lines].

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Output Report		Yes	No
TX/RX User Data List	Yes, No	Yes	No
Fax User Data List[*1]	Yes, No		
Common Settings			
Register Favorite Settings	Checking Settings, Location to Register Button : M1 to M18	No	Yes
Show Comment	On, Off*	No	No
Button Name, Input Comment	Name, Comment	No	Yes
Edit Favorite Settings	Delete, Check Content, Rename (Name, Comment) : M1 to M18	No	Yes
Show Comments	On, Off*	No	No
Display Confirmation for Favorite Settings	On*, Off	No	No
Default Screen	Standard*, One-Touch, Favorite Settings, Address Book	No	No
Change Default Settings	Register, Initialize	No	No
Register Options Shortcuts			
Shortcut 1	2-Sided Original*, Unassigned	No	No
Shortcut 2	Different Size Originals*, Unassigned	No	No
TX Report	For Error Only*, On, Off	Yes	Yes
Report with TX Image	On*, Off	Yes	Yes
Report with Color TX Image	On, Off*	Yes	Yes
Communication Management Report			
Auto Print (100 Transmissions)	On*, Off	Yes	Yes
Specify Print Time	On, Off*	Yes	Yes
Timer Setting	00 : 00 to 23 : 59 (00 : 00*)	Yes	Yes
Send/Receive Separate	On, Off*	Yes	Yes
TX Terminal ID	Print*, Do Not Print	Yes	Yes
	TX Terminal ID: Print • Print Position: Inside, Outside* • Display Destination Unit Name: On*, Off • Telephone # Mark*1: Fax*, TEL	Yes	Yes
Delete Failed TX Jobs	On*, Off	Yes	Yes
Retry Times	0 to 5times (3times*)	Yes	Yes
Data Compression Ratio	High Ratio, Normal*, Low Ratio	Yes	Yes
YCbCr TX Gamma Value	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes	Yes
Use Divided Chunk Send for WebDAV TX	On*, Off	Yes	Yes

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Confirm SSL Certificate for WebDAV TX	On, Off*	Yes	No
Add Items to Verify	CN: On, Off*	Yes	No
Limit New Destination			
Fax	On, Off*	Yes	Yes
E-mail	On, Off*	Yes	Yes
I-Fax	On, Off*	Yes	Yes
File	On, Off*	Yes	Yes
Always Add Device Signature to Send*1	On, Off*	Yes	Yes
Restrict File Formats	On, Off*	Yes	Yes
Limit E-Mail to Send to Myself	On, Off*	Yes	Yes
Restrict File TX to Personal Folder	On, Off*	Yes	Yes
Personal Folder Specification Method	Home Folder, Register for Each User*, Use Login Server	Yes	Yes
Home Folder Settings	Protocol, Host Name, Folder Path	Yes	Yes
Use Auth. Info. of Each User	On, Off*	Yes	Yes
E-Mail/I-Fax Settings			
Register Unit Name	(NULL*)	Yes	No
Communication Settings			
SMTP RX	On, Off*	Yes	Yes
POP	On*, Off	Yes	Yes
SMTP Server (Server name or IP address)	(NULL*)	Yes	No
E-mail Address	(NULL*)	Yes	No
POP Server (Server name or IP address)	(NULL*)	Yes	No
POP Login Name	(NULL*)	Yes	No
POP Password	(NULL*)	Yes	No
POP Interval	0 min (Off), 1 to 99 mins (0 mins*)	Yes	No
Authent./Encryption			
POP AUTH Method	Standard*, APOP, POP AUTH	Yes	Yes
POP Authentication Before Send	On, Off*	Yes	Yes
Allow SSL (POP)	On, Off*	Yes	No
SMTP Authentication (SMTP AUTH)	On, Off*	Yes	No
User Name	(NULL*)	Yes	No
Password	(NULL*)	Yes	No
Allow SSL (SMTPReceive)	Always SSL, On, Off*	Yes	No
Allow SSL (SMTP Send)	On, Off*	Yes	No
Display Auth. Screen When Send	On, Off*	Yes	No
Confirm SSL Certificate for SMTP TX	On, Off*	Yes	No
Add Items to Verify	CN: On, Off*	Yes	No
Confirm SSL Certificate for POP RX	On, Off*	Yes	No
Add Items to Verify	CN: On, Off*	Yes	No
Maximum Data Size for Sending	0 (Off), 1 to 99 MB (3MB*)	Yes	Yes
Default Subject	(Attached Image*)	Yes	Yes
Specify Authentication User Dest. to Reply	On, Off*	Yes	No
Set Authentication User Dest. to Sender	On*, Off	Yes	No
Allow Unregistered Users to Send E-Mail	On, Off*	Yes	Yes

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Full Mode TX Timeout	1 to 99 hrs (24 hrs*)	Yes	Yes
Print MDN/DSN upon Receipt	On, Off*	Yes	Yes
Use Send via Server	On, Off*	Yes	Yes
Allow MDN Not via Server	On*, Off	Yes	Yes
Restrict TX Destination Domain			
Restrict Sending to Domains	On, Off*	Yes	Yes
Permitted Domains	Register, Details/Edit, Delete	Yes	Yes*2
Autocomplete for Entering E-Mail Addresses	On*, Off	No	Yes
Fax Settings*1			
Default Screen	Standard*, Address Book	No	No
Change Default Settings	Register, Initialize	No	No
Register Options Shortcuts			
Shortcut 1	Density*, Unassigned	No	No
Shortcut 2	Original Type*, Unassigned	No	No
Shortcut 3	2-Sided Original*, Unassigned	No	No
Shortcut 4	Different Size Originals*, Unassigned	No	No
Register Sender Name (TTI)	01 to 99 : Register/Edit, Delete	Yes	No
Use Auth. User Name as Sender Name	On, Off*	No	Yes
ECM TX	On*, Off	Yes	Yes
Set Pause Time	1 to 15sec (2sec*)	Yes	Yes
Auto Redial	On*, Off	Yes	Yes
Set Details: Redial Times	1 to 10 times (2times*)	Yes	Yes
Set Details: Redial Interval	2 to 99 mins (2 mins*)	Yes	Yes
Set Details: Redial When TX Error	Error and 1st Page*, All Pages, Off	Yes	Yes
Check Dial Tone Before Sending	On*, Off	Yes	Yes
Fax TX Report	For Error Only*, On, Off	Yes	Yes
Report with TX Image	On*, Off	Yes	Yes
Fax Activity Report			
Auto Print (40 Transmissions)	On*, Off	Yes	Yes
Specify Print Time	On, Off*	Yes	Yes
Timer Setting	00 : 00 to 23 : 59 (00 : 00*)	Yes	Yes
Send/Receive Separate	On, Off*	Yes	Yes
Set Line			
Line 1 to Line 4	If only the Super G3 FAX Board is installed: • Line 1	Yes	No
	If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed: • Line 1, Line 2	Yes	No
	If the Super G3 FAX Board, Super G3 2nd Line Fax Board, and Super G3 3rd/4th Line Fax Board are installed: • Line 1, Line 2, Line 3, Line 4	Yes	No
Register Unit Telephone Number	(NULL*)	Yes	No
Register Unit Name	(NULL*)	Yes	No
Select Line Type	Pulse, Tone*	Yes	No

Item			Setting Description	Can be set in Remote UI	Device Information Delivery Available
	Select TX Line		If the Super G3 FAX Board and Super G3 2nd Line Fax Board are installed: • Line 1: Priority TX*, Prohibit TX • Line 2: Priority TX, Prohibit TX	Yes	No
			If the Super G3 FAX Board, Super G3 2nd Line Fax Board, and Super G3 3rd/4th Line Fax Board are installed: • Line 1: Priority TX, Prohibit TX* • Line 2: Priority TX, Prohibit TX • Line 3: Priority TX, Prohibit TX • Line 4: Priority TX, Prohibit TX	Yes	No
	TX Start Speed		33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps	Yes	Yes
	PIN Code Access		On, Off*	Yes	Yes
	Confirm Entered Fax Number		On, Off*	Yes	Yes
	Allow Fax Driver TX		On*, Off	Yes	Yes
	Remote Fax TX Settings[*1]				
		Remote Fax Server Address	IP address or host name (48 characters maximum): (NULL*)	Yes	No
		TX Timeout	1 to 99 hrs (one hour increments) (24hrs*)	Yes	Yes
		No. of TX Lines	1 to 4 Line (1*)	Yes	No
		Select Priority Line	Auto*, Line 1, Line 2[*3], Line 3[*3], Line 4[*3]	Yes	No
	Remote Fax Settings				
		Use Remote Fax	On, Off*	Yes	Yes

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Receive/Forward

* Default Settings

[*1] Indicates items that appear only when the appropriate optional products are available for use.

[*2] Indicates items that are not delivered as device information.
Receive Method:, E-Mail Priority, Details/Edit, Delete, Print List

[*3] Indicates items that are not delivered if a PIN is set.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Output Report			
TX/RX User Data List	Yes, No	Yes	No
Fax User Data List[*1]	Yes, No	Yes	No
Common Settings			
Print on Both Sides	On, Off*	Yes	Yes
Select Drawer			
SwitchA	On*, Off	Yes	Yes
SwitchB	On*, Off	Yes	Yes
SwitchC	On*, Off	Yes	Yes
SwitchD	On*, Off	Yes	Yes
Reduce Fax RX Size	On*, Off	Yes	Yes
	On • Reduction Mode: Auto*, Fixed • Reduction %: 75% to 97% (90%*) • Reduction Direction: Vertical & Horizontal, Vertical Only*	Yes	Yes
2 On 1 Log	On, Off*	Yes	Yes
Received Page Footer	Print, Do Not Print*	Yes	Yes
YCbCr RX Gamma Value	Gamma 1.0, Gamma 1.4, Gamma 1.8*, Gamma 2.2	Yes	Yes
Handle Files with Forwarding Errors	Always Print*, Store/Print, Off	Yes	Yes
Forwarding Settings	Receive Method:, Validate/Invalidate, Register (Registered Forwarding Settings), Delete, Details/Edit, Print List, Forward w/o Conditions, E-Mail Priority	Yes	Yes[*2]
Set Fax/I-Fax Inbox			
Set/Register Confidential Fax Inboxes			
Inbox No.	00 to 49	Yes	Yes
Register Box Name	(NULL*)	Yes	Yes[*3]
PIN	(NULL*)	Yes	Yes
URL Send Settings	(NULL*)	Yes	Yes[*3]
Initialize	-	Yes	No
Memory RX Inbox PIN	Seven digits maximum: (NULL*)	Yes	No
Use Fax Memory Lock[*1]	On, Off*	Yes	Yes
Use I-Fax Memory Lock	On, Off*	Yes	Yes
Memory Lock Start Time	Everyday (1 to 5), Specify Days (Sun to Sat, 1 to 5), Off*	Yes	Yes
Memory Lock End Time	Everyday (1 to 5), Specify Days (Sun to Sat, 1 to 5), Off*	Yes	Yes
Divided Data RX Timeout	0 to 99 hrs (24hrs*)	Yes	Yes
Always Send Notice for RX Errors	On*, Off	Yes	Yes

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
Fax Settings*1				
	ECM RX	On*, Off	Yes	Yes
	Fax RX Report	For Error Only, On, Off*	Yes	Yes
	Confidential Fax Inbox RX Report	On*, Off	Yes	Yes
	RX Start Speed	33600 bps*, 14400 bps, 9600 bps, 7200 bps, 4800 bps, 2400 bps	Yes	Yes
	RX Password	20 digits maximum: (NULL*)	Yes	No

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Store/Access Files

* Default Settings

*1 Indicates items that are not delivered if a PIN is set.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Common Settings			
Scan and Store Settings			
Register/Edit Favorite Settings	Register, Rename, Delete, Check Content (M1 to M9)	No	No
Change Default Settings	Register, Initialize	No	No
Access Stored Files Settings			
Register/Edit Favorite Settings	Register, Rename, Delete, Check Content (M1 to M9)	No	No
Change Default Settings	Register, Initialize	No	No
Mail Box Settings			
Set/Register Mail Boxes			
Mail Box No.	00 to 99	No	No
Register Box Name	(NULL*)	Yes	Yes*1
PIN	(NULL*)	Yes	No
Time Until File Auto Delete	0=None, 1, 2, 3, 6, 12 hrs, 1, 2, 3, 7, 30 days (3 days*)	No	No
URL Send Settings	(NULL*)	Yes	Yes*1
Print upon Storing from Printer Driver	On, Off*	Yes	Yes*1
Initialize	-	No	No
Settings for All Mail Boxes			
Time Until File Auto Delete	0=None, 1, 2, 3, 6, 12 hrs, 1, 2, 3, 7, 30 days (3 days*)	No	No
Print When Storing from Printer Driver	On, Off*	Yes	No
Box Security Settings			
Limit Box PIN to 7 Digits/Restrict Access	On, Off*	Yes	Yes
Disp. Print When Storing from Printer Driver	On*, Off	Yes	Yes
Advanced Box Settings			
Open to Public	Off*, By WebDAV, By SMB	Yes	Yes
WebDAV Server Settings			
Authentication Type	Basic, Off*	Yes	Yes
Use SSL	On, Off*	Yes	Yes
Allow to Create Personal Space	On*, Off	Yes	Yes
Delete All Personal Spaces	Yes, No	Yes	No
Initialize Shared Space	Yes, No	Yes	No
Prohibit Writing from External	On*, Off	Yes	Yes
Authentication Management	On, Off*	Yes	Yes
File Formats Allowed for Storing	Dev. Supt. Formats*, Comm. Office Formats, All	Yes	Yes
Save Operation Log	On*, Off	Yes	Yes
Network Settings			
Network Place Settings	Register (Name, Protocol, Location), Details, Delete	Yes	No
Protocol for External Reference			
SMB	On*, Off	Yes	No
WebDAB	On*, Off	Yes	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Confirm SSL Certificate for Network Access	On, Off*	Yes	No
Add Items to Verify	CN: On, Off*	Yes	No
Memory Media Settings			
Use Scan/Print Function			
Use Scan Function	On*, Off	Yes	Yes
Use Print Function	On*, Off	Yes	Yes

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Secure Print

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is available for use.

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
Simple Authentication Settings				
	Omit Password	On, Off*	Yes	Yes
	Require Domain Name to Determine My Job	On*, Off	Yes	Yes
Only Allow Encrypted Print Jobs*1		On, Off*	Yes	Yes

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Hold

* Default Settings

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Use Hold Function	On*, Off	No	No
Time Until Hold Job Auto Delete	0=Off, 1, 2, 3, 6, 12 hrs, 1, 2, 3, 7, 30 days (3 days*)	No	No

T-10-20

Web Access

* Default Settings

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Settings			
View Settings			
Show Images	On*, Off	No	No
Show Animated GIF Images	On*, Off	No	No
Enable Table	On*, Off	No	No
Fit Web Page Into Screen Size	On, Off*	No	No
Use JavaScript	On*, Off	No	No
Use Word Wrap	On, Off*	No	No
Use Japanese Hyphenation	On, Off*	No	No
Format	Std CSS only, Std CSS + Style Attribute, Std CSS + Style Attribute + External Imported CSS*	No	No
Standard CSS	CSS1*, CSS2, CSS3	No	No
Show Flash Contents	On*, Off	No	No
Flash Animation Frame Interval	Short, Medium*, Long	No	No
Home Page Settings	URL Use Current Page as Home: (NULL*)	No	No
Home Page during Startup	On*, Off	No	No
Auto Clear Settings			
Display during Auto Clear	Show Home Page*, Show Blank Page, Keep Last Page	No	No
Security			
Use SSL 2.0	On*, Off	No	No
Use SSL 3.0	On*, Off	No	No
Use TLS 1.0	On*, Off	No	No
Certificates Enable/Disable Details	-	No	No
Display Mixed HTTPS/HTTP Pg	On*, Off	No	No
Display Server Certificate Auth. Warning	On, Off*	No	No
Displ Warning when Entering Secured Page	On, Off*	No	No
Displ. Warning when Leaving Secured Page	On, Off*	No	No
Cache	Use Cache: On, Off*	No	No
Clear Cache	Yes, No	No	No
Cookie	Cookie Handling: Accept*, Block, Prompt	No	No
Delete Cookies	Yes, No	No	No
Privacy Policy and Regulations			
Restrict URL Entry	On, Off*	No	No
Restrict Add/Edit Favorites	On, Off*	No	No
Restrict Editing Home Pages	On, Off*	No	No
Restrict Add/Edit Page Memos	On, Off*	No	No
Restrict Printing	On, Off*	No	No
Restrict File Upload	On, Off*	No	No
Restrict History Display	On, Off*	No	No
Dept. ID/User Name with History	On, Off*	No	No
Full Screen	On, Off*	No	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Hide Buttons in Toolbar	On, Off*	No	No
Hide Address in Toolbar	On, Off*	No	No
Hide Web Access Button	On, Off*	No	No
Restrict Share Device Information	On*, Off	No	No
Share Device Information with Following Address	-	No	No
Proxy Settings			
Use a proxy server (Display Only)	-	No	No
Proxy Server Address (Display Only)	-	No	No
Port Number (Display Only)	-	No	No
Use proxy auth. (Display Only)	-	No	No
Address Without Using Proxy	(NULL*)	No	No
Use HTTP1.1 for proxy connection: On, Off	On, Off*	No	No
Version	(Display Only)	No	No

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Set Destination

Set Destination

* Default Settings

*1 Indicates items that are not delivered as device information: Details/Edit, Delete, Search by Name

*2 Indicates items that are not delivered as device information: Edit, Delete

*3 Indicates items that appear only when the appropriate optional equipment is available for use.

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
Address Lists		Address List 1 to Address List 10, One-Touch	Yes	No
		Print List: Yes, No	Yes	No
Register Destinations		Register New Dest., Details/Edit, Delete, Search by Name	Yes	Yes*1
Rename Address List		Address List 1 to Address List 10, Rename	Yes	Yes
Register One-Touch		Register/Edit, Delete	Yes	Yes*2
Change Default Display of Address Book		Local*, LDAP Server, Remote	Yes	No
Address Book PIN		PIN: Seven digits maximum (NULL*)	Yes	Yes
Manage Address Book Access Numbers		On, Off*	Yes	Yes
Include Pswd. When Exporting Address Book		On, Off*	Yes	Yes
Register LDAP Server		Register, Details/Edit, Delete, Print List	Yes	No
Auto Search When Using LDAP Server		On* Off	No	Yes
Register/Edit LDAP Search Conditions		Display Name, Attribute Name	Yes	No
Change Default LDAP Search Conditions		Register, Initialize	No	No
Acquire Remote Address Book*3				
	Acquire Address Book	On, Off*	Yes	Yes
	Remote Address Book Server Address	IP Address or Host Name	Yes	No
	Communication Timeout	15 to 120 sec (30sec*)	Yes	Yes
	Fax TX Line Auto Select Adjustment	On*, Off	Yes	Yes
Make Remote Add. Book Open				
	Make Address Book Open	On, Off*	Yes	Yes

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Management Settings

User Management

* Default Settings

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
System Manager Information Settings				
	System Manager ID	7654321*	Yes	Yes
	System PIN	7654321*	Yes	Yes
	System Manager	(NULL*)	Yes	Yes
	E-Mail Address	(NULL*)	Yes	Yes
	Contact Information	(NULL*)	Yes	Yes
	Comment	(NULL*)	Yes	Yes
Department ID Management				
	Department ID Management	On, Off*	Yes	Yes
	Register PIN	Register, Edit, Delete, Limit Functions	Yes	Yes
	Page Totals	Clear, Print List, Clear All Totals, Large2 Count Management	Yes	No
	Allow Printer Jobs with Unknown IDs	On*, Off	Yes	Yes
	Allow Remote Scan Jobs with Unknown IDs	On*, Off	Yes	Yes
	Allow Black Copy/Print Jobs	On, Off*	Yes	Yes
	Allow Black Printer Jobs	On, Off*	Yes	Yes

T-10-23

Device Management

* Default Settings

*1 Indicates items that appear only when the appropriate optional equipment is available for use.

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Device Information Settings			
Device Name	Model Name*	No	No
Location	(NULL*)	No	No
Device Information Delivery Settings			
Register Destinations	Auto Search/Register, Reg., Details, Delete, Print List	No	No
	Auto Search/Register • Search Depth (Router): 1 to 8 (1*) • Display Host Name: On, Off* • Start Auto Search	No	No
Set Auto Delivery	Everyday (1 to 5), Specify Days (Sun to Sat, 1 to 5), Off*	No	No
Settings/Registration Value	On, Off* • Network Settings: Include, Exclude	No	No
Dept. ID	On, Off*	No	No
Address Book	On, Off*	No	No
Web Access Favorites*1	On, Off*	No	No
Printer Settings	On, Off*	No	No
Paper Information	On, Off*	No	No
Workflow Composer*1	On, Off*	No	No
Manual Delivery			
Settings/Registration Value	On, Off* • Network Settings: Include, Exclude	No	No
Dept. ID	On, Off*	No	No
Address Book	On, Off*	No	No
Web Access Favorites*1	On, Off*	No	No
Printer Settings	On, Off*	No	No
Paper Information	On, Off*	No	No
Workflow Composer*1	On, Off*	No	No
Restrict Receiving Device Information	On*, Off	No	No
Restore Data	Settings/Reg. Value, Dept. ID, Address Book, Web Access Favorites*1, Printer Settings, Paper Information, Start	No	No
Restrict Receiving for Each Function			
Settings/Registration Value	On*, Off	No	No
Dept. ID	On*, Off	No	No
Address Book	On*, Off	No	No
Web Access Favorites*1	On*, Off	No	No
Printer Settings	On*, Off	No	No
Paper Information	On*, Off	No	No
Workflow Composer*1	On, Off*	No	No
Set Paper Information	All, Basic Only*	No	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Communication Log	Details, Print List, Report Settings	No	No
	Report Settings • Auto Print (100 transmissions): On*, Off	No	No
	• Specify Print Time: On, Off*	No	No
	• 00: 00 to 23:59 (00: 00*)	No	No
	• Separate Report Type: On, Off*	No	No
Limited Functions Mode[*1]	On, Off*	No	No
Finissher Tray A/B/C	On, Off*	No	No
Finissher Saddle Stitch Unit	On, Off*	No	No
Folding Unit	On, Off*	No	No
Finissher Puncher	On, Off*	No	No
Limit Functions When Security Key is Off[*1]	Limit Partial Functions*, Limit All Functions	Yes	Yes
Confirm Device Signature Certificate[*1]	Certificate Details: Verify Cert.	Yes	No
Confirm User Signature Certificate[*1]	Certificate Details: Verify Cert.	Yes	No
Certificate Settings			
Generate Key			
Key Name	(NULL*)	Yes	No
Signature Algorithm	SHA1*, SHA256, SHA384, SHA512	Yes	No
Key Algorithm	RSA*, ECDSA	Yes	No
When RSA isselected	Key Length (bit): 512*, 1024, 2048, 4096	Yes	No
When ECDSA is selected	Key Type: P256*, P384, P521	Yes	No
Validity Start Date	Month, Date, Year (01/01/2000 - 12/31/2037) : (NULL*)	Yes	No
Validity End Date	Month, Date, Year (01/01/2000 - 12/31/2037) : (NULL*)	Yes	No
Country/Region	Country/Region name and code : United States (US)*	Yes	No
State	(NULL*)	Yes	No
City	(NULL*)	Yes	No
Organization	(NULL*)	Yes	No
Organization Unit	(NULL*)	Yes	No
Common Name	IP address of the machine or FQDN (41 characters maximum) (NULL*)	Yes	No
Generate/Update Device Signature Key	Yes, No	Yes	No
Key and Certificate List			
Key and Certificate List for Users[*1]			
Certificate Details	Version, Serial Number, Signature Algorithm, Issue Destination, Validity Start Date, Validity End Date, Issuer, Public Key, Certificate Thumbprint, Verify Cert.	Yes	No
Delete	-	Yes	No
Key and Certificate List for This Device[*1]			
Certificate Details	Version, Serial Number, Signature Algorithm, Issue Destination, Validity Start Date, Validity End Date, Issuer, Public Key, Certificate Thumbprint, Verify Cert.	Yes	No
Delete	-	Yes	No
Display Use Location	Key and Certificate	Yes	No
CA Certificate List			
Certificate Details	Version, Serial Number, Signature Algorithm, Issue Destination, Validity Start Date, Validity End Date, Issuer, Public Key, Certificate Thumbprint, Verify Cert.	Yes	No
Delete	-	Yes	No

Item	Setting Description	Can be set in Remote UI	Device Information Delivery Available
Cert. Revocation List (CRL)			
CRL Details	Serial Number, Expires, Verify CRL	Yes	No
Delete	-	Yes	No
Register Key and Certificate			
Register	-	Yes	No
Delete	-	Yes	No
Register CA Certificate			
Register	-	Yes	No
Delete	-	Yes	No
Display Job Status Before Authentication	On*, Off	Yes	No
Display Log	Off Obtain Job Log with Management Software: Allow, Do Not Allow*	Yes	No
Save Audit Log	On, Off*	Yes	No
Format Encryption Method to FIPS 140-2	On, Off*	Yes	No

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License/Other

* Default Settings

*1 Indicates items that appear only when the appropriate optional product is available for use.

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
Register License		(NULL*)	No	No
MEAP Settings				
	Print System Information	Yes, No	No	No
	Use SSL	On, Off*	Yes	No
Remote UI		On*, Off	No	Yes
	Use SSL	On, Off*	Yes	No
	Use Reference Print*1	On, Off*	Yes	Yes
Delete Message Board Contents		Yes, No	No	No
Register/Update Software		Install Applications/Options, Software Management Settings	Yes	No

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Data Management

* Default Settings

Item		Setting Description	Can be set in Remote UI	Device Information Delivery Available
HDD Data Complete Deletion				
	Hard Disk Data Complete Deletion	On, Off*	Yes	No
	Timing of Deletion	During Job*, After Job	Yes	No
	Overwrite Method for Deletion Mode	Once with 0 (Null) Data*, Once with Random Data, 3 Times with Random Data, DoD Standard	Yes	No
Initialize All Data/Settings		Once with 0 (Null) Data*, Once with Random Data, 3 Times with Random Data, 9 Times with Random Data, DoD Standard	No	No
TPM Settings		Use TPM: On, Off* Back Up TPM Key (12 characters maximum for password), Restore TPM Key	No	No

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Backup Data

Data	Location	Replace						Delete												Backup by User			Backup by Service			
								User function						Service function												
		Replace the HDD / All format	Replace the Main PCB 1	Replace the Main PCB 2	DC Cont-roller PCB	Reader Cont-roller PCB	Replace the TPM PCB	Initialize All Data/ Settings	Settings/Registration : Function Settings				Advanced Box Settings > Delete Personal/ Shared Space > Delete All	Function > CLEAR > MN-CONT	Function > CLEAR > MMI	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE	Yes/ No	Method	Location to be stored	Yes/No		Method	Location to be stored
									Copy > Change Default Settings > Initialize	Send > Common Settings > Change Default Settings > Initialize	Send > Fax Settings > Change Default Settings > Initialize	Printer Settings > Custom Settings > Initialize											Back-up	Re-store		
Address List	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	Yes	Remote UI (block of Export/Import)	PC	No	Yes *1	USB memory	-
Forwarding Settings	HDD/ SRAM (MCON2)	Clear	-	Clear	-	-	-	Clear	-	-	-	-	-	Clear	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import)	PC	No	Yes *1	USB memory	-
Settings / Registration																										
Preferences	SRAM (MCON2)	-	-	Clear	-	-	-	Clear	-	-	-	-	-	Clear	Clear	Clear *2	-	-	-	Yes *3	Remote UI (block of Export/Import)	PC	Yes	Yes *1	SST, Download Menu (HDD/USB)	PC
Adjustment/ Maintenance	SRAM (MCON2)	-	-	Clear	-	-	-	Clear	-	-	-	-	-	Clear	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import)	PC	Yes	Yes *1		PC
Function Settings	SRAM (MCON2/ DCON)	-	-	Clear	Clear	-	-	Clear	Clear	Clear	Clear	-	-	Clear	Clear	Clear *4	Clear *5	-	-	Yes *6	Remote UI (block of Export/Import)	PC	Yes	Yes *1		PC
Set Destination	SRAM (MCON2)	-	-	Clear	-	-	-	Clear	-	-	-	-	-	Clear	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import)	PC	Yes	Yes *1		PC
Management Settings	SRAM (MCON2)	-	-	Clear	-	-	-	Clear	-	-	-	-	-	Clear	Clear	-	-	-	-	Yes *7	Remote UI (block of Export/Import)	PC	Yes	Yes *1		PC
Printer Settings	SRAM (MCON2)	-	-	Clear	-	-	-	Clear	-	-	-	Clear	-	Clear	Clear	-	-	-	-	Yes	Remote UI (Export/Import)	PC	Yes	Yes *1		PC
Set Paper Information	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Yes	Remote UI (block of Export/Import)	PC	No	No	-	-
Setting items for each menu in Main Menu (Copy, Scan and Send, Fax, Scan and Store, Access Stored Files, Fax/I-Fax Inbox)																										
Favorite Settings	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes *8	Remote UI (block of Export/Import)	PC	Yes	Yes *9	SST (Meapback)	PC
Default Settings	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	No	-	-	Yes	Yes *10 *11	SST (Meapback)	PC
Shortcut settings for “Options”	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	No	-	-	Yes	Yes *10	SST (Meapback)	PC
Previous Settings	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	No	-	-	Yes	Yes *10	SST (Meapback)	PC
Setting items for Quick Menu																										
Button Size information	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes	Remote UI (block of Export/Import)	PC	Yes	Yes *1 *12	SST (Meapback)	PC
Wallpaper Setting	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes	Remote UI (block of Export/Import)	PC	Yes	Yes *1 *12	SST (Meapback)	PC
Button information in Quick Menu	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes	Remote UI (block of Export/Import)	PC	Yes	Yes *1 *12	SST (Meapback)	PC
Restrict Quick Menu	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes	Remote UI (block of Export/Import)	PC	Yes	Yes *1 *12	SST (Meapback)	PC
Setting items for Main Menu																										

Data	Location	Replace						Delete												Backup by User			Backup by Service			
								User function						Service function												
		Replace the HDD / All format	Replace the Main PCB 1	Replace the Main PCB 2	DC Cont-roller PCB	Reader Cont-roller PCB	Replace the TPM PCB	Initialize All Data/ Settings	Settings/Registration : Function Settings				Advanced Box Settings > Delete Personal/ Shared Space > Delete All	Function > CLEAR > MN-CONT	Function > CLEAR > MMI	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE	Yes/ No	Method	Location to be stored	Yes/No		Method	Location to be stored
									Copy > Change Default Settings > Initialize	Send > Common Settings > Change Default Settings > Initialize	Send > Fax Settings > Change Default Settings > Initialize	Printer Settings > Custom Settings > Initialize											Back-up	Re-store		
Button settings in Main Menu	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import)	-	Yes	Yes *1	USB memory	-
Button settings on the top of the screen	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import)	-	Yes	Yes *1	USB memory	-
Wallpaper Setting for Main Menu	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import)	-	Yes	Yes *1	USB memory	-
Other settings for Main Menu	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import)	-	Yes	Yes *1	USB memory	-
Box settings																										
User Box specification settings (Register Box Name, Password, Time until Document Auto Erase, Print uponstoring from the printer driver)	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Yes *13	Remote UI (Bacup /Restore)	PC/USB-HDD	No	Yes *1	USB memory	-
Image data of User Box, Confidential Fax Box, and System Box Image Data	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	- *29	-	-	-	-	-	Yes *13	Remote UI (Bacup /Restore)	PC/USB-HDD	No	Yes *1	USB memory	-
Data File of Advanced Box	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	Clear	-	-	-	-	-	-	Yes *14	Remote UI (Bacup /Restore)	PC/USB-HDD *15	No	Yes	USB memory	-
Advanced box settings																										
Advanced box account	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes *16	Remote UI (block of Export/Import)	PC	Yes	Yes *1 *17	SST (Meapback), USB memory	PC
Network place setting information	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Yes	Remote UI (block of Export/Import)	PC	No	Yes *1	USB memory	-
Box settings																										
Image forms stored in the Form Composition mode	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Yes *13	Remote UI (Bacup /Restore)	PC	No	No	-	-
Web browser settings																										
Web Access setting information	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Yes *18	Remote UI (block of Export/Import)	PC	Yes	Yes *1	SST, Download Menu (HDD/USB)	PC
MEAP settings																										
MEAP application	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	No	-	-	Yes	Yes	SST (Meapback)	PC
License files for MEAP applications	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes	SMS	PC	Yes	Yes	SST (Meapback)	PC

Data	Location	Replace						Delete												Backup by User			Backup by Service			
								User function						Service function												
		Replace the HDD / All format	Replace the Main PCB 1	Replace the Main PCB 2	DC Cont-roller PCB	Reader Cont-roller PCB	Replace the TPM PCB	Initialize All Data/ Settings	Settings/Registration : Function Settings				Advanced Box Settings > Delete Personal/ Shared Space > Delete All	Function > CLEAR > MN-CONT	Function > CLEAR > MMI	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE	Yes/ No	Method	Location to be stored	Yes/No		Method	Location to be stored
									Copy > Change Default Settings > Initialize	Send > Common Settings > Change Default Settings > Initialize	Send > Fax Settings > Change Default Settings > Initialize	Printer Settings > Custom Settings > Initialize											Back-up	Re-store		
User authentication information registered in the Local Device Authentication user authentication system of SSO-H (Single Sign-On H)	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes	SSO-H	PC	Yes	Yes	SST (Meapback)	PC
Data saved using MEAP applications	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	Yes *19	-	-	Yes	Yes	SST (Meapback)	PC
SMS (Service Management Service) password of MEAP	HDD	Clear	-	-	-	-	-	Clear *20	-	-	-	-	-	-	-	-	-	-	Clear	No	-	-	Yes	Yes	SST (Meapback)	PC
Universal data settings																										
Unsent documents (documents waiting to be sent with the Delayed Send mode)	SRAM (MCON2) HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	Clear	Clear	-	-	-	-	No	-	-	No	No	-	-
Job logs	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	No	-	-	No	No	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen)	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	No	-	-	No	No	-	-
Auto Adjust Gradation setting values	HDD (SRAM (MCON2))	-	-	Clear	-	-	-	Clear	-	-	-	-	-	Clear	-	-	-	-	-	No	-	-	Yes	Yes	SST, Download Menu (HDD/USB)	PC
PS font	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	No	-	-	No	No	-	-
Key information to be used for encryption when TPM is OFF	SRAM (MCON2)	Clear *21	-	Clear *22	-	-	-	Clear	-	-	-	-	-	Clear *22	-	-	Clear *22	-	-	No *23	-	-	No	No	-	-
Key and settings information to be used for encryption when TPM is ON	SRAM (MCON2) HDD TPM Board	Clear *24	-	Clear *25	-	-	Clear	Clear *26	-	-	-	-	-	Clear *25	-	-	Clear *25	-	-	Yes *27	Settings/ Registration Management Settings > Data Managemnet > TPM Settings	USB memory	No	No	-	-
Service Mode																										
Service mode setting values (MN-CON)	SRAM (MCON2)	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	Clear	-	-	-	-	Yes	Remote UI (block of Export/Import) COPIER> OPTION> USER> SMD-EXPT > ON Only *28	PC	Yes	Yes	SST, Download Menu (HDD/USB) *29	HDD/ USB
Service mode setting values (DC-CON)	SRAM (DC-CON)	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	-	-	-	Yes	-	PC	Yes	Yes	COPIER> FUNCTION> SYSTEM> DSRAMBUP	HDD

Data	Location	Replace						Delete												Backup by User			Backup by Service			
								User function						Service function												
		Replace the HDD / All format	Replace the Main PCB 1	Replace the Main PCB 2	DC Cont-roller PCB	Reader Cont-roller PCB	Replace the TPM PCB	Initialize All Data/ Settings	Settings/Registration : Function Settings				Advanced Box Settings > Delete Personal/ Shared Space > Delete All	Function > CLEAR > MN-CONT	Function > CLEAR > MMI	Function > CLEAR > DC-CON	Function > CLEAR > R-CON	Function > CLEAR > ADRS-BK	Function > CLEAR > JV-CASHE	Yes/ No	Method	Location to be stored	Yes/No		Method	Location to be stored
									Copy > Change Default Settings > Initialize	Send > Common Settings > Change Default Settings > Initialize	Send > Fax Settings > Change Default Settings > Initialize	Printer Settings > Custom Settings > Initialize											Back-up	Re-store		
Service mode setting values (R-CON)	EEPROM (R-CON)	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	-	-	Yes	-	PC	Yes	Yes	COPIER> FUNCTION> SYSTEM> RSRAMBUP	HDD
Audit Log	HDD	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	Clear	No	-	-	Yes	Yes	SST (Meapback)	PC

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*1	If there are the backup data which exported in USB memory, Restore is possible in Download Menu (USB).
*2	The following items are Deleted. Preferences > Paper Settings > Register Envelope Drawer Preferences > Paper Settings > B5/EXEC Paper Selection Preferences > Paper Settings > A5R/STMTR Paper Selection
*3	An exclusion item: Preferences > Timer/Energy Settings > [Adjust Time]/[Date/Time Settings]
*4	The following items are Deleted. Function Settings > Common > Paper Feed Settings > Paper Drawer Auto Selection On/Off Function Settings > Common > Paper Feed Settings > Feed Method Switch
*5	The following items are Deleted. Function Settings > Common > Scan Settings > Scanner Noise Settings Function Settings > Common > Scan Settings > Timing to Raise Feeder Tray Function Settings > Common > Scan Settings > Streak Prevention
*6	The following data are impossible of backup Function Settings > Common > Print Settings > Register Form Function Settings > Receive/Forward > Common Settings > Set Fax/I-Fax Inbox
*7	The following data are impossible of backup Management Settings > User Management > Department ID Management > Page Totals
*8	Backup is available only "Favorite Settings" in "Scan to Send"
*9	:If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data.
*10	:If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data.
*11	If there are the backup data which exported in USB memory except a history, Restore is possible in Download Menu (USB).
*12	:If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data.
*13	Login System Administrator and do backup.
*14	IIt is possible only when logging in as an administrator user. When ON is selected for the authentication management of Advanced Box, Advanced Box account needs to be exported in advance and imported at restoration.
*15	When the optional high-capacity HDD is installed, backup can be done only to USB-HDD.
*16	When ON is selected for the authentication management of Advanced Box, Advanced Box account needs to be exported in advance and imported at restoration.
*17	:If start-up in download mode in safe mode is available in the event of an HDD failure, it is assumed that MEAP applications can be backed up using SST in some cases. In that case, the data can be recovered with the information of the MEAP applications maintained by checking that the machine starts normally after installation of the system after replacement of the HDD, starting the machine in download mode in safe mode, and restoring the backup data.
*18	Only "favorites of web browser" can be backed improves when You perform individual export of RUI.
*19	Only when MEAP applications have a backup function

*20	Since the password is TPM-encrypted and saved, password backed up after all data/settings have been initialized cannot be restored. When all data/settings have been initialized, initialize the password using a switch license for password initialization. [Reference] Since TPM encryption key is updated when all data/settings are initialized, the password which was backed up cannot be read.
*21	If the backup key information in the HDD is missing, it is automatically recovered from the key in the SRAM (MCON2).
*22	If the key information in the SRAM (MCON2) is missing, it is automatically recovered from the backup key in the HDD.
*21,22	When You change Main PCB 2 and HDD at the same time, the automatic restoration of the key information is not performed.
*23	No means is available to back up externally.
*24	An error code is displayed when the TPM setting is “ON”. After all data/settings are initialized after restart, select "ON" for the TPM setting to enable the TPM setting.
*25	If the TPM key information in the SRAM of the HDD or the Main Controller PCB 2 becomes missing, the key information in the SRAM is automatically recovered from the backup of the common key in the HDD. Then the internal state of TPM setting changes to "ON". Note that the TPM setting needs to be manually changed to "ON" since "OFF" is displayed for UI.
*26	TPM settings becomes "OFF" when all data/settings are initialized.
*27	Backup only against TPM PCB failure is possible. In addition, restoration cannot be done to other machines whose TPM setting is set to "ON".
*28	Backup is possible in SramImg, DSRAMBUP, RSRAMBUP. When You set it in COPIER>OPTION>USER>SMD-EXPT>ON, a backup/restore is possible in Service Mode Settings from the Remote UI. There is a backup button on the TOP page of the service mode. HDD and USB memory can back up Service Mode Settings by backup button. The contents of Settings/Registration become the object of the collective backup. The exclusion item refers to "a list of DCM backup exclusion items".
*29	Because clearing MN-CONT changes the memory reception setting to "OFF", the image data saved in the Memory RX Inbox is automatically printed after restart. After a print, it is deleted from a system box.

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DCM backup exclusion items			
Preferences	Paper Settings	Paper Type Management Settings	Custom Type > Details/Edit > Change
		Register Envelope Drawer	
		Register Multi-Purpose Tray Defaults	
	Display Settings	Erasing the Remaining Toner Error Message	
	Timer/Energy Settings	Current Time Adjustment	
	Network	Output Report	
		TCP/IP Settings	IP Address Settings (IPv4) > PING Command
			IP Address Settings (IPv6) > PING Command
			IPP Print Settings
			SSL Settings
			Confirm Dept. ID PIN
		IPSec settings	
		IEEE802.1X Settings	
		Firewall Settings	IP Address Block Log
	Accessibility	Voice Navigation Settings	Tune Microphone
Adjustment/ Maintenance	Adjust Image Quality	Auto Adjust Gradation	
		Conect Shading	
		Auto Correct Color Mismatch	
	Adjust Action	Saddle Stitcher Staple Repositioning	
		Change Fold/Stitch Position	
	Maintenance		
Function Settings	Common	Paper Feed Settings	Paper Drawer Auto Selection On/Off
		Print Settings	Local Print Default Settings
			Form for Superimpose Image
			Secure Watermark Settings > Adust Background/Character Contrast
	Printer		
	Send	Output Report	TX/RX User Data List
			Fax User Data List
		E-Mail/I-Fax Settings	Communication Settings
	Receive/Forward	Output Report	
		Common Settings	Forwarding Settings
	Store/Access Files	Mail Box Settings	Settings for All Mail Boxes
		Advanced Box Settings	Delete All Personal Spaces
		Network Settings	
Set Destination	Address Lists		
	Register Destinations		
	Register LDAP Server		
	Auto Serarch when using LDAP Server		

DCM backup exclusion items			
Management Settings	User Management	Department ID Management	Page Totals
			Print List
	Device Management	Device Information Delivery Settings	Manual Delivery
			Resor Data
			Communication Log
			Register Destination > Auto Serch/Registor
		Restrict Receiving Device Information	
		Limit Function when Security key is off	
		Certificate Settings	
	License/Other	Register License	
		MEAP Settings	Print System Information
			Remote UI On/Off
			Delete Massage Board Contents
	Data Management	Back Up	
		Restore	
		Back Up/Restore Log	
		Initialize All Data/Settings	
		TPM Settings	

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Appendix > Backup Data

Detail of HDD partition

CHK-TYPE	CHK-TYPE Group	Partition name	Description	HDD Format	
				HD-CLEAR	Using SST or USB memory
1	Four same time	FSTDEV	Image data storage area (Box etc)	enable	Entering SST menu or USB menu • Select "ALL" All partition format same time. • Select "BOOTDEV" Only BOOTDEV is erased.
2		IMG-MNG	Management data of image		
3		FSTCDEV	Image data storage area (for Job archive system)		
4		THUMDEV	Thumbnail		
5	One	APL_GEN	Storage area of universal data (Note: For details, see the following list.)	enable	
6	Three same time	TMP_GEN	Storage area of universal data (temporary file)	enable	
7		TMP_FAX	FAX (temporary file)		
8		TMP_PSS	PSS (temporary file)		
9	One	PDLDEV	PDL-related file storage area (font, registration form, color correction information file for ICCProfile-PDL function)	Enabled	
10	One	BOOTDEV	Firmware storage area (Bootable/MEAP/key/certificate/PDF dictionary/RUI contents/voice dictionary (ICC profile. PS test data.))	Disabled	
11	One	APL_MEAP	MEAP	Enabled	
12	One	APL_SEND	Address book, Setting for Forwarding	Disabled	
13	One	APL_KEEP	MEAP stored data	Disabled	
14	One	APL_LOG	System log storage area	Enabled	
15	One	CRBDEV	Advanced Box area	Enabled	
16	One	APL_CDS	Area for distribution server	Enabled	

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Selecting "CHK-TYPE1" means selecting four partitions.

APL_GEN Details of universal data

Category	Data
Settings / Registration	Preferences
	Adjustment/Maintenance
	Function Settings
	Set Destination
	Management Settings
	Printer Settings
	Paper Information Settings
Setting items for each menu in Main Menu	Favorite Settings
	Default Settings
	Shortcut settings for “Options”
	Previous Settings

Category	Data
Setting for Advance Box	User information of Advanced Box
	Registration information of Network Place
Setting for Web Access	Web Access Setting information
Setting for Universal Data	Unsent document (which is set timer transmission or reservation transmission)
	Job log information
	Key and server certificate which are registered in Management Settings>Device Settings>Certificate Setting
	Auto Adjust Gradation setting values
	PS font

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Soft Counter List

Soft counter specifications

The numbers entered for software counters are classified as follows:

No.	Counter Details
000 to 099	Remote copy
100 to 199	Total
200 to 299	Copy
300 to 399	Print
400 to 499	Copy and print
500 to 599	Scan
600 to 699	Box
700 to 799	Reception print
800 to 899	Report print
900 to 999	Transmission

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Meanings of symbols in tables

- L: Large size (larger than B4 size)
- S: Small size (smaller than B4 size)
- S: Small size (smaller than B4 size)
  It can be changed by the service mode (COPIER > OPTION > USER > B4_L_CNT) so that the paper larger than B4 size can be counted as large size paper.
- Copy: Local copy + remote copy
- Copy A: Local copy + remote copy + box print
- Print: PDL print + report print + box print
- Print A: PDL print + report print
- Scan: Black and white scan + color scan

No.	Counter Details
002	Remote copy (full color 1)
003	Remote copy (full color 2)
004	Remote copy (mono color 1)
005	Remote copy (mono color 2)
006	Remote copy (black and white 1)
007	Remote copy (black and white 2)
008	Remote copy (full color / large)
009	Remote copy (full color / small)
010	Remote copy (mono color / large)
011	Remote copy (mono color / small)
012	Remote copy (black and white / large)
013	Remote copy(black and white / small)
014	Remote copy (full color + mono color / large)
015	Remote copy(full color + mono color / small)
016	Remote copy (full color + mono color 2)
017	Remote copy(full color + mono color 1)
018	Remote copy (full color / large / double sided)
019	Remote copy (full color / small / double sided)
020	Remote copy (mono color / large / double sided)
021	Remote copy (mono color / small / double sided)
022	Remote copy (black and white / large / double sided)
023	Remote copy (black and white / small / double sided)
071	Toner bottle black
072	Toner bottle yellow
073	Toner bottle magenta
074	Toner bottle cyan
081	Toner bottle black + Remove the toner bottle black
082	Toner bottle yellow + Remove the toner bottle yellow
083	Toner bottle magenta + Remove the toner bottle magenta
084	Toner bottle cyan + Remove the toner bottle cyan
101	Total 1
102	Total 2
103	Total(large)
104	Total (small)
105	Total (full color2)
106	Total (full color2)
108	Total (black and white 1)
109	Total (black and white 2)
110	Total (mono color /large)
111	Total (mono color /small)
112	Total (black and white /large)
113	Total (black and white /small)
114	Total 1(double sided)
115	Total 2(double sided)
116	large (double sided)

No.	Counter Details
117	small (double sided)
118	Total (mono color 1)
119	Total (mono color 2)
120	Total (full color /large)
121	Total (full color /small)
122	Total (full color +mono color /large)
123	Total (full color +mono color /small)
124	Total (full color +mono color 2)
125	Total (full color +mono color 1)
126	Total A1
127	Total A2
128	Total A (large)
129	Total A (small)
130	Total A (full color 1)
131	Total A (full color 2)
132	Total A (black and white 1)
133	Total A (black and white 2)
134	Total A (mono color /large)
135	Total A (mono color /small)
136	Total A (black and white /large)
137	Total A (black and white /small)
138	Total A 1(double sided)
139	Total A 2(double sided)
140	large A (double sided)
141	small A (double sided)
142	Total A (mono color 1)
143	Total A (mono color 2)
144	Total A (full color /large)
145	Total A (full color /small)
146	Total A (full color +mono color /large)
147	Total A (full color +mono color /small)
148	Total A (full color +mono color 2)
149	Total A (full color +mono color 1)
150	Total B1
151	Total B2
152	Total B (large)
153	Total B (small)
154	Total B (full color 1)
155	Total B (full color 2)
156	Total B (black and white 1)
157	Total B (black and white 2)
158	Total B (mono color /large)
159	Total B (mono color /small)
160	Total B (black and white /large)
161	Total B (black and white /small)

No.	Counter Details
162	Total B1 (double sided)
163	Total B2 (double sided)
164	largeB (double sided)
165	smallB (double sided)
166	Total B (mono color 1)
167	Total B (mono color 2)
168	Total B (full color /large)
169	Total B (full color /small)
170	Total B (full color +mono color /large)
171	Total B (full color +mono color /small)
172	Total B (full color +mono color 2)
173	Total B (full color +mono color 1)
201	Copy (Total 1)
202	Copy (Total 2)
203	Copy (large)
204	Copy (small)
205	Copy A (Total 1)
206	Copy A (Total 2)
207	Copy A (large)
208	Copy A (small)
209	Local copy (Total 1)
210	Local copy (Total 2)
211	Local copy (large)
212	Local copy (small)
217	Copy (full color 1)
218	Copy (full color 2)
219	Copy (mono color 1)
220	Copy (mono color 2)
221	Copy (black and white 1)
222	Copy (black and white 2)
223	Copy (full color /large)
224	Copy (full color /small)
225	Copy (mono color /large)
226	Copy (mono color /small)
227	Copy (black and white /large)
228	Copy (black and white /small)
229	Copy (full color +mono color /large)
230	Copy (full color +mono color /small)
231	Copy (full color +mono color /2)
232	Copy (full color +mono color /1)
233	Copy (full color /large/double sided)
234	Copy (full color /small/double sided)
235	Copy (mono color /large/double sided)
236	Copy (mono color /small/double sided)
237	Copy (black and white /large/double sided)

No.	Counter Details
238	Copy (black and white /small/double sided)
245	Copy A (full color 1)
246	Copy A (full color 2)
247	Copy A (mono color 1)
248	Copy A (mono color 2)
249	Copy A (black and white 1)
250	Copy A (black and white 2)
251	Copy A (full color /large)
252	Copy A (full color /small)
253	Copy A (mono color /large)
254	Copy A (mono color /small)
255	Copy A (black and white /large)
256	Copy A (black and white /small)
257	Copy A (full color +mono color /large)
258	Copy A (full color +mono color /small)
259	Copy A (full color +mono color 2)
260	Copy A (full color +mono color 1)
261	Copy A (full color /large/double sided)
262	Copy A (full color /small/double sided)
263	Copy A (mono color /large/double sided)
264	Copy A (mono color /small/double sided)
265	Copy A (black and white /large/double sided)
266	Copy A (black and white /small/double sided)
273	Local copy (full color 1)
274	Local copy (full color 2)
275	Local copy (mono color 1)
276	Local copy (mono color 2)
277	Local copy (black and white 1)
278	Local copy (black and white 2)
279	Local copy (full color /large)
280	Local copy (full color /small)
281	Local copy (mono color /large)
282	Local copy (mono color /small)
283	Local copy (black and white /large)
284	Local copy (black and white /small)
285	Local copy (full color +mono color /large)
286	Local copy (full color +mono color /small)
287	Local copy (full color +mono color 2)
288	Local copy (full color +mono color 1)
289	Local copy (full color /large/double sided)
290	Local copy (full color /small/double sided)
291	Local copy (mono color /large/double sided)
292	Local copy (mono color /small/double sided)
293	Local copy (black and white /large/double sided)
294	Local copy (black and white /small/double sided)

No.	Counter Details
301	Print (Total 1)
302	Print (Total 2)
303	Print (large)
304	Print (small)
305	Print A(Total 1)
306	Print A(Total 2)
307	Print A(large)
308	Print A(small)
309	Print (full color 1)
310	Print (full color 2)
311	Print (mono color 1)
312	Print (mono color 2)
313	Print (black and white 1)
314	Print (black and white 2)
315	Print (full color /large)
316	Print (full color /small)
317	Print (mono color /large)
318	Print (mono color /small)
319	Print (black and white /large)
320	Print (black and white /small)
321	Print (full color +mono color /large)
322	Print (full color +mono color /small)
323	Print (full color +mono color /2)
324	Print (full color +mono color /1)
325	Print (full color /large /double sided)
326	Print (full color /small/double sided)
327	Print (mono color /large /double sided)
328	Print (mono color /small/double sided)
329	Print (black and white /large /double sided)
330	Print (black and white /small/double sided)
331	PDLPrint (Total 1)
332	PDLPrint (Total 2)
333	PDLPrint (large)
334	PDLPrint (small)
335	PDLPrint (full color 1)
336	PDLPrint (full color 2)
337	PDLPrint (mono color 1)
338	PDLPrint (mono color 2)
339	PDLPrint (black and white 1)
340	PDLPrint (black and white 2)
341	PDLPrint (full color /large)
342	PDLPrint (full color /small)
343	PDLPrint (mono color /large)
344	PDLPrint (mono color /small)
345	PDLPrint (black and white /large)

No.	Counter Details
346	PDLPrint (black and white /small)
351	PDLPrint (full color /large /double sided)
352	PDLPrint (full color /small/double sided)
353	PDLPrint (mono color /large /double sided)
354	PDLPrint (mono color /small/double sided)
355	PDLPrint (black and white /large /double sided)
356	PDLPrint (black and white /small/double sided)
401	Copy + print (full color /large)
402	Copy + print (full color /small)
403	Copy + print (black and white/large)
404	Copy + print (black and white/small)
405	Copy + print (black and white2)
406	Copy + print (black and white1)
407	Copy + print (full color +mono color /large)
408	Copy + print (full color +mono color /small)
409	Copy + print (full color +mono color /2)
410	Copy + print (full color +mono color /1)
411	Copy + print (large)
412	Copy + print (small)
413	Copy + print (2)
414	Copy + print (1)
415	Copy + print (mono color /large)
416	Copy + print (mono color /small)
417	Copy + print (full color /large/double sided)
418	Copy + print (full color /small/double sided)
419	Copy + print (mono color /large/double sided)
420	Copy + print (mono color /small/double sided)
421	Copy + print (black and white/large/double sided)
422	Copy + print (black and white/small/double sided
501	Scan (Total 1)
502	Scan (Total 2)
503	Scan (large)
504	Scan (small)
505	Black and white Scan (Total 1)
506	Black and white Scan (Total 2)
507	Black and white Scan (large)
508	Black and white Scan (small)
509	Color scan (Total 1)
510	Color scan (Total 2)
511	Color scan (large)
512	Color scan (small)
601	Box print (Total 1)
602	Box print (Total 2)
603	Box print (large)
604	Box print (small)

No.	Counter Details
605	Box print (full color 1)
606	Box print (full color 2)
607	Box print (mono color 1)
608	Box print (mono color 2)
609	Box print (black and white 1)
610	Box print (black and white 2)
611	Box print (full color /large)
612	Box print (full color /small)
613	Box print (mono color /large)
614	Box print (mono color /small)
615	Box print (black and white /large)
616	Box print (black and white /small)
617	Box print (full color +mono color /large)
618	Box print (full color +mono color /small)
619	Box print (full color +mono color 2)
620	Box print (full color +mono color 1)
621	Box print (full color /large/double sided)
622	Box print (full color /small/double sided)
623	Box print (mono color /large/double sided)
624	Box print (mono color /small/double sided)
625	Box print (black and white /large/double sided)
626	Box print (black and white /small/double sided)
631	memory media print (Total 1)
632	memory media print (Total 2)
633	memory media print(large)
634	memory media print(small)
635	memory media print (full color 1)
636	memory media print (full color 2)
639	memory media print(black and white 1)
640	memory media print(black and white 2)
641	memory media print(full color/large)
642	memory media print(full color/small)
645	memory media print(mono color /large)
646	memory media print(mono color /small)
651	memory media print(full color /large/double sided)
652	memory media print(full color /small/double sided)
655	memory media print(black and white /large/double sided)
656	memory media print(black and white /small/double sided)
701	Reception print (Total 1)
702	Reception print (Total 2)
703	Reception print(large)
704	Reception print(small)
705	Reception print (full color 1)
706	Reception print (full color 2)
709	Reception print(black and white 1)

No.	Counter Details
710	Reception print(black and white 2)
711	Reception print(full color/large)
712	Reception print(full color/small)
715	Reception print(mono color /large)
716	Reception print(mono color /small)
721	Reception print(full color /large/double sided)
722	Reception print(full color /small/double sided)
725	Reception print(black and white /large/double sided)
726	Reception print(black and white /small/double sided)
727	Advanced Box Print (Total 1)
728	Advanced Box Print (Total 2)
729	Advanced Box Print(large)
730	Advanced Box Print(small)
731	Advanced Box Print (full color 1)
732	Advanced Box Print (full color 2)
733	Advanced Box Print(black and white 1)
734	Advanced Box Print(black and white 2)
735	Advanced Box Print(full color/large)
736	Advanced Box Print(full color/small)
737	Advanced Box Print(mono color /large)
738	Advanced Box Print(mono color /small)
739	Advanced Box Print(full color /large/double sided)
740	Advanced Box Print(full color /small/double sided)
741	Advanced Box Print(black and white /large/double sided)
742	Advanced Box Print(black and white /small/double sided)
743	Network Print(Total 1)
744	Network Print(Total 2)
745	Network Print(large)
746	Network Print(small)
747	Network Print(full color 1)
748	Network Print(full color 2)
749	Network Print(black and white 1)
750	Network Print(black and white 2)
751	Network Print(full color/large)
752	Network Print(full color/small)
753	Network Print(mono color /large)
754	Network Print(black and white/small)
755	Network Print(full color /large/double sided)
756	Network Print(full color /small/double sided)
757	Network Print(black and white /large/double sided)
758	Network Print(black and white /small/double sided)
759	Mobile Print(Total 1)
760	Mobile Print(Total 2)
761	Mobile Print(large)
762	Mobile Print(small)

No.	Counter Details
763	Mobile Print(full color 1)
764	Mobile Print(full color 2)
765	Mobile Print(black and white 1)
766	Mobile Print(black and white 2)
767	Mobile Print(full color/large)
768	Mobile Print(full color/small)
769	Mobile Print(black and white /large)
770	Mobile Print(black and white/small)
771	Mobile Print(full color /large/double sided)
772	Mobile Print(full color /small/double sided)
773	Mobile Print(black and white /large/double sided)
774	Mobile Print(black and white /small/double sided)
801	Report print (Total 1)
802	Report print (Total 2)
803	Report print (large)
804	Report print (small)
805	Report print (full color 1)
806	Report print (full color 2)
809	Report print (black and white 1)
810	Report print (black and white 2)
811	Report print (full color /large)
812	Report print (full color /small)
815	Report print (black and white /large)
816	Report print (black and white /small)
821	Report print (full color /large /double sided)
822	Report print (full color /small /double sided)
825	Report print (black and white /large /double sided)
826	Report print (black and white /small /double sided)
915	Transmission scan total 2(color)
916	Transmission scan total 2(black and white)
917	Transmission scan total 3(color)
918	Transmission scan total 3(black and white)
921	Transmission scan total 5(color)
922	Transmission scan total 5(black and white)
929	Transmission scan total 6(color)
930	Transmission scan total 6(black and white)
937	Box scan (color)
938	Box scan (black and white)
939	Remote scan (color)
940	Remote scan (black and white)
945	Transmission scan / E-mail (color)
946	Transmission scan / E-mail (black and white)
959	Media Scan (Color)
960	Media Scan (black and white)
961	Application Scan(Total 1)

No.	Counter Details
962	Application Black and white Scan(Total 1)
963	Application Color Scan(Total 1)
964	SuperBoxLocal Scan (Color)
965	SuperBoxLocal Scan(Black and white)

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Removal

Removal

Overview

- User data kept by the machine contains address books and inbox documents that users can recognize.
- By using the copy, print, or send function, there is also information left on the HDD of MFPs that is generally not recognizable but can be recovered as documents. (Refer to the illustration on the next page.)
- For security, the user mode is provided to delete data on SRAM and perform overwrite deletion to render user data on HDD unrecoverable.

User data delete

- To delete user data, execute Settings/Registration > System Management > Initialize All Data/Settings in user mode. Performing Initialize All Data/Settings returns user mode setting values to their factory defaults.
- Usually, one overwrite is enough. Note that increasing the number of overwrite increases the time required for the deletion operation.

Note:
- When you perform Initialize All Data/Settings, license and data of MEAP application are initialized to the state same as when the HDD is replaced. If MEAP application may be used by other users after the machine is removed, disable the MEAP application and uninstall it in advance.
- Performing Initialize All Data/Settings does not delete the license of the system option.

Deletion of Service Mode Settings

The user mode setting values may have been changed at the user's request. In that case, the service mode setting values should be changed back to the default values before removing the machine.

Work Procedure

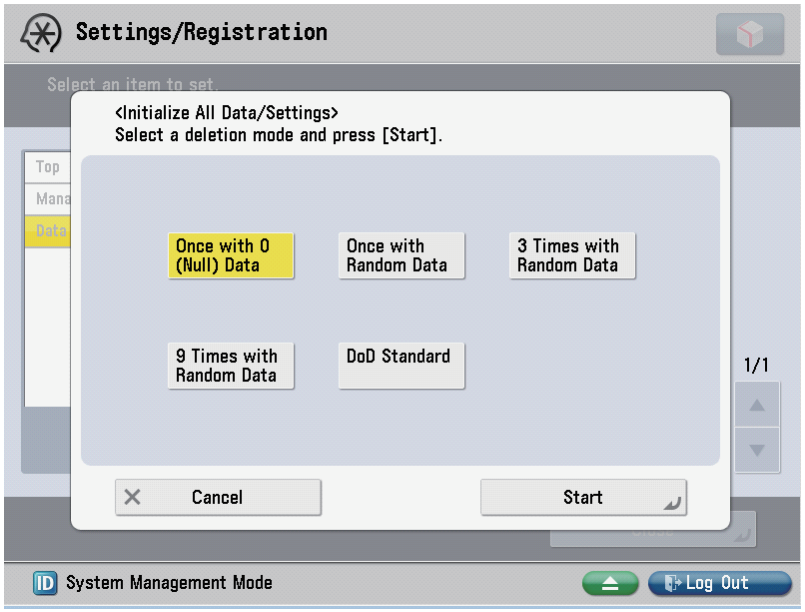
If the user uses MEAP applications, ask the user to uninstall the MEAP applications if necessary.

User data delete procedure

Settings/Registration > System Management > Initialize

Select a deletion mode

If the user has not given any instruction on which item in the deletion mode should be used, select the default "Once with 0 (Null) Data".



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Note:
- When all the data are initialized, the user data on the HDD and the user data on the SRAM of the Main Controller PCB 2 are deleted. For the items to be deleted, refer to the backup list.
- Performing "Initialize All Data" turns auto gradation adjustment values and TPM settings to OFF. Therefore, to enable normal operation the next time, the operation performed at installation is necessary.
- Performing Initialize All Data/Settings does not delete the license of the system option.

Report output upon completion of Initialize All Data/Settings

With MN-CONT Ver. 10.23 and later, a report is output after executing Initialize All Data/Settings. Consider using this report to provide to user as a material to inform of work details when executing Initialize All Data/Settings upon user's request.

Operation after Initialize All Data/Settings

The machine is started normally at restart after Initialize All Data/Settings without displaying the message (Turn OFF the main power supply on the right side of the machine) on the screen to prompt shutdown

The report is output after startup.

```
*******************************
***  System Information  ***
*******************************


<< Initialize All Data/Settings Report >>

 Serial Number                 ZZZ99999
 Device Name                   iR-ADV 8205 (iA8205)

 Overwrite Method for Deletion Mode   Once with Random Data  (*1)


 The following data stored in the device has been completely erased.

  - Data stored in the temporary data area
  - User generated data
  - Settings under Settings/Registration (restored to factory defaults)
```

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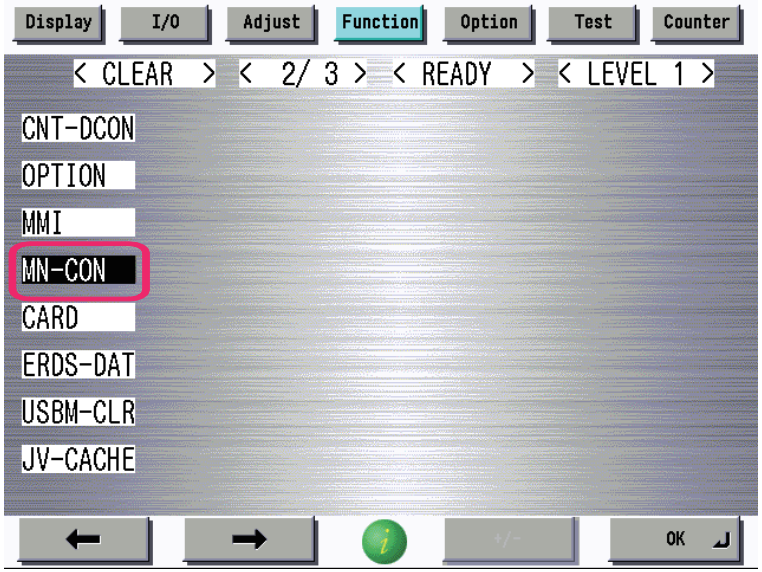
*1 display following one.
"Once with 0 (Null) Data"
"Once with Random Data"
"3 Times with Random Data"
"9 Times with Random Data"
"DoD Standard"

Limitations

The language of the report is only English, and cannot be changed.
The report is output without fail (a function to select ON/OFF of report output is not provided).
There is no second output of report when the machine is turned ON without paper.
Only the output of this report remains in the job log.

● Deletion of Service Mode Setting Values

Service Mode Lev1 > Function> CLEAR > MN-CONT



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Note:
When MN-CON clear is executed, the address book on the HDD is not deleted. As for the user data, initialize all the data.