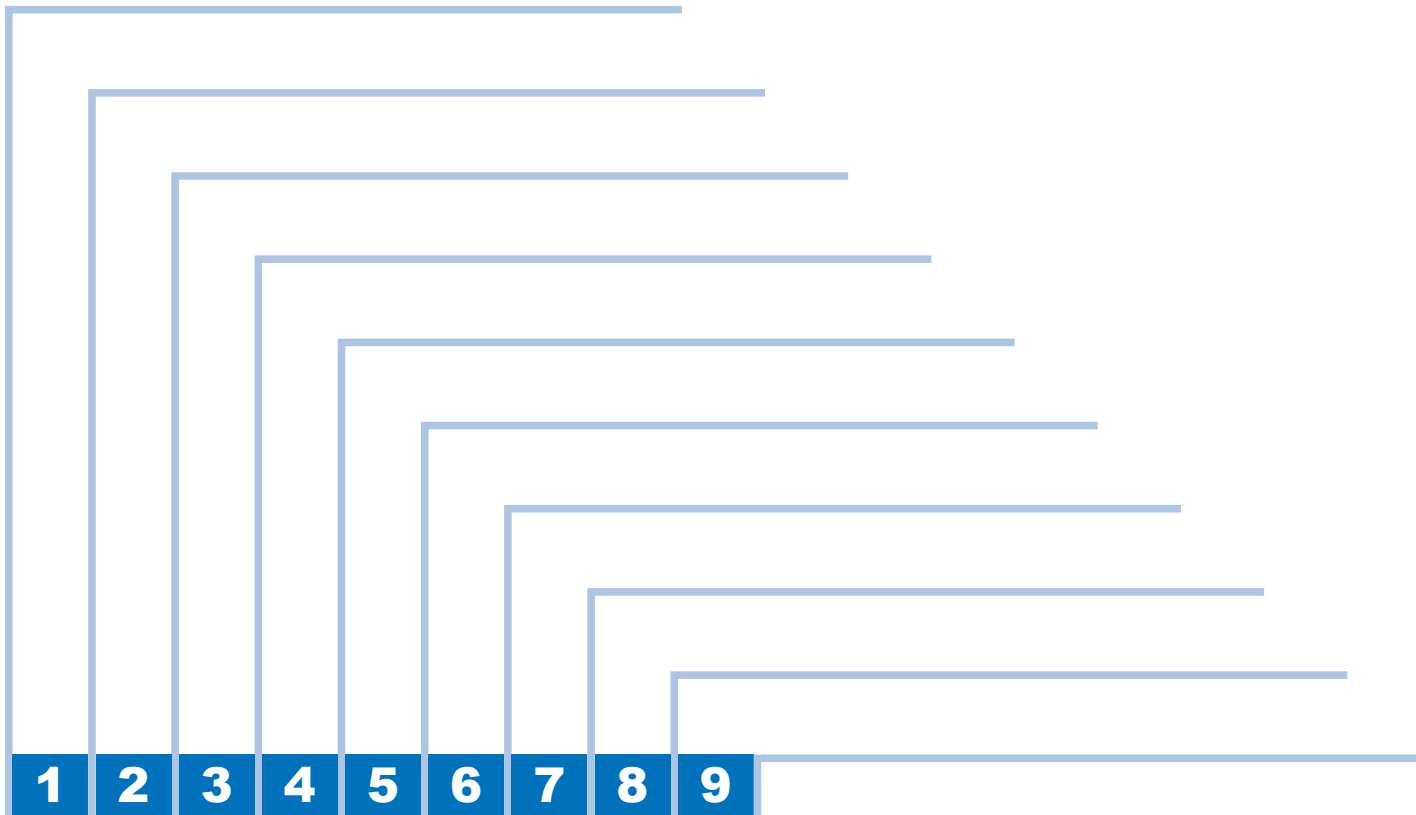




imageRUNNER ADVANCE

C3330/C3325/C3320 Series

Service Manual Rev. 2.0



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.

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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	Symbols	Explanation
	Check.		Remove the claw.
	Check visually.		Insert the claw.
	Check a sound.		Push the part.
	Disconnect the connector.		Connect the power cable.
	Connect the connector.		Disconnect the power cable.
	Remove the cable/wire from the cable guide or wire saddle.		Turn on the power.
	Install the cable/wire to the cable guide or wire saddle.		Turn off the power.
	Remove the screw.		Loosen the screw.
	Install the screw.		Tighten the screw.

Symbols	Explanation	Symbols	Explanation
	Cleaning is needed.		Measurement is needed.

The following rules apply throughout this Service Manual:

- 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.
- 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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Safety Precautions

- Laser Safety
- Handling of Laser System
- Turn Power Switch ON
- Power Supply
- Safety of Toner
- Notes When Handling a Lithium Battery
- Notes Before it Works Serving
- Points to Note at Cleaning
- Notes On Assembly/Disassembly

Laser Safety

Since radiation emitted inside the machine is completely confined within protective housings, external covers and interlock switches, the laser beam cannot escape from the machine during any phase of user operation.

Therefore this machine is classified in Class 1 laser products that are regarded as safe during normal use according to International Standard IEC60825-1.

Handling of Laser System

This machine is classified in Class 1 laser products.

However, inside the machine, Class 3B laser beam is emitted and is hazardous when entered into an eye.

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 an eye.)

The machine's covers that confine laser beam radiation are identified by means of a warning label (Figure). If you must open the cover and defeat interlock switches, be sure not to enter the laser beam into an eye during the work.

The following warnings are given to comply with Safety Principles (EN60950-1).

Diese Maschine ist der Klasse 1 der Laserprodukte zugeordnet.

Innerhalb der Maschine wird jedoch ein Laserstrahl der Klasse 3B ausgestrahlt und es ist gefährlich, wenn dieser Strahl in die Augen gerät.

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. (Reflektierende Laserstrahlen könnten sonst in die Augen geraten.)

Die Geräte-Abdeckungen, die Laserstrahlen reflektieren können, werden durch einen besonderen Warnaufkleber gekennzeichnet (siehe Bild).

Muss die Abdeckung geöffnet und die Sicherheitssperre ausgeschaltet werden, besondere Vorsicht walten lassen, damit der Laserstrahl nicht in die Augen gerät.



F-0-1

Turn Power Switch ON

The machine is equipped with 2 power switches: main power switch and control energy saver key.

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).



F-0-2

Power Supply

⚠ CAUTION:

1. As a general rule, do not use extension cords. Using an extension cord may result in a fire or electrical shock. If an extension cord must be used, however, use one for local rated voltage and over, untie the cord binding, and insert the power plug completely into the extension cord outlet to ensure a firm connection between the power cord and the extension cord.
2. The socket-outlet shall be installed near the equipment and shall be easily accessible.

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.
- Toner 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 (EN60950-1).

⚠ Achtung:

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

警告

如果更換不正確之電池型式會有爆炸的風險
請依製造商說明書處理用過之電池

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.

Notes On Assembly/Disassembly

Follow the items below to assemble/disassemble the device.

1. Disconnect the power plug to avoid any potential dangers during assembling/disassembling works.
2. If not specially instructed, reverse the order of disassembly to reinstall.
3. Ensure to use the right screw type (length, diameter, etc.) at the right position when assembling.
4. To keep electric conduction, binding screws with washers are used to attach the grounding wire and the varistor. Ensure to use the right screw type when assembling.
5. Unless it is specially needed, do not operate the device with some parts removed.
6. Never remove the paint-locked screws when disassembling.

CAUTION

DOUBLE POLE/NEUTRAL FUSING

ACHTUNG

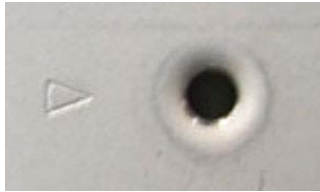
Zweipolige bzw. Neutraleiter-Sicherung

Points to Note when Tightening a Screw

For reduction in weight, thin plates are used in some parts of this machine.

In the case of a screw hole with a triangle mark near it as shown in the figure below, strongly tightening the screw may damage or deform the screw hole.

In the case of a screw hole with a triangle mark, take care not to apply too much force when tightening the screw.



F-0-3

The recommended torque value is shown below as a reference value.

		Type of Screws							
		RS tight		W Sams		Binding		TP	
Fastened member		Metal	Resin	Metal	Resin	Metal	Resin	Metal	Resin
Tightening torque (N*m)	M4	Approx. 1.6	Approx. 1.6	Approx. 1.6	Approx. 0.8	Approx. 1.6	Approx. 0.8	Approx. 1.6	Approx. 0.8
	M3	Approx. 0.8	Approx. 0.8	Approx. 0.6	Approx. 0.6	Approx. 0.6	Approx. 0.6	Approx. 0.6	Approx. 0.6

* For PCB, refer to the tightening torque value of resin (fastened member).

T-0-1

Type of Screws			
RS tight	W Sams	Binding	TP

F-0-4

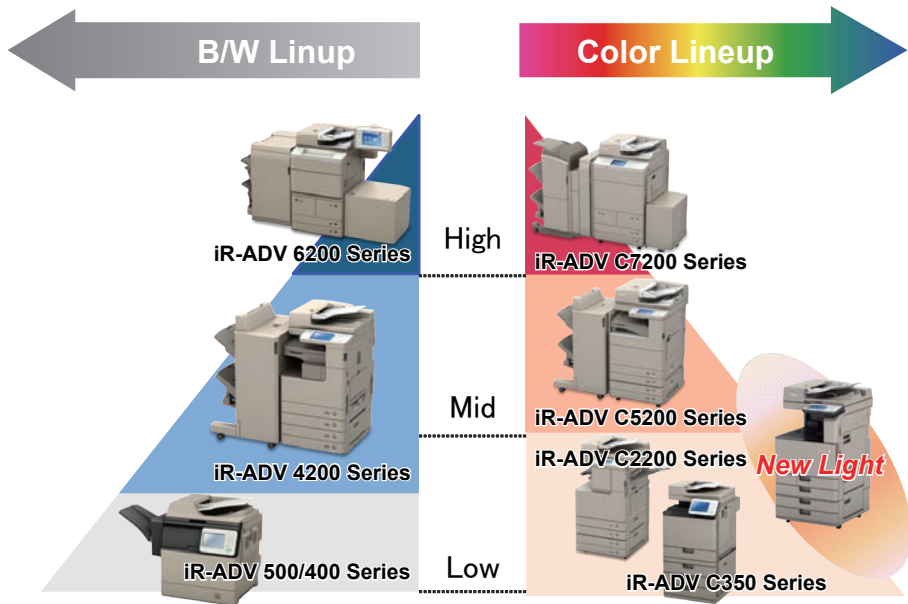


Product Overview

- Product Lineup
- Features
- Specifications
- Parts Name

Product Lineup

Positioning



F-1-1



F-1-2

Host machine

< Product name >

imageRUNNER ADVANCE C3330 / C3325 / C3320

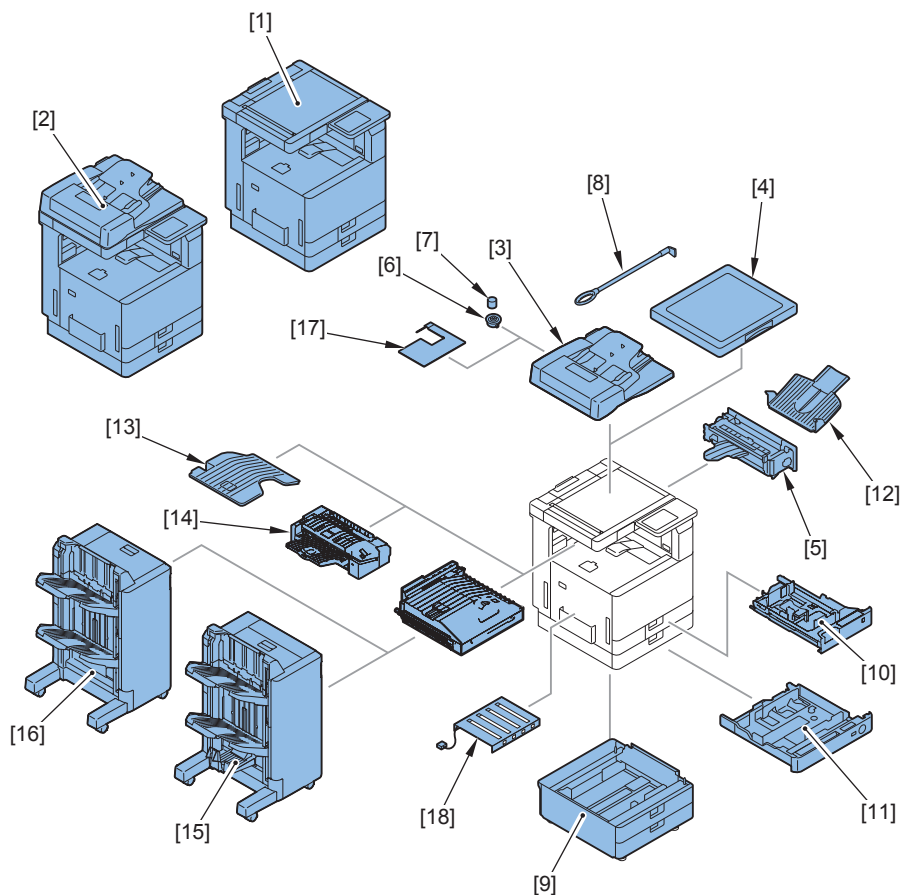
Underlined (2-digit) numeric figures indicate print speed (ppm: print per minute).

	C3330	C3325	C3320
Print Speed (BW/Color)	30/ <u>30</u> ppm	25/ <u>25</u> ppm	20/ <u>20</u> ppm

T-1-1

Option

Pickup / Delivery / Image Reading System Options

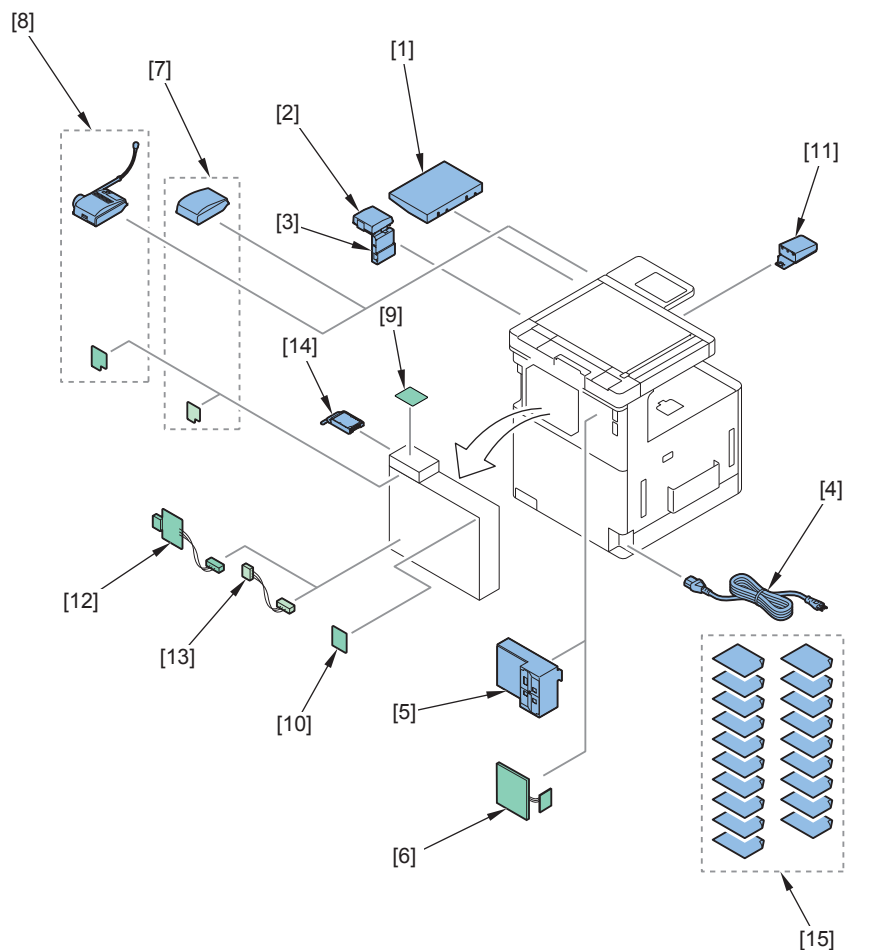


F-1-3

No.	Product name	Condition
[1]	imageRUNNER ADVANCE C3330/C3325/C3320	--
[2]	imageRUNNER ADVANCE C3330/C3325/C3320	--
[3]	DADF-AQ1	Cannot be installed with Platen Cover Type U.
[4]	Platen Cover Type U	Cannot be installed with DADF-AQ1.
[5]	3 Way Unit-D1	--
[6]	Stamp Ink Cartridge-C1	DADF-AQ1 is required.
[7]	Stamp Unit-B1	DADF-AQ1 is required.
[8]	ADF Access Handle-A1	--
[9]	Cassette Feeding Unit-AL1	--
[10]	FL Cassette-AX1	Option cassette for Cassette 1 (small size)
[11]	FL Cassette-AY1	Option cassette for Cassette 2/3/4 (large size)
[12]	Copy Tray-J2	3 Way Unit-D1 is required.
[13]	Inner 2way Tray-J1	3 Way Unit-D1 is required. Cannot be installed with Inner Finisher-G1. Cannot be installed with Booklet Finisher-U1. Cannot be installed with Staple Finisher-U1.
[14]	Inner Finisher-G1	Cannot be installed with Inner 2way Tray-J1. Cannot be installed with Booklet Finisher-U1. Cannot be installed with Staple Finisher-U1.
[15]	Booklet Finisher-U1	3 Way Unit-D1 is required.
[16]	Staple Finisher-U1	3 Way Unit-D1 is required.
[17]	Reader Heater Unit-L1	--
[18]	Main Body Heater Unit-A1	120V region: Cassette Heater is necessary 230V region (Europe): Reader Heater/Cassette Heater is necessary

T-1-2

Function expansion system options



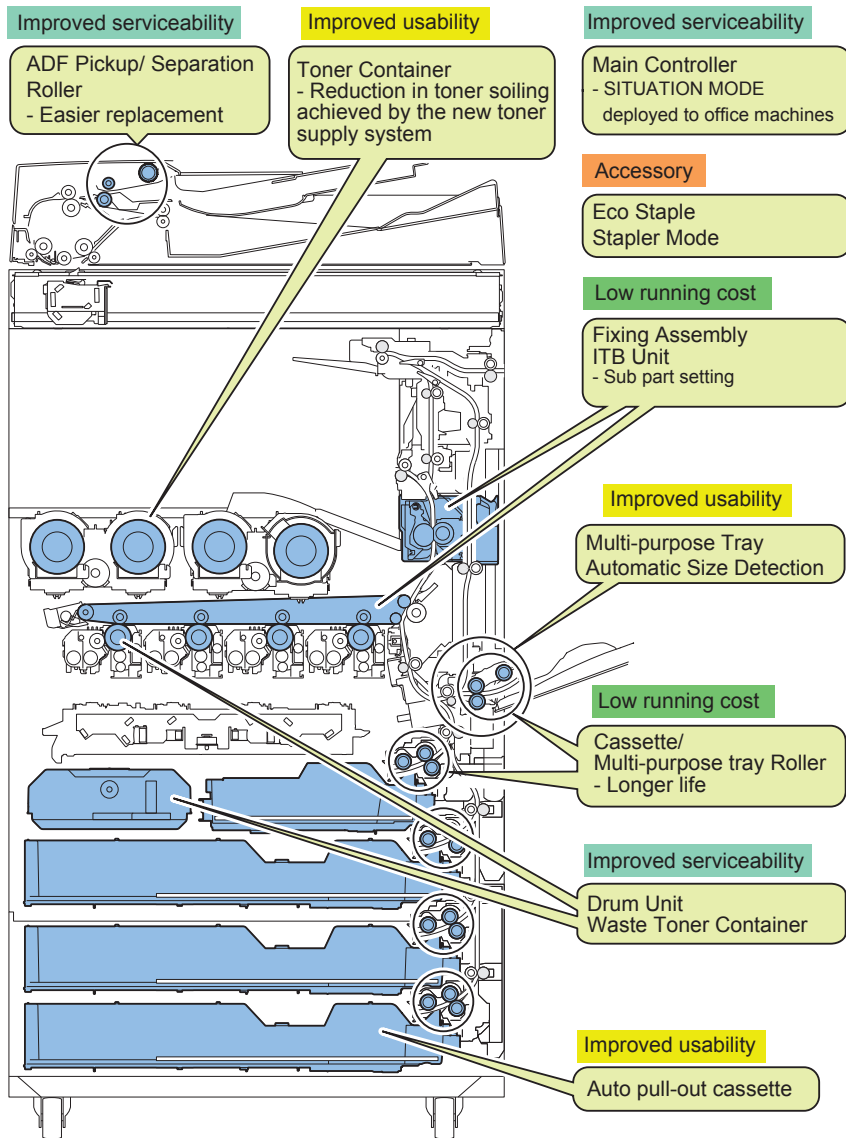
F-1-4

No.	Product name	Condition
[1]	Utility Tray-A2	Cannot be installed with Voice Operation Kit-C2.
[2]	Copy Card Reader-F1	Copy Card Reader Attachment-B4 is required. Cannot be installed with Copy Control Interface Kit-A1. Cannot be installed with Serial Interface Kit-K2.
[3]	Copy Card Reader Attachment-B4	Copy Card Reader-F1 is required.
[4]	Power Supply Cable-W1	Only for Brazil
[5]	Super G3 FAX Board-AR1	--
[6]	Super G3 2nd Line Fax Board-AR1	Super G3 FAX Board-AR1 is required.
[7]	Voice Guidance Kit-F2	Voice Guidance Connection Kit for iR-ADV C3300 series is required.
	Voice Guidance Connection Kit for iR-ADV C3300 series	--
[8]	Voice Operation Kit-C2	Cannot be installed with Utility Tray-A2.
[9]	HDD Data Encryption Kit-C9	--
[10]	Document Scan Lock Kit-B1	--
[11]	USB Device Port-E4	--
[12]	Serial Interface Kit-K2	Cannot be installed with Copy Card Reader-F1. Cannot be installed with Copy Control Interface Kit-A1.
[13]	Copy Control Interface Kit-A1	Cannot be installed with Copy Card Reader-F1. Cannot be installed with Serial Interface Kit-K2.
[14]	Removable HDD Kit-AK1	--
[15]	Remote Fax Kit-A1	--
	PCL International Font Set-A1	--
	PCL Printer Kit-BB1	--
	PS Printer Kit-BB1	--
	Direct Print Kit (for PDF)-H1	--
	Direct Print Kit (for XPS)-H1	--
	Direct Print Kit (for PDF/XPS)-H1	--
	Barcode Printing Kit-D1	--
	Color Universal Send Kit-AA1	--
	Universal Send Trace & Smooth PDF Kit-A1	--
	Universal Send Advanced Feature Set-D1	--
	Universal Send Advanced Feature Set-E1	--
	Universal Send Security Feature Set-D1	--
	Universal Send Digital User Signature Kit-C1	--
	Encrypted Secure Print Software-D1	--
	Secure Watermark-B1	--
	iR-ADV Security Kit-L1 for IEEE 2600.1 Common Criteria Certification	--
	ACCESS MANAGEMENT SYSTEM KIT-B1	--
	Web Access Software-H1	--

T-1-3

Features

Product Features



F-1-5

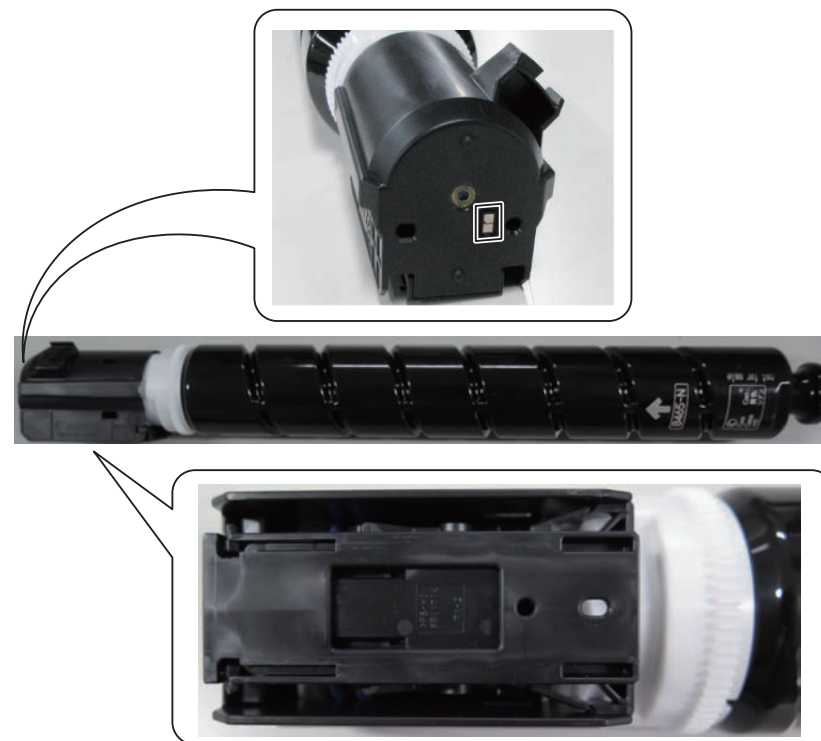
Characteristics

Toner Container

This equipment uses IAP (Insulated & Air Pressure) toner bottles.

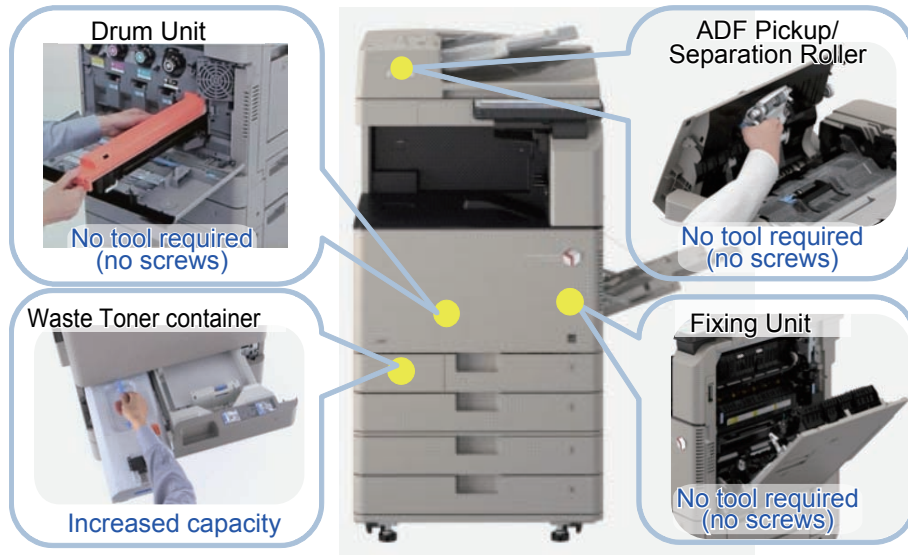
Characteristics	Description
Toner supply mouth: Smaller diameter	Toner soiling-resistant, soiling-resistant
Toner supply: Air assist method	Enables stable toner supply even through the small supply mouth.
Design without a cap member	Improves toner replaceability. (No need to remove the cap)
Installation of IC tag	Installation of IC tag enables to record the Toner Bottle ID and the toner level.

T-1-4



F-1-6

■ Improved Replaceability of Consumables



F-1-7

Many of this machine's consumable parts can be replaced without tools.

Furthermore, the following parts can be replaced by the user.

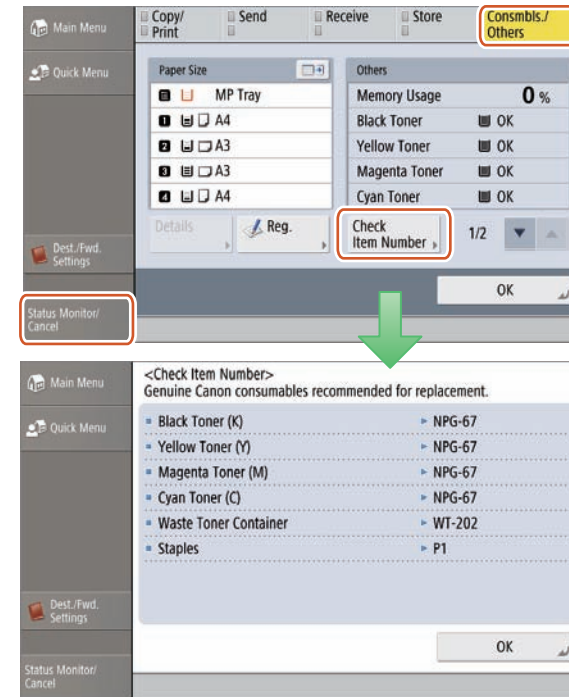
User replaceable consumable parts	Parts number	Model number	Description of replacement procedure
Waste Toner Container	FM1-A606	WT-202	On individual package
Fixing Unit	FM1-A613 (100V) FM1-D276 (120V) FM1-D277 (230V)	FX-202	On individual package
ADF Maintenance Kit (a set of Pickup Roller & Separation Roller)	4Y8-3044	DR-202	In the procedure included in the package
Drum Unit	-	NPG-67 C-EXV 49 GPR-53	On individual package

T-1-5

■ Item Numbers of Consumables Specified on Host Machine (reinforcement of the association between the host machine and the consumables)

< Control Panel UI >

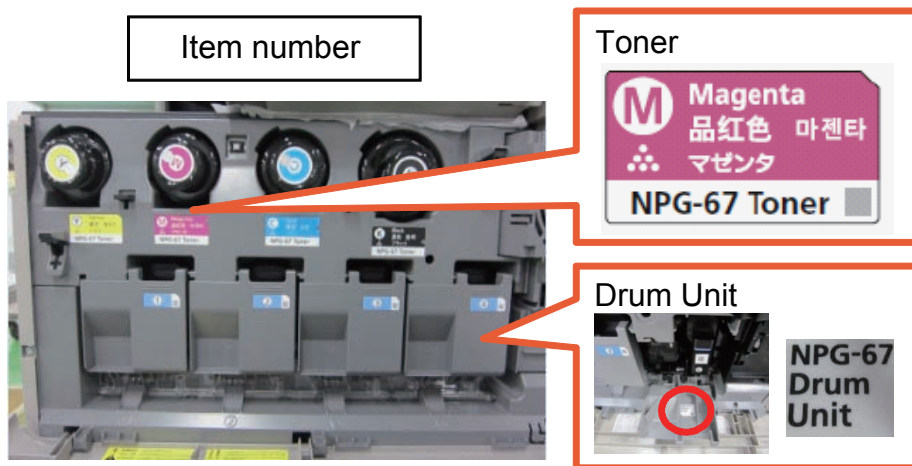
Item numbers are assigned to user replaceable consumable parts separately from part numbers, and can be viewed in Status Monitor/Cancel > Consumbls./Others > Check Item Number from the Control Panel UI.



F-1-8

< Labels >

Item number labels have also been added to the host machine, and can be checked.



F-1-9

Items whose item numbers are displayed
Black Toner (K)
Yellow Toner (Y)
Magenta Toner (M)
Cyan Toner (C)
Waste Toner Container
Staples
Drum Unit *1

T-1-6

* The item numbers of the Fixing Unit and ADF Maintenance Kit are not displayed.

*1: Can be displayed only in the case of COPIER > OPTION > USER > P-CRG-LF=1

< Package >

Describing the same item number also on the part's package enhances the association between the part and the host machine at the user site.



F-1-10

Maintenance Video for Consumables Replacement

Videos are adopted to guide users with an easy-to-understand navigation of the replacement so that they can replace parts correctly without performing any wrong operation.



F-1-11

Item	Display timing
Toner Container	When the toner becomes empty (For Bk, it is forcibly displayed by pop-up. For YMC, it is displayed when the button at the bottom right is pressed since printing using only BK is still possible).
Waste Toner Container	"An orange button appears when ""Waste toner is near full. Replacement not yet needed"" is displayed. When completely full, it is forcibly displayed by pop-up."
Staples	Displayed by pop-up if there are no staples the next time stapling is executed
Drum Unit *1	A button appears when 7 days have elapsed since the specified drum life value (*2) was reached.

T-1-7

*1: Can be displayed only in the case of COPIER > OPTION > USER > P-CRG-LF=1

*2: Can be set in COPIER > OPTION > FNC-SW > D-DLV-CL/BK

Setup Guide

Setup Guide is designed to improve the workability during the installation by enabling to implement the series of necessary setting items at installation of a device in the format of a navigation.

The items that can be set are as follows:

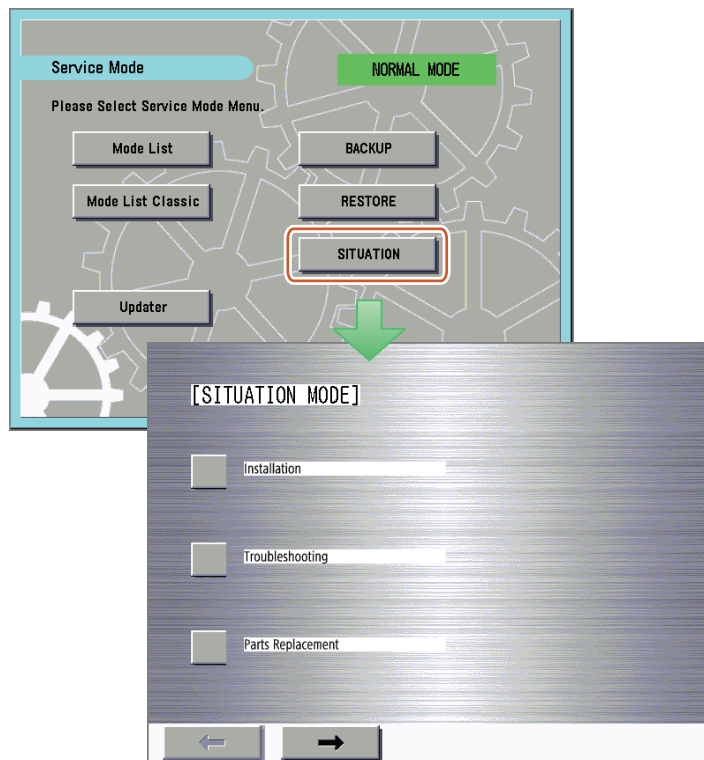
Display order	Setting screen	Remarks
1	Switch Language/Keyboard	If canceled, the device starts up without Setup Guide.
2	Paper Settings	Paper Settings
3	Authentication Login	If skipped, the screen proceeds to Auto Adjust Gradation (User Authentication is standard).
4	Option Tray Settings	ON should be selected only when the Option Tray is installed.
5	Date/Time Settings	Sets the date and time
6	Network Settings	Sets the IP address, subnet, and gateway
7	DNS/Proxy Settings	DNS/Proxy Settings
8	Selection Country/Retion (FAX-TYPE settings)	Skipped depending on the country. The countries that require selection are USA, EUR, and ASIA.
9	FAX Settings	Sipped if no G3 fax. Configuration of a second line is outside the scope of the Setup Guide.
10	System Manager Information Settings	System Manager Information Settings
11	Auto Adjust Gradation	Executes auto gradation adjustment
12	Output Report	
13	End Setup Guide	-

T-1-8

■ Introduction of Situation Mode

Situation mode has been newly provided to improve the workability and searchability of service technicians at the site.

This mode makes it possible to easily use the service mode appropriate for the scene at the site.



F-1-12

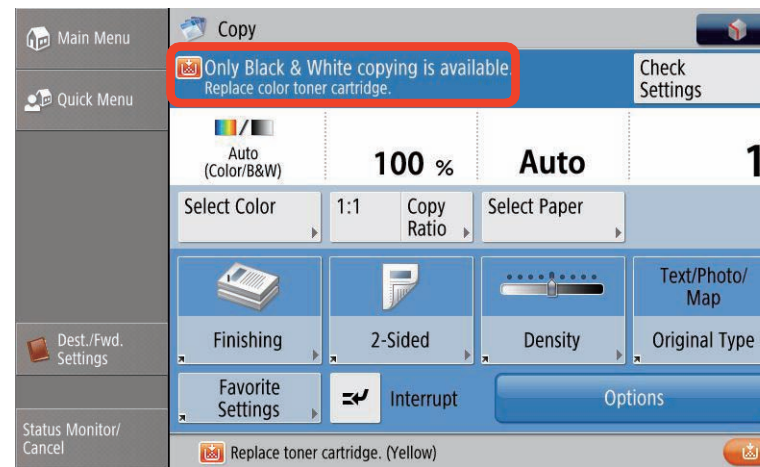
< Category >

Installation	Items related to installation
Troubleshooting	Items related to troubleshooting
Parts Replacement	Items performed at parts replacement
Major Adjustment	Major items of adjustment

T-1-9

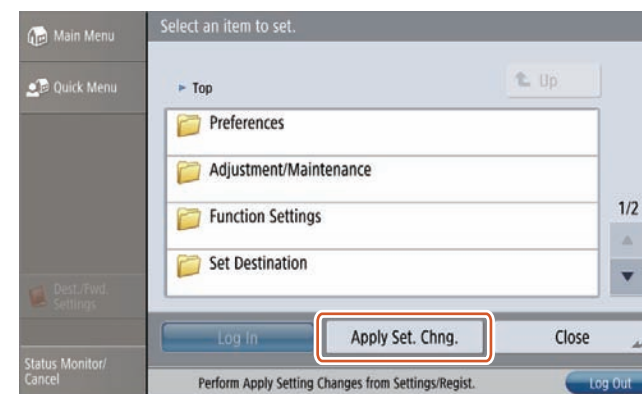
■ Limiting of Color Printing

Even if an error attributed to the Developing Unit or drum of any of the Y/M/C colors has occurred, B&W printing and copying remain possible without entering the limited printer function mode where the entire printing function stops.



F-1-13

■ Update of Setting Values without Restarting



F-1-14

The main network related setting values can be updated "without restarting" after changing the setting.

* There are some setting values that require restarting.

Specifications

Specifications

Copyboard	Original fixed reading		
Machine installation method	Desktop		
Light source	White LED		
Photosensitive medium	OPC		
Image reading sensor	CMOS		
Exposure method	Laser exposure		
Charging method	DC Roller charging		
Developing method	Dry, 2-component development		
Transfer method	Intermediate Belt transfer		
Separation method	Curvature separation + Static Eliminator		
Pickup method	Simple retard roller method		
Fixing method	On-demand fixing		
Delivery method	Face-down		
Magnification ratio	25 to 400% (in 1% increment)		
Drum cleaning method	Cleaning Blade		
Transfer cleaning method	Cleaning Blade		
Toner type	Non-magnetic negative toner		
Toner supplying method	Toner Container method		
Toner level detection function	Yes		
Leading edge image margin	4.0 +1.5/-1.0 mm		
Left & right edge image margin	2.5 +/- 1.5 mm (2-side : 2.5 +/- 2.0 mm)		
Leading edge non-image width	4.0 +1.5/-1.0 mm		
Left & right edge non-image width	2.5 +/- 1.5 mm (2-side : 2.5 +/- 2.0 mm)		
Warm-up time ¹⁾	After Powering ON	Quick Startup 'OFF'	34 sec. or less
		Quick Startup 'ON'	10 sec. or less Time until the key operation of the Control Panel becomes possible: 7 seconds or less * Quick startup may not occur depending on the usage conditions
	Returning from the Sleep mode	10 sec. or less	
First copy time	Full Color	8.2 sec.	
	B/W	5.9 sec.	
Image gradations	256 gradations		
Print resolution	1200 × 1200 dpi		

Paper type	Cassette	Thin (52 to 63 g/m ²), Plain 1 (64 to 75 g/m ²), Plain 2 (76 to 90 g/m ²), Plain 3 (91 to 105 g/m ²), Recycled 1 (64 to 75 g/m ²), Recycled 2 (76 to 90 g/m ²), Recycled 3 (91 to 105 g/m ²), Color, Pre-Punched, Bond, Heavy 1 (106 to 128 g/m ²), Heavy 2 (129 to 163 g/m ²), Heavy 3 (164 to 220 g/m ²), Transparency, and Envelopes		
	Multi-purpose Tray	Thin (52 to 63 g/m ²), Plain 1 (64 to 75 g/m ²), Plain 2 (76 to 90 g/m ²), Plain 3 (91 to 105 g/m ²), Recycled 1 (64 to 75 g/m ²), Recycled 2 (76 to 90 g/m ²), Recycled 3 (91 to 105 g/m ²), Color, Pre-Punched, Bond, Heavy 1 (106 to 128 g/m ²), Heavy 2 (129 to 163 g/m ²), Heavy 3 (164 to 220 g/m ²), Heavy 4 (221 to 256 g/m ²), Tracing, Coated, Labels, Transparency, and Envelopes		
Paper size	Cassette 1	A4, B5, A5R, LTR, STMTR, EXEC, Custom size (139.7 x 182 mm to 297 x 215.9 mm), and Envelopes (Nagagata 3, Younagagata 3, ISO-C5).		
	Cassette 2	A3, B4, A4, A4R, B5, B5R, A5R, 12" x 18", 11" x 17", LGL, LTR, LTRR, STMTR, EXEC, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, FOLIO, A-LTR, A-LTRR, GLTR, GLTR-R, GLGL, ILGL, AFLS, FLS, Custom size (139.7 x 182 mm to 304.8 x 457.2 mm), and Envelopes (Nagagata 3, Younagagata 3, Kakugata 2, Monarch, COM10 No.10, DL).		
	Multi-purpose Tray	A3, B4, A4, A4R, B5, B5R, A5, A5R, 12" x 18", 11" x 17", LGL, LTR, LTRR, STMTR, EXEC, OFFICIO, E-OFFICIO, B-OFFICIO, M-OFFICIO, A-OFFICIO, FOLIO, A-LTR, A-LTRR, GLTR, GLTR-R, GLGL, ILGL, AFLS, FLS, Custom size (98.4 x 139.7 mm to 320 x 457.2 mm), and Envelopes.		
Pickup capacity	Cassette	550 sheets (80 g/m ²) or 640 sheets (64 g/m ²)		
	Multi-purpose Tray	100 sheets (80 g/m ²)		
Duplex method	Through-pass duplex			
Memory capacity	4 GB			
HDD capacity	250 GB or more (Used space: 250 GB)			
Operation noise	70 dB or less (During printing)			
Ozone volume	Maximum: 3.0 mg/h or less (RAL UZ-171)			
Rated power supply	120 V AC, 60 Hz, 7.5 A 220 to 240 V AC, 50/60 Hz, 4.0 A			
Power consumption	Maximum power consumption	1.5 kW or less		
	When in the Sleep mode	0.8 W		
	When the main power switch is turned OFF	Quick Startup 'ON'	0.45 W	
		Quick Startup 'OFF'	0.1 W	

Dimensions (H x W x D)	imageRUNNER ADVANCE C3330i/C3325i/C3320i : 878 mm x 565 mm x 693 mm
Weight	imageRUNNER ADVANCE C3330i/C3325i/C3320i : Approx. 71.2 kg

T-1-10

*1: Activation time may vary, depending on the environment and conditions under which the machine is being used. (At a room temperature of 20 deg C in all above cases.)

Weight and Size

Product name	Width (mm)	Depth (mm)	Height (mm)	Weight Approx. (kg)
imageRUNNER ADVANCE C3330/C3325/C3320 (with DADF)	565	693	878	71.2
DADF-AQ1	565	525	139	8.1
Cassette Feeding Unit-AL1	565	615	248	16.1
Inner Finisher-G1	604	525	188	7.2
Booklet Finisher-U1	771	657	971	67.5
Staple Finisher-U1	662	646	971	40.5

T-1-11

Productivity

Product name	Productivity	
imageRUNNER ADVANCE C3330 Series	A3	15 sheets / minute
	B4	15 sheets/minute
	A4	30 sheets/minute
	B5	30 sheets/minute
	12" x 18"	7 sheets/minute
	11" x 17"	15 sheets/minute
	LGL	15 sheets/minute
	LTR	30 sheets/minute
imageRUNNER ADVANCE C3325 Series	EXEC	20 sheets/minute
	A3	15 sheets/minute
	B4	15 sheets/minute
	A4	25 sheets/minute
	B5	25 sheets/minute
	12" x 18"	7 sheets/minute
	11" x 17"	15 sheets/minute
	LGL	15 sheets/minute
imageRUNNER ADVANCE C3320 Series	LTR	25 sheets/minute
	EXEC	15 sheets/minute
	A3	15 sheets/minute
	B4	15 sheets/minute
	A4	20 sheets/minute
	B5	20 sheets/minute

T-1-12

* Except when paper is fed from the multi-purpose tray.

The copy speed may vary, depending on the settings for paper type, paper size, and the sending method. When continuously copying, adjustments for machine temperature or image quality may cause machine operations to pause or become slow.

Paper type

Following shows the types of usable papers.

See the table below for the custom paper size.

Type	Feeding direction (mm)	Width direction (mm)
Custom paper size 0-2	139.7 to 147.9	98.4 to 119.9
Custom paper size 0-3	148 to 215.9	
Custom paper size 0-4	216 to 457.2	
Custom paper size 1-1	139.7 to 147.9	120 to 129.9
Custom paper size 1-2	148 to 215.9	
Custom paper size 1-3	216 to 457.2	
Custom paper size 2-1	139.7 to 147.9	130 to 297
Custom paper size 2-2	148 to 181.9	
Custom paper size 2-3	182 to 215.9	
Custom paper size 2-4	216 to 457.2	130 to 139.6
Custom paper size 3-1	182 to 215.9	
Custom paper size 3-2	216 to 431.8	
Custom paper size 3-3	431.9 to 457.2	139.7 to 209.9
Custom paper size 5-1	182 to 209.9	
Custom paper size 5-2	210 to 215.9	
Custom paper size 5-3	216 to 279.3	210 to 279.3
Custom paper size 5-4	279.4 to 431.8	
Custom paper size 5-6	431.9 to 457.2	
Custom paper size 6-1	210 to 215.9	210 to 297
Custom paper size 6-2	216 to 279.3	
Custom paper size 6-3	279.4 to 431.8	
Custom paper size 7-2	139.7 to 147.9	279.4 to 297
Custom paper size 7-3	148 to 181.9	
Custom paper size 7-4	182 to 279.3	
Custom paper size 7-5	279.4 to 457.2	297.1 to 320
Custom paper size 7-6	182 to 279.3	
Custom paper size 8-1	279.4 to 457.2	
Custom paper size 9	457.3 to 1200	297.1 to 304.8
		304.9 to 320
		98.4 to 320

T-1-13

Pickup

Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
Thin paper (52 to 63 g/m ²)	A3	420	297	Yes	No	Yes	Yes	Yes
Plain paper 1 (64 to 75 g/m ²)	B4	364	257	Yes	No	Yes	Yes	Yes
Plain paper 2 (76 to 90 g/m ²)	A4R	297	210	Yes	No	Yes	Yes	Yes
Plain paper 3 (91 to 105 g/m ²)	A4	210	297	Yes	Yes	Yes	Yes	Yes
Color paper (64 to 82 g/m ²)	B5R	257	182	Yes	No	Yes	Yes	Yes
Recycled paper 1 (64 to 75 g/m ²)	B5	182	257	Yes	Yes	Yes	Yes	Yes
Recycled paper 2 (76 to 90 g/m ²)	A5	148	210	Yes	No	No	No	No
Recycled paper 3 (91 to 105 g/m ²)	A5R	210	148	Yes	Yes	Yes	Yes	Yes
	11x17	431.8	279.4	Yes	No	Yes	Yes	Yes
	LGL	355.6	215.9	Yes	No	Yes	Yes	Yes
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes
	LTRR	279.4	215.9	Yes	No	Yes	Yes	Yes
	STMTR	215.9	139.7	Yes	Yes	Yes	Yes	Yes
	STMT	139.7	215.9	Yes	No	No	No	No
	SRA3	450	320	Yes	No	No	No	No
	12x18	457.2	304.8	Yes	No	Yes	Yes	Yes
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes
	OFFICIO	317.5	215.9	Yes	No	Yes	Yes	Yes
	E-OFFICIO	320	220	Yes	No	Yes	Yes	Yes
	B-OFFICIO	355	216	Yes	No	Yes	Yes	Yes
	M-OFFICIO	341	216	Yes	No	Yes	Yes	Yes
	A-OFFICIO	340	220	Yes	No	Yes	Yes	Yes
	A-LTR	220	280	Yes	No	Yes	Yes	Yes
	A-LTRR	280	220	Yes	No	Yes	Yes	Yes
	GLTR-R	266.7	203.2	Yes	No	Yes	Yes	Yes
	GLTR	203.2	266.7	Yes	Yes	Yes	Yes	Yes
	GLGL	330.2	203.2	Yes	No	Yes	Yes	Yes
	AFLS	337	206	Yes	No	Yes	Yes	Yes
	FLS	330.2	215.9	Yes	No	Yes	Yes	Yes
	K8	390	270	Yes	No	Yes	Yes	Yes
	K16	195	270	Yes	Yes	Yes	Yes	Yes
	K16R	270	195	No	No	Yes	Yes	Yes
	F4A	342.9	215.9	Yes	No	Yes	Yes	Yes
	I-LGL	345	215	Yes	No	Yes	Yes	Yes
	Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No
	Long Length	457.3 to 1200	98.4 to 320	Yes	No	No	No	No
	Custom paper size 0-2, 0-3, 0-4, 1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 2-4, 7-2, 7-3, 7-6, 8-1, 9	-	-	Yes	No	No	No	No
	Custom paper size 3-1, 5-1, 5-2, 6-1	-	-	Yes	Yes	Yes	Yes	Yes
	Custom paper size 3-2, 3-3, 5-3, 5-4, 5-6, 6-2, 6-3, 7-4, 7-5	-	-	Yes	No	Yes	Yes	Yes

Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
Heavy paper 1 (106 to 128 g/m ²) Heavy paper 2 (129 to 163 g/m ²) Heavy paper 3 (164 to 220 g/m ²)	A3	420	297	Yes	No	Yes	Yes	Yes
	B4	364	257	Yes	No	Yes	Yes	Yes
	A4R	297	210	Yes	No	Yes	Yes	Yes
	A4	210	297	Yes	Yes	Yes	Yes	Yes
	B5R	257	182	Yes	No	Yes	Yes	Yes
	B5	182	257	Yes	Yes	Yes	Yes	Yes
	A5	148	210	Yes	No	No	No	No
	A5R	210	148	Yes	Yes	Yes	Yes	Yes
	11x17	431.8	279.4	Yes	No	Yes	Yes	Yes
	LGL	355.6	215.9	Yes	No	Yes	Yes	Yes
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes
	LTRR	279.4	215.9	Yes	No	Yes	Yes	Yes
	STMTR	215.9	139.7	Yes	Yes	Yes	Yes	Yes
	STMT	139.7	215.9	Yes	No	No	No	No
	SRA3	450	320	Yes	No	No	No	No
	12x18	457.2	304.8	Yes	No	Yes	Yes	Yes
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes
	OFFICIO	317.5	215.9	Yes	No	Yes	Yes	Yes
	E-OFFICIO	320	220	Yes	No	Yes	Yes	Yes
	B-OFFICIO	355	216	Yes	No	Yes	Yes	Yes
	M-OFFICIO	341	216	Yes	No	Yes	Yes	Yes
	A-OFFICIO	340	220	Yes	No	Yes	Yes	Yes
	A-LTR	220	280	Yes	No	Yes	Yes	Yes
	A-LTRR	280	220	Yes	No	Yes	Yes	Yes
	GLTR-R	266.7	203.2	Yes	No	Yes	Yes	Yes
	GLTR	203.2	266.7	Yes	Yes	Yes	Yes	Yes
	GLGL	330.2	203.2	Yes	No	Yes	Yes	Yes
	AFLS	337	206	Yes	No	Yes	Yes	Yes
	FLS	330.2	215.9	Yes	No	Yes	Yes	Yes
	K8	390	270	Yes	No	Yes	Yes	Yes
	K16	195	270	Yes	Yes	Yes	Yes	Yes
	K16R	270	195	No	No	Yes	Yes	Yes
	F4A	342.9	215.9	Yes	No	Yes	Yes	Yes
I-LGL	345	215	Yes	No	Yes	Yes	Yes	
Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No	
Long Length	457.3 to 1200	98.4 to 320	Yes	No	No	No	No	
Custom paper size 0-2, 0-3, 0-4, 1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 2-4, 7-2, 7-3, 7-6, 8-1, 9	-	-	Yes	No	No	No	No	
Custom paper size 3-1, 5-1, 5-2, 6-1	-	-	Yes	Yes	Yes	Yes	Yes	
Custom paper size 3-2, 3-3, 5-3, 5-4, 5-6, 6-2, 6-3, 7-4, 7-5	-	-	Yes	No	Yes	Yes	Yes	

Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
Heavy paper 4 (221 to 256 g/m ²)	A3	420	297	Yes	No	No	No	No
	B4	364	257	Yes	No	No	No	No
	A4R	297	210	Yes	No	No	No	No
	A4	210	297	Yes	No	No	No	No
	B5R	257	182	Yes	No	No	No	No
	B5	182	257	Yes	No	No	No	No
	A5	148	210	Yes	No	No	No	No
	A5R	210	148	Yes	No	No	No	No
	11x17	431.8	279.4	Yes	No	No	No	No
	LGL	355.6	215.9	Yes	No	No	No	No
	LTR	215.9	279.4	Yes	No	No	No	No
	LTRR	279.4	215.9	Yes	No	No	No	No
	STMTR	215.9	139.7	Yes	No	No	No	No
	STMT	139.7	215.9	Yes	No	No	No	No
	SRA3	450	320	Yes	No	No	No	No
	12x18	457.2	304.8	Yes	No	No	No	No
	EXEC	184.1	266.7	Yes	No	No	No	No
	K8	390	270	Yes	No	No	No	No
	K16	195	270	Yes	No	No	No	No
	Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No
Long Length	457.3 to 1200	98.4 to 320	Yes	No	No	No	No	
Custom paper size 0-2, 0-3, 0-4, 1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 5-1, 5-2, 5-3, 5-4, 5-6, 6-1, 6-2, 6-3, 7-2, 7-3, 7-4, 7-5, 7-6, 8-1, 9	-	-	Yes	No	No	No	No	

Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
1-Side Coated Paper 1 (106 to 128 g/m ²)	A3	420	297	Yes	No	No	No	No
	B4	364	257	Yes	No	No	No	No
1-Side Coated Paper 2 (129 to 163 g/m ²)	A4R	297	210	Yes	No	No	No	No
	A4	210	297	Yes	No	No	No	No
1-Side Coated Paper 3 (164 to 220 g/m ²)	B5R	257	182	Yes	No	No	No	No
	B5	182	257	Yes	No	No	No	No
Duplex Coated Paper 1 (106 to 128 g/m ²)	A5	148	210	Yes	No	No	No	No
	A5R	210	148	Yes	No	No	No	No
Duplex Coated Paper 2 (129 to 163 g/m ²)	11x17	431.8	279.4	Yes	No	No	No	No
	LGL	355.6	215.9	Yes	No	No	No	No
Duplex Coated Paper 3 (164 to 220 g/m ²)	LTR	215.9	279.4	Yes	No	No	No	No
	LTRR	279.4	215.9	Yes	No	No	No	No
	STMTR	215.9	139.7	Yes	No	No	No	No
	STMT	139.7	215.9	Yes	No	No	No	No
	SRA3	450	320	Yes	No	No	No	No
	12x18	457.2	304.8	Yes	No	No	No	No
	EXEC	184.1	266.7	Yes	No	No	No	No
	K8	390	270	Yes	No	No	No	No
	K16	195	270	Yes	No	No	No	No
	Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No
	Custom paper size 0-2, 0-3, 0-4, 1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 5-1, 5-2, 5-3, 5-4, 5-6, 6-1, 6-2, 6-3, 7-2, 7-3, 7-4, 7-5, 7-6, 8-1	-	-	Yes	No	No	No	No

Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
Tracing (64 to 99 g/m ²)	A3	420	297	Yes	No	No	No	No
	B4	364	257	Yes	No	No	No	No
	A4R	297	210	Yes	No	No	No	No
	A4	210	297	Yes	No	No	No	No
	B5R	257	182	Yes	No	No	No	No
	B5	182	257	Yes	No	No	No	No
	A5	148	210	Yes	No	No	No	No
	A5R	210	148	Yes	No	No	No	No
	11x17	431.8	279.4	Yes	No	No	No	No
	LGL	355.6	215.9	Yes	No	No	No	No
	LTR	215.9	279.4	Yes	No	No	No	No
	LTRR	279.4	215.9	Yes	No	No	No	No
	STMTR	215.9	139.7	Yes	No	No	No	No
	STMT	139.7	215.9	Yes	No	No	No	No
	SRA3	450	320	Yes	No	No	No	No
	12x18	457.2	304.8	Yes	No	No	No	No
	EXEC	184.1	266.7	Yes	No	No	No	No
	K8	390	270	Yes	No	No	No	No
	K16	195	270	Yes	No	No	No	No
	Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No
Custom paper size 0-2, 0-3, 0-4, 1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 5-1, 5-2, 5-3, 5-4, 5-6, 6-1, 6-2, 6-3, 7-2, 7-3, 7-4, 7-5, 7-6, 8-1	-	-	Yes	No	No	No	No	
Transparency (121 to 220 g/m ²)	A4	210	297	Yes	Yes	Yes	Yes	Yes
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes

Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
Labels (118 to 185 g/m ²)	A3	420	297	Yes	No	No	No	No
	B4	364	257	Yes	No	No	No	No
	A4R	297	210	Yes	No	No	No	No
	A4	210	297	Yes	No	No	No	No
	B5R	257	182	Yes	No	No	No	No
	B5	182	257	Yes	No	No	No	No
	A5	148	210	Yes	No	No	No	No
	A5R	210	148	Yes	No	No	No	No
	11x17	431.8	279.4	Yes	No	No	No	No
	LGL	355.6	215.9	Yes	No	No	No	No
	LTR	215.9	279.4	Yes	No	No	No	No
	LTRR	279.4	215.9	Yes	No	No	No	No
	STMTR	215.9	139.7	Yes	No	No	No	No
	STMT	139.7	215.9	Yes	No	No	No	No
	SRA3	450	320	Yes	No	No	No	No
	12x18	457.2	304.8	Yes	No	No	No	No
	EXEC	184.1	266.7	Yes	No	No	No	No
	K8	390	270	Yes	No	No	No	No
	K16	195	270	Yes	No	No	No	No
	Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No
Custom paper size 0-2, 0-3, 0-4, 1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 2-4, 3-1, 3-2, 3-3, 5-1, 5-2, 5-3, 5-4, 5-6, 6-1, 6-2, 6-3, 7-2, 7-3, 7-4, 7-5, 7-6, 8-1	-	-	Yes	No	No	No	No	
Bond (83 to 99 g/m ²)	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes
	LTRR	279.4	215.9	Yes	No	Yes	Yes	Yes
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes
	Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No
Postcard (164 to 220 g/m ²)	Postcard	148	100	Yes	No	No	No	No
	Reply Postcard	200	148	Yes	No	No	No	No
	4 on 1 Postcard	200	296	Yes	No	No	No	No

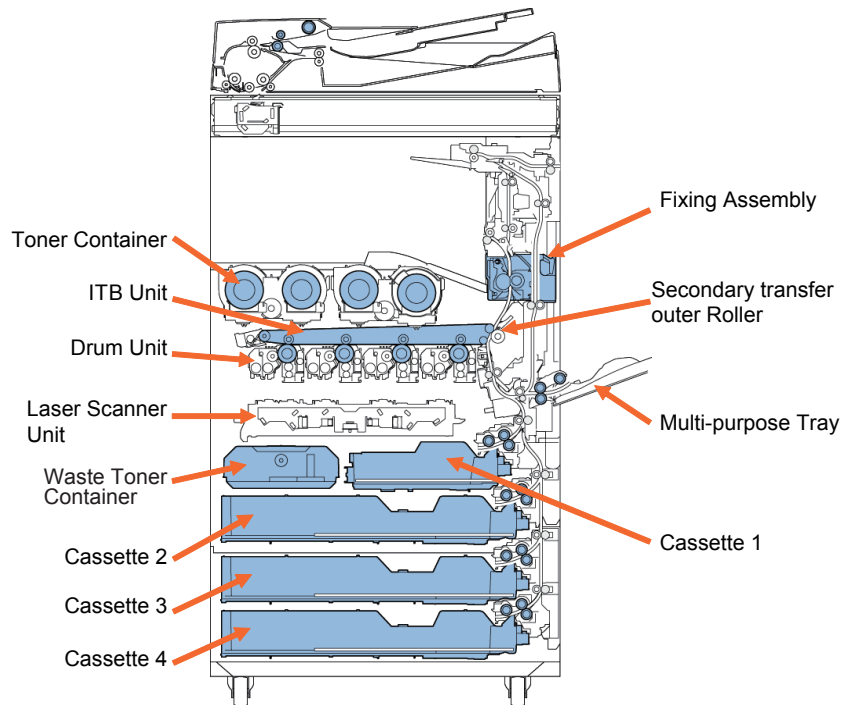
Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
Pre-Punched paper (64 to 75 g/m ²)	A3	420	297	Yes	No	Yes	Yes	Yes
	B4	364	257	Yes	No	Yes	Yes	Yes
	A4R	297	210	Yes	No	Yes	Yes	Yes
	A4	210	297	Yes	Yes	Yes	Yes	Yes
	B5R	257	182	Yes	No	Yes	Yes	Yes
	B5	182	257	Yes	Yes	Yes	Yes	Yes
	A5	148	210	Yes	No	No	No	No
	A5R	210	148	Yes	Yes	Yes	Yes	Yes
	11x17	431.8	279.4	Yes	No	Yes	Yes	Yes
	LGL	355.6	215.9	Yes	No	Yes	Yes	Yes
	LTR	215.9	279.4	Yes	Yes	Yes	Yes	Yes
	LTRR	279.4	215.9	Yes	No	Yes	Yes	Yes
	STMTR	215.9	139.7	Yes	Yes	Yes	Yes	Yes
	STMT	139.7	215.9	Yes	No	No	No	No
	SRA3	450	320	Yes	No	No	No	No
	12x18	457.2	304.8	Yes	No	Yes	Yes	Yes
	EXEC	184.1	266.7	Yes	Yes	Yes	Yes	Yes
	OFFICIO	317.5	215.9	Yes	No	Yes	Yes	Yes
	E-OFFICIO	320	220	Yes	No	Yes	Yes	Yes
	B-OFFICIO	355	216	Yes	No	Yes	Yes	Yes
	M-OFFICIO	341	216	Yes	No	Yes	Yes	Yes
	A-OFFICIO	340	220	Yes	No	Yes	Yes	Yes
	A-LTR	220	280	Yes	No	Yes	Yes	Yes
	A-LTRR	280	220	Yes	No	Yes	Yes	Yes
	GLTR-R	266.7	203.2	Yes	No	Yes	Yes	Yes
	GLTR	203.2	266.7	Yes	Yes	Yes	Yes	Yes
	GLGL	330.2	203.2	Yes	No	Yes	Yes	Yes
	AFLS	337	206	Yes	No	Yes	Yes	Yes
	FLS	330.2	215.9	Yes	No	Yes	Yes	Yes
	K8	390	270	Yes	No	Yes	Yes	Yes
	K16	195	270	Yes	Yes	Yes	Yes	Yes
	K16R	270	195	No	No	Yes	Yes	Yes
	F4A	342.9	215.9	Yes	No	Yes	Yes	Yes
I-LGL	345	215	Yes	No	Yes	Yes	Yes	
Free Size	139.7 to 630	98.4 to 320	Yes	No	No	No	No	
Custom paper size 0-2, 0-3, 0-4, 1-1, 1-2, 1-3, 2-1, 2-2, 2-3, 2-4, 7-2, 7-3, 7-6, 8-1	-	-	Yes	No	No	No	No	
Custom paper size 3-1, 5-1, 5-2, 6-1	-	-	Yes	Yes	Yes	Yes	Yes	
Custom paper size 3-2, 3-3, 5-3, 5-4, 5-6, 6-2, 6-3, 7-4, 7-5	-	-	Yes	No	Yes	Yes	Yes	

Paper Type	Size	Feeding direction (mm)	Width direction (mm)	Pickup position				
				Multi	CST1	CST2	CST3	CST4
Envelope (75 to 105 g/m ²)	COM10_R	241.3	104.7	Yes	No	Yes	No	No
	Monarch_R	190.5	98.4	Yes	No	Yes	No	No
	ISO-C5_R	229	162	Yes	No	No	No	No
	DL_R	220	110	Yes	No	Yes	No	No
	Nagagata 3_R	235	120	Yes	No	Yes	No	No
	Younagagata 3_R	235	120	Yes	No	Yes	No	No
	Kakugata 2_R	332	240	Yes	No	Yes	No	No
	COM10	104.7	241.3	Yes	Yes	No	No	No
	Monarch	98.4	190.5	Yes	No	No	No	No
	ISO-C5	162	229	Yes	Yes	No	No	No
	DL	110	220	Yes	Yes	No	No	No
	Nagagata 3	120	235	Yes	Yes	No	No	No
	Younagagata 3	120	235	Yes	Yes	No	No	No

T-1-14

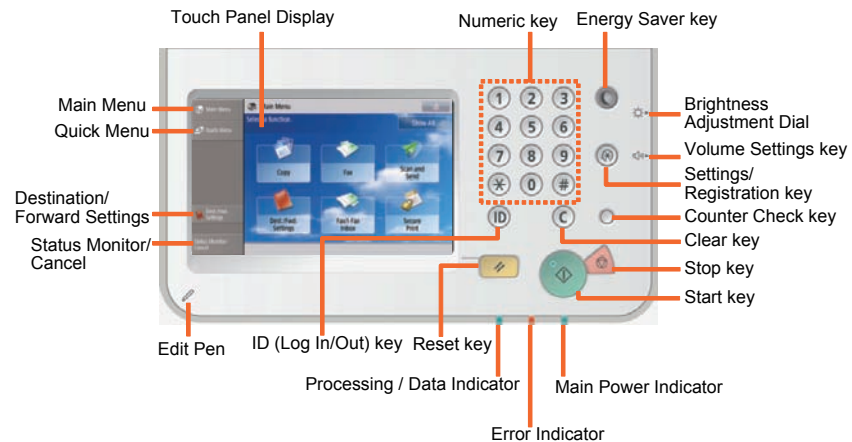
Parts Name

Cross Sectional View



F-1-15

Control Panel



F-1-16

2

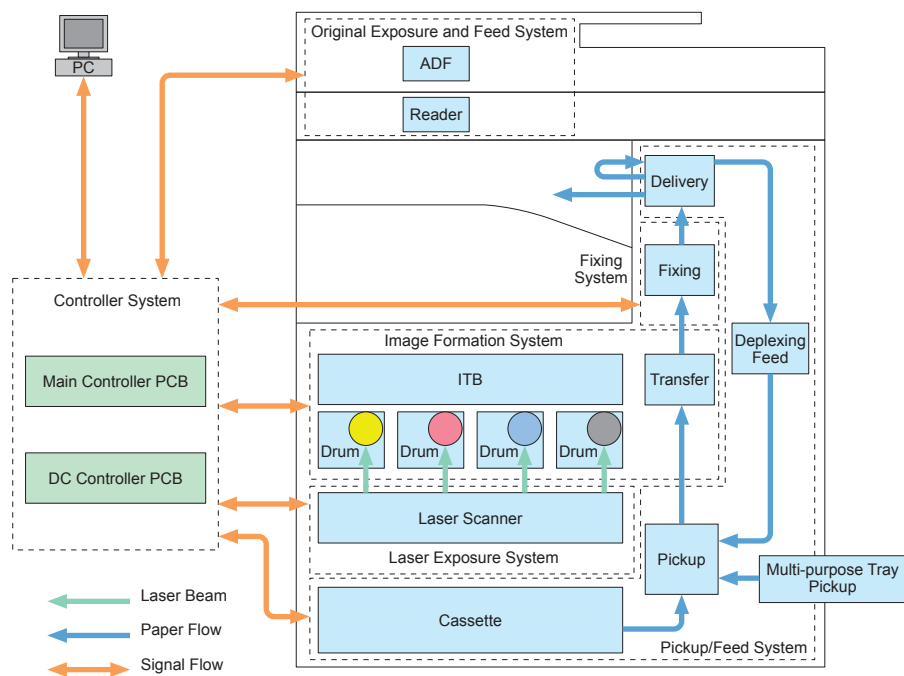
Technical Explanation

- Basic Configuration
- Document Exposure
- Main Controller
- Laser Exposure System
- Image Formation System
- Fixing System
- Pickup / Feed System
- External Auxiliary System
- MEAP
- Embedded RDS
- Updater
- DCM

Basic Configuration

Functional Configuration

This machine consists of 6 major blocks: Original Exposure and Feed System, Controller System, Laser Exposure System, Image Formation System, Fixing System, and Pickup Feed System.



F-2-1

Document Exposure

Overview

Features

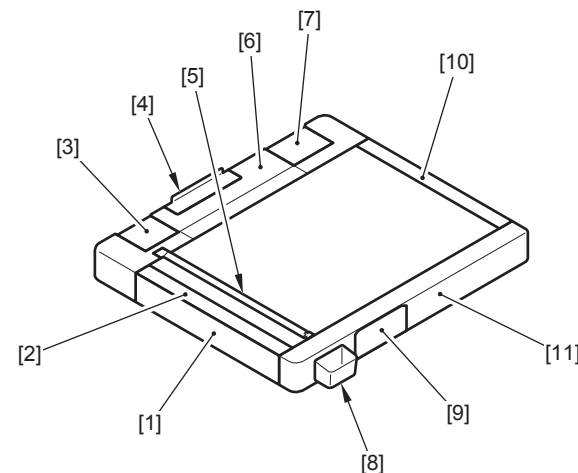
- Low energy consumption by adopting a new Scanner Unit

Specifications

Item	Specification/function	Remarks	
Exposure system	High-brightness white LED + reflection plate	-	
Original scan	In BOOK mode	Scan by movement of scanner unit	
	In DADF mode	Scan by original stream reading with scanner unit fixed	
Scanning resolution	600 dpi x 600 dpi 300 dpi x 300 dpi		
Gradation	256 gradations	-	
Carriage position detection	Scanner Unit HP Sensor (PS_A1)	-	
Magnification change	B&W: scan magnification change (Vertical 2-line skipping: 25 to 50%) Color: digital reproduction		
	In horizontal direction	Image processing in main controller PCB	
	In vertical direction	Image processing in main controller PCB	
Number of line of Reading sensor	4 lines (R, G, B, B/W)	-	
Original size detection	In BOOK mode	Horizontal direction: detection by Scanner unit sensor (scanner unit)	-
		Vertical scanning: Detection by the Reflection Sensor (Original Size Sensor (AB configuration/AK configuration) or Original Size Sensor (Inch))	Total 1 point (2 points for global)
	In DADF mode	Horizontal scanning: Detection by the Photo Interrupter	-
		Vertical scanning: Detection by the Photo Interrupter and Reflection Sensor	-
Maximum original size	In BOOK mode	297 mm x 431.8 mm	-
	In DADF mode	297 mm x 630 mm	-

T-2-1

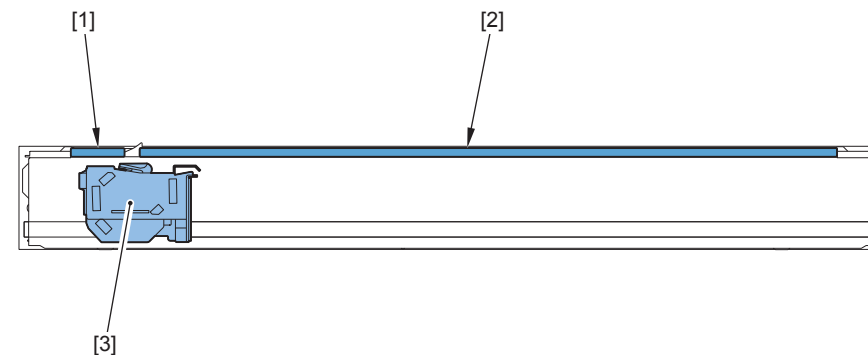
External View



F-2-2

- | | |
|--------------------------------------|--------------------------------------|
| [1] Reader Left Cover | [2] Reader Left Retaining Cover |
| [3] Reader Hinge Lower Cover (Left) | [4] Reader PCB Cover |
| [5] Reader Glass Support Cover | [6] Reader Rear Cover |
| [7] Reader Hinge Lower Cover (Right) | [8] Glass Cleaning Sheet Storage Box |
| [9] Reader Front Cover (Small) | [10] Reader Right Retaining Cover |
| [11] Reader Front Cover | |

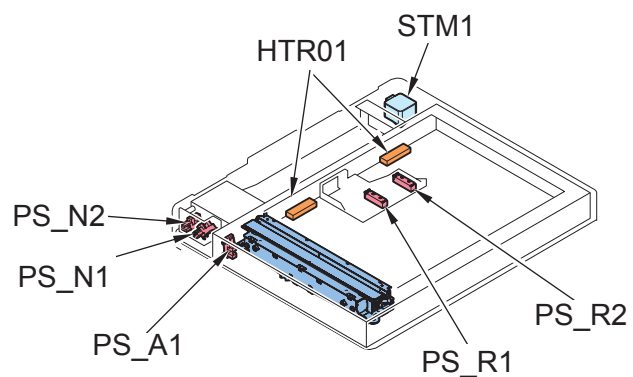
Cross Section



F-2-3

- | | |
|-----------------------|----------------------|
| [1] Stream Read Glass | [2] Copy Board Glass |
| [3] Scanner Unit | |

Major Electrical Parts



F-2-4

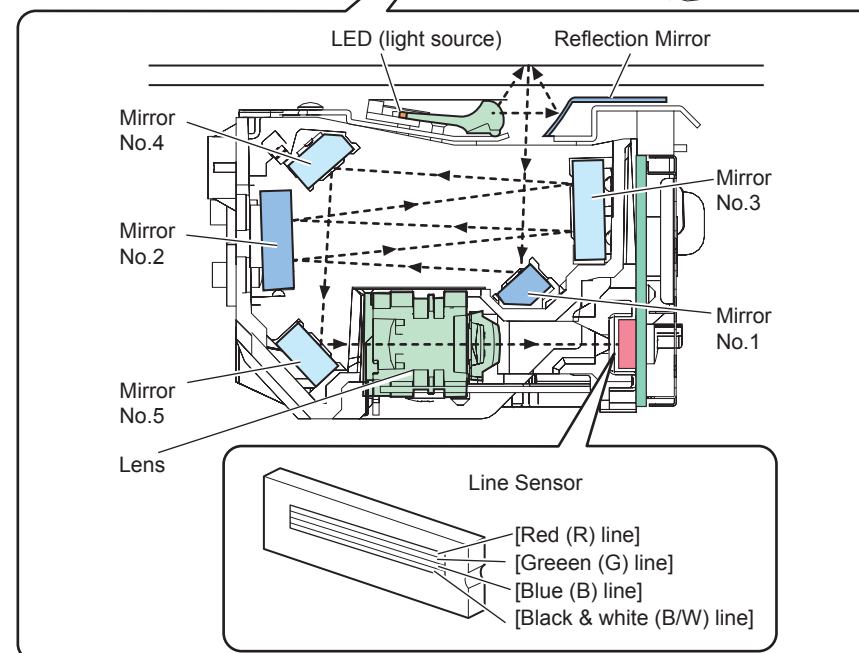
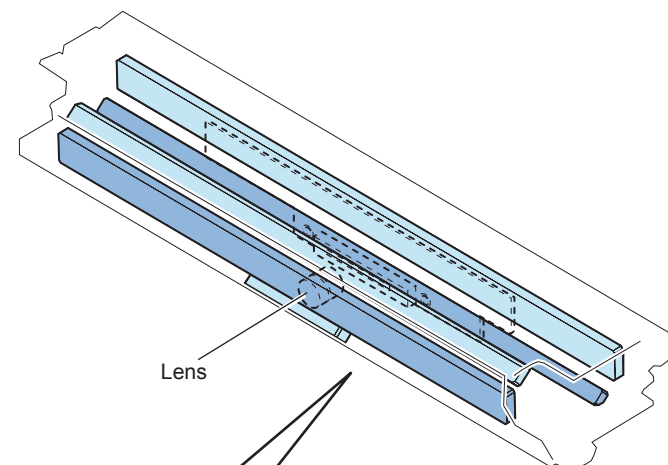
Component part	Symbol	Function/specification
Scanner motor	STM1	2 phase pulse motor: pulse control
Scanner unit HP sensor	PS_A1	Scanner unit HP detection
DADF open/closed sensor (Front)	PS_N1	DADF open detection (DADF is detected at 5 degree)
DADF open/closed sensor (Rear)	PS_N2	DADF open detection (size detection timing is detected when DADF is open at 25 degree)
Original size sensor (AB type / AK type)	PS_R1	Size detection in vertical direction (AB type / AK type)
Original size sensor (INCH type)	PS_R2	Size detection in vertical direction (INCH type)
Scanner unit	---	Image reading, analog image processing
Reader Heater	HTR01	To prevent condensation from forming on the reader

T-2-2

Scanner Unit

Original exposure and scanning are performed by the integrated scanner unit of LED, turndown mirror, free curved mirror, and Reading sensor.

Light emitted from LED is reflected by the original and reaches the Reading Sensor through the Reflection Mirror and the newly developed Lens Unit.



F-2-5

LED lamp unit

On LED lamp unit, the light is generated from the 1 LED lamp PCBs (LED chip: 40 pieces per PCB).

Generated light is exposed to the original through the reflection plate.

Reading sensor

The Reading Sensor scans the image per 1 image line.

The Reading Sensor has 4 lines (R, G, B, B/W), but only uses 3 lines (R, G, B) when scanning images.

Related Error Codes :

E302-0001 : White Shading error

E302-0002 : Black Shading error

Related Alarm Codes :

02-0025 : Insufficient Scanner Unit LED light intensity alarm

Reader Heater

See "External Auxiliary > Heater Control" in Chapter 2.

Controls

Reading Speed

There are two patterns when the Reading Sensor performs reading depending on the combination of Copyboard/DF and 300 dpi/600 dpi.

		Reading Speed
Book mode	300dpi	260 mm/s
	600dpi	150 mm/s
ADF mode	300dpi	300 mm/s
	600dpi	150 mm/s

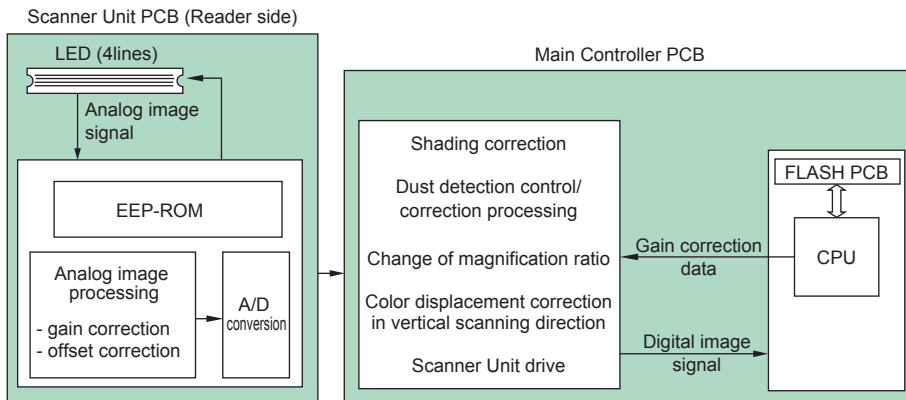
T-2-3

Image Processing

Overview

The functions of the PCB related to image processing are shown below:

- Main Controller PCB
 - Shading correction (executed per job)
 - Dust detection control/correction processing
 - Change of magnification ratio
 - Color displacement correction in vertical scanning direction
 - Scanner Unit drive
- Scanner Unit PCB
 - Analog image processing, A/D conversion



F-2-6

Shading Correction

Shading correction corrects unevenness of the output of the Reading Sensor. In shading correction, there is a type of shading correction that is executed per job.

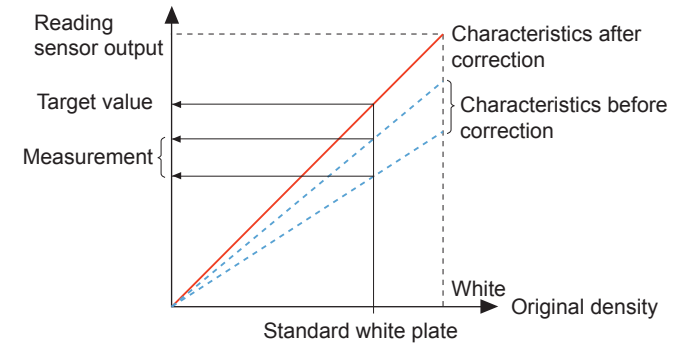
Operating timing:

When a job starts

Shading correction is performed for each scanning of original.

With this operation, light of LED Lamp is emitted to the Standard White Plate, and the reflected light is converted into digital data at the analog image processing part of the Scanner Unit PCB. The amount of digitized reflected light is input to the shading correction circuit in the Main Controller PCB as the shading coefficient. In the shading correction circuit, the stored target value and the shading coefficient are compared, and the difference is determined as the shading correction value.

With this shading correction value, variation of pixel of the Reading Sensor of each scan is corrected to make the image density level even.



F-2-7

Related Error Codes :

E302-0001 : White Shading error

E302-0002 : Black Shading error

Related Alarm Codes :

02-0025 : Insufficient Scanner Unit LED light intensity alarm

Dust detection / correction control

Overview

Dust detection / correction control executes the following processing in association with the shading correction to correct image density variation (white streaks) in areas of dust.

- 1) Before shading, dust adhered at shading positions is detected.
- 2) After shading, the shading coefficient of already detected areas of dust is corrected.

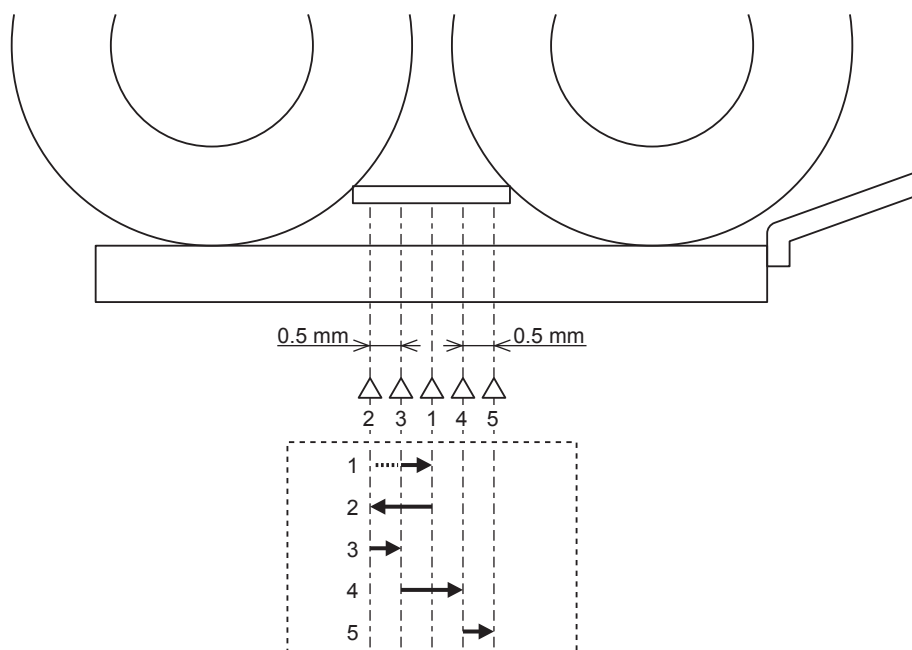
[Execution timing]

Dust detection / correction control is always executed at the time of white shading during shading correction.

There are 2 processings for dust.

- 1) Processing to avoid dust (when starting the first stream reading job after turning ON the power, when ending a stream reading job, etc.)

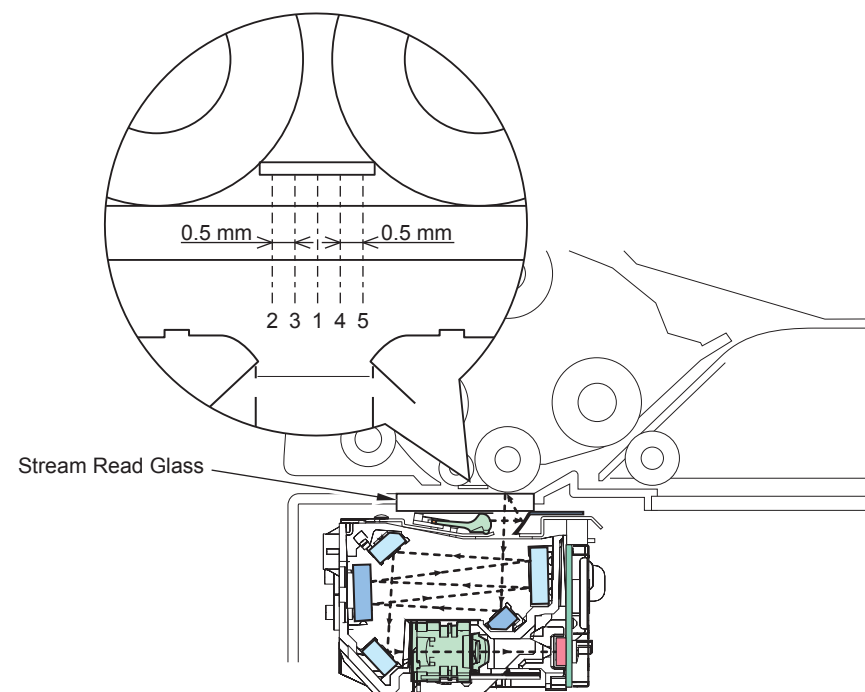
Like the time of completion of a job, presence/absence of dust is detected at all positions (1, 2, 3, 4 and 5 in that order). The position where dust is least present is used as the reading position and reading starts.



F-2-8

- 2) Processing to correct dust (when a regular stream reading job starts, between papers)

Dust detection is executed at the reading position, and image density variation (white streaks) in areas of dust is corrected from the next original if there is any dust.



F-2-9

Related Service Mode :

- DADF mode dust dtct level adj: ppr intvl
(Lv1) COPIER > OPTION > IMG-RDR > DFDST-L1
- DADF mode dust dtct level adj: after job
(Lv1) COPIER > OPTION > IMG-RDR > DFDST-L2

● Change of Magnification Ratio

The scanner performs reading at 600 dpi or 300 dpi. For the color mode, only COLOR mode is used; the scanner does not perform reading in B&W mode scanning regardless of the color mode selected in the Control Panel.

When configured to read in black and white, the controller converts the mode to black and white to perform processing.

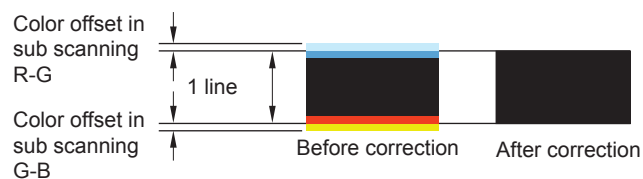
Copyboard/ADF	Resolution (dpi)	Color/B&W	Color in which the scanner performs reading
Copyboard	600	Color	Color
	300		
	600	B&W	
	300		
ADF	600	Color	Color
	300		
	600	B&W	
	300		

T-2-4

● Color displacement correction in vertical scanning direction

Color displacement correction control in vertical scanning direction is a processing to correct the displacement in RGB by shifting pixels in the vertical direction (up to 1 pixel) to align GREEN with RED and BLUE images when RGB cannot be read such that they are accurately overlapped at color scanning.

Example) Scanned image of black line when RED is shifted upwards and BLUE is shifted downwards compared to GREEN



F-2-10

There are two types of color displacement correction values as shown below: The correction value is adjusted in advance before shipping and is saved in service mode. (In COPIER > ADJUST > CCD)

When a job is started, color displacement correction processing is performed based on the saved color displacement correction values.

Reader Scan
<ul style="list-style-type: none"> • 100-RG • 100-GB

T-2-5

■ Original Size Detection

● Overview

This machine determines the size of an original by the combination of the measurement results of the reflected light at particular points of the Reflection Sensor and Reading Sensor. Furthermore, two points are measured for each size to perform accurate detection even if the original is moved when the ADF is closed.

- Horizontal scanning direction: Reading Sensor (15-point measurement)
- Vertical scanning direction: Reflection Photo Sensor (1 point for AB configuration, 1 point for inch configuration)

The original size is determined using the following procedure:

1) Search of external light (horizontal scanning direction only)

The sensor level at each detection position in the horizontal scanning direction is measured while the LED is OFF.

2) Detection of output level of each sensor

The LED of the Reading Sensor Unit is turned ON to measure the sensor level at each detection position in the horizontal scanning direction.

Furthermore, the Reflection Photo Sensor LED for the vertical scanning direction is turned ON to measure the sensor output.

The original size is determined by the combination of these outputs.

The detectable sizes differ depending on the country. The country setting can be changed in service mode.

* When KSIZE-SW is set for configurations other than inch configuration (including GLOBAL), the original is detected as AB/K configuration.

SENS-CNF	MODEL-SZ2	KSIZE-SW	Detection configuration
0	0	0	AB
0	0	1	AB/K
1	0	-	INCH
-	1	1	AB/K
-	1	0	GLOBAL

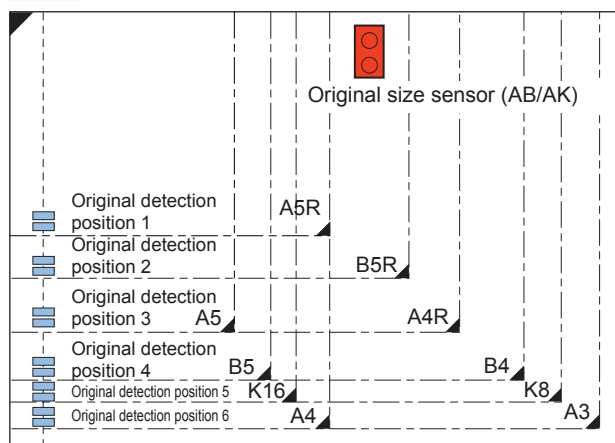
T-2-6

The sensor needs to be changed when switching the detection configuration between AB and Inch.

Description of Controls

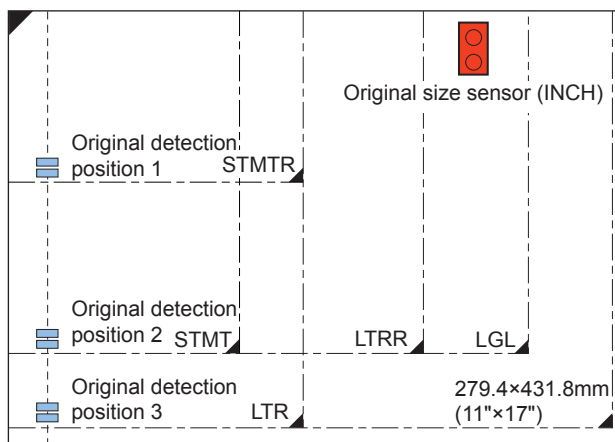
In horizontal scanning direction, sensor level of each original detection position is measured by moving the Scanner Unit to the detection position shown in the figure in relation to the original set position. In the vertical scanning direction, the original size is determined using the Original Size Sensor.

AB type



Reading Sensor original detection position

Inch type



Reading Sensor original detection position

F-2-11

Service Tasks

Service Mode/Adjustment

White Level Adjustment

Luminance levels when the same white is read using the Copyboard and DF are automatically adjusted.

[Service mode]

COPIER > FUNCTION > CCD > DF-WLVL1 (copyboard)

COPIER > FUNCTION > CCD > DF-WLVL2 (DF)

MTF Adjustment

Color differences and moire caused by the differences in the MTF of the Reading Unit are reduced.

[Service mode]

COPIER > ADJUST > CCD > MTF-CLC

Copyboard Image Position Adjustment

The image position at copyboard scanning is adjusted.

[Service mode]

COPIER > ADJUST > ADJ-XY > ADJ-X (Vertical scanning)

COPIER > ADJUST > ADJ-XY > ADJ-Y (Horizontal scanning)

Vertical Scanning Magnification Ratio Adjustment

Fine adjustment of the vertical scanning magnification ratio at copyboard scanning is performed.

[Service mode]

COPIER > ADJUST > ADJ-XY > ADJ-X-MG

Clearing of Backup Data

[Service mode]

COPIER > FUNCTION > CLEAR > R-CON

Related Error Codes :

Scanner HP error

E202-0001 : The DADF Scanner Unit could not detect the home position when starting scanning operation.

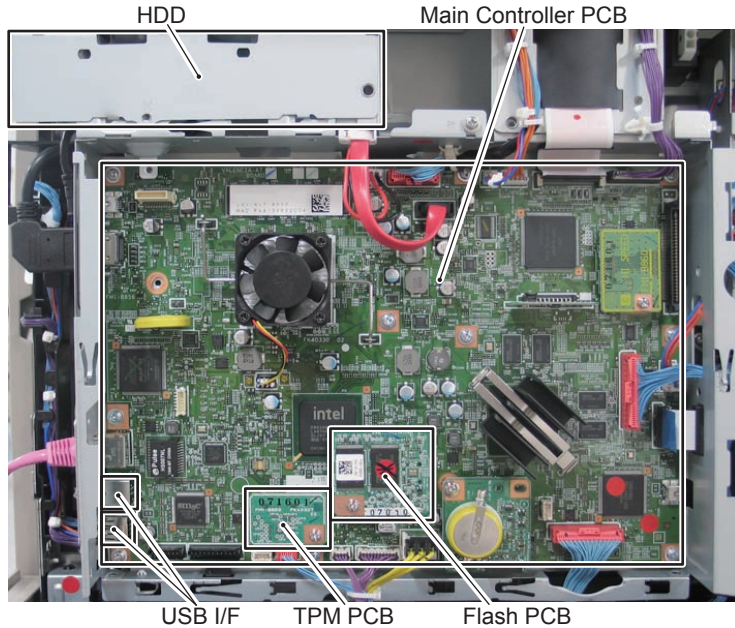
E202-0002 : The DADF Scanner Unit could not detect the home position when completing scanning operation.

E202-0003 : An error in the Scanner Unit (Paper Front) position was detected when reading of a job was started.

Main Controller

Overview

Configuration / Function

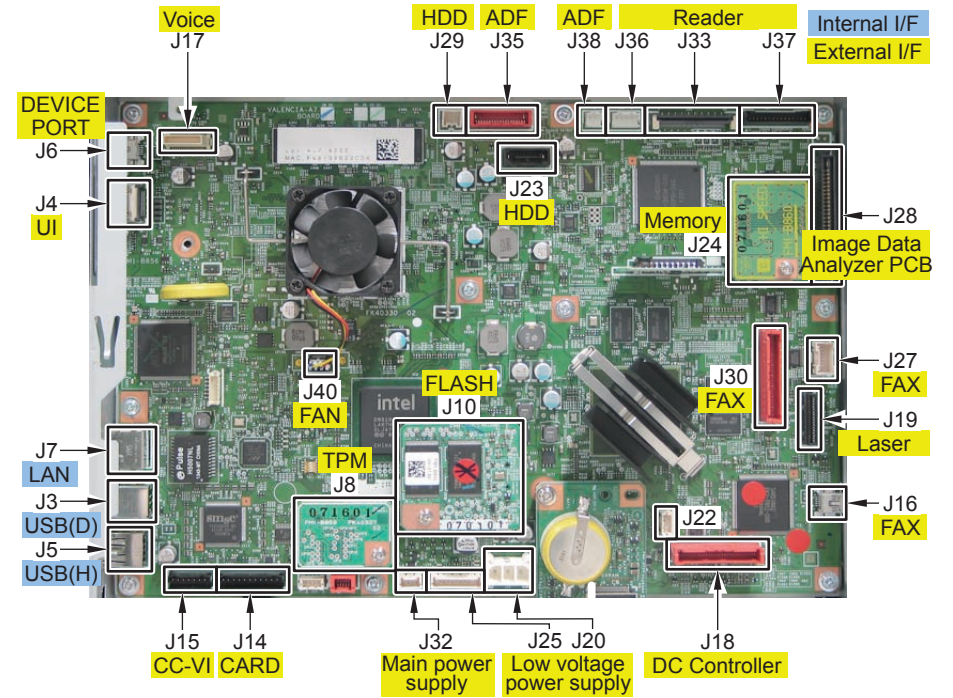


F-2-12

Item	Function
Main Controller PCB	System Control/Memory Control/Printer Output Image Processing Control, Reader Image Input Processing, Card Reader Connection I/F, Fax Image Processing, USB Extension HUB Connection I/F
RAM	Temporarily storage of image data: Capacity of 1 GB (for controller control) + 1 GB (for image processing)
USB port	USB2.0 Device I/F, USB2.0 Host I/F
Hard disk	2.5-inch SATA I/F Standard: 250 GB (250 GB usable area), address list, security information (password, certificate), image data, preferences
Flash PCB	Storage of system software: 2 GB
TPM PCB	Generation and storage of the encryption key. (Only when Management Settings > Data Management > TPM Settings is "On". Default: Off)

T-2-7

Main controller PCB



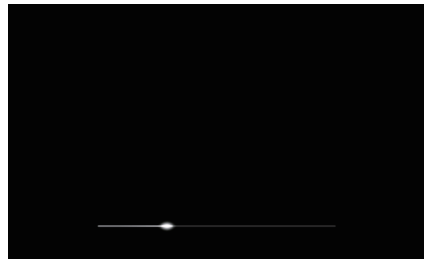
F-2-13

No.	Functions and specifications	No.	Functions and specifications
J3	USB I/F (Device)	J20/J25	Low-voltage Power Supply PCB
J4	Control Panel I/F	J23/J29	Hard disk
J5	USB I/F (Host)	J24	Counter Memory PCB
J6	USB Device Port	J27/J30	Fax (1-Line)
J7	LAN I/F	J28	Image Data Analyzer PCB
J8	TPM PCB	J32	Main Power Supply Switch
J10	Flash PCB	J33	Scanner Unit
J14	Serial Interface Kit Copy Card Reader	J35/J38	ADF Driver PCB
J15	Copy Control Interface Kit I/F	J36	Scanner Motor
J16	Fax (2-Line)	J37	Scanner Unit HP Sensor Copyboard Cover Open/Close Sensor (Front/Rear)
J17	Voice Operation Kit		Original Size Sensor (AB/INCH)
J18	DC Controller PCB	J40	Controller Fan

T-2-8

Boot Sequence

Power Supply Switch ON



- Initializing process of hardware
- Starting BIOS
[Main Controller PCB]
- Starting IPL (boot program) and OS system software
[Flash PCB]
- Starting application
[Hard disk]

[] : Program storage location



Standby screen display

NOTE:

To achieve faster startup, the progress bar and the active 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):

E602-0001: HDD error

HDD fails to be Ready. When the HDD is not formatted

When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.

E614-0001: Flash PCB error

The Flash PCB cannot be recognized. When the Flash PCB is not formatted

E614-0002: Error in file system on the Flash PCB

The file system could not be initialized normally at startup.

When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.

E614-4001: Error in file system on the Flash PCB

The OS boot file is not found.

When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.

E614-4002: Error in file system on the Flash PCB

The OS kernel is not found.

When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.

E748-2010: Flash PCB error / HDD error

IPL (boot program) not found, or HDD not recognized.

Shutdown Sequence

Before shutting down the power supply, it is necessary to perform the HDD completion process (Purpose: to prevent damage on the HDD) and execute the fixing disengagement operation. This sequential process is called "shutdown sequence". The shutdown sequence has been manually executed with the legacy (existing) models (by holding down the power supply switch on the Control Panel for a specific duration).

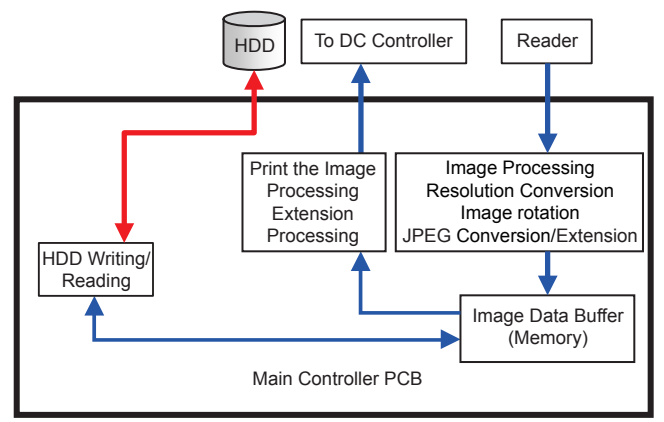
With this machine, the Main Controller PCB detects turning OFF the Main Power Supply Switch, and the shutdown sequence is started and executed automatically.

Note that the maximum shutdown time with this equipment is 110 seconds. (If the maximum of 110 seconds has elapsed, the power supply is turned OFF by the hard timer circuit on the Low Voltage Power Supply PCB.)

NOTE:

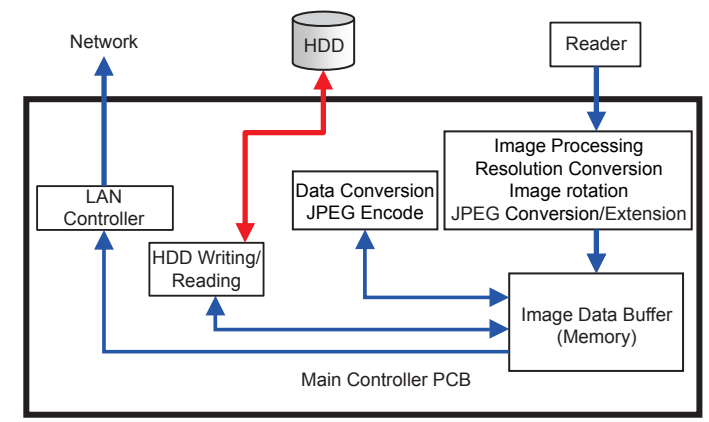
If the power supply is stopped without shutting down the machine, or if the processing to completely delete the hard disk (deletion of the primary file) fails to be completed within the shutdown time (max. 110 sec.), data consistency is checked at startup. In such a case, startup takes up to 80 seconds. The progress bar is displayed during the data checking.

Controls
Copy



F-2-14

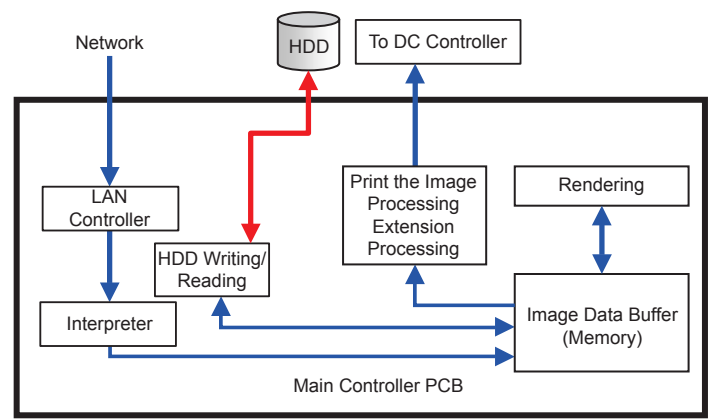
SEND



F-2-16

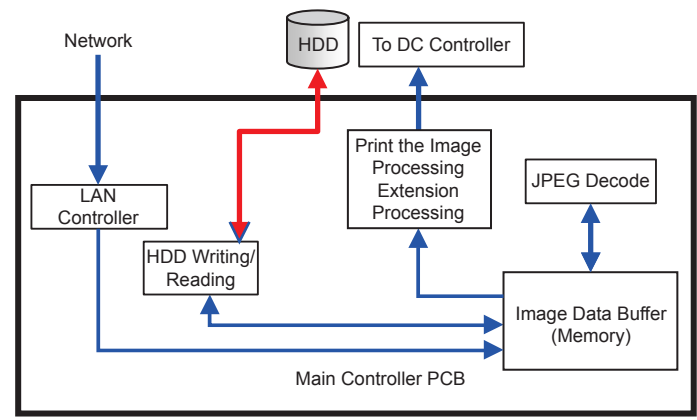
*Same as Remote FAX.

Print



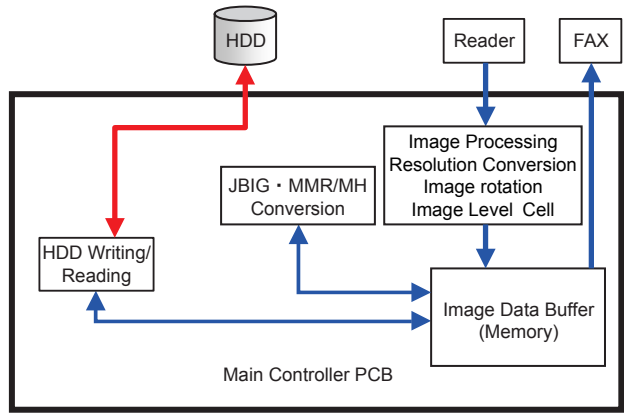
F-2-15

Network(Advanced Box / Space Client)



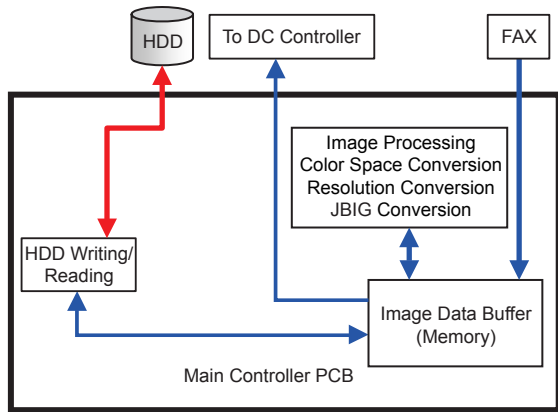
F-2-17

■ Fax SEND



F-2-18

■ Fax Receive



F-2-19

Security

Management Settings of Hard Disk

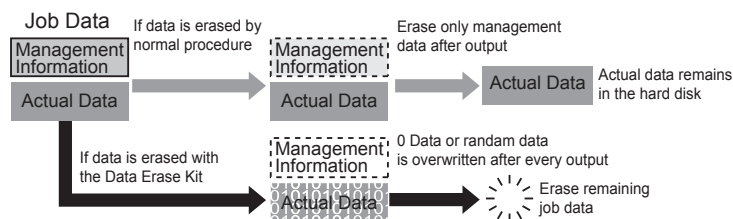
Besides data of originals that is accumulated using the fax function, this machine's hard disk stores information registered in the address book and password information of the address book. Therefore, management of the data in the hard disk requires reliable security measures.

The machine is equipped with data encryption and deletion functions for data management to prevent information leakage and to maintain safety and confidentiality.

Complete Deletion of Hard Disk Data

When copying, sending, receiving and printing, the machine separates the job data to save in the management information area and the actual data area. When a job is completed, the management information is automatically deleted, but the actual data remains on the hard disk.

The actual data remaining on the machine's hard disk is completely deleted by overwriting zero data or random data. This is effective for preventing data leakage when replacing or disposing of the hard disk.



F-2-20

When the Data Erase Kit is enabled, unneeded or deleted data in the hard disk can be completely deleted. The timing and mode for deleting the hard disk can be selected.

The data completely deleted from the hard disk is as follows:

- Temporary image data generated at scanning
- Data remaining after files in the reception tray (Confidential Fax Inbox/Memory RX Inbox) are deleted
- Data sent/received to/from Fax/I-Fax
- Spool data
- Data temporarily saved as print data

Initialize All Data/Settings

Saved files and registered information are initialized.

Data saved in the machine such as files, information registered in the address book, job log information and so on can be deleted (initialized).*

CAUTION:

"Initialize All Data/Settings" is intended to be performed by the user mainly when disposing of the machine. As the purpose of this function is different from that of complete deletion of job data, user management information will also be deleted; therefore explanation to users is necessary.

* Details will be explained in the section of TPM.

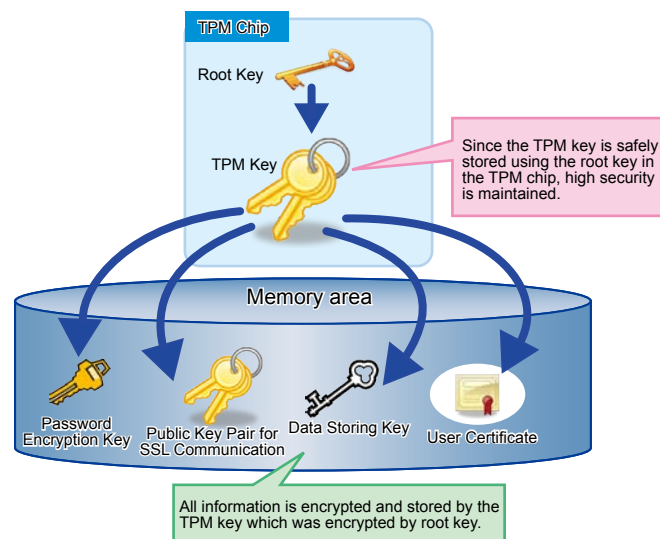
Security Function (Encryption Key, Certificate and Protection of Password)

Overview

A PCB called "TPM PCB" is installed on the machine's Main Controller PCB. TPM, which is an abbreviation for "Trusted Platform Module", is a name of a chip that has a function for generating and saving the encryption key as well as public-key encryption arithmetic function.

The TPM PCB protects security information (passwords, certificates and encryption keys) stored in the Flash. It does not protect the setting/registered/saved data other than security information.

Encryption and decryption of security information use the TPM key within the chip.



F-2-21

As it is practically impossible to extract the TPM key from the chip, the machine's security information is well protected even when the following cases occur:

- If the hard disk or the Main Controller PCB is removed and installed in another MFP (as the TPM PCB retains the model information when the TPM setting is enabled)
- If the machine's system is intruded upon via the network

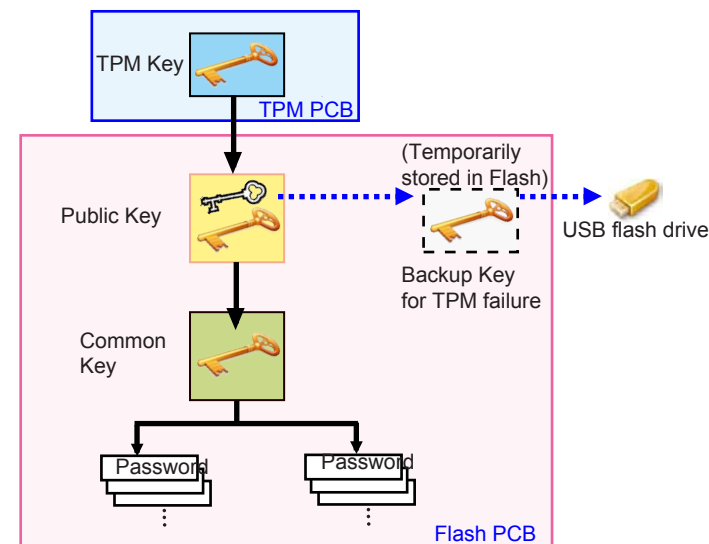
The setting is required in Settings/Registration mode.

Management Settings > Data Management > TPM Settings > On (default: Off)

Security Information Structure

The operation of the security function differs depending on the TPM settings on the UI. There are 2 types of TPM settings, and the respective flows of security information are described below:

Image diagram when the TPM settings are enabled



F-2-22

When TPM settings are enabled, the TPM key becomes valid, so three-stage keys can be used. Therefore, the security information of each machine is securely protected.

The security information for this setting consists of three keys and the information of multiple passwords stored in the Flash PCB.

Each piece of information is stored in the specified storage location. (enclosed in blue in the above diagram)

As this information is linked to the security information in the lower layer, the function does not work unless all information is available.

Note that, as a backup function in the case of failure, a backup key is temporarily stored in the Flash memory. (Limited to the first time when TPM Settings is turned to On)

This key can be backed up using a USB flash drive. After being backed up, it is deleted from the Flash PCB.

As the stored public key information is lost upon failure/replacement of the Flash PCB, the security information cannot be correctly decoded. In this case, "Initialize All Data/Settings" of Settings/Registration needs to be executed to disable TPM settings.

When the TPM settings are disabled, the TPM key becomes invalid, so the security information is protected only by the shared key. In that case, the security information of each machine is protected at the same level as that of conventional machines.

When the TPM settings are disabled, the security information consists of a shared key and the information of multiple passwords stored in the Flash memory. Unlike when the TPM settings are enabled, stored password information is initialized upon failure/replacement of the Flash memory.

● TPM Settings of Security Information

Whether to use TPM can be selected for security information by changing the TPM settings in the Settings/Registration mode.

- When TPM Settings is On
In this case, four-stage security information (TPM key, public key, shared key and password) is enabled.
- When TPM Settings is Off
In this case, two-stage security information (shared key and password) is enabled.

■ Works to be Done Before and After Introduction

The setting is required in Settings/Registration mode. ("TPM Settings" at the time of shipment: Off)

- Enabling of the Function
- Backup of TPM key
- Restoration of TPM key
- Disabling of the Function

As a general rule, these works should be performed by the user.

CAUTION:

When configuring the TPM Settings to "On", advise the user of the following points.

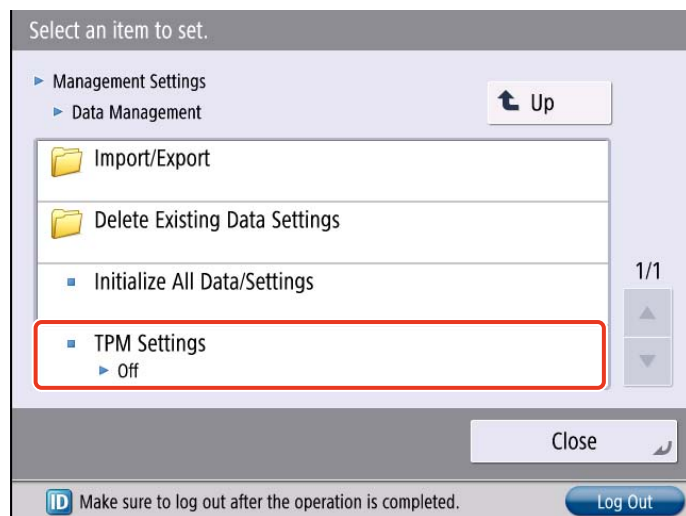
- After setting it to "On", immediately back up the TPM key.
- Be sure to remember the password set when the TPM key was backed up.
- Do not lose the USB flash drive containing the backup file of the TPM key.
- When replacing the TPM PCB due to a failure, etc, the TPM key needs to be restored after replacement. (Restore TPM Key is enabled only when replacing the TPM PCB.)
- If the TPM key is not restored, the security information (passwords, encryption keys and certificates) cannot be used.
- It is necessary to execute "Initialize All Data/Settings" first to enable TPM settings again when the TPM key could not be restored due to reasons such as having lost a USB flash drive. It is because of the security issue that arises if Settings/Registration data is kept as-is.

Enabling of the Function

CAUTION:

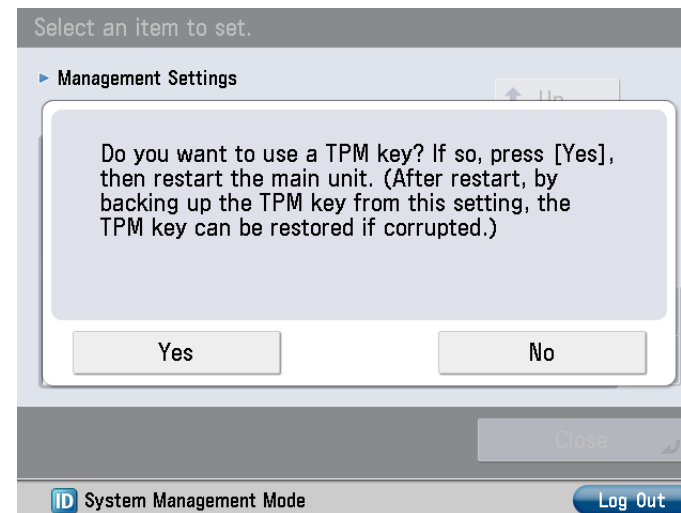
Be sure to recommend to the user (administrator) to set the System PIN beforehand. After configuring the TPM Settings to "On", back up the TPM key, but it can only be done once. It is effective to set the System PIN as a means to prevent a situation in which those other than the administrator obtains the backup file due to the TPM key not having been backed up.

- 1) Set Management Settings > Data Management > TPM Settings to "On".



F-2-23

- 2) Restart the machine after clicking "Yes".



F-2-24

This function is enabled after restart.

Backup of TPM key

Only a USB flash drive (supported file system: FAT32) can be used as a device to save the backup file of the TPM key.

The data size of this file is several MB.



F-2-25

1) Connect the USB flash drive to the machine.

The USB I/F (host) is located on the Control Panel side and the Main Controller PCB side.

CAUTION:

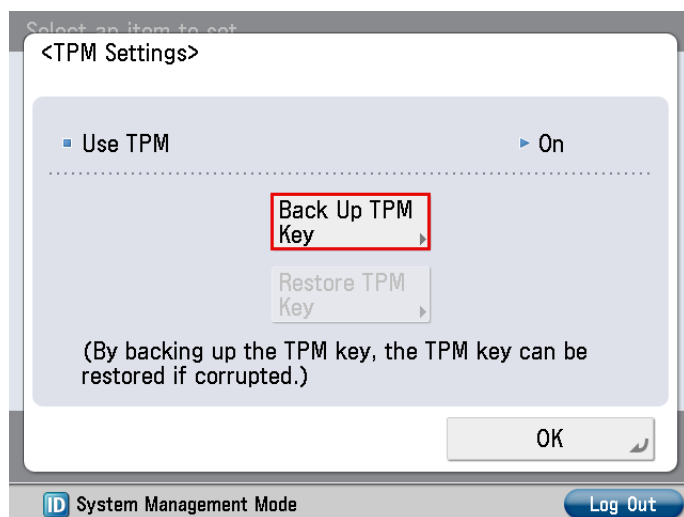
Connect only one USB flash drive.

If two or more are connected when the backup operation is executed, a message is displayed indicating that the backup has failed.

NOTE:

As the backup file of the TPM key is saved by serial number, backup files of multiple machines can be saved in the USB flash drive.

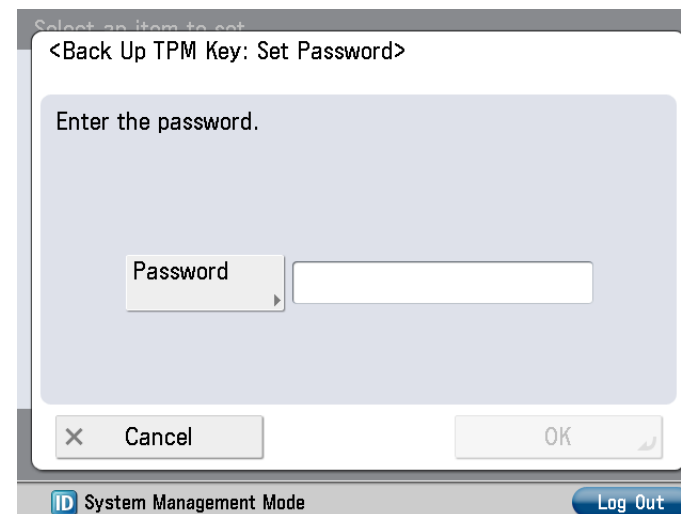
2) Execute Management Settings > Data Management > TPM Settings, and click [Back Up TPM Key].



F-2-26

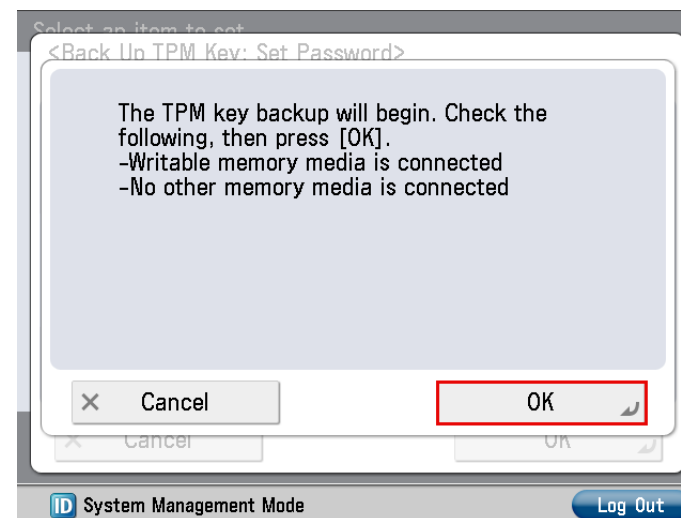
3) After clicking [Password], enter the password (4 to 12 digits).

Then, re-enter the verification password.



F-2-27

4) Click [OK]. Backup of TPM key starts.



F-2-28

5) When the screen indicating the completion of backup is displayed, click [OK], and remove the USB flash drive.

CAUTION: Causes of backup failure

In the following cases, a message indicating that the backup has failed and its cause are displayed. Take appropriate measures.

- No USB flash drive is connected.
- Two or more USB flash drives are connected.
- Not enough space on USB flash drive.
- The connected USB flash drive is read-only.
- No key.

CAUTION: Storing the USB flash drive

Advise users of the following.

- Store the USB flash drive under lock and key.
- Do not store the backup files of the TPM keys in a USB flash drive at a location to which the general public has access, such as on a server.

NOTE: Name of the backup file of the TPM key

The serial number of the machine is automatically assigned to the name of the backup file.

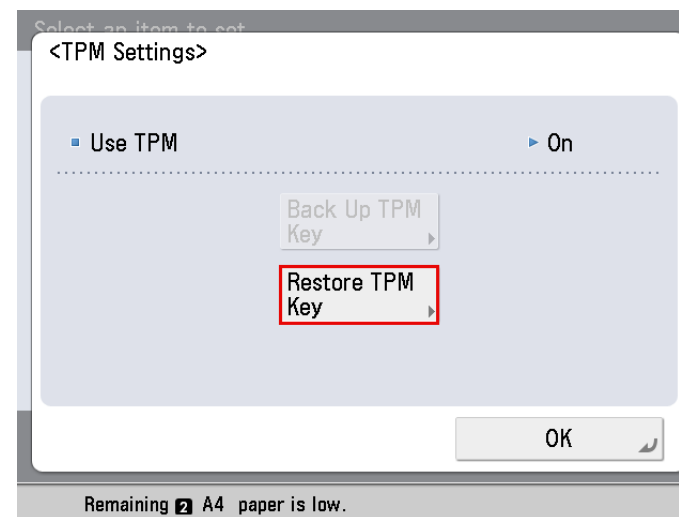
● Restoration of TPM key

The operation is almost the same as that of backup.

Differences:

When the restoration is completed, restart (turning OFF and then ON the Main Power Supply Switch) is required.

- 1) Connect the USB flash drive containing the saved TPM key.
- 2) Execute Management Settings > Data Management > TPM Settings, and click [Restore TPM Key].



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- 3) Enter the password set at backup operation.
- 4) When the screen appears confirming the start of restoration, click [OK]. Restoration starts.
- 5) When the screen indicating the completion of restoration is displayed, click [OK], remove the USB flash drive, and then turn OFF and then ON the Main Power Supply Switch.

CAUTION: Causes of restoration failure

In the following cases, a message indicating that the restoration has failed and its cause are displayed. Take appropriate measures.

- No USB flash drive is connected.
- Two or more USB flash drives are connected.
- A secured USB flash drive is connected.
- The USB flash memory contains no TPM key.
- The TPM key on the USB flash memory is not for the target machine.
- The entered password does not match.
- "Initialize All Data/Settings" is executed after backing up the TPM key.
- Flash PCB is faulty.

● Disabling of the Function**CAUTION: Points to note at disabling the function**

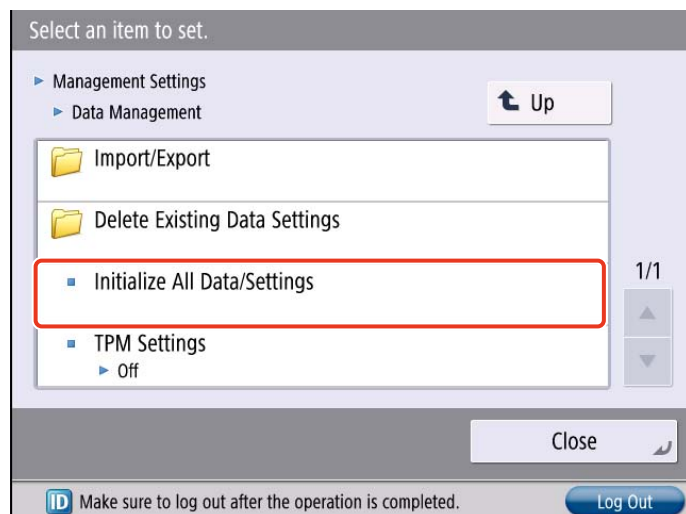
To stop the operation of TPM, Initialize All Data/Settings needs to be executed. Since user information on the hard disk is all initialized at this time, be sure to back up the data before configuring the TPM Setting to "Off".

1) Before deleting the data, back up or export necessary data.

<List of Data that is Deleted>

- Data saved in Mail Box
- Data saved in the reception tray (Confidential Fax Inbox/Memory RX Inbox)
- Destination information registered in the address book
- The reading mode registered by the send function
- [Favorite Settings] registered by the copy function, file save/usage functions, and the send function
- MEAP applications and license files
- Data saved using MEAP applications
- SMS (Service Management Service) password of MEAP (If the password has been changed, the default password is restored.)
- User authentication information registered in Settings/Registration > Management Settings > User Management > Authentication Management
- Unsent documents (documents for which delayed or scheduled transmission settings have been specified)
- Job log information
- Settings specified in Settings/Registration
- Registered forwarding settings
- Key and certificate registered in Settings/Registration > Management Settings > Device Management > Certificate Settings

- 2) Executes "Initialize All Data/Settings" to configure the TPM Setting to "Off".



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- 3) Restore or import the data backed up or exported in step 1.

TPM-related error code:

E746-0031: TPM error

A communication error between the Main Controller PCB and the TPM PCB was detected at startup.

E746-0032: TPM error

Mismatch of the TPM key was detected.

E746-0033: TPM error

It was detected that data in TPM was inconsistent.

E746-0034: TPM auto-recovery error

The error occurred when clearing HDD while TPM setting was ON.

E746-0035: TPM version error

TPM PCB which cannot be used in this machine was installed.

Target data for encryption/decryption (reference)

Type	Application/Function	Security Information	Storage Destination
Password/ PIN	Confidential Fax Inbox	Password for Confidential Fax Inbox	Hard disk
		SEND	Hard disk
		Address Book PIN	FLASH
		LDAP Server password	FLASH
		POP Server password	FLASH
		Password of time stamp PDF	FLASH
		Password of Adobe ES Rights Management server	FLASH
	UI	Service mode password	FLASH
	Network	IPP authentication password	FLASH
		FTP authentication password	FLASH
		User name and password of proxy authentication client	FLASH
		Log-in password of NetWare print server	FLASH
		Shared key of IPSec policy	FLASH
		User name and password for PEAP/TTLS authentication	FLASH
Others	User information registered in the device	Hard disk	
	Fax RX password	FLASH	
	Department management data (including administrator password)	FLASH	
Encryption key	MIB	Authentication key and encryption key for SNMPv3	FLASH
Certificate /Private key	SSL, AMS	Device key pair (SSL, AMS)	Hard disk
	Signature SEND	User key pair	Hard disk
Others	User environment data	Keyring information (password)	Hard disk

T-2-9

HDD Encryption Kit (option)

When installed, this option generates an encryption key in the Encryption Board to encrypt the whole hard disk, including the system software. Encryption prevents leakage of confidential information (temporary image data generated when copying and printing, registered information in the address book as well as its password information) if the hard disk is stolen.

CAUTION:

The system does not need to be reinstalled when installing the HDD Encryption Kit. Because the system is stored in the Flash PCB, it does not need to be deleted.

Hard Disk Encryption Function

Temporary image data such as scanned images and PDL data is written to the hard disk of the host machine as needed. Information of images and user files remains as-is on the hard disk after printing or file deletion because only management information is deleted in the course of normal operations. This encryption function prevents recovery of original images in the event that the hard disk is removed and analyzed using a disk editor or other tools.

Data Encryption System

The Encryption Board encrypts the data sent from the controller, and records it in the hard disk.

The Encryption Board decodes the encrypted data saved in the hard disk, and then sends it to the controller.

Conditions of Encryption Board Operation

As the Encryption Board includes a function to identify and authenticate the host machine, an error occurs when an once-used Encryption Board is installed to a different machine.

Compatibility among Device, Encryption Board and Hard Disk

When the Encryption Board is installed and the authentication information on the controller side and that on the Encryption Board do not match, E602-2000 occurs.

There are four cases of combination among the device, the Encryption Board and the hard disk.

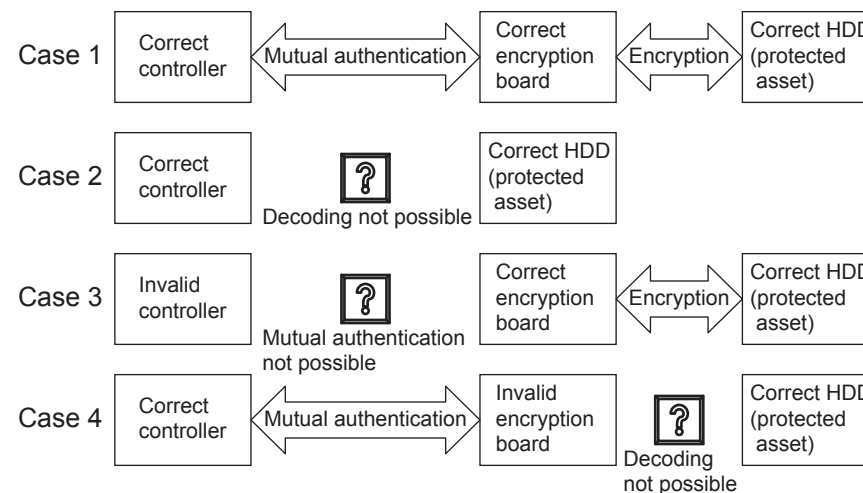
The state of each combination is described here.

Case 1: Normal operation

Case 2: A hard disk-related error occurs because the system on the hard disk cannot be read (errors other than E602-2000).

Case 3: E602-2000 occurs because of the failure of mutual authentication.

Case 4: Proper decryption is not possible because the key of the Encryption Board is different.



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■ Overview of Countermeasures for Trouble

Service task	User Data	Recovery	Countermeasure
Hard disk replacement	Deleted	Replace Hard disk	1) Format hard disk.
Encryption Board replacement	Deleted	Install HDD encryption Kit	1) Replace the Encryption Board. 2) Initialize the Encryption Board. 3) Format the hard disk.
Flash PCB replacement	Deleted	Clear the key for HDD data encryption kit, and install the HDD Data Encryption Kit.	1) Initialize the Encryption Board. 2) Format the hard disk.
Clearing of the Main Controller (COPIER > FUNCTION > MN-CON)	Deleted	After MN-CON clear process is done	As the authentication information is not cleared by the clearing of MN-CON, there is no work to be done specific to the HDD Encryption Kit.

T-2-10

Related Error Code:

E602-2000: Authentication error between the host machine and the Encryption Board
Authentication between the host machine and the Encryption Board could not be performed because I/O error occurred in the file system after startup

E602-5001: Authentication error between the host machine and the Encryption Board
Mistake in the procedure for installing the HDD Encryption Board

E602-5002: HDD error

A non-genuine HDD was detected.

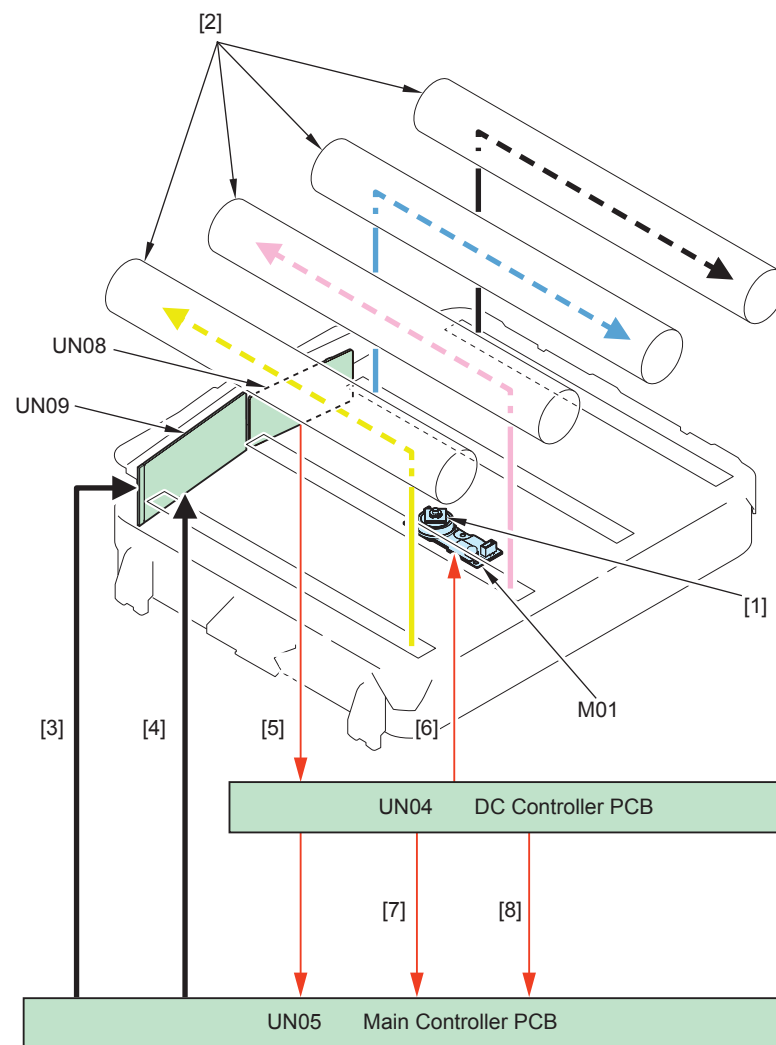
Laser Exposure System

Overview

The laser exposure system forms a static latent image on the Photosensitive Drum by laser exposure.

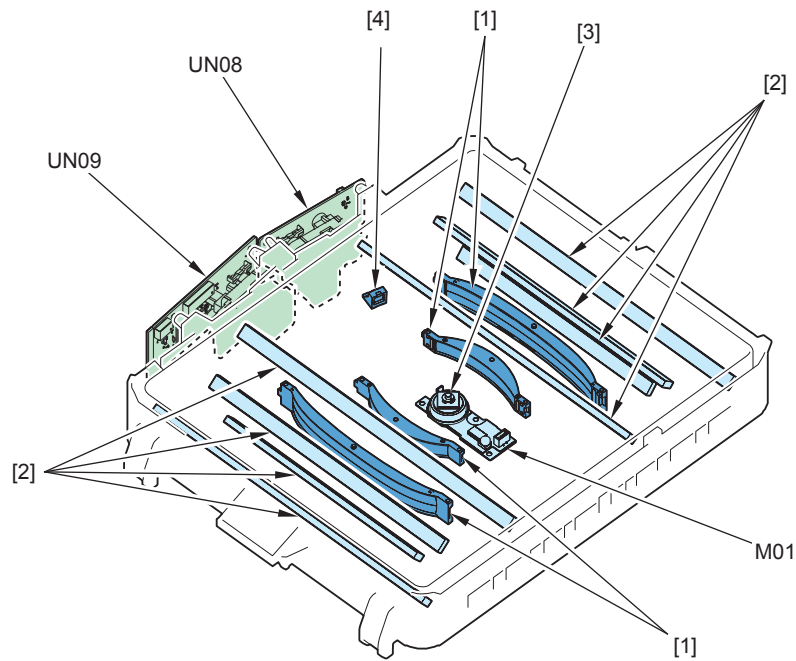
The Laser Scanner Unit consists of the Laser Assembly and the Scanner Motor, and is controlled by the signal from the DC Controller.

This machine adopts the 1-polygon, 4-laser method to realize a compact size.



F-2-32

- | | | | |
|-----|------------------------------|------|-----------------------|
| [1] | Polygon Mirror | UN08 | C/Bk Laser Driver PCB |
| [2] | Photosensitive Drum | UN09 | Y/M Laser Driver PCB |
| [3] | APC signal | M01 | Scanner Motor |
| [4] | Video signal | | |
| [5] | BD signal | | |
| [6] | Scanner Motor control signal | | |
| [7] | ITOP | | |
| [8] | Laser On/Off signal | | |



F-2-33

- | | | | |
|-----|-------------------|------|-----------------------|
| [1] | Imaging Lens | UN08 | C/Bk Laser Driver PCB |
| [2] | Reflection Mirror | UN09 | Y/M Laser Driver PCB |
| [3] | Polygon Mirror | M01 | Scanner Motor |

Specification

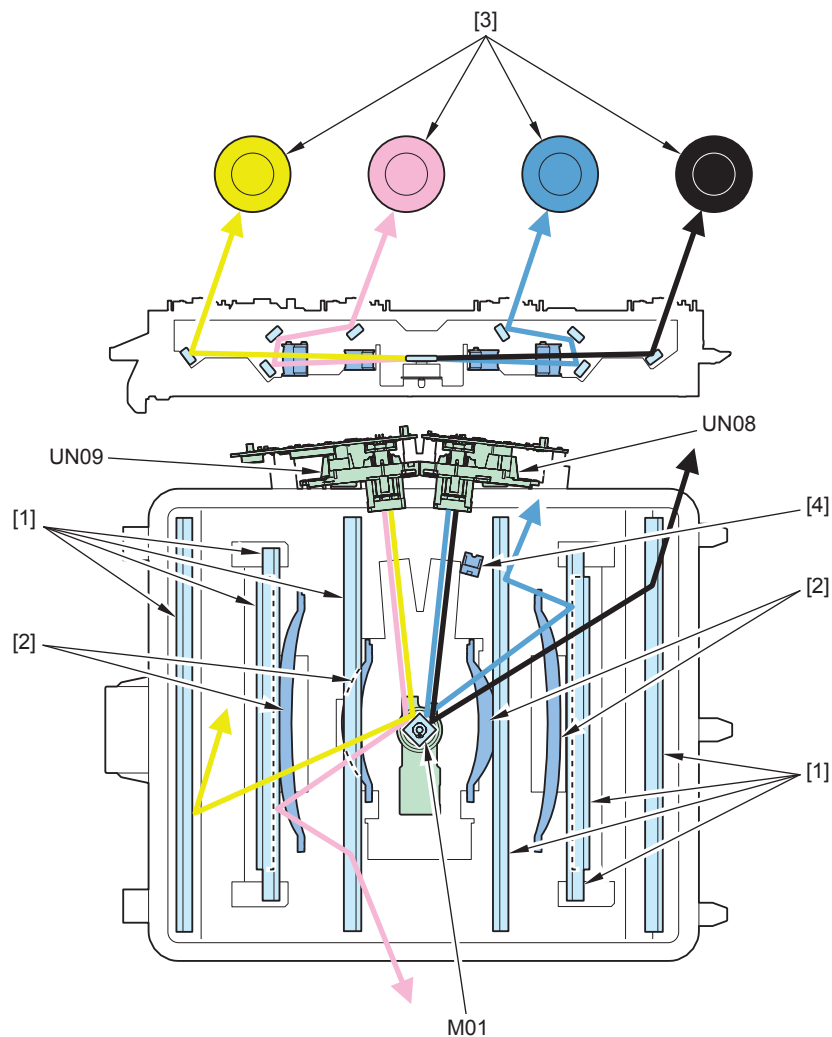
Item	Description
Wave length	780 to 800 nm
Laser type	Infrared (invisible) laser
Laser output	10 mW
Number of Laser Scanner Units	1
Number of laser beams	1 beam per color/scanning
Resolution	At full speed: 600 dpi At half speed: 600 or 1200 dpi
Motor type	Brushless motor
Motor revolutions	Approx. 42,300 rpm (full/half speed)
Number of Polygon Mirror surfaces	Four surfaces (20 mm dia.)

T-2-11

1-Polygon 4-Laser Method

This method performs laser scanning using one Scanner Motor and four laser diodes. The multifaceted mirror on one Scanner Motor can scan lasers equivalent to four stations, thereby realizing space-saving.

Below is the Laser Scanner Unit outline drawing.



- [1] Reflection Mirror
- [2] Imaging Lens
- [3] Photosensitive Drum

- UN08 C/Bk Laser Driver PCB
- UN09 Y/M Laser Driver PCB
- M01 Scanner Motor

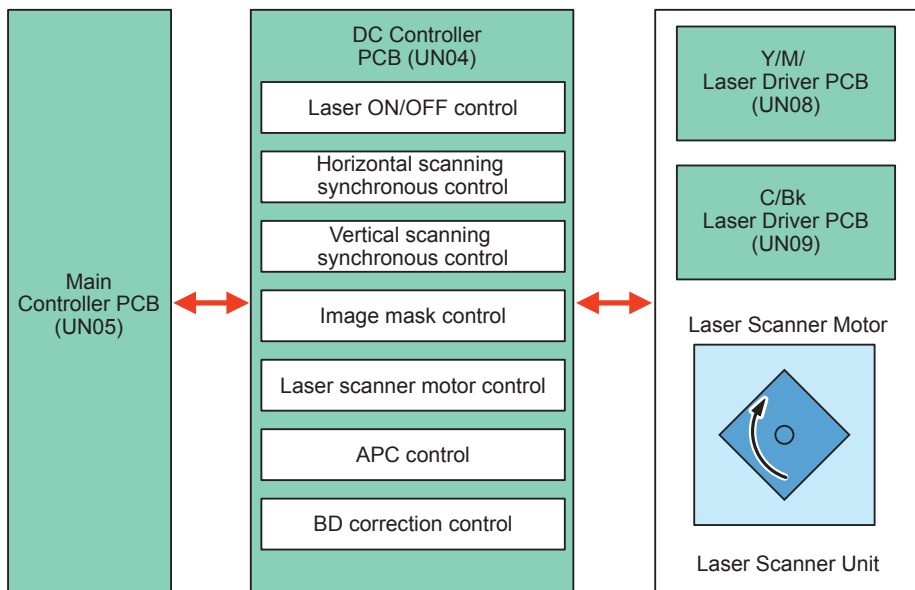
F-2-34

Controls

Overview

Item	Operation description
Laser ON/OFF control	Turns the laser beam ON and OFF according to the combination of laser control signals.
Horizontal scanning synchronous control	Aligns the write start position in the horizontal scanning direction.
Vertical scanning synchronous control	Aligns the write start position in the vertical scanning direction.
Image mask control	Prevents soiling of the Secondary Transfer Outer Roller.
Laser scanner motor control	Rotates the Polygon Mirror at a specified speed.
APC(Auto Power Control) control	Ensures constant laser beam light intensity for each line.
BD correction control	Corrects displacement of BD timing for the displacement of the Polygon Mirror angle.

T-2-12



F-2-35

Laser ON/OFF control

Purpose

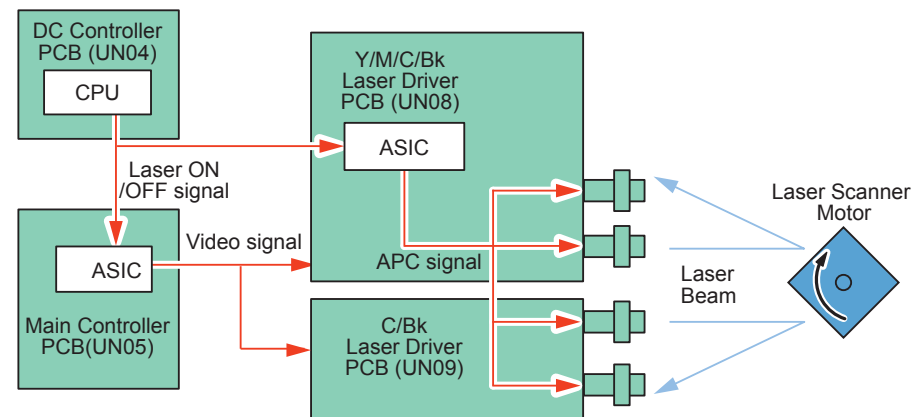
Turns the laser beam ON and OFF according to the combination of laser control signals.

Execution timing

After Power-On

Control description

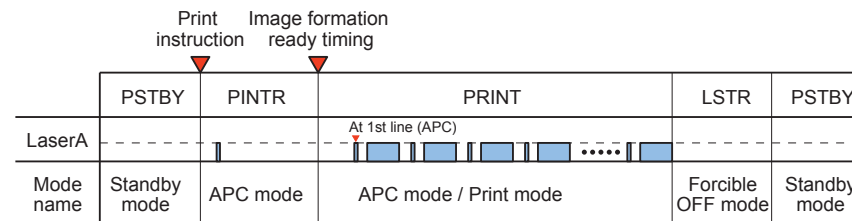
The DC Controller switches between four modes (Forced OFF mode, APC mode, Print mode, and Standby mode) by laser control signals.



F-2-36

Mode	Laser Status	Remarks
Forced OFF mode	OFF	Clears the light intensity setting determined by the APC.
APC mode	ON	Adjusts the laser light intensity.
Print mode	ON/OFF	Emits the laser according to the video signal.
Standby mode	OFF	The machine is in standby mode.

T-2-13



F-2-37

Horizontal scanning synchronous control

Purpose

Aligns the write start position in the horizontal scanning direction.

Execution Timing

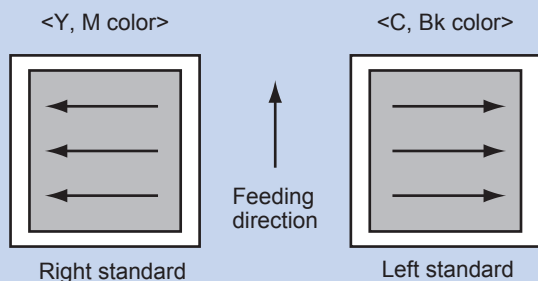
When printing is started (for each line)

Control description

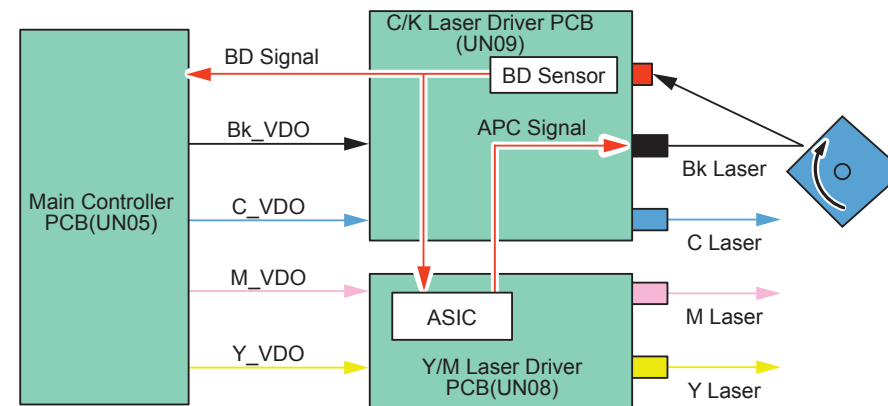
- 1) The Y/M Laser Driver PCB forcibly emits the Bk laser diode of the C/Bk Laser Driver PCB by setting the Bk laser control signal to APC mode.
- 2) The laser beam of the Bk laser has a BD circuit in the scanning light path, and is incident on the BD Circuit.
- 3) The BD Circuit detects the laser beam and generates a BD signal, and sends it to the Main Controller.
- 4) The Main Controller synchronizes with this signal, and sends video signals (Y_VDO, M_VDO, C_VDO and Bk_VDO) to the Y/M and C/Bk Laser Driver PCBs while regarding the reference BD signal as the vertical scanning synchronous signal (BD) for each line. This enables each Laser Driver PCB to emit a laser beam from a fixed position for each line.

NOTE:

- As the BD signal is the horizontal scanning synchronous signal of the Bk color, the Bk color serves as each color's reference for horizontal scanning.
- With this machine, the reference in the horizontal scanning direction for Y and M colors is the right edge (right-to-left) while that for C and Bk colors is the left edge (left-to-right).



F-2-38



F-2-39

Vertical scanning synchronous control

Purpose

Aligns the write start position in the vertical scanning direction.

Execution Timing

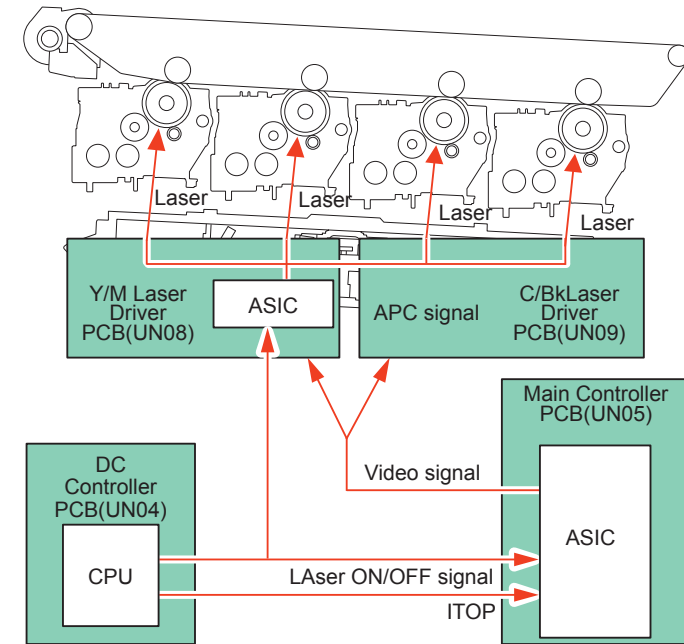
At each print

Control description

- 1) When the DC Controller receives a print order, it detects an internal reference signal. Based on this signal, a vertical scanning synchronous signal (ITOP) is generated and sent to the Main Controller.
- 2) The Main Controller synchronizes with ITOP signal and generates video signals (Y_VDO, M_VDO, C_VDO and Bk_VDO), and sends them to the Laser Scanner Unit.
- 3) The Laser Scanner Unit generates the laser drive signals based on the video signals. At this timing, the Laser Scanner Unit emits laser beams to match the leading edge of image with that of paper.

NOTE:

If the process speed is slowed by the print mode, the cycle of the TOP signal in continuous printing is lengthened according to the degree of slowing.



F-2-40

Image mask control

Purpose

Prevents soiling of the Secondary Transfer Outer Roller.

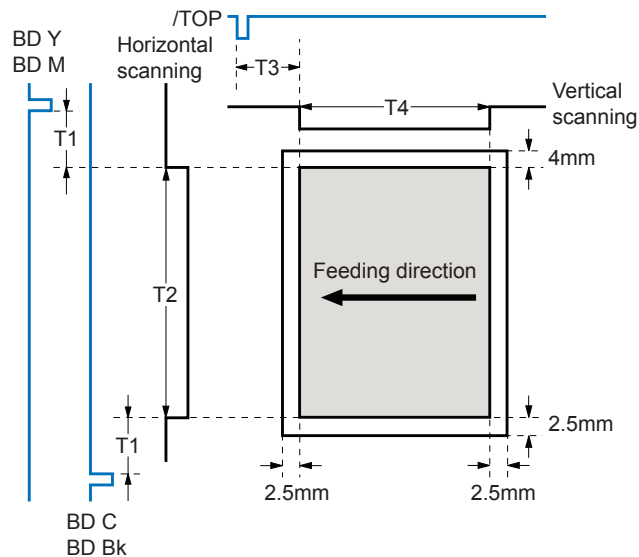
Image mask control is carried out at horizontal scanning and vertical scanning, respectively, to avoid laser beams from emitting outside of the image area.

Execution Timing

At power-on, and at each print

Type	Control description	Mask Width
Horizontal scanning	The image mask in the horizontal scanning direction is executed based on the paper size selected by the user. (Each color's BD signal is the reference)	2 mm
Vertical scanning	The image mask in the vertical scanning direction is executed based on the paper size selected by the user. (TOP signal is the reference)	2 mm

T-2-14



- is image mask disable area (image written available).
- T1、 T2、 T4 are differ by paper size.
- T3 is differ by feeding control.

F-2-41

Laser scanner motor control

Purpose

Rotates the Scanner Motor at a specific speed.

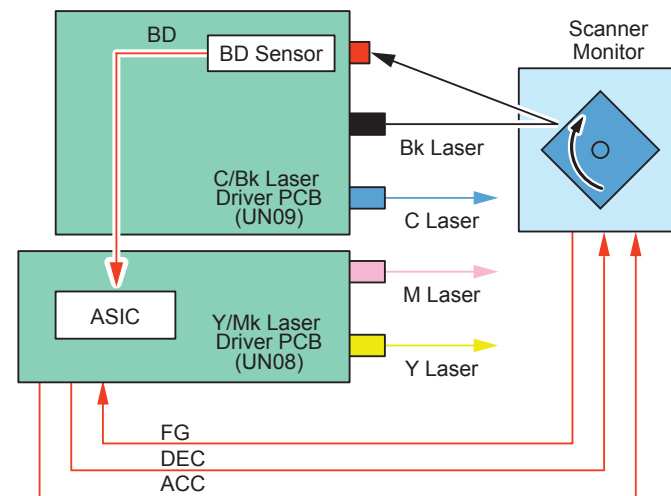
Execution Timing

At power-on, and at each print

Control description

Scanner Motor rotation speed is controlled by the Y/M Laser Driver PCB.

- 1) The Y/M Laser Driver PCB outputs Scanner Motor control signals (acceleration signal: ACC, deceleration signal: DEC) to the Scanner Motor to rotate the Polygon Mirror.
- 2) The Y/M Laser Driver PCB controls the Scanner Motor rotation speed to be constant by reference to the Scanner Motor rotation speed signal (FG signal).
(From when the Scanner Motor starts rotation until it reaches the target revolutions and the machine starts image formation process)
- 3) When the laser beams are emitted at image formation, the BD Sensor of the C/Bk Laser Driver PCB detects the BD signal and inputs it to the Y/M Laser Driver PCB.
- 4) The Y/M Laser Driver PCB controls the Scanner Motor control signals (acceleration signal: ACC, deceleration signal: DEC) based on the input timing of the BD signal to control the Scanner Motor rotation speed.



F-2-42

Related Error Code:

E100-0001: BD error

The BD lock was unlocked although it had been locked once.

E110-0001: Scanner Motor error

At startup, the speed was not locked by FG control.

E110-0002: Scanner Motor error

At startup, the speed was not locked by BD control.

E110-0003: Scanner Motor error

At startup, the phase was not locked by BD control.

E110-0004: Scanner Motor error

The laser exposure timing correction of the Polygon Mirror was not detected after phase lock by BD control.

■ APC(Auto Power Control) control

● Purpose

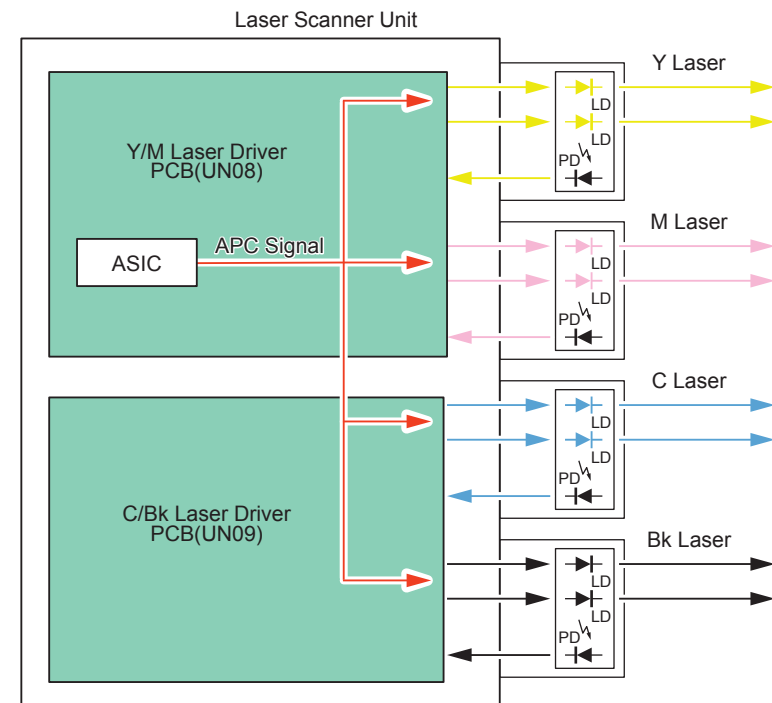
Ensures constant laser beam light intensity for each line.

● Execution Timing

For each line (before writing the image)

● Control description

- 1) The Y/M Laser Driver PCB outputs the APC signal to the Laser Driver IC on each Laser Driver PCB.
- 2) The APC mode is set for the Y/M and C/Bk Laser Driver PCB ICs, and the laser diode of each color is forcibly emitted. The photo diode (PD) monitors the laser diode (LD), and each Laser Driver IC adjusts the output of laser diode until the laser light intensity reaches a specified level.



F-2-43

BD correction control

Purpose

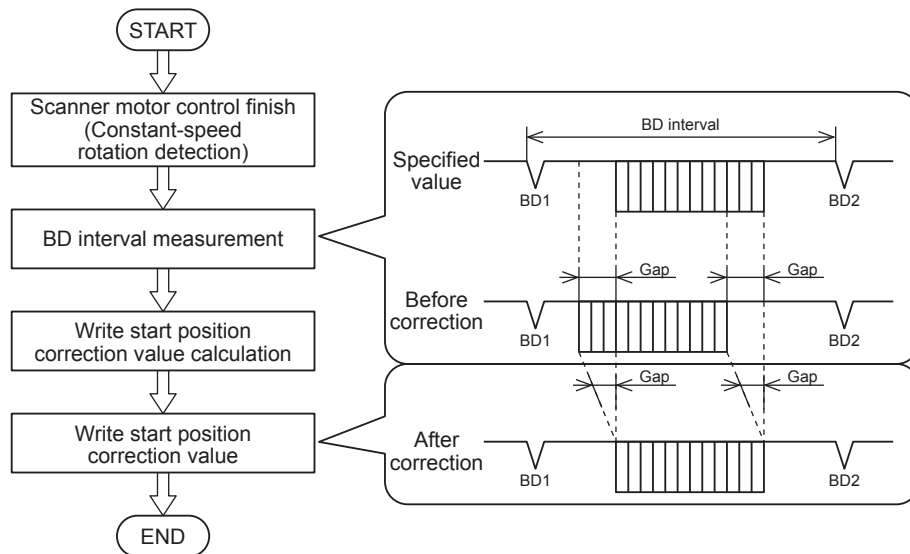
Corrects the displacement of each color's laser write start position due to the varied angle of the Polygon Mirror surface.

Execution timing

At power-on, and at each print

Control description

- 1) The Main Controller PCB measures the BD interval after the completion of constant speed rotation control of the Scanner Motor.
- 2) The Main Controller PCB calculates the correction value from the displacement of the BD interval.
- 3) The write start position is corrected by correcting the write start timing based on the above correction value.



F-2-44

Related Error Code:

E100-0001: BD error

The BD lock was unlocked although it had been locked once.

E110-0001: Scanner Motor error

At startup, the speed was not locked by FG control.

E110-0002: Scanner Motor error

At startup, the speed was not locked by BD control.

E110-0003: Scanner Motor error

At startup, the phase was not locked by BD control.

E110-0004: Scanner Motor error

The laser exposure timing correction of the Polygon Mirror was not detected after phase lock by BD control.

Image Formation System

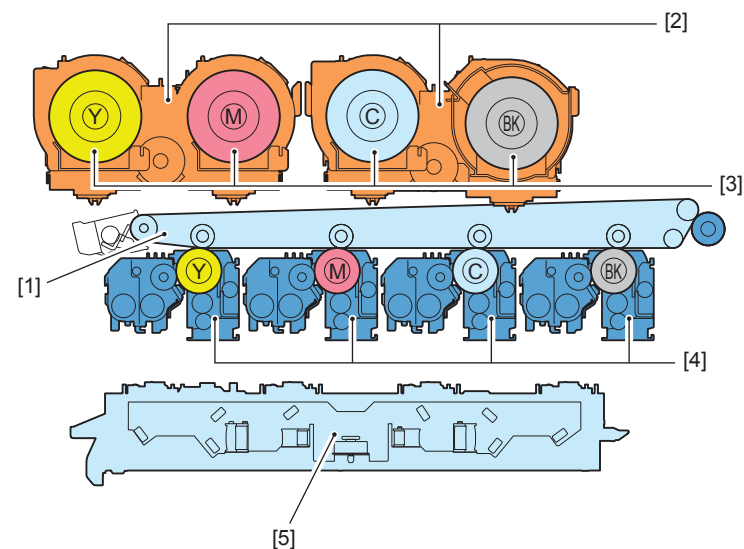
Overview

Specifications

	Item	Function/Method
Photosensitive Drum	Material	OPC
	Drum diameter	30 mm in diameter
	Cleaning	Cleaning Blade
	Process speed	1/1 speed: 119.4 mm/s 1/2 speed: 59.7 mm/s
	Drum Heater	None
Developing Unit	Developing Cylinder	1 cylinder (single-developing method)
	Developing method	Dry, 2-component development
	Toner	Non-magnetic negative toner
	Toner level detection	Yes (Toner Density Sensor is also used)
Primary Charging	Charging method	Roller charging
	Cleaning	Brush Roller
Toner Container	Toner Container detection	Yes
	Replacement of Toner Container (during continuous print)	Disabled
Transfer method		Intermediate transfer (ITB)
ITB Unit	Circumferential length	Inner circumferential length: 791.9 mm
	Cleaning	Cleaning Blade
	Belt displacement correction	Controlled by rib
Primary transfer	Transfer method	Transfer Roller
	Disengagement mechanism	Yes
Secondary transfer	Transfer method	Transfer Roller
	Disengagement mechanism	None
	Cleaning	Static cleaning
Separation method		Curvature separation + Static Eliminator

T-2-15

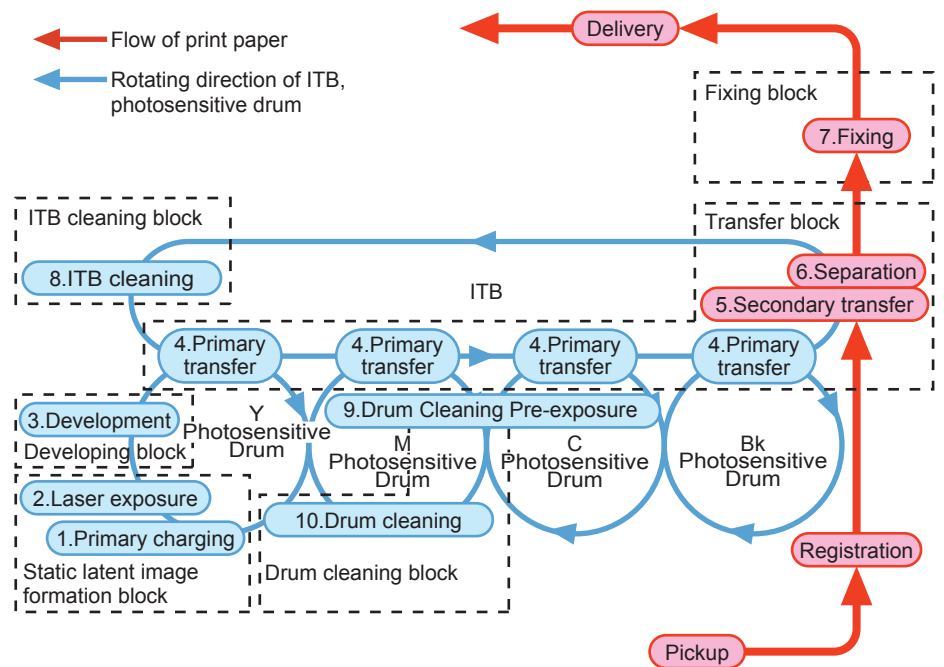
Parts Configuration



F-2-45

- [1] ITB Unit
- [2] Driving the Toner Bottles
- [3] Toner Bottle
- [4] Drum Unit
- [5] Laser Scanner Unit

Print Process



F-2-46

Static latent image formation block	1	Primary Charging	The surface of the Photosensitive Drum is charged to make a uniform negative potential.
	2	Laser exposure	Emission of the laser light forms a static latent image on the surface of the Photosensitive Drum. (Image exposure: laser exposed area becomes image area)
Developing block	3	Development	With the dry, 2-component AC developing method, toner that has been negatively charged by the Developing Cylinder is attached to the Photosensitive Drum.
Transfer block	4	Primary transfer	Toner on the surface of the Photosensitive Drum is transferred to the ITB by applying positive potential from back side of the ITB.
	5	Secondary transfer	Toner on the ITB is transferred to the paper by applying positive potential to the Secondary Transfer Outer Roller.
	6	Separation	With the curvature separation method, the paper is separated from the ITB. In the case of thin paper which has low elastic force, the Static Eliminator reduces potential on the back side of paper to make the thin paper to be separated easily.
Fixing block	7	Fixing	The toner on the paper is fixed on the paper by heat and pressure.
ITB cleaning block	8	ITB cleaning	The Cleaning Blade removes the residual toner attached on the ITB.
Drum cleaning block	9	Drum Cleaning Pre-exposure	Pre-exposure LED Unit removes the residual charge.
	10	Drum cleaning	The Cleaning Blade remove the residual toner attached on the Photosensitive Drum.

T-2-16

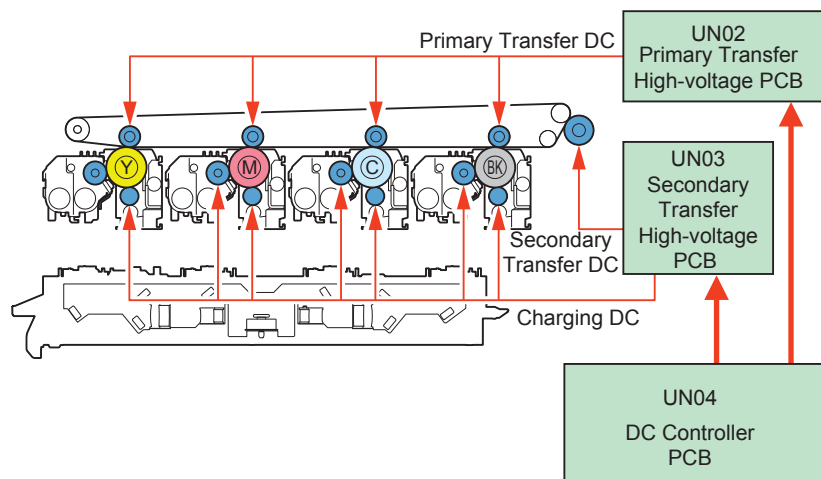
Bias Types

The following 5 types of bias are used with this machine.

Bias name	Bias types	Application location	Control PCB
Primary charging bias (DC)	DC	Primary Charging Roller	Secondary Transfer High Voltage PCB (UN03)
Developing bias (DC)	DC	Developing Cylinder	
Developing bias (AC)	AC		
Primary transfer bias	DC	Primary Transfer Roller	Primary Transfer High Voltage PCB (UN02)
Secondary transfer bias	DC	Secondary Transfer Outer Roller	Secondary Transfer High Voltage PCB (UN03)

T-2-17

The abovementioned biases are generated by the 2 High Voltage PCBs and are also supplied to the loads used in printing process.



F-2-47

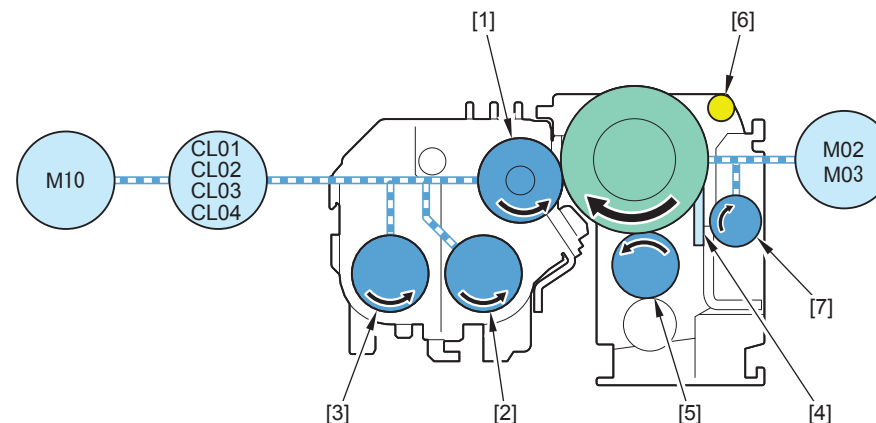
Controls

Overview

Drum Unit / Developing Unit	Toner Supply Area
Parts / Drive Configuration	Parts / Drive Configuration
Drum Cleaning / Drum Cleaning Pre-exposure Control	Opening/Closing of Toner Container Shutter
Drum Unit Detection	Bottle State Detection
Drum Unit Life Detection	Toner Container Detection
Primary Charging	ATR (Auto Toner Replenishment) Control
	Toner Supply Control
	Toner Level Detection
	Detection of Completion of Toner Replacement
Transfer/Separation	Waste Toner Feed Unit
Parts / Drive Configuration	Parts / Drive Configuration
Primary Transfer Control	Waste Toner Container Full Level Detection
Secondary Transfer Control	Detection of Completion of Waste Toner Replacement
Primary Transfer Roller Disengagement Control	Waste Toner Container Detection
ITB Displacement Correction	
ITB Cleaning	
Secondary Transfer Outer Roller Cleaning Control	
Separation	
Image Stabilization Control	Other Controls
Control Timing List	Special Controls
Laser Power Correction (D-max) Control	Warm-up Rotation Control
D-half Control	Behavior When Color Printing is Limited or There is No Color Toner
ARCDAT Control (Automatic and Reciprocal Color Density Adjustment Technology)	
Color Displacement Correction Control	
Patch Sensor Adjustment	
Auto Gradation Adjustment (PASCAL) Control	

Drum Unit / Developing Unit

Parts / Drive Configuration



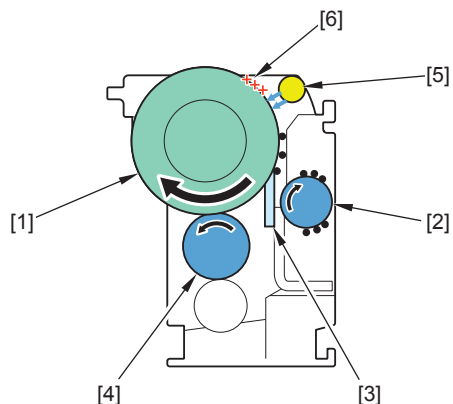
Parts name	Role
[1] Developing Cylinder	The toner and carrier inside the Developer Container are coated on the surface, and the toner is developed on the Photosensitive Drum.
[2] Developer Feed Screw A	Toner and carrier in the Developer Container are supplied to the Developing Cylinder.
[3] Developer Feed Screw B	Toner and carrier in the Developer Container are stirred and supplied to the Developer Feed Screw A.
[4] Cleaning Blade	Residual toner on the Photosensitive Drum is removed.
[5] Primary Charging Roller	The surface of the Photosensitive Drum is charged to make a uniform potential.
[6] Drum Cleaning Pre-exposure LED	Residual charge remaining on the Photosensitive Drum surface is removed.
[7] Cleaning Screw	Residual toner is fed.
M02 Bk Drum _ ITB Motor	The Photosensitive Drum (Bk) is rotated.
M03 CL Drum Motor	The Photosensitive Drum (Y/M/C) is rotated.
M10 Developing Motor	The Y, M, C, Bk Developing Cylinder and the Developer Feed Screw are rotated.
CL01 Developing Cylinder to 04 Clutch Y/M/C/Bk	The drive path to the Y/M/C/Bk Developing Unit is switched.

Related Error Code:

E010-0001/0002/0003 : Bk Drum_ITB Motor error

E012-0001/0002/0003 : CL Drum Motor error

● Drum Cleaning / Drum Cleaning Pre-exposure Control



F-2-48

Parts name	Role
[1] Photosensitive Drum	After a static latent image has been formed on the Photosensitive Drum, a toner image is formed with the toner from the Developing Cylinder.
[2] Cleaning Screw	Residual toner that has been removed by the Cleaning Blade is fed.
[3] Cleaning Blade	Residual toner on the Photosensitive Drum is removed.
[4] Primary Charging Roller	The surface of the Photosensitive Drum is charged to make a uniform potential.
[5] Drum Cleaning Pre-exposure LED	Residual charge remaining on the Photosensitive Drum surface is removed.
[6] Residual Charge	Residual charge remaining on the Photosensitive Drum surface

T-2-18

Drum cleaning

Purpose: To clean residual toner on the Photosensitive Drum

The Cleaning Blade, which is in contact with the Drum, cleans residual toner on the Photosensitive Drum.

Next, residual toner is fed to the Waste Toner Container by the rotation of the Cleaning Screw.

Drum Cleaning Pre-exposure Control

Purpose: To remove residual charge from the Photosensitive Drum surface by emitting light from the Pre-exposure LED

Ghost imaging, etc. is reduced by removing residual charge.

Related Service Mode:

COPIER > FUNCTION > MIXC-P > PRE-EXP : Lighting-up of Pre-exposure LED
 COPIER > OPTION > FNC-SW > PREXP-SW : Set Clean Pre-exposure LED light condtn

COPIER > ADJUST > EXP-LED > PR-EXP-Y : Adj Cln Pre-expo LED(Y) intnsty: 1/1SPD

COPIER > ADJUST > EXP-LED > PR-EXP-M : Adj Cln Pre-expo LED(M) intnsty: 1/1SPD

COPIER > ADJUST > EXP-LED > PR-EXP-C : Adj Cln Pre-expo LED(C) intnsty: 1/1SPD

COPIER > ADJUST > EXP-LED > PR-EXP-K : Adj Cln Pre-expo LED(Bk) intnsty: 1/1SPD

COPIER > ADJUST > EXP-LED > PR-EXPY2 : Adj Cln Pre-expo LED(Y) intnsty: 1/2SPD

COPIER > ADJUST > EXP-LED > PR-EXPM2 : Adj Cln Pre-expo LED(M) intnsty: 1/2SPD

COPIER > ADJUST > EXP-LED > PR-EXPC2 : Adj Cln Pre-expo LED(C) intnsty: 1/2SPD

COPIER > ADJUST > EXP-LED > PR-EXPK2 : Adj Cln Pre-expo LED(Bk) intnsty: 1/2SPD

Related Alarm Code:

29-0101 : Drum (Y) pre-exposure alarm

29-0201 : Drum (M) pre-exposure alarm

29-0301 : Drum (C) pre-exposure alarm

29-0401 : Drum (K) pre-exposure alarm

● Drum Unit Detection

Purpose: To detect whether the Drum Unit is installed

Detection timing:

- At power-on
- When recovering from sleep (after 8 hours or more have elapsed)
- When opening/closing the Front Door/Right Door

Execution time: Within 1 second

Detection description: The presence/absence of a Drum Unit is detected as follows:

- The following is determined from the DC current monitor value when the charging voltage starts to be applied.

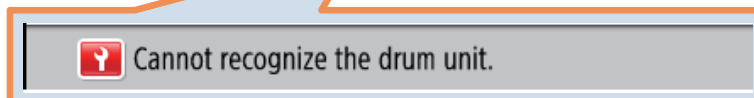
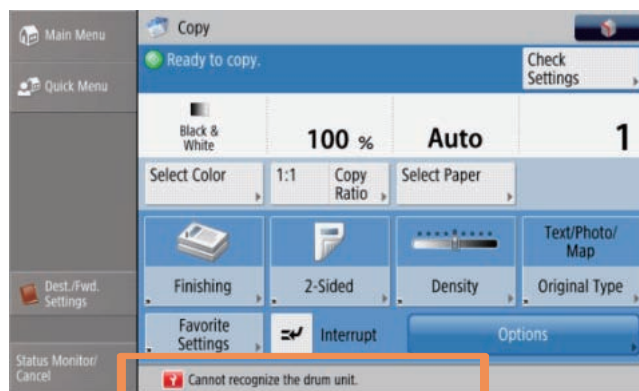
When the current monitor value is less than the specified value (5 micro A): Drum Unit absent

When the current monitor value is the specified value (5 micro A) or higher: Drum Unit present

NOTE:

If the Drum Unit is detected as present but the IC tag of the Drum Unit cannot be detected, alarm code 09-0010/0011/0012/0013 is generated.

Host machine operation: If the Drum Unit is detected as absent, "Cannot recognize the drum unit" is displayed on the LUI status line.



F-2-49

NOTE:

Drum Unit detection may not be executed at times such as at recovery from sleep mode (of 8 or more hours).

"No drum jam" is detected when a print job is executed with no Drum Unit installed in the machine.

Related Jam Code: 00-0B0D: No drum jam

● Drum Unit Life Detection

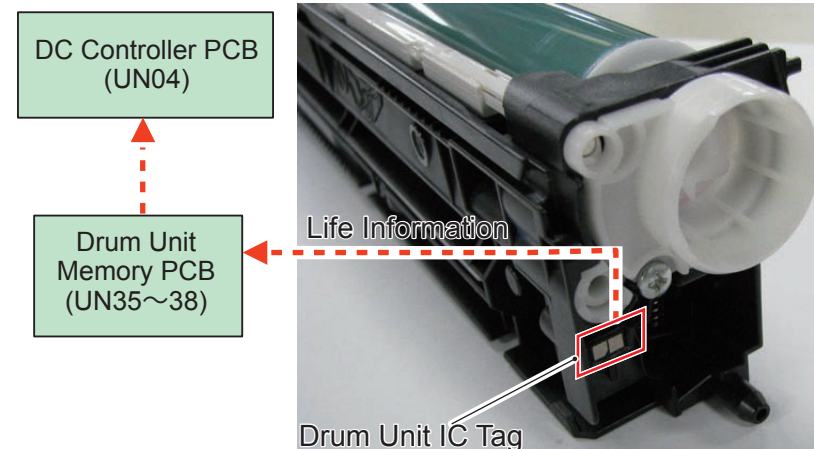
Purpose: To detect the life of the Drum Unit (Photosensitive Drum)

Detection timing:

- At power-on
- For each print
- At recovery from sleep mode

Detection description:

- 1) The drum life is calculated from the drum rotation time + application time of the primary charging DC bias.
- 2) The value calculated in step 1) is added to the Drum count value that has been stored in the IC tag of the Drum Unit.



NOTE:

The life (displayed in %) can be checked by the following service mode:
COPIER > COUNTER > LF > Y/M/C/K-DRM-LF : Drum counter life display (Y/M/C/Bk)

	Pre-toner Low Alarm	Display to prompt replacement	Completion of replacement
Timing	• Y/M/C/K-DRM-LF (*1) = 100% (initial value) The value can be changed in service mode.(*2)	7 days after pre-toner low alarm is sent (Default: Hide (*3))	When the Drum Unit is detected
Detected to (location)	Drum Unit New/Old Sensor	-	Drum Unit New/Old Sensor
Message (Operation of the host machine)	None	Replace the drum unit (1/2/3/4).	None
Alarm code	40-0070 (Y), 0071 (M), 0072 (C), 0073 (Bk) (*4)	None	35-0070 (Y), 0071 (M), 0072 (C), 0073 (Bk) (*5)

*1: (Lv.1) COPIER > COUNTER> LF > Y/M/C/K-DRM-LF

T-2-19

*2: (Lv.1) COPIER > OPTION > FNC-SW > D-DLV-CL/BK

*3: Display/Hide can be switched in (Lv.2) COPIER > OPTION > USER > P-CRG-LF (0: Hide)

*4: During the period from when a pre-toner low alarm is sent to when a replacement completion alarm is sent, the next pre-toner low alarm is not sent. Displayed in COPIER > DISPLAY > ALARM-2

*5: Displayed in COPIER > DISPLAY > ALARM-3

● Primary Charging

Primary charging bias control

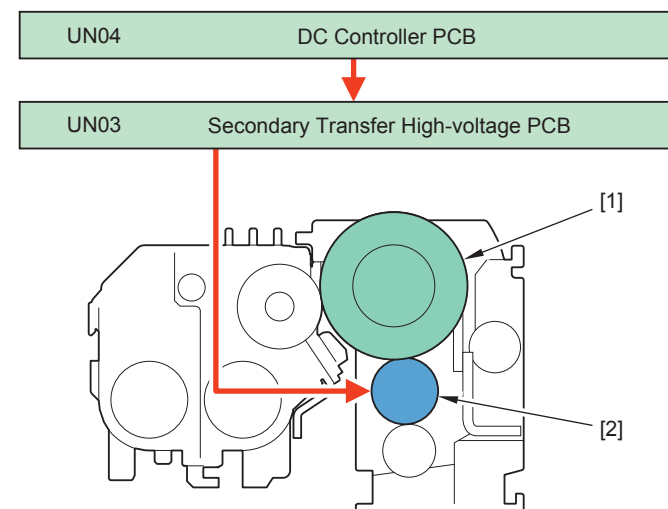
Purpose: To apply voltage to the Primary Charging Roller in order to charge the Photosensitive Drum Surface to a negative potential

Charging method: Roller charging (DC charging (no AC charging))

The primary charging bias (DC negative), which has been generated by the Secondary Transfer High-voltage PCB, is applied to the Primary Charging Roller.

The primary charging bias value is determined by the following conditions on the DC Controller PCB:

- Environment (humidity detected by the Environment Sensor (UN27))
- Life of the Photosensitive Drum



F-2-50

Parts name	
[1]	Photosensitive Drum
[2]	Primary Charging Roller

T-2-20

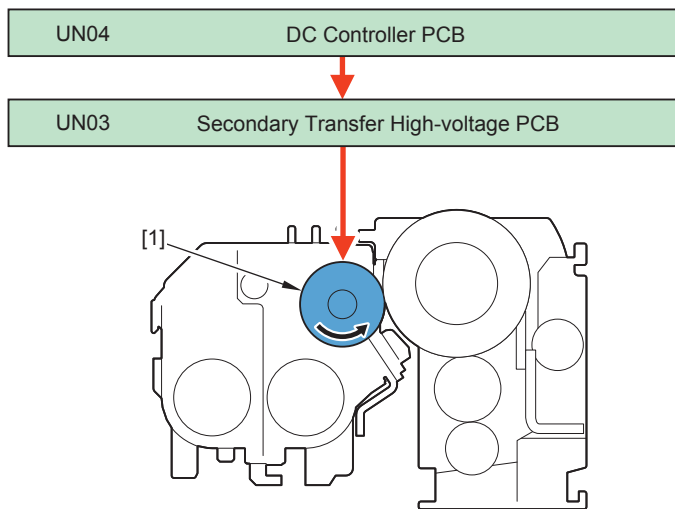
Developing bias control

Purpose: To apply voltage to the Developing Cylinder in order to generate a potential difference from the Photosensitive Drum

Control description

The developing bias (AC, DC negative), which has been generated on the Secondary Charging PCB (UN03), is applied to the Developing Cylinder.

- Developing DC bias: The bias to generate potential difference with the Photosensitive Drum. The bias value is determined based on the Environment Sensor (UN27).
- Developing AC bias: The bias to improve image quality.



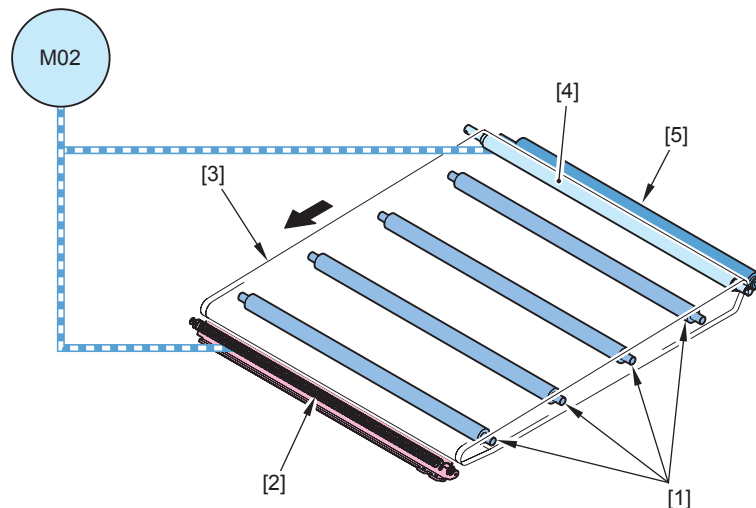
F-2-51

Parts name	
[1]	Developing Cylinder

T-2-21

Transfer/Separation

Parts / Drive Configuration



F-2-52

Parts name		Role
[1]	Primary Transfer Roller	Toner on the Photosensitive Drum is attracted to the ITB.
[2]	ITB Cleaning Screw	Residual toner inside the ITB Cleaner Unit is fed.
[3]	ITB (Intermediate Transfer Belt)	Toner on the Photosensitive Drum is transferred to a paper.
[4]	Secondary Transfer Inner Roller	The ITB is driven.
[5]	Secondary Transfer Outer Roller	As well as attracting toner on the ITB to the paper, paper is fed.
M02	Bk Drum _ ITB Motor	The Secondary Transfer Roller/ITB Cleaning Screw/Bk Drum Unit is driven.

T-2-22

Related Error Code:

E010-0001/0002/0003 : Bk Drum_ITB Motor error

● Primary Transfer Control

Primary Transfer ATVC

Purpose: To set the transfer voltage required to obtain the target transfer current value in order to prevent transfer failure due to environmental changes

Control description:

- 1) Current value of the primary transfer DC bias is detected.
- 2) Optimal target current value is determined based on temperature/humidity data of the Environment Sensor (UN27).
- 3) The primary transfer DC bias to be applied to the Primary Transfer Roller is determined.

Control timing	Adjustment timing	Conditions
Automatic adjustment by the output of a specific number of prints	When a job starts	For each 100 accumulated images When sudden environmental changes are detected by the Environment Sensor
	At paper interval	For each 100 accumulated images
	Control at job completion	For each 500 accumulated images (only in high temperature and high humidity environment) For each 1000 accumulated images
At startup	At power-on	At normal startup If 8 hours or more have elapsed in high-speed startup mode
	At recovery from sleep mode	If 8 hours or more have elapsed in sleep mode
Automatic adjustment by switching modes	When switching to a color job from a B&W job	100 or more accumulated images of color jobs When sudden environmental changes are detected by the Environment Sensor from when the previous ATVC was executed
Automatic adjustment by replacement	Drum Unit replacement	When a new Drum Unit is inserted
	Replace the Developing Unit.	When INISET-Y/M/C/K/4C is executed in service mode
At initial installation	At power-on	At initial installation

T-2-23

Related Service Mode:

COPIER > FUNCTION > MISC-P > 1ATVC-EX : Exe of primary transfer ATVC control

Related Alarm Code:

30-0025 : A voltage value below the threshold value was detected with primary transfer ATVC control for yellow

30-0026 : A voltage value below the threshold value was detected with primary transfer ATVC control for magenta

30-0027 : A voltage value below the threshold value was detected with primary transfer ATVC control for cyan

30-0028 : A voltage value below the threshold value was detected with primary transfer ATVC control for black

Primary transfer bias control

Purpose: To apply current to the Primary Transfer Roller

The primary transfer bias is divided into each color (Y/M/C/Bk), and is generated by the Primary Transfer High Voltage PCB (UN02) and applied to the Primary Transfer Roller.

The primary transfer bias value is determined by the primary transfer ATVC control.

ON and OFF of the primary transfer bias can be switched by color, and it is possible to turn OFF the bias of the color which will not be used.

NOTE:

The ATVC control secures transfer performance that is not affected by change in resistance caused by the environment as well as deterioration of the Primary Transfer Roller and is executed respectively to the primary transfer bias of each color.

● Secondary Transfer Control

Secondary Transfer ATVC

Purpose: To set the transfer voltage required to obtain the target transfer current value in order to prevent transfer failure due to environmental changes and paper type

Control timing	Conditions
When a job starts	Executed each time at initial rotation
At paper interval	For each 100 accumulated images

T-2-24

Control description:

- 1) Monitor current value of the secondary transfer DC bias is detected.
- 2) Optimal target current value is determined based on temperature/humidity data of the Environment Sensor (UN27) and paper type.
- 3) The secondary transfer DC bias is determined that is to be applied to the Secondary Transfer Outer Roller.

Related Service Mode:

COPIER > DISPLAY > MISC > ENV-TR : Dspl of environment: sec trns ATVC ctrl

Related Service Mode:

COPIER > ADJUST > HV-TR > TR-ENV1 to 16 : Sec trns indiv setting environment:set 1 to 16

COPIER > ADJUST > HV-TR > TR-DUP1 to 16 : Sec trn indiv set clr mod/fd side: set 1 to 16

COPIER > ADJUST > HV-TR > TR-VL1 to 16 : Sec trns indiv set ppr allot voltg:set 1 to 16

COPIER > ADJUST > HV-TR > TR-PPR1 to 16 : Sec trns indiv setting paper type: set 1 to 16

COPIER > ADJUST > HV-TR > 2TR-OFF : Uniform adj sec trn ATVC ppr allot voltg

Related Alarm Code:

30-0032 : Error in secondary transfer ATVC (below the lower limit)

Secondary transfer bias control

Purpose: To transfer toner on the ITB to paper

The secondary transfer bias, which has been generated on the Secondary Transfer High Voltage PCB (UN03), is applied to the Secondary Transfer Outer Roller.

There are 2 types of the secondary transfer bias (the DC positive and the DC negative) to apply bias with the following purpose.

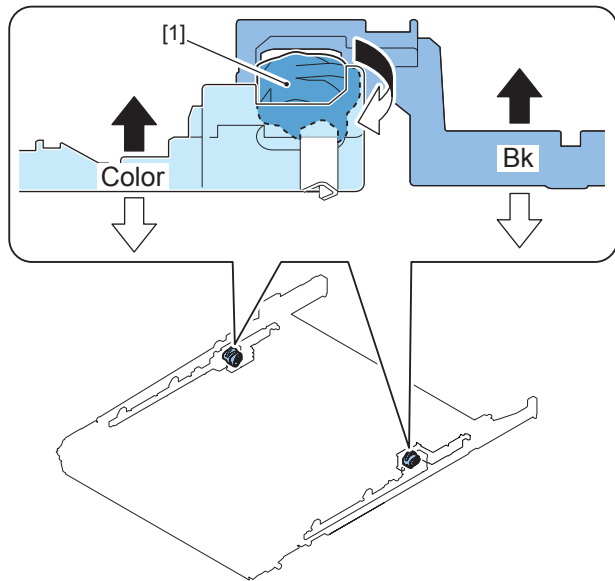
- DC positive: Toner on the ITB is transferred to a paper when printing.
- DC negative: Toner on the Secondary Transfer Outer Roller is attracted onto the ITB when cleaning.

The secondary transfer bias value is determined by the ATVC control with the DC Controller, which makes constant current value running though the Secondary Transfer Outer Roller.

Primary Transfer Roller Disengagement Control

Purpose: To disengage the color Primary Transfer Roller in the single color Bk mode in order to increase the life of image formation parts (Photosensitive Drum, ITB)

The cam mechanism provides 3 phases, which correspond to the 3 states of Bk mode, CL mode, and full disengagement mode.



F-2-53

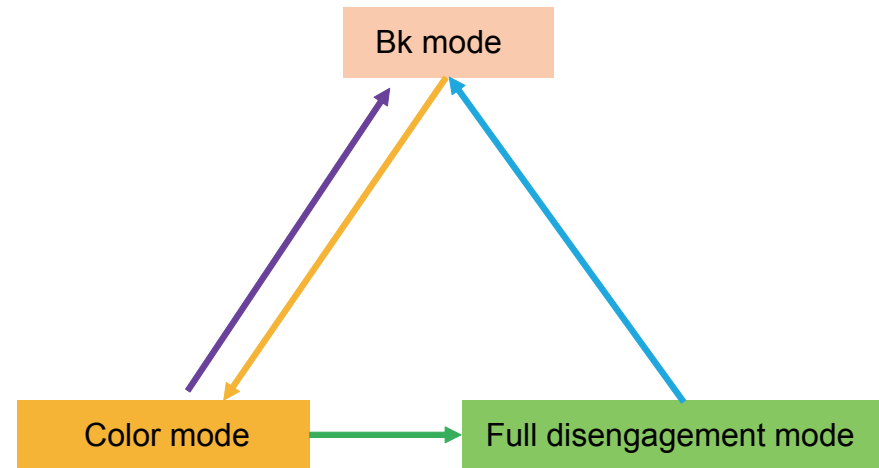
Primary transfer disengagement initialization

Initialization is performed so that the coupling is securely engaged at power-on and when the door is closed because the state of the primary transfer disengagement is not determined.

Operation overview:

The Primary Transfer Disengagement Cam is rotated so that the mode transitions in the following order: Bk mode, Color mode, and Fully disengaged mode

After initialization, the mode transitions to Bk mode of the HP state.

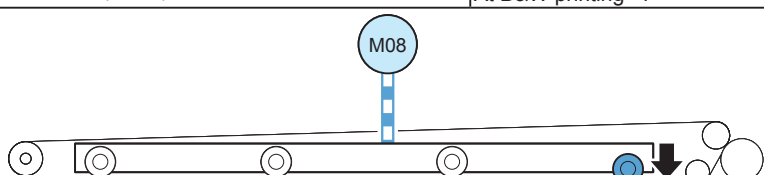
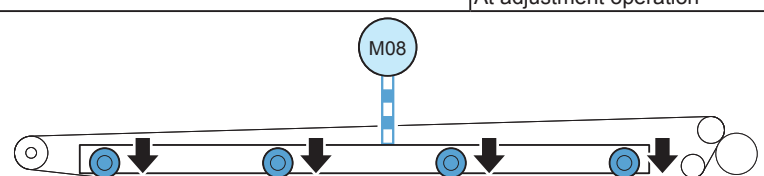
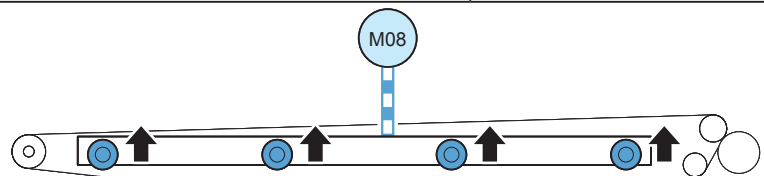


F-2-54

Related Error Code:

E074-0001/0002 : ITB HP time out error

Status of each mode/timing to enter each mode

Mode to shift to	State	Shift timings
Bk mode	Only the Bk Primary Transfer Roller is engaged Detected by the Primary Transfer Disengagement HP Sensor (PS33)	When shifting to standby mode
		While in Deepsleep mode At B&W printing *1
		
CL mode	All Primary Transfer Rollers are engaged	At color printing *1
		At adjustment operation
		
Full disengagement mode	All Primary Transfer Rollers are disengaged	When Front Door is opened
		When Right Door is opened *2 At power-off *3
		

*1 When image formation is executed

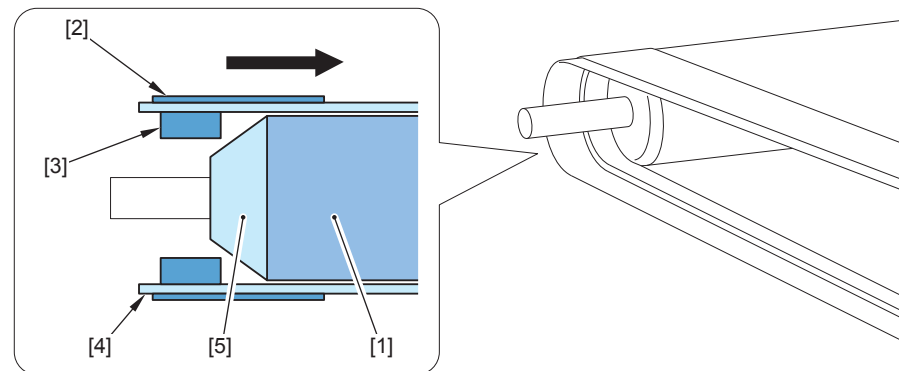
T-2-25

*2 The rollers are not disengaged when the doors are opened during Deepsleep mode.

*3 The rollers are not disengaged at power-off during Deepsleep mode.

● ITB Displacement Correction

Purpose: To correct ITB displacement



F-2-55

Parts name	Role
[1] ITB Tension Roller	The ITB is driven.
[2] Reinforcing tape	The ITB edges are reinforced (to increase the strength).
[3] Rib	ITB displacement is controlled.
[4] ITB	Belt for performing primary transfer
[5] Flange	The shape is sloped to prevent the rib from being placed over it.

T-2-26

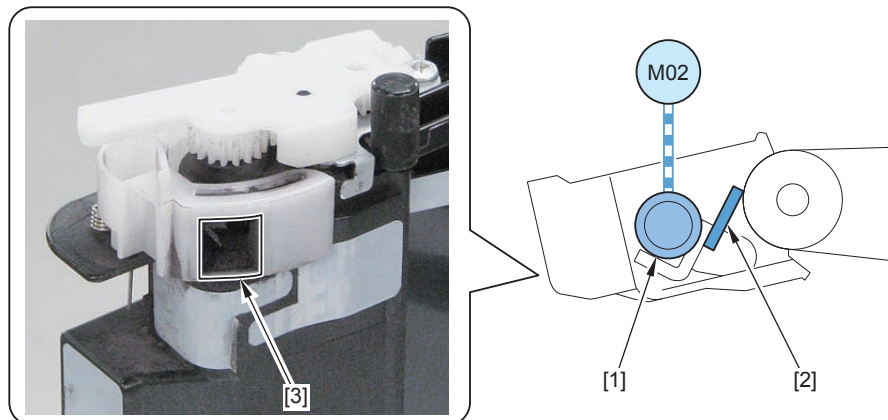
Belt displacement is prevented by ITB displacement correction by the rib guide mechanism. If the rib is placed over the ITB Tension Roller or the flange, the cycle of the side of the belt on which the rib is mounted over the roller or the flange becomes faster, and a force acts to restore it.

ITB Cleaning

Purpose: To remove residual toner on the ITB.

Control description:

- 1) The ITB Cleaning Blade scrapes toner on the ITB.
- 2) The scraped toner is fed to the Waste Toner Container by the ITB Cleaning Screw.



F-2-56

Parts name	Role
[1] ITB Cleaning Screw	Residual toner inside the ITB Cleaner Unit is fed.
[2] ITB Cleaning Blade	Residual toner on the ITB is collected.
[3] Waste Toner Ejection Mouth	Ejection Mouth for toner collected on the ITB
M02 Bk Drum_ ITB Motor	The ITB Cleaning Screw is driven.

T-2-27

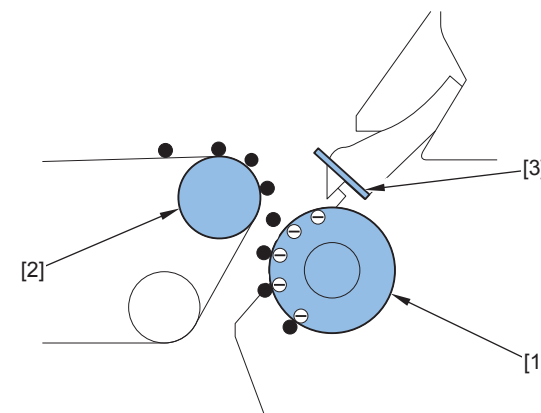
Related Service Mode:
COPIER > OPTION > CLEANING > OHP-PTH : Set of ITB clean transp threshold value

Secondary Transfer Outer Roller Cleaning Control

Purpose: To prevent transfer failure and soiling at the back of the paper caused by soiling of the Secondary Transfer Outer Roller.

Control description:

The secondary transfer cleaning bias, which has been generated on the Secondary Transfer High-voltage PCB (UN03), is applied to the Secondary Transfer Outer Roller. Residual toner on the Secondary Transfer Outer Roller is attached to the ITB, and then collected by the ITB Cleaning Unit.



Control timing	Adjustment timing	Conditions
Automatic adjustment by the output of a specific number of prints	When a job starts	Each time
	At paper interval	For each 100 accumulated images When transparency is fed
	At job completion	Each time
Automatic adjustment by the accumulation of video count values	At paper interval	For each accumulated video count value of 3000% After 30 images from the start of a job and the video count value of less than 2.0% (equivalent to accumulated video count value of 100%)
	At job completion	Each time
	Jam removal	At recovery from jam
At startup	At main power-on	8 hours or more have elapsed in high-speed startup mode At normal startup
	At recovery from sleep mode	8 hours or more have elapsed in sleep mode
Automatic adjustment by replacement	Drum Unit replacement	When a new Drum Unit is inserted
	Replace the Developing Unit.	When FUNCTION > INSTALL > INISET-Y/M/C/K/4C is executed

Control timing	Adjustment timing	Conditions
At initial installation	At power-on	At initial installation
When Settings/Registration is executed	Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation	
	Adjustment/Maintenance > Adjust Image Quality > Correct Shading	
	Adjustment/Maintenance > Adjust Image Quality > Correct Color Mismatch	
When service mode is executed	When FUNCTION > CLEANING > 2TR-CLN is executed	

T-2-28

Related Service Mode:

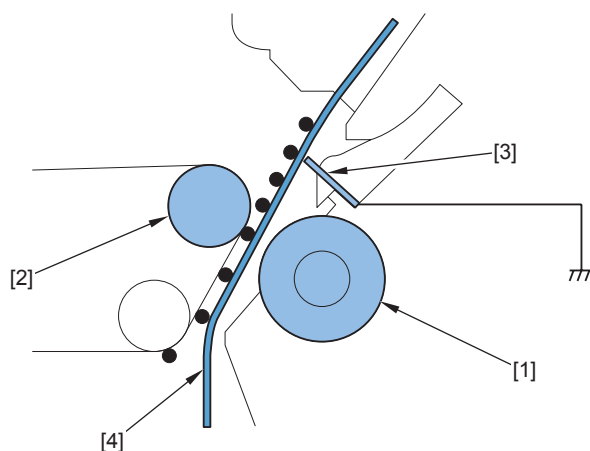
COPIER > FUNCTION > CLEANING > 2TR-CLN : Clean of Secondary Transfer Outer Roller

● Separation

This control separates paper from the ITB by elastic force of the paper. (Curvature separation method)

In the case of thin paper which has low elastic force, the Static Eliminator removes positive potential at the back of the paper.

This reduces electrostatic absorption force of the paper so that paper can be easily separated.



F-2-57

Parts name	
[1]	Secondary Transfer Outer Roller
[2]	Secondary Transfer Inner Roller
[3]	Separation Static Eliminator
[4]	Paper

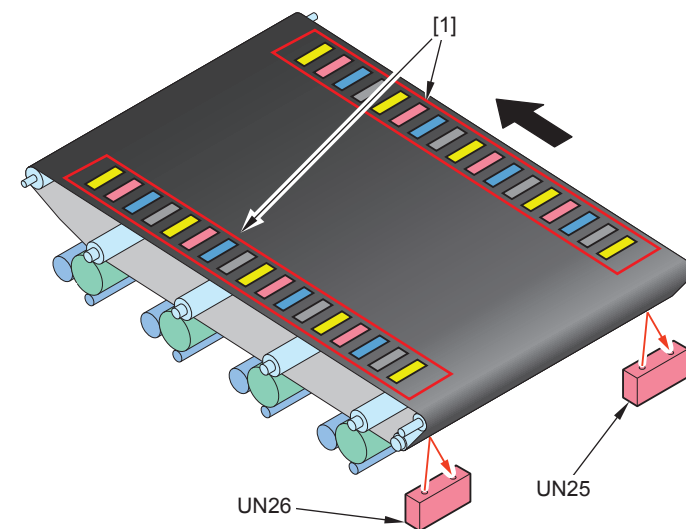
T-2-29

■ Image Stabilization Control

● Overview

Purpose: To control to prevent image failure due to change of the environment or deterioration of parts to ensure stabilized print image

Various controls are performed to form patch pattern [1] on the ITB and read the patch pattern using the Registration Patch Sensor Unit (Rear/Front) (UN25/26).



F-2-58

Related Alarm Code:

10-0006 : Patch Sensor error 1

10-0007 : Patch Sensor error 2

● Control Timing List

Execution items for image stabilization control differ according to the environment and condition of image formation parts.

Following shows the control items at each sequence.

Control timing	Conditions for execution	Type of control					
		Laser power correction control	D-half control	ARCDAT control	Color displacement correction control	Patch Sensor adjustment	PASCAL control
At power-on	Normal temperature environment	-	-	Yes	-	-	-
	High temperature and high humidity environment	Yes	Yes	Yes	-	Yes	-
	8 hours or more have elapsed in high-speed startup mode	-	-	Yes	-	-	-
	At initial installation	Yes	Yes	Yes	Yes	Yes	-
At recovery from sleep mode	8 hours or more have elapsed in sleep mode	Yes	-	Yes	-	-	-
	8 hours or more have elapsed in sleep mode (high temperature and high humidity environment).	Yes	Yes	Yes	-	Yes	-
When a job starts	At initial rotation when sudden environmental change is detected	Yes	-	-	-	-	-
At paper interval	For each 100 accumulated images	-	-	Yes	-	-	-
At job completion	At last rotation for each accumulated 50 images	-	-	Yes	-	-	-
	At last rotation for each accumulated 500 images (high temperature and high humidity environment)	Yes	Yes	Yes	-	Yes	-
	At last rotation for each accumulated 1000 images	Yes	Yes	Yes	-	Yes	-
At parts replacement	When replacing the Drum Unit	Yes	Yes	Yes	Yes	Yes	-
	When replacing the Developing Unit (when INISET-Y/M/C/K/4C is executed in service mode)	Yes	Yes	Yes	-	Yes	-
When the Settings/Registration menu is executed	When Auto Gradation Adjustment > Full Adjust is executed	Yes	Yes	Yes	-	Yes	Yes
	When Auto Gradation Adjustment > Quick Adjust is executed	Yes	Yes	Yes	-	Yes	Yes
	When Correct Shading is executed	Yes	Yes	Yes	-	-	-
	When Auto Correct Color Mismatch is executed	-	-	-	Yes	-	-

T-2-30

● Laser Power Correction (D-max) Control

Purpose: To determine the optimal laser output

Control description:

- 1) The Main Controller PCB forms the patch pattern of the target color on the ITB.
- 2) The DC Controller measures the patch density using the Registration Patch Sensor Unit (Rear/Front) (UN25/26) and corrects the laser output for each color to get the target density.

● D-half Control

Purpose: To determine the optimal image gradation

Control description:

- 1) The Main Controller PCB outputs patch data in each color (Y/M/C/Bk) to the DC Controller PCB.
- 2) The DC Controller PCB forms a patch pattern of each color (Y/M/C/Bk) on the ITB from this data.
- 3) The DC Controller measures the patch pattern using the Registration Patch Sensor Unit (Rear/Front) (UN25/26) and the result is sent to the Main Controller PCB.
- 4) Based on the data above, the Main Controller PCB executes gradation correction to obtain ideal halftone image.

● ARCDAT Control (Automatic and Reciprocal Color Density Adjustment Technology)

Purpose: To realize the ideal gradation characteristics while reducing downtime

Control description:

- 1) The Main Controller PCB outputs patch data in each color (Y/M/C/Bk) to the DC Controller PCB.
- 2) The DC Controller PCB forms a patch pattern of each color (Y/M/C/Bk) on the ITB.
- 3) The DC Controller PCB measures the patch pattern using the Registration Patch Sensor Unit (Rear/Front) (UN25/26) and the result is returned to the Main Controller PCB.
- 4) The Main Controller PCB compares this measured data with the reference data for ARCDAT control that has been backed up. The difference by comparison is reflected to the D-half result as the offset value.

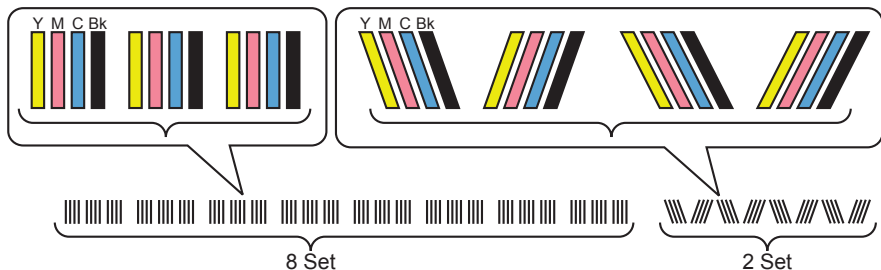
Color Displacement Correction Control

Purpose: To correct color displacement caused by uneven exposure (skew/bent) from the Laser Scanner Unit or uneven rotation of the drum/ITB

Control description: Color displacement is corrected by forming a patch for color displacement on the ITB and reading the amount of color displacement by the patch sensor.

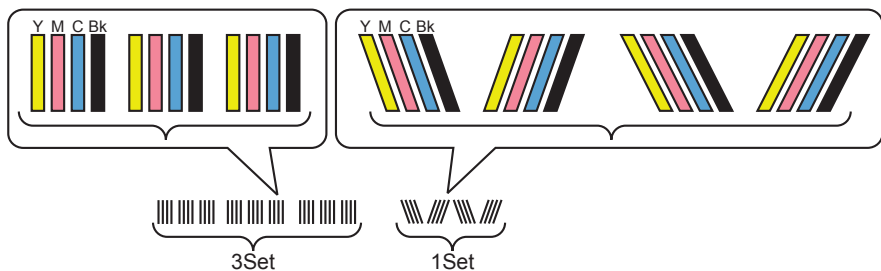
- 1) A patch pattern (short/long) for each color is created on the ITB.
- 2) This patch pattern is read by the Registration Patch Sensor Unit (Rear/Front) (UN25/26) to detect the amount of color displacement compared to the reference color (Y).
- 3) Based on the abovementioned detection result, correction is performed according to the amount of color displacement.

Long patch pattern



F-2-59

Short patch pattern



Type	Patch pattern
Patch for correction in horizontal scanning direction	
Patch for correction in vertical scanning direction	

T-2-31

NOTE:

Short pattern is normally used as the patch pattern used when performing color displacement correction.

Long pattern is used only in the following cases:

- When Adjustment/Maintenance > Adjust Image Quality > Auto Correct Color Mismatch is executed

Correction description:

Type of control	Correction description
Correction in horizontal scanning direction	Write start correction Write-start timing in horizontal scanning direction is changed.
	Overall magnification ratio correction Pixels in horizontal scanning direction is increased/reduced (at the both edges of the image)
Correction in vertical scanning direction	Write start correction Write-start timing in vertical scanning direction is changed.
	Image skew correction Image data is corrected.

T-2-32

Related Alarm Code: There is no color displacement alarm for Y because Y is the reference for the laser light.

- 34-0003 : Auto registration adjustment
- 34-0024 : The correction value (M) of the write start position in the vertical scanning direction exceeded the upper limit during color fine adjustment
- 34-0026 : The correction value (M) of the write start position in the horizontal scanning direction exceeded the upper limit during color fine adjustment
- 34-0034 : The correction value (C) of the write start position in the vertical scanning direction exceeded the upper limit during color fine adjustment
- 34-0036 : The correction value (C) of the write start position in the horizontal scanning direction exceeded the upper limit during color fine adjustment
- 34-0044 : The correction value (Bk) of the write start position in the vertical scanning direction exceeded the upper limit during color fine adjustment
- 34-0046 : The correction value (Bk) of the write start position in the horizontal scanning direction exceeded the upper limit during color fine adjustment
- 34-2201 : As a result of wrong detection processing, data that can be used for correction in the vertical scanning direction was not found (M)
- 34-2211 : As a result of wrong detection processing, data that can be used for correction in the horizontal scanning direction was not found (M)
- 34-2301 : As a result of wrong detection processing, data that can be used for correction in the vertical scanning direction was not found (C)
- 34-2311 : As a result of wrong detection processing, data that can be used for correction in the horizontal scanning direction was not found (C)
- 34-2401 : As a result of wrong detection processing, data that can be used for correction in the vertical scanning direction was not found (Bk)
- 34-2411 : As a result of wrong detection processing, data that can be used for correction in the horizontal scanning direction was not found (Bk)

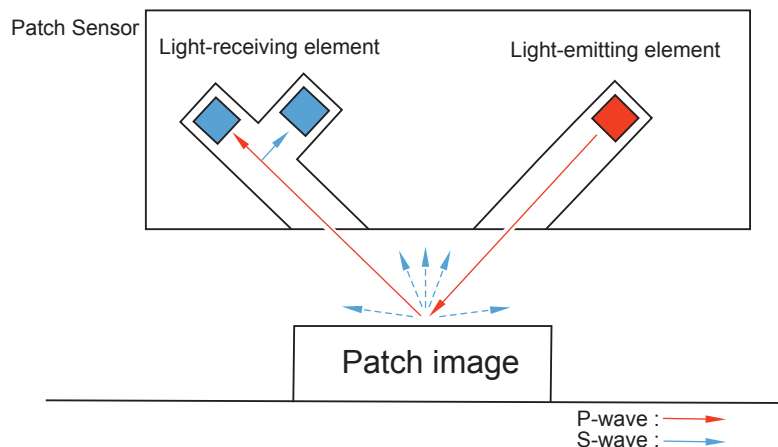
● Patch Sensor Adjustment

Purpose: To perform correction of the Patch Sensor light intensity and sampling of the ITB background.

Configuration of the Patch Sensor

The light produced by the LED is reflected from the patch image and detected by the light-receiving element.

There are two types of waves that are P wave and S wave, and the light intensity is detected by the light-receiving element.



F-2-61

Light intensity adjustment

The light intensity of the Patch Sensor is changed sequentially and adjusted such that the P wave output is 2.5 V.

Sampling of the ITB background

To prevent uneven reflection in the inner circumference of the ITB, the background of the whole circumference of the ITB is sampled by the Patch Sensor without forming patches. The patch image that is read is compared with the sampling results of the ITB background to read the density.

Related Service Mode:

COPIER > DISPLAY > DENS > P-B-P-Y : Dspl ITB rear side base intnsty (Pwave)
 COPIER > DISPLAY > DENS > P-B-P-C : Dspl ITB front side base intnsty (Pwave)
 COPIER > DISPLAY > DENS > P-B-S-Y : Dspl ITB rear side base intnsty (Swave)
 COPIER > DISPLAY > DENS > P-B-S-C : Dspl ITB front side base intnsty (Swave)

● Auto Gradation Adjustment (PASCAL) Control

Purpose: To stabilize gradation density characteristics of the image

This control is executed when "Auto Adjust Gradation > Full Adjust" is selected in the Settings/Registration menu. Gradation density of the patch pattern on the test print is scanned by the Reader to create an image density correction table.

The foregoing table corrects image gradation density characteristics which change according to the environment change and deterioration of the Photosensitive Drum.

Control timing:

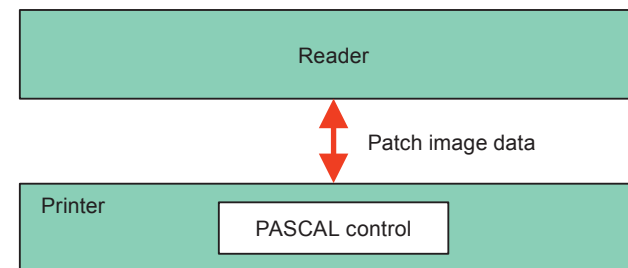
When Settings/Registration > Adjustment/Maintenance > Adjust Image Quality > Auto Adjust Gradation > Full Adjust is being executed

Control description:

- 1) When the specified conditions are satisfied, the Main Controller PCB prints 3 types of memorized test prints (patch pattern).
- 2) Place the test prints on the reader.
- 3) The reader scans the gradation density of the patch pattern from the test prints.
- 4) The Main Controller PCB creates an image gradation density correction table from the gradation density data of patch pattern scanned by the reader.

Related Service Mode:

COPIER > OPTION > DSWY-SW > HPFL-DSP : Set hvy,prnt 1200dpi dedicated mod
 dsp1
 0: Hide
 1: Display plain paper/heavy paper
 2: Display standard/printer 1200 dpi dedicated mode
 3: Display standard (plain paper)/standard (heavy paper)/printer 1200 dpi dedicated mode

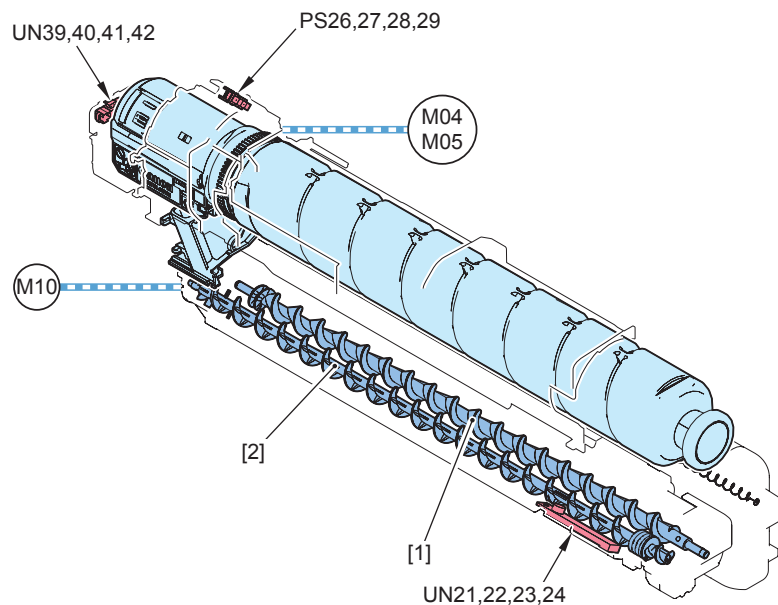


F-2-62

Toner Supply Area

Parts / Drive Configuration

Toner is supplied from the Toner Container to the Developing Unit. The toner level in the Toner Container is detected at the same time.



Parts name	Role
[1]	Toner Feed Screw A Toner is supplied to the Developing Unit.
[2]	Toner Feed Screw B Toner is supplied to the Developing Unit.
UN39 to 42	Bottle New/Old Detection Sensor (Y/M/C/Bk) The state of the Toner Bottle is detected.
PS26 to 29	Toner Supply Sensor (Y/M/C/Bk) Presence/absence of the Toner Bottle is detected. Rotation of the Toner Bottle is detected.
UN21 to 24	Toner Density Sensor (Y/M/C/Bk) Toner/carrier ratio in the Developing Unit is detected.
M04/M05	Bottle Motor (YM)/(CK) Toner Bottle is rotated.
M10	Developing Motor The screw inside the Developing Unit is driven.

T-2-33

Related Error Code:

E021-0001/0002 : Developing Motor error

E021-0120 : Developing Screw rotation detection error (Y)

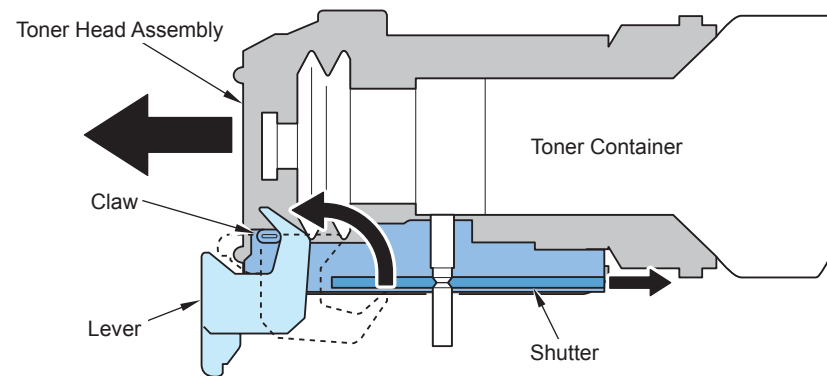
E021-0220 : Developing Screw rotation detection error (M)

E021-0320 : Developing Screw rotation detection error (C)

E021-0420 : Developing Screw rotation detection error (Bk)

Opening/Closing of Toner Container Shutter

Purpose: To automatically open and close the Toner Container shutter

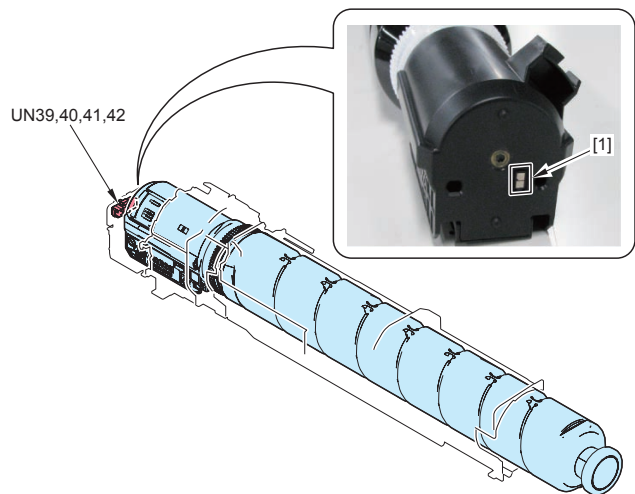


F-2-63

Bottle State Detection

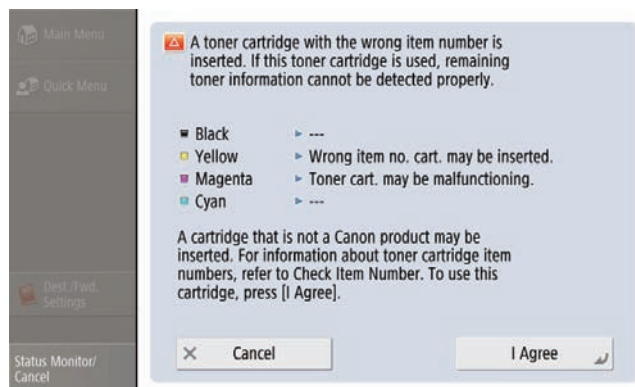
Purpose: To detect the state of the Toner Container

The Bottle New/Old Detection Sensor (Y/M/C/Bk) (UN39/UN40/UN41/UN42) detects the state from the IC tag of the Toner Container.



F-2-64

Screen display



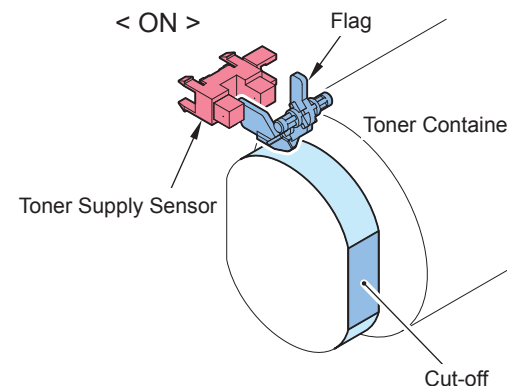
Message	Status
Wrong cartridge color may be inserted.	A toner cartridge of the wrong color is inserted
Wrong item no. cart. may be inserted.	A toner cartridge with the wrong item number is inserted.
Toner cart. may be malfunctioning.	The inserted toner cartridge may have been damaged.
----	The correct toner cartridge is inserted.

T-2-34

Toner Container Detection

Presence/absence of the Toner Container is detected.

The Toner Supply Sensor (Y/M/C/Bk) (PS26/PS27/PS28/PS29) is arranged as shown in the figure below; when the Toner Container is inserted, the sensor reacts and the Toner Container is detected.



F-2-66

ATR (Auto Toner Replenishment) Control

Purpose: To supply toner to the Developing Unit to achieve an ideal ratio of the developer (toner + carrier) in the Developing Unit.

Control timing	Adjustment timing	Conditions
Automatic adjustment by the accumulation of video count values	At job completion	For each accumulated video count value of 1500%
	At paper interval	For each accumulated video count value of 3000%
At initial installation	Power on	At initial installation

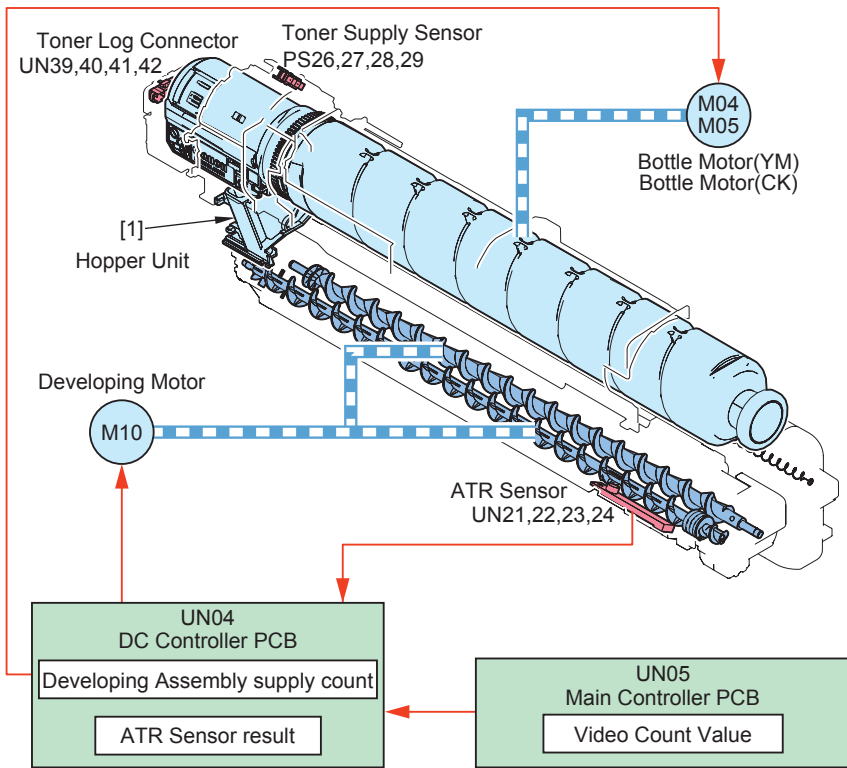
T-2-35

Control description:

- The toner density of each color is corrected to the target value at the abovementioned control timing and is controlled to achieve an appropriate toner supply to the Developing Unit. The DC Controller PCB determines toner supply amount by the following 2 data:
- Toner Density Sensor output value (DC Controller)
 - Video count value (Main Controller)

The DC Controller PCB turns ON the Bottle Motors (YM)/(CK) (M04/05) when it determines that toner supply is necessary.

This supplies the specified amount of toner to the Developing Unit.



F-2-67

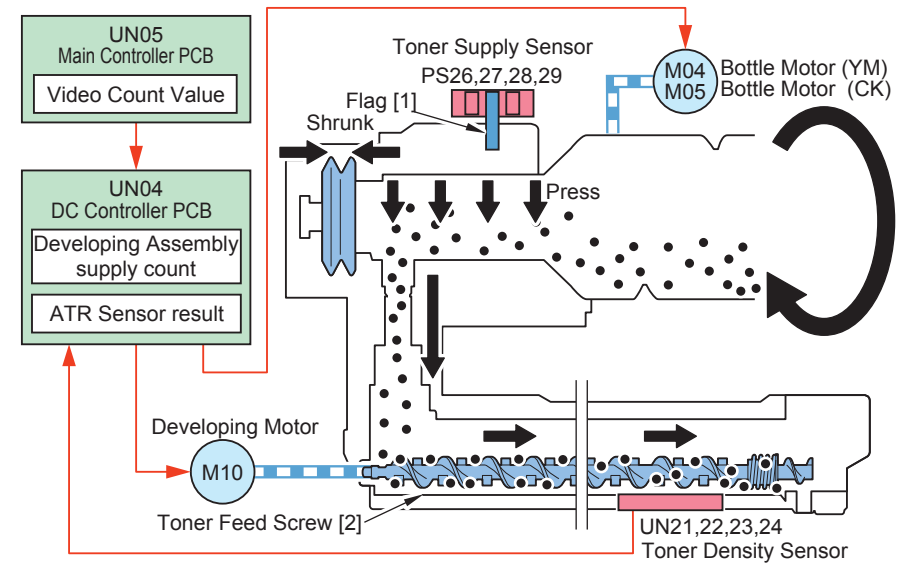
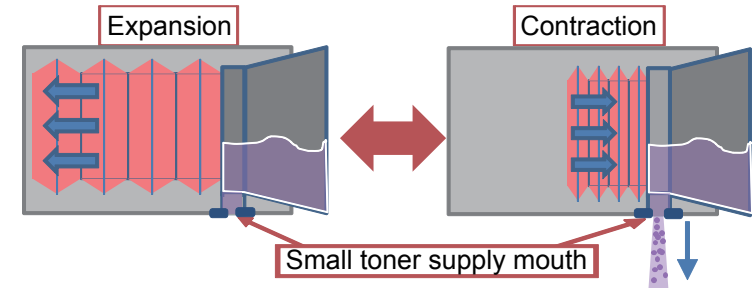
Related Error Code:

- E020-01A8/01B8 : ATR Sensor (Y) output error
- E020-02A8/02B8 : ATR Sensor (M) output error
- E020-03A8/03B8 : ATR Sensor (C) output error
- E020-04A8/04B8 : ATR Sensor (Bk) output error
- E020-01C8 : Error in take-up of Sealing Member (Y)
- E020-02C8 : Error in take-up of Sealing Member (M)
- E020-03C8 : Error in take-up of Sealing Member (C)
- E020-04C8 : Error in take-up of Sealing Member (Bk)

● Toner Supply Control

Purpose: To supply toner in the Toner Container to the Developing Unit

This machine uses a Toner Container that has an accordion mechanism at the leading edge. The drive of the Bottle Motor rotates the Toner Bottle and operates the accordion section. At that time, air pressure is used to supply toner to the Developing Unit.

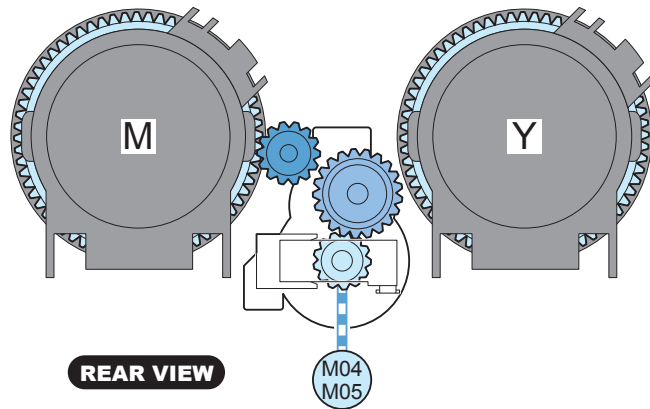


Title	Toner Container
Description	Toner is supplied from the Toner Container to the Developing Unit.
Supply timing	When toner supply is determined necessary by the result of ATR control, toner is supplied.
Operation of the host machine	The Bottle Motor (YM/CK) (M04/M05) are driven*.

* The supply amount is determined based on the output values of the Toner Density Sensor and video count.

This machine has only 2 Toner Bottle Motors, and toner is supplied by driving Toner Bottles of two colors alternately by one motor.

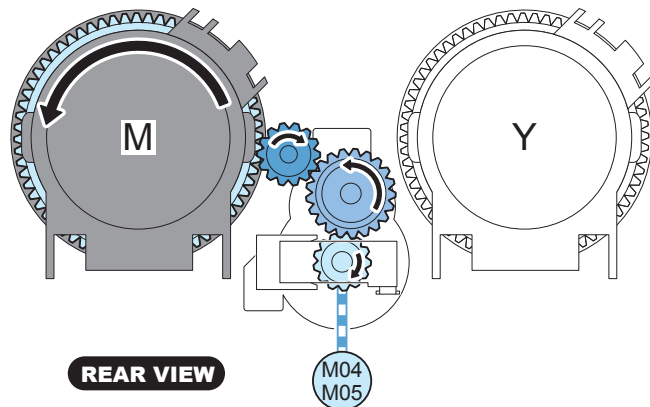
The following shows the image of the Drive Unit viewed from the back side.



F-2-68

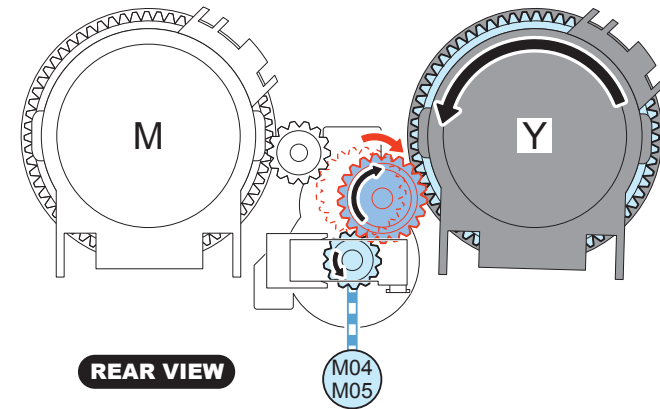
The operation is going to be explained taking Y and M as an example.

1. The motor rotates.
2. The driving force is transmitted to the gears, and the Toner Bottle rotates.



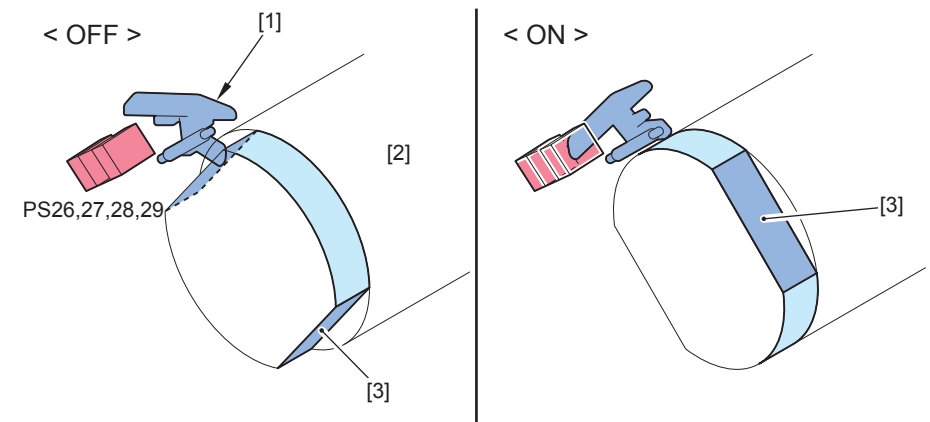
F-2-69

3. When the motor rotates in the reverse direction, the Swing Gear moves to the opposite direction.
4. The driving force is transmitted only to the gears on the side toward which the gear moved, and the Toner Bottle rotates and toner is supplied.



F-2-70

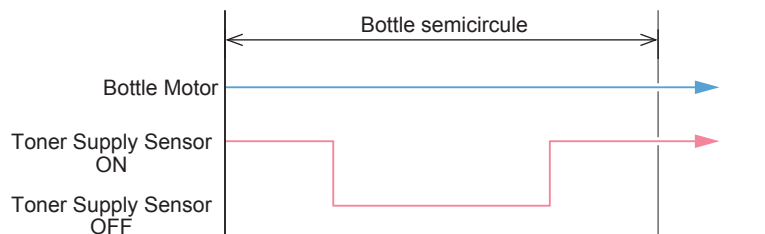
5. When toner is supplied, the Toner Supply Sensor (Y/M/C/Bk) (PS26/PS27/PS28/PS29) is started while it is turned ON. Driving the Bottle Motor (YM/CK) (M04/05) rotates the Toner Bottle, causing the flag of the Toner Supply Sensor to drop to the cut-off part of the Toner Bottle as shown in the figure below, which in turn switches OFF the sensor. When the flag then moves away from the cut-off part of the Toner Supply Sensor, the sensor is switched ON. While the Toner Supply Sensor is in turned OFF, 1 block's worth of toner is supplied to the Developing Unit.



F-2-71

Parts name	
[1]	Flag
[2]	Toner Container
[3]	Cut-off

T-2-36



F-2-72

Related Error Code:

- E025-0110/0120 : Bottle Motor error (Y)
- E025-0210/0220 : Bottle Motor error (M)
- E025-0310/0320 : Bottle Motor error (C)
- E025-0410/0420 : Bottle Motor error (Bk)
- E025-0168 : No toner detection error (Y)
- E025-0268 : No toner detection error (M)
- E025-0368 : No toner detection error (C)
- E025-0468 : No toner detection error (Bk)

● Toner Level Detection

	Prior delivery alarm	Display Remaining Toner error ^{*7}	Empty toner
Toner level	Default: XX % ^{*1} The value can be changed in service mode ^{*2}	Default: XX % ^{*1} The value can be changed in service mode ^{*3}	0 %
Detection Timing	Predicted from the toner supply count (Determined from the number of toner supplies to the Developing Unit)		When the output signal from the Toner Density Sensor does not fall below the designated value even after performing a toner supply operation
Detected to (location)	Toner supply count ^{*4}		Toner Density Sensor
Message (Operation of the host machine)	None	Toner is low. Replacement not yet needed. (Continuous printing is enabled.)	Replace the toner cartridge. (Host machine is stopped.)
Alarm Code	10-0017 (Y) ^{*5} 10-0018 (M) ^{*5} 10-0019 (C) ^{*5} 10-0020 (Bk) ^{*5}	10-0001 (Bk) ^{*6} 10-0002 (C) ^{*6} 10-0003 (M) ^{*6} 10-0004 (Y) ^{*6}	None

T-2-37

* 1: The default differs depending on the country.

* 2: (Lv.1) COPIER > OPTION > FNC-SW > T-DLV-CL/BK

* 3: (Lv.2) COPIER > OPTION > DSPLY-SW > T-LW-LVL

CAUTION:

The message to inform of the absence of toner may be displayed before the message to warn of the remaining toner level if the value of (Lv.2) COPIER > OPTION > DSPLY-SW > T-LW-LVL is lowered than the initial value due to the margin of the toner supply count.

* 4: Toner supply count shows the level of toner supplied from the Toner Container to the Developing Unit.

* 5: When an unidentified Toner Bottle is used, pre-toner low alarm is generated at the same time no toner is detected and the machine stops.

* 6: Alarm code created by UGW (it is not recorded in the LUI log).

* 7: Whether to display the message to warn of the remaining toner level can be set in COPIER > OPTION > DSPLY-SW > TNR-WARN (Lv.1).

● Detection of Completion of Toner Replacement

Detection of the completion of replacement	
Detection timing	When a replacement of Toner Container is detected
Detected to (location)	Bottle New/Old Detection Sensor (Y/M/C/Bk) (UN39/UN40/UN41/UN42)
Alarm code	10-0100-xxxx *1 Toner Bottle BK: 0071, Y: 0072, M: 0073, C: 0074 Unidentified Toner Bottle BK: 0181, Y: 0182, M: 0183, C: 0184
Remarks	The toner supply count is reset at the same time.

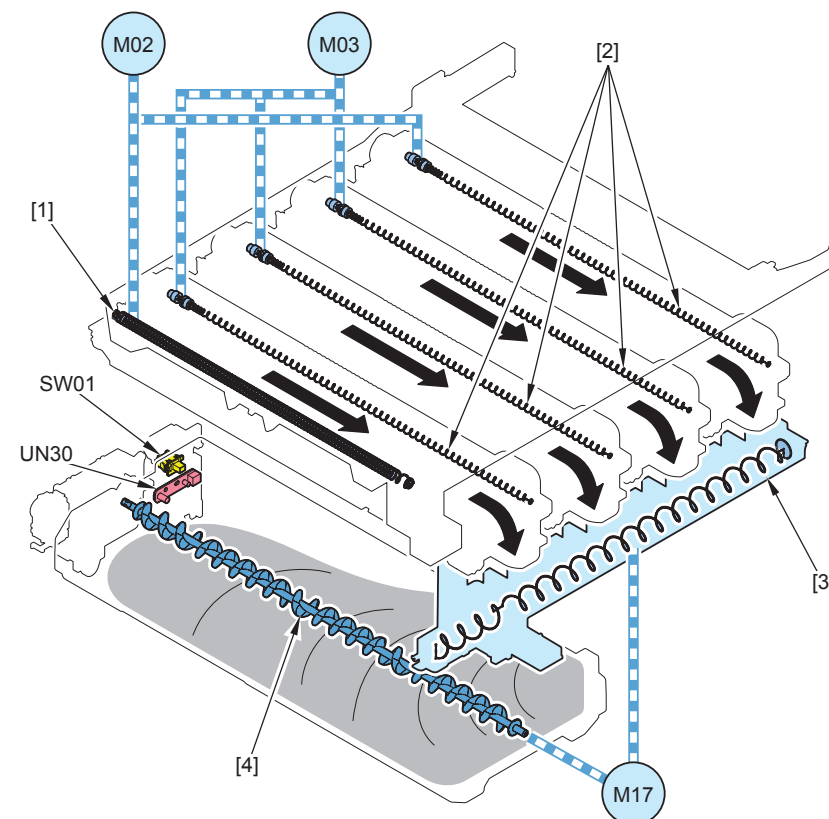
T-2-38

- *1 Care is required because immediately after the DC Controller PCB is replaced, no toner replacement completion alarm is generated even if the Toner Bottle is replaced under the following conditions/timing:
- The DC Controller is replaced with the power disconnected, and then a new Toner Bottle is installed before the power is turned ON
 - The DC Controller is replaced with the power disconnected, the power is turned ON with the Toner Bottle removed or the Front Door opened, and then a new Toner Bottle is installed

■ Waste Toner Feed Unit

● Parts / Drive Configuration

Waste toner in the Drum Unit and ITB Cleaning Unit is fed to the Waste Toner Container.

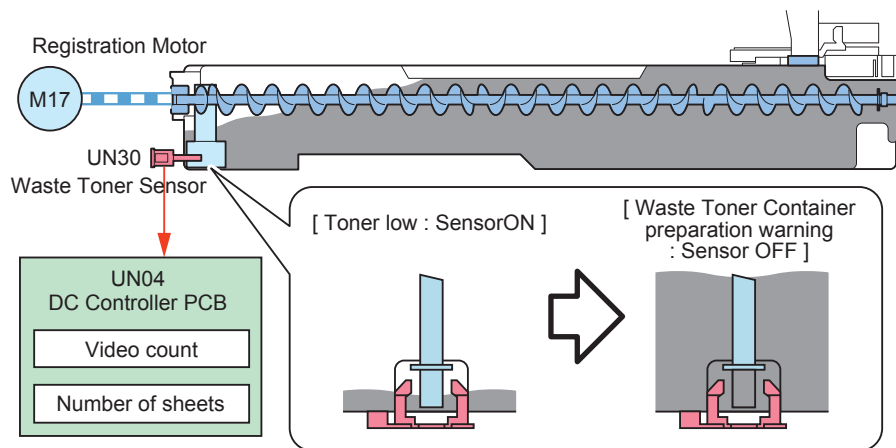


Parts name	Role
[1] ITB Cleaning Screw	Collected toner is fed to the ITB Cleaning Unit.
[2] Drum Unit Cleaning Screw	Residual toner in the Drum Unit is fed.
[3] Waste Toner Feed Screw	Toner collected from the ITB Unit/Drum Unit is fed to the Waste Toner Container.
[4] Waste Toner Screw	The waste toner inside the Waste Toner Container is made uniformly even.
M02 Bk Drum _ ITB Motor	The Bk Drum Unit Cleaning Screw is driven. The ITB Cleaning Screw is driven.
M03 CL Drum Motor	The Y/M/C Drum Unit Cleaning Screw is driven.
M17 Waste Toner Feed Motor	The Waste Toner Screw is driven. The waste toner inside the Waste Toner Container is made uniformly even.
UN30 Waste Toner Sensor PCB	Full level of the Waste Toner Container is detected.

Parts name	Role
SW01 Waste toner container detection switch	Waste Toner Container is detected

● Waste Toner Container Full Level Detection

Purpose: To detect the toner level accumulated in the Waste Toner Container



Detection description	Pre-toner low alarm / Waste Toner Container Preparation Alarm (*1)	Waste Toner Container Full
Detection timing	After paper equivalent to approx. 3000 counts (*2) (color ratio: 30%, accumulated video count value: 5%) is fed from the time when the result of output from the Waste Toner Sensor PCB (UN30) changes from ON to OFF	After paper equivalent to approx. 2200 counts (calculated at color ratio 30% and image ratio 5%) is fed from when the preparation alarm occurs
Detected to (location)	Waste Toner Sensor PCB (UN30) + Video count value, or the number of sheets fed	Video count value, or the number of sheets fed
Message (Operation of the host machine)	Prepare a new Waste Toner Container. (Printing can be continued.)	Replace the Waste Toner Container. (Host machine is stopped.)
Alarm code	11-0010	11-0001

*1: The Waste Toner Container preparation warning message can be set to be displayed or hidden using COPIER > OPTION > DSPLY-SW > WT-WARN (Lv.1).

*2: The timing to display the preparation warning can be changed using COPIER > OPTION > CUSTOM > EXT-TBOX (Lv.1) (the timing to notify of the Waste Toner Container being full is also changed at the same time).

Related Error Code :

E013-0001 : Waste Toner Feed Motor error

● Detection of Completion of Waste Toner Replacement

Detection timing	When the Waste Toner Sensor PCB (UN30) is turned ON after the Cassette 1 is opened/closed while "preparation warning" or "waste toner full level" is detected ^{*1}
Remarks	The parts counter is automatically cleared. ^{*2}

T-2-39

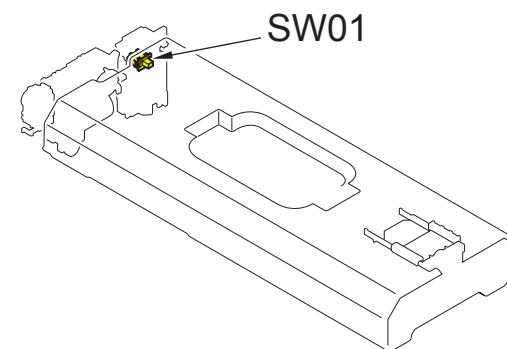
*1: It is not cleared if the Waste Toner Container is replaced while "preparation warning" or "full" is not detected or when the power is disconnected.

*2: It can also be manually cleared (COPIER > COUNTER > DRBL-1 > WST-TNR)

● Waste Toner Container Detection

Purpose: To detect the presence/absence of the Waste Toner Container

Waste toner container detection switch (SW01) detects the presence/absence of the Waste Toner Container.

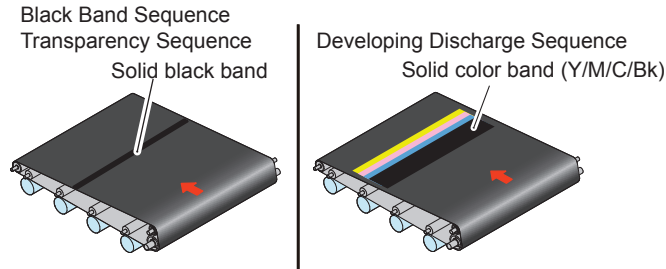


F-2-73

Other Controls

Special Controls

This machine has the following sequences as the special sequence.



Black band sequence

F-2-74

Control timing	Conditions
At paper interval	For each 100 accumulated images When transparency is fed
At job completion	For each 70 accumulated images

If continuous printing is performed while toner has not been sent to the ITB Cleaning Blade, the Cleaning Blade may be bent up .

Because of this, toner (solid Bk with the width of 297 mm and the length of 1 mm) is transferred to the ITB and is supplied to the ITB Cleaning Blade.

Developing discharge sequence

Control timing: When the average image ratio per sheet reaches 2% or less

Developing performance can decrease when performing continuous printing with low image ratio. To prevent this error, an adequate amount of toner based on the average image ratio for each color (width = A4, length = a solid color band according to the deteriorated toner amount) is transferred to the ITB.

Related Service Mode:
 (Lv.2) COPIER > OPTION > IMG-DEV > DELV-THY : Set image ratio for Y-color toner eject
 (Lv.2) COPIER > OPTION > IMG-DEV > DELV-THM : Set image ratio for M-color toner eject
 (Lv.2) COPIER > OPTION > IMG-DEV > DELV-THC : Set image ratio for C-color toner eject
 (Lv.2) COPIER > OPTION > IMG-DEV > DELV-THK : Set image ratio for Bk-color toner eject
 (Lv.2) COPIER > OPTION > IMG-DEV > DELV-DNS : ON/OFF of soiled paper edge prevention

Transparency black band sequence

Control timing	Conditions
At paper interval	For each 10 sheets of transparency
At job completion	For each 5 sheets of transparency

Since surfactant adheres to the ITB if a large volume of transparency film is fed, image failure due to degradation of transfer efficiency occurs.

A 80 mm-wide solid Bk patch is formed on the ITB to remove the surfactant together with toner.

Related Service Mode:
 (Lv.2) COPIER > OPTION > CLEANING > OHP-PTH : Set of ITB clean transp threshold value

Warm-up Rotation Control

This operation is performed to check the status of sensor/motor at power-on or recovery from sleep mode.

According to the conditions, one of the following 3 patterns of warm-up rotation is performed: none, short, or long.

Condition		Pattern
Power-on		Short
Power-on (at high-speed startup)	High temperature and high humidity environment	None
	No high temperature and high humidity environment	None
At recovery from sleep mode (8 hours or more elapsed in sleep mode)	High temperature and high humidity environment	Long
	No high temperature and high humidity environment	Short
When door is closed	High temperature and high humidity environment	None
	No high temperature and high humidity environment	None

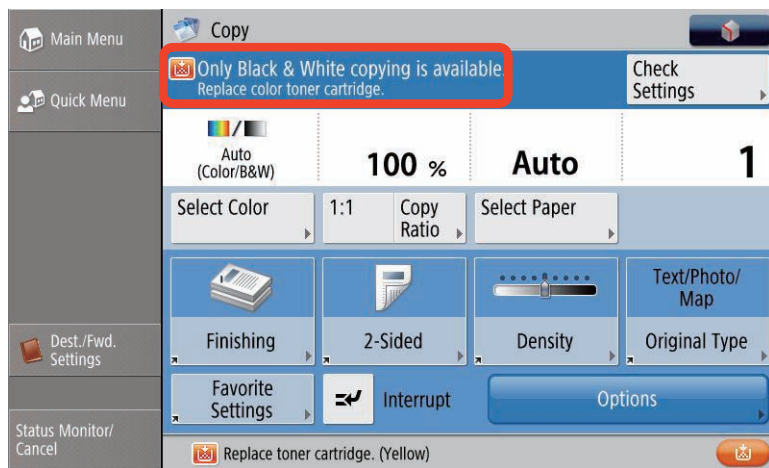
Warm-up rotation control is not executed when "Insert the waste toner container.", "Replace the waste toner container.", or "Replace toner cartridge. (Black)" is displayed.

Warm-up rotation control	Long	Short	None
Primary Transfer ATVC	Yes	Yes	No
Developing Unit Idle Rotation*	Yes	Yes	No
Secondary Transfer Outer Roller Cleaning	Yes	Yes	No
Patch Sensor adjustment	Yes	No	No
Laser Intensity Correction (D-max) Control	Yes	No	No
D-half Control	Yes	No	No
ARCDAT	Yes	Yes	No

* The Developing Unit idle rotation time: Short: Approx. 15 seconds, Long: Approx. 30 seconds

● Behavior When Color Printing is Limited or There is No Color Toner

This is a function to enable B&W printing and copying without stopping the entire printing function when an error attributed to the Y/M/C Developing Unit or when there is no Y/M/C toner.



F-2-75

<Target error code>

E020-0XA8 / 0XB8 / 0XC8 (* X : 1=Y, 2=M, 3=C)

When color printing is limited or there is no color toner, the following Settings/Registration menu cannot be executed:

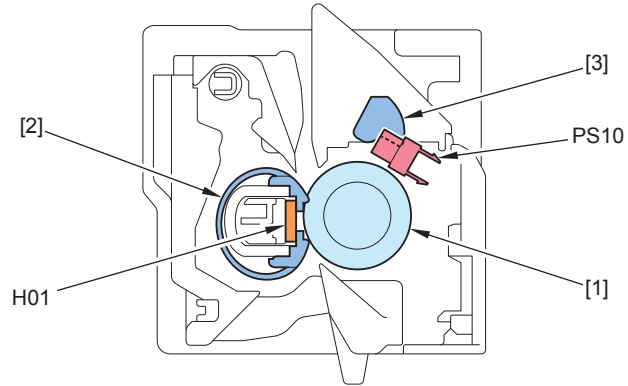
Settings/Registration > Adjustment/Maintenance
Adjust Image Quality > Auto Adjust Gradation
Adjust Image Quality > Correct Shading
Adjust Image Quality > Auto Correct Color Mismatch
Maintenance > Host Machine Inner Cleaning

T-2-40

Fixing System

Overview

This machine uses the on-demand fixing method.



F-2-76

- [1] Fixing Pressure Roller
- [2] Fixing Film
- [3] Sensor Flag
- H01 Fixing Heater
- PS10 Fixing Outlet Sensor

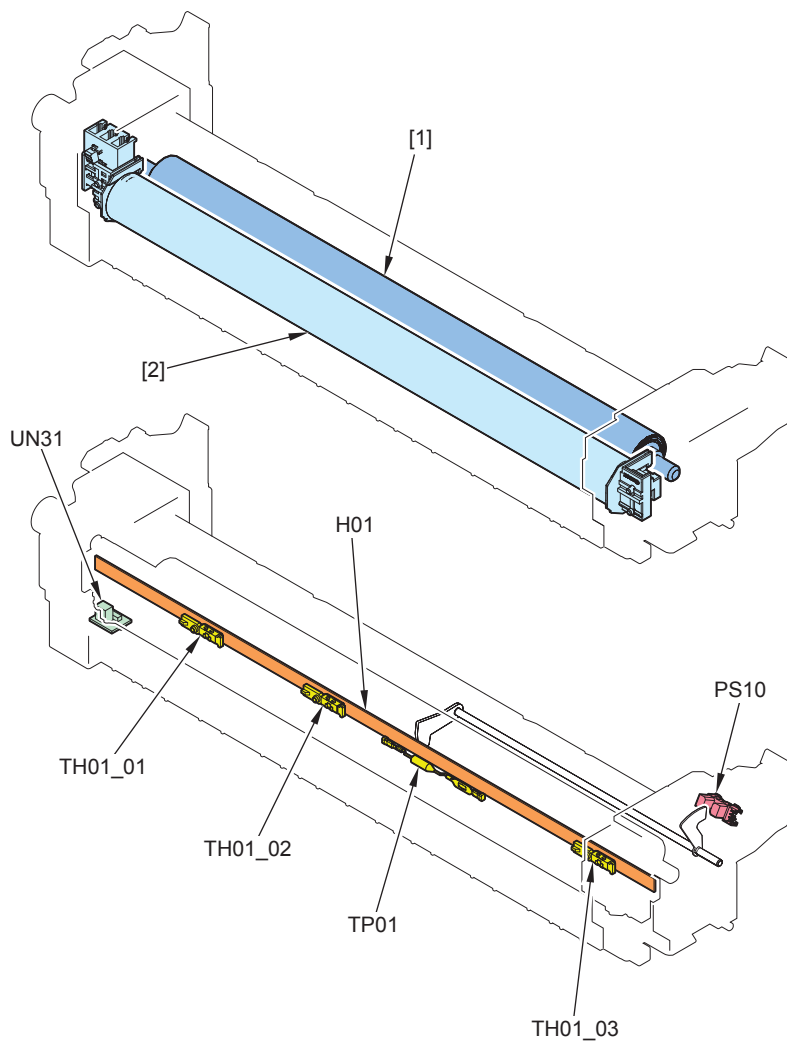
1. Improved replaceability of the Fixing Unit
Easy replacement without screws or tools
2. Setting of Fixing Unit sub parts and improved replaceability
Fixing Unit sub parts (Fixing Film Unit, Fixing Pressure Roller and Fixing Pressure Roller Shaft Support) are set as service parts, enabling each replacement.
3. Detection of whether the Fixing Unit is new
Whether the Fixing Unit is new can be detected.

Specifications

Item	Function/Method
Fixing method	On-demand fixing
Fixing speed	119.4 mm/s (1/1 speed) 59.7 mm/s (1/2 speed)
Heater	Ceramic Heater The Main Heater (heat distribution: high at center) and the Sub Heater (heat distribution: high at edges) are individually driven. The heater activation rate changes according to the paper size. Purpose: To control temperature increase at the edges
Control temperature	Target temperature of the Main Thermistor (TH01_02) at printing <Plain Paper 1 (64 to 75 g/m2)> 169 to 207 deg C
Detection of temperature	By Main Thermistor and Sub Thermistors 1 and 2
Protection function	Main Thermistor and Sub Thermistors 1 and 2 When a failure is detected, power supply to the Fixing Heater is shut down. Temperature Fuse Rated operation temperature: 228 +0/-6 deg C

T-2-41

Major Components



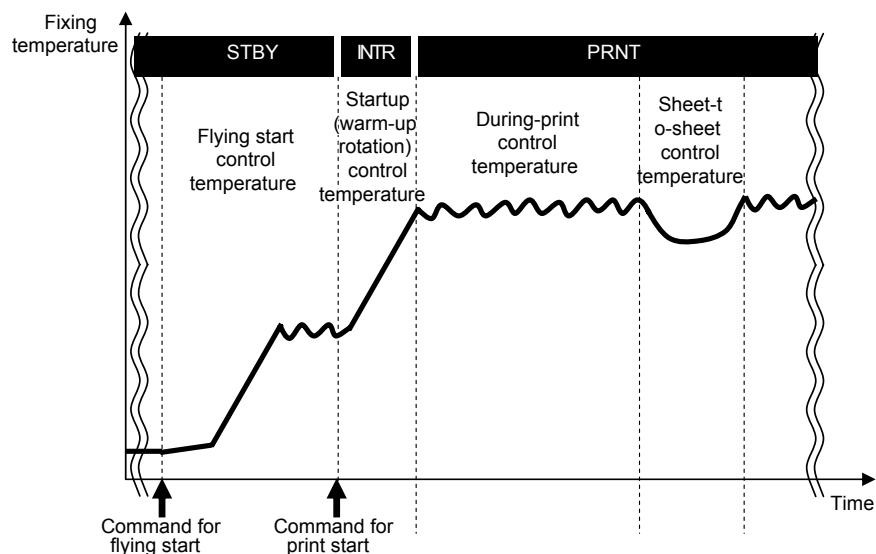
F-2-77

Part Name		Function/Method
[1]	Fixing Pressure Roller	A toner image on paper is fixed by applying heat/pressure.
[2]	Fixing Film Unit	
H01	Fixing Main Heater	For heating the center of Fixing Film (Ceramic Heater)
	Fixing Sub Heater	For heating the edges of Fixing Film (Ceramic Heater)
TH01_02	Main Thermistor	This is engaged with Heater. Temperature is controlled and abnormal temperature increase is detected.
TH01_01	Sub Thermistor 2	This is engaged with Heater. (Non paper feed area. Installed at the rear side of the host machine.) Temperature is controlled, and temperature at the edge and abnormal temperature increase are detected.
TH01_03	Sub Thermistor 1	This is engaged with Heater. (Non paper feed area. Installed at the front side of the host machine.) Temperature is controlled, and temperature at the edge and abnormal temperature increase are detected.
TP01	Fixing Temperature Fuse	Heater non contact type AC power supply is shut down at detection of a failure.
PS10	Fixing Outlet Sensor	Jam Detection
UN31	Fixing Fuse PCB	Whether the Fixing Unit is new can be detected.

T-2-42

Controls

Overview of Fixing Temperature Control



F-2-78

Standby Temperature Control

This is a control to pre-heat the Fixing Assembly to reduce time to start printing.

- Flying Start

Print Temperature Control

This is a control to increase fixing temperature to the target level and keep it during printing.

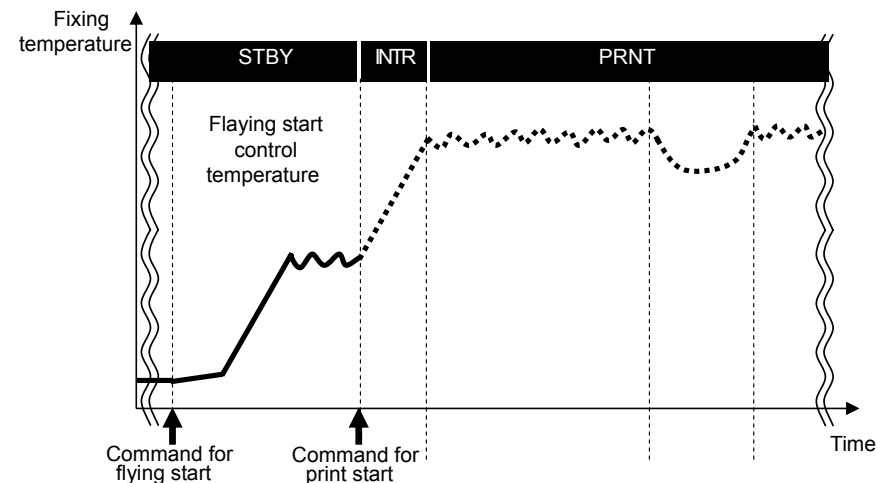
- Startup (initial rotation) temperature control
- Initial rotation extension temperature control (only for media of 300 mm in width or wider)
- Print temperature control
- Paper interval temperature control

Down Sequence Control

This is a control to prevent fixing failure due to temperature increase at the edge or temperature decrease. Productivity (throughput) decreases.

- Down sequence when feeding small-size paper
- Down sequence when using paper of mixed sizes and types

Standby Temperature Control



F-2-79

Flying Start

Purpose:

To reduce time to print the first sheet (FCOT).

Startup conditions:

- When Control Panel Numeric Keypad/Touch Panel is pressed
- When the Main Power Switch is turned ON*¹
- When recovering from sleep mode to standby mode*¹
- When the jam process completes*¹
- When opening and closing the Front/Right Door*¹

*1: This control is performed regardless of setting whether to execute Service Mode
COPIER > OPTION > IMG-FIX > FLYING.

Control description:

The temperature control target is set at 118 to 176 deg C and the Fixing Motor is controlled at half-speed to start operation. The control continues for 15 sec at most until the machine receives a command to start printing.

Related Service Mode:

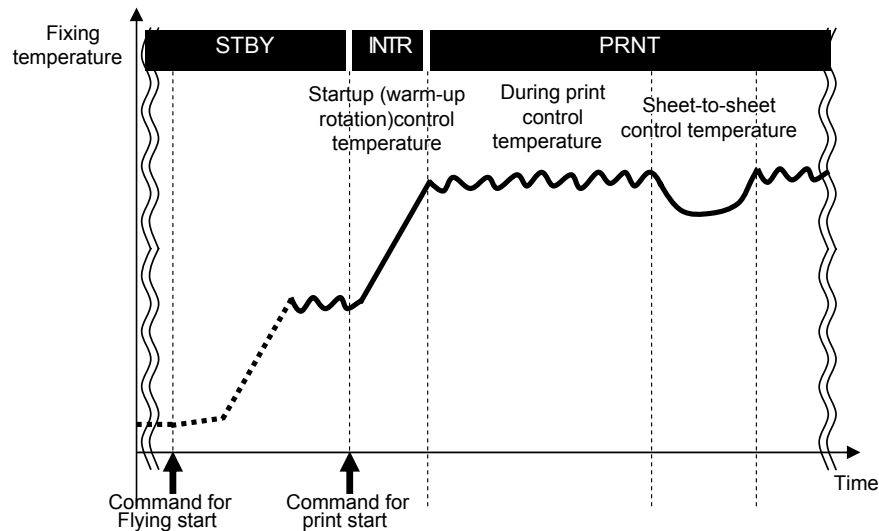
- (Lv.2) COPIER > OPTION > IMG-FIX > FLYING : To set ON/OFF of flying start temperature control.

<Setting value>

0 to 1

0: ON, 1: OFF

Print Temperature Control



F-2-80

Startup (initial rotation) Temperature Control

A fixing temperature is increased to a printable temperature after receiving a command to start printing.

Temperature Control by Extended Initial Rotation

The control to extend the initial rotation time is executed for media wider than 300 mm because heat at the edges of the heater may be insufficient. Applicable media and extension times are as follows.

	Horizontal scanning direction width	
	300.1 to 304.9	305.0 +
Plain paper	-	10 s
Heavy paper 1	-	15 s
Heavy paper 2	-	15 s
Heavy paper 3	15 s	15 s
Heavy paper 4	15 s	15 s

T-2-43

Print temperature control

An appropriate target temperature is set according to the number of sheets, paper type, and environment at continuous printing.

The temperature of the Fixing Heater is controlled according to the result of detection by the Main Thermistor (TH01_02).

Target temperature during printing <when paper width is 300 mm or less>

Paper type	Paper weight (g/m ²)	Resolution (dpi)	Fixing speed (mm/s)	Target temperature (deg C)	
				Color	B/W
Thin paper	52 to 63	600	119.4	162 to 199	162 to 199
Plain paper 1	64 to 75			169 to 207	169 to 207
Plain paper 2	76 to 90			180 to 214	173 to 209
Plain paper 3	91 to 105			195 to 230	182 to 217
Recycled paper 1	64 to 75			169 to 207	169 to 207
Recycled paper 2	76 to 90			175 to 209	169 to 203
Recycled paper 3	91 to 105			195 to 230	182 to 217
Color paper	64 to 82			169 to 207	169 to 207
Tracing paper	64 to 99			180 to 214	173 to 209
Pre-punched paper	64 to 75				
Thin paper	52 to 63	1200	59.7	132 to 162	
Plain paper 1	64 to 75			136 to 166	
Plain paper 2	76 to 90			142 to 172	
Plain paper 3	91 to 105			149 to 179	
Recycled paper 1	64 to 75			136 to 166	
Recycled paper 2	76 to 90			142 to 172	
Recycled paper 3	91 to 105			149 to 179	
Color paper	64 to 82			136 to 166	
Tracing paper	64 to 99			142 to 172	
Pre-punched paper	64 to 75				
Bond paper	83 to 99	600 / 1200	59.7	171 to 192	
Heavy paper 1	106 to 128			175 to 196	
Heavy paper 2	129 to 163			181 to 202	
Heavy paper 3	164 to 220			188 to 209	
Heavy paper 4	221 to 256			171 to 192	
1-Sided Coated 1	106 to 128			175 to 196	
1-Sided Coated 2	129 to 163			181 to 202	
1-Sided Coated 3	164 to 220			171 to 192	
2-Sided Coated 1	106 to 128			175 to 196	
2-Sided Coated 2	129 to 163			181 to 202	
2-Sided Coated 3	164 to 220	161 to 191			
Transparency	121 to 220	181 to 202			
Label paper	118 to 185	181 to 202			
Postcard	164 to 220	175 to 196			
Envelope	75 to 105				

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Target temperature during printing <when paper width exceeds 300 mm>

Paper type	Paper weight (g/m ²)	Paper Width (mm)	Resolution (dpi)	Fixing speed (mm/s)	Target temperature (deg C)	
					Color	B/W
Thin paper	52 to 63	300.1 +	600 / 1200	59.7	140 to 175	
Plain paper 1	64 to 75				143 to 180	
Plain paper 2	76 to 90				146 to 185	
Plain paper 3	91 to 105				150 to 190	
Recycled paper 1	64 to 75				143 to 180	
Recycled paper 2	76 to 90				146 to 185	
Recycled paper 3	91 to 105				150 to 190	
Color paper	64 to 82				143 to 180	
Tracing paper	64 to 99				146 to 185	
Pre-punched paper	64 to 75				146 to 185	
Bond paper	83 to 99				146 to 185	
Heavy paper 1	106 to 128				300.1 to 305.0	600 / 1200
1-Sided Coated 1 2-Sided Coated 1		305.0 +	165 to 195			
Heavy paper 2	129 to 163	300.1 to 305.0	169 to 199			
1-Sided Coated 2 2-Sided Coated 2		305.0 +	172 to 202			
Heavy paper 3	164 to 220	300.1 +	175 to 205			
1-Sided Coated 3 2-Sided Coated 3		305.1 +	184 to 212			
Label paper			184 to 212			
Heavy paper 4	221 to 256	300.1 +	183 to 213			
		305.1 +	192 to 220			

T-2-45

Paper Interval Temperature Control

The paper interval temperature is decreased to prevent temperature increase when the paper interval becomes wider than a normal condition*1.

Paper Interval Temperature = Target temperature during printing - (25 to 50 deg C)*2

*1 During down sequence

- During auto 2-sided mode
- During small-size mode
- At execution of controls (ATR control, registration control, ATVC control)

*2 Determined by the elapsed time since the previous fixing temperature control (including standby control) and the fixing temperature when startup control started.

Related Service Mode:

- Display of Thermistor detection temperature (Lv.1) COPIER > DISPLAY > ANALOG
 - > FIX-E (To display the center temperature of the Fixing Heater detected by the Main Thermistor)
 - > FIX-E2 (To display the front edge temperature of the Fixing Heater detected by the Sub Thermistor 1)
 - > FIX-E3 (To display the rear edge temperature of the Fixing Heater detected by the Sub Thermistor 2)
- Setting of fixing temperature control temperature (Lv.1)COPIER > OPTION > CUSTOM > TEMP-TBL (Plain paper 1, Color paper)
 - (Lv.1)COPIER > OPTION > IMG-FIX
 - > TMP-TBL2 (Heavy paper 1)
 - > TMP-TBL3 (Heavy paper 2)
 - > TMP-TBL4 (Heavy paper 3)
 - > TMP-TBL5 (Thin paper)
 - > TMP-TBL6 (Envelope)
 - > TMP-TBL7 (Plain paper 2, Tracing paper, Pre-punched paper)
 - > TMP-TBL8 (Transparency)
 - > TMP-TBL9 (coated paper 1)
 - > TMP-TB10 (coated paper 2)
 - > TMP-TB11 (Recycled paper 1)
 - > TMP-TB12 (Plain paper 3)
 - > TMP-TB13 (Recycled paper 2)
 - > TMP-TB17 (Recycled paper 3)
 - > TMP-TB18 (coated paper 3)
 - > TMP-TB19 (Heavy paper 4)
 - > TMP-TB20(Paper width 300.1 mm to 320 mm: Plain paper, Recycled paper, Thin paper, Color paper, Tracing paper, Pre-punched paper, Bond paper)
 - > TMP-TB21 (Paper width 300.1mm to 305 mm: Heavy paper, Coated paper, Label paper)
 - > TMP-TB22 (Paper width 305.1 mm to 320 mm: Heavy paper, Coated paper, Label paper)
 - > TMP-TB23 (Half-Speed time: Plain paper, Recycled paper, Thin paper, Color paper, Tracing paper, Pre-punched paper, Bond paper)

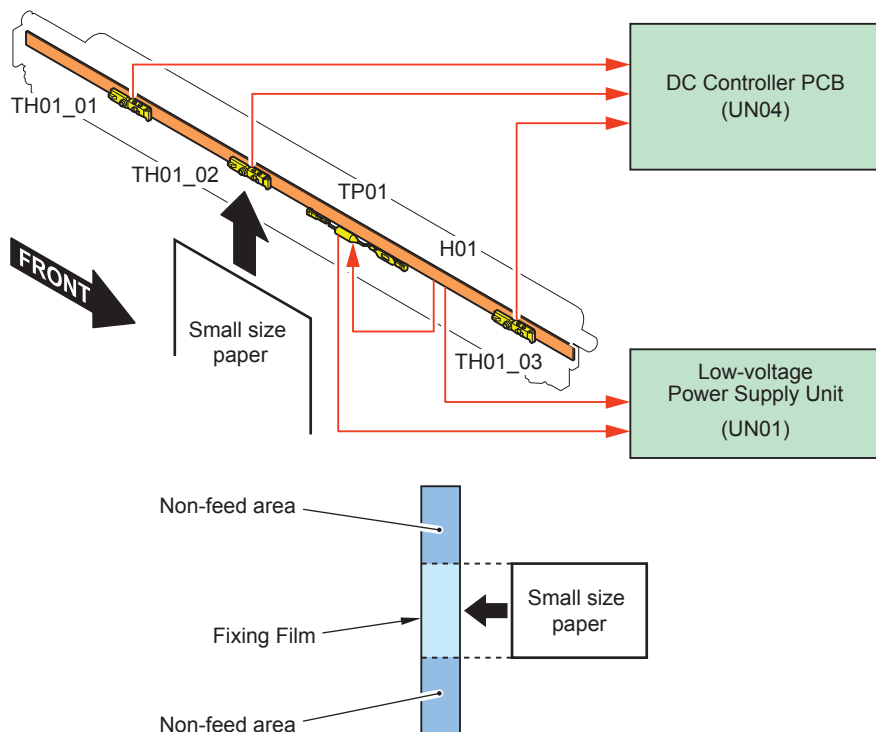
<Setting Value>

- 3 : -15 deg C⁻¹
- 2 : -10 deg C
- 1 : -5 deg C
- 0 : 0 deg C [default]
- +1 : +5 deg C
- +2 : +10 deg C

*1. This setting is only available for TMP-TB11 (Recycled paper 1).

Down Sequence Control

Down Sequence When Feeding Small-size Paper



F-2-81

Purpose:

To prevent fixing offset and deterioration of the Fixing Film by controlling temperature increase at a non paper feed area at continuous printing of small-size paper (paper with the width-direction length of LTR landscape or less)

Execution Condition:

When the detection temperature by the Sub Thermistor 1 (TH01_03) or Sub Thermistor 2 (TH01_01) exceeded a specified temperature (255 to 270 deg C) during printing

Operation:

The paper interval is increased to lower the temperature and adjust it slightly below the target printing temperature.

Printing speed <when paper width is 300 mm or less>

Paper type	Paper weight (g/m ²)	Resolution (dpi)	Fixing speed (mm/s)	Target temperature (deg C)		Print speed (ppm)
				Color	B/W	
Thin paper	52 to 63	600	119.4	162 to 199	162 to 199	15 to 4
Plain paper 1	64 to 75			169 to 207	169 to 207	
Plain paper 2	76 to 90			180 to 214	173 to 209	
Plain paper 3	91 to 105			195 to 230	182 to 217	
Recycled paper 1	64 to 75			169 to 207	169 to 207	
Recycled paper 2	76 to 90			175 to 209	169 to 203	
Recycled paper 3	91 to 105			195 to 230	182 to 217	
Color paper	64 to 82			169 to 207	169 to 207	
Tracing paper	64 to 99			180 to 214	173 to 209	
Pre-punched paper	64 to 75			180 to 214	173 to 209	
Thin paper	52 to 63	1200	59.7	132 to 162		8 to 2
Plain paper 1	64 to 75			136 to 166		
Plain paper 2	76 to 90			142 to 172		
Plain paper 3	91 to 105			149 to 179		
Recycled paper 1	64 to 75			136 to 166		
Recycled paper 2	76 to 90			142 to 172		
Recycled paper 3	91 to 105			149 to 179		
Color paper	64 to 82			136 to 166		
Tracing paper	64 to 99			142 to 172		
Pre-punched paper	64 to 75			142 to 172		
Bond paper	83 to 99	600 / 1200	59.7	171 to 192		8 to 2
Heavy paper 1	106 to 128			175 to 196		
Heavy paper 2	129 to 163			181 to 202		
Heavy paper 3	164 to 220			188 to 209		
Heavy paper 4	221 to 256			171 to 192		
1-Sided Coated 1	106 to 128			175 to 196		
1-Sided Coated 2	129 to 163			181 to 202		
1-Sided Coated 3	164 to 220			171 to 192		
2-Sided Coated 1	106 to 128			175 to 196		
2-Sided Coated 2	129 to 163			181 to 202		
2-Sided Coated 3	164 to 220			161 to 191		
Transparency	121 to 220			181 to 202		
Label paper	118 to 185			181 to 202		
Postcard	164 to 220			181 to 202		
Envelope	75 to 105			175 to 196		

T-2-46

Printing <when paper width exceeds 300 mm>

Paper type	Paper weight (g/m ²)	Paper Width (mm)	Resolution (dpi)	Fixing speed (mm/s)	Target temperature (deg C)		Print speed (ppm)				
					Color	B/W					
Thin paper	52 to 63	300.1 +	600 / 1200	59.7	140 to 175		8 to 2				
Plain paper 1	64 to 75				143 to 180						
Plain paper 2	76 to 90				146 to 185						
Plain paper 3	91 to 105				150 to 190						
Recycled paper 1	64 to 75				143 to 180						
Recycled paper 2	76 to 90				146 to 185						
Recycled paper 3	91 to 105				150 to 190						
Color paper	64 to 82				143 to 180						
Tracing paper	64 to 99				146 to 185						
Pre-punched paper	64 to 75				146 to 185						
Bond paper	83 to 99				146 to 185						
Heavy paper 1	106 to 128				300.1 to 305.0	600 / 1200		59.7	162 to 192		8 to 2
1-Sided Coated 1					305.0 +				165 to 195		
2-Sided Coated 1		305.0 +	169 to 199								
Heavy paper 2	129 to 163	300.1 to 305.0	600 / 1200	59.7	172 to 202		8 to 2				
1-Sided Coated 2		305.0 +			175 to 205						
2-Sided Coated 2		305.0 +			184 to 212						
Heavy paper 3	164 to 220	300.1 +	600 / 1200	59.7	183 to 213		8 to 2				
1-Sided Coated 3		305.1 +			192 to 220						
2-Sided Coated 3		305.1 +			192 to 220						
Label paper	221 to 256	300.1 +	600 / 1200	59.7	183 to 213		8 to 2				
Heavy paper 4		305.1 +			192 to 220						

T-2-47

Related Service Mode:

- Set small paper down sequence start temp (Lv.1) COPIER > OPTION > IMG-SPD > FX-D-TMP

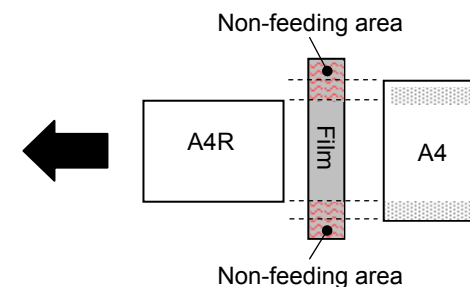
<Setting value>

- 4 : -20 deg C
- 3 : -15 deg C
- 2 : -10 deg C
- 1 : -5 deg C
- 0 : 0 deg C [default]
- +1 : +2 deg C
- +2 : +4 deg C
- +3 : +6 deg C
- +4 : +8 deg C

● Down Sequence When Using Paper of Mixed Size and Mixed Type

Purpose:

When feeding a sheet with a wider width than a preceding sheet during continuous printing, temperature at the non paper-feed area of the Fixing Film increases, causing fixing offset and wrinkles upon feeding succeeding sheets. This down sequence controls temperature increase at the non paper feed area of the Fixing Film.



F-2-82

Execution Condition:

When the difference between the higher temperature detected by either the Sub Thermistor 1 (TH01_03) or the Sub Thermistor 2 (TH01_01) and the temperature of the Main Thermistor (TH01_02) is the specified temperature (5 to 25 deg C) or higher at the time a sheet with a wider width than a preceding one is fed during printing

Operation:

The paper interval is increased to decrease temperature, and feeding the succeeding sheet and power supply to the Heater are stopped.

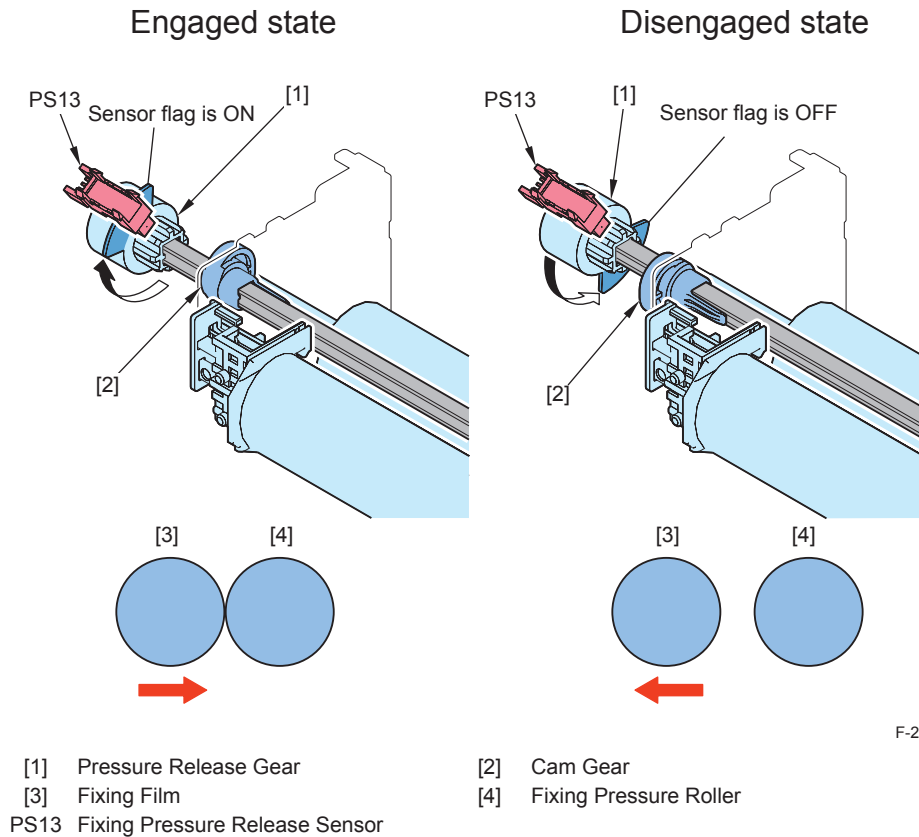
Termination condition:

This down sequence is terminated at the point when any of the following conditions is satisfied.

- The difference between the higher temperature detected by either the Sub Thermistor 1 (TH01_03) or the Sub Thermistor 2 (TH01_01) and the temperature of the Main Thermistor (TH01_02) becomes the specified temperature (5 to 25 deg C) or higher.
- A maximum of 30 seconds has elapsed since the preceding sheet passed the fixing nip.

Film Unit Engagement/Disengagement Control

The Fixing Film Unit is disengaged from the Fixing Pressure Roller under a specific condition in order to prevent deformation of the Fixing Film/Fixing Pressure Roller due to heat and pressure that arise when the drive of the Fixing Pressure Roller stops, and to improve jam removability.



F-2-83

Execution condition/timing of engagement operation:

- At power-on(*)
- At recovery from sleep mode(*)
- At warm-up rotation
- When the Fixing Roller is in a disengaged position at the start of a job
- At recovery from jam and error

* Disabled when the 24V interlock is disconnected due to reasons such as door being open.

Execution condition/timing of disengagement operation:

- At power-off
- When entering sleep mode
- At occurrence of a jam
- When an error occurs (excluding E009/E014 of fixing drive system errors)
- When no fixing operation has occurred for 4 hours or more while the Fixing Film Unit is engaged.

Related Error Code:

E009-0000: Fixing pressure timeout error

The Fixing Pressure Release Sensor did not detect ON status within 10 sec after the start of pressure application operation for fixing.

E009-0001: Fixing disengagement timeout error

The Fixing Pressure Release Sensor did not detect OFF status within 10 sec after the start of fixing disengagement operation.

Fixing Arch Control

Purpose : To prevent image failure/feed failure

Operation:

The slack that occurs when paper is fed from the Secondary Transfer Outer Roller to the Fixing Pressure Roller is kept to a specified level.

Since the feeding speed of the Fixing Pressure Roller and that of the Secondary Transfer Outer Roller are not the same when paper is fed to the Fixing Unit, image failure, paper wrinkle, image stretching, etc. occur.

To prevent these symptoms, one Arch Sensor (PS11) located at the inlet of the Fixing Unit detects the slack of paper and adjusts the the rotation speed of the Fixing Motor. This keeps an appropriate level of paper slack.

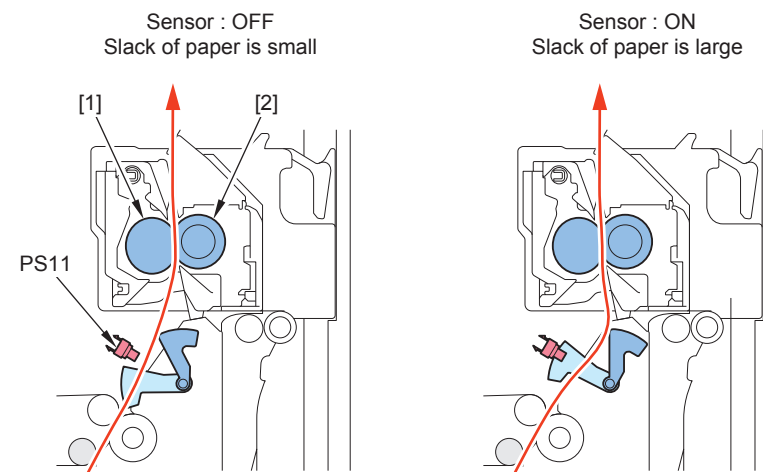
The Arch Sensor (PS11) detects a paper arch between the transfer nip and fixing nip, and changes the drive speed of the Fixing Motor as follows:

- 1) When the paper leading edge passes 23 mm in front of the Fixing Nip Assembly, the Fixing Motor drive speed is decelerated by 4.5% (for A4/LTR plain paper) relative to the process speed. The decelerated speed is maintained until the paper leading edge passes over 12 mm from the fixing nip.
- 2) When the Arch Sensor (PS11) is ON:

After the Arch Sensor has been detected ON for consecutive 20 ms or longer, the Fixing Motor drive is accelerated by 0.1% (for A4/LRT plain paper) relative to the process speed.

When Arch Sensor (PS11) is OFF:

After the Arch Sensor has been detected OFF for consecutive 20 ms or longer, the Fixing Motor drive is decelerated by 3.9% (for A4/LTR plain paper) relative to the process speed.
- 3) The Fixing Motor drive speed is switched as the Arch Sensor (PS11) repeatedly turns ON and OFF.
- 4) When the paper trailing edge passes 20 mm in front of the secondary transfer nip area (for A4/LTR plain paper), the Fixing Motor drive returns to constant speed.



F-2-84

[1] Fixing Film

[2] Fixing Pressure Roller

PS11 Arch Sensor

Fixing Unit Detection

During warm-up rotation (at power-on/recovery from sleep mode/closing of the cover), the Fixing Unit detection signal (FSR-CNCT-THX) is input to the DC Controller to detect the Fixing Unit.

If the Fixing Unit is not detected, "Set the fixing assembly." is displayed on the Control Panel, and operation stops.



F-2-85

Fixing Unit Life Detection

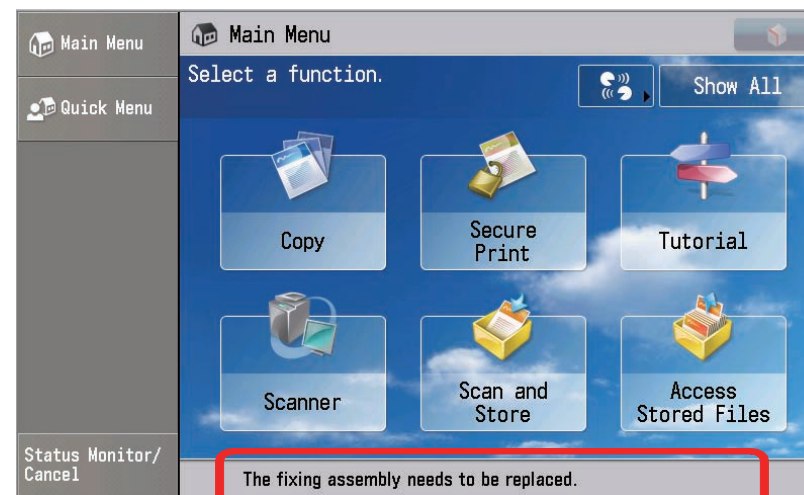
Purpose: To detect the life of the Fixing Unit in order to prevent fixing errors due to the Fixing Unit having reached the end of life

This machine has a counter in the DC Controller to determine the life of the Fixing Unit.

The life of the Fixing Unit is determined by the following 3 conditions:

1. Total drive time
Displayed when the sum of the total drive times reaches 2,150 hours.
2. Number of sheets fed
Displayed when 150,000 sheets have been fed
3. Total drive time + Number of sheets fed
Displayed when either of above conditions 1 or 2 is first detected

When these conditions reach certain limits "The fixing assembly needs to be replaced." is displayed on the Control Panel status line.



F-2-86

Related Service Mode:

(Lv.2) COPIER > OPTION > DSPLY-SW > FXMSG-SW : ON/OFF Fixing Unit replacement message
0 to 1
0: OFF, 1: ON (default)

(Lv.2) COPIER> OPTION> FNC-SW> FXWRNLVL : To set the threshold value to display the life of Fixing Film.
0 to 3
0: Warning is hidden. (default)
1: Warning is displayed when the counter for life judgment reaches the specified value. (Driving time)
2: Warning is displayed when the counter for life judgment reaches the specified value. (Number of sheets)
3: Warning is displayed when the counter for life judgment reaches the specified value. (Both driving time and number of sheets)

The life of the Fixing Unit is detected when FXMSG-SW and FXWRNLVL is 1.
As the default value of FXWRNLVL is 0, the life is not detected at factory default.

Detection of whether the Fixing Unit is new

The Fixing Fuse PCB (UN31) detects whether the Fixing Unit is new.

Fixing Fuse PCB (UN31) Fuse present: Fixing Unit is new

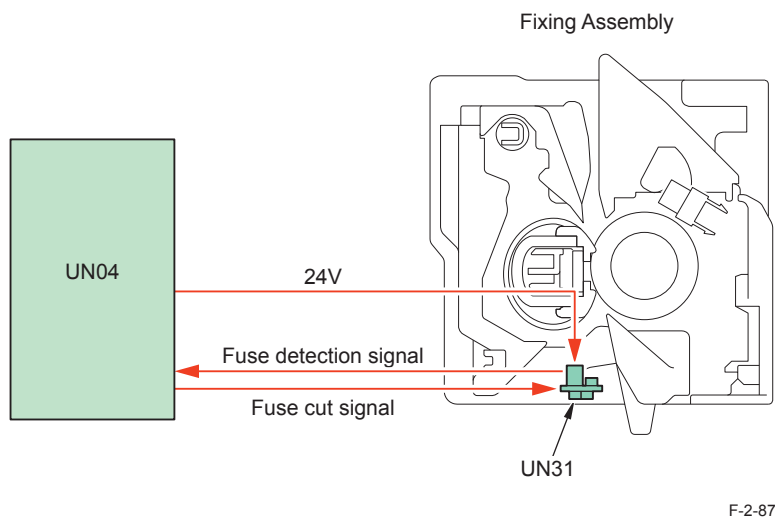
Fixing Fuse PCB (UN31) Fuse not present: Fixing Unit is being used

Installing a new Fixing Unit in the machine blows the fuse.

When a new unit is detected, the part counter (COPIER > COUNTER > DRBL-1 > FX-UNIT) is cleared.

When a new Fixing Unit is installed after an error occurs and it is recognized as new, the error is automatically cleared.

When the part counter of the Fixing Unit (COPIER > COUNTER > DRBL-1 > FX-UNIT) is cleared, the Fixing Unit replacement completion alarm (alarm code 35-0076) is generated.



Related Error Code:

E811-0000: Fuse in the Fixing Fuse PCB blowout error

The fuse in the Fixing Fuse PCB was not blown out at power-on.

Protection function

Code	Description	Clearing of error
E001	Detection of abnormal high temperature	
0001	Main Thermistor detected a temperature of 284 deg C or higher for more than 0.2 second.	Clear
0002	Sub Thermistor 1 detected a temperature of 295 deg C or higher for more than 0.2 second.	Clear
0003	Sub Thermistor 2 detected a temperature of 295 deg C or higher for more than 0.2 second.	Clear
0004	Main Thermistor detected a temperature of 287 deg C or higher for more than 0.2 second.	Clear
0005	Sub Thermistor 1 detected a temperature of 297 deg C or higher for more than 0.2 second.	Clear
0006	Sub Thermistor 2 detected a temperature of 297 deg C or higher for more than 0.2 second.	Clear
E002	Detection of abnormal temperature increase	
0001	Main Thermistor detected a temperature of 40 deg C or lower for 3 sec or longer from when the Fixing Heater was turned ON until start of Temperature control.	Clear
0002	Sub Thermistor 1 detected a temperature of 40 deg C or lower for 3 sec or longer from when the Fixing Heater was turned ON until start of Temperature control.	Clear
0003	Sub Thermistor 2 detected a temperature of 40 deg C or lower for 3 sec or longer from when the Fixing Heater was turned ON until start of Temperature control.	Clear
0004	Main Thermistor detected a temperature increase of 1 deg C for less than 5 sec from when the Fixing Heater was turned ON until start of Temperature control.	Clear
E003	Detection of low temperature	
0004	Main Thermistor detected a temperature of 80 deg C or lower for 1 sec or longer from start of Temperature control until completion of the last rotation (the Fixing Heater is turned OFF).	Clear
0005	Sub Thermistor 1 detected a temperature of 80 deg C or lower for 1 sec or longer from start of Temperature control until completion of the last rotation (the Fixing Heater is turned OFF).	Clear
0006	Sub Thermistor 2 detected a temperature of 80 deg C or lower for 1 sec or longer from start of Temperature control until completion of the last rotation (the Fixing Heater is turned OFF).	Clear
E004	Detection of a failure in fixing heater drive circuit	
0001	Zero cross interruption was detected although the Fixing Relay was not turned ON.	Not needed.
0002	Current outside the specified range flowed to the Fixing Heater when the heater was turned ON. Or, failure of fixing current detection circuit was detected.	Not needed.

Code	Description	Clearing of error
E009	Fixing Film Unit engagement/disengagement error	
0000	The Fixing Pressure Release Sensor did not detect ON status within 10 sec after the start of pressure application operation for fixing.	Not needed.
0001	The Fixing Pressure Release Sensor did not detect OFF status within 10 sec after the start of fixing disengagement operation.	Not needed.
E808	Detection of a failure in zero cross circuit	
0001	After the start of the zero cross signal detection, the frequency between 43 Hz and 67 Hz could not be detected for 0.5 consecutive sec.	Not needed.
0002	After the frequency of zero cross signal fell into the specified frequency band, the frequency between 43 Hz and 67 Hz could not be detected for 0.5 consecutive sec.	Not needed.

T-2-48

● Countermeasure When the Fixing Unit Error (E001/E002/E003) Occurs

When a Fixing Unit-related error (E001/E002/E003) occurred to previous models, a service visit was necessary to clear the error in service mode (COPIER > FUNCTION > CLEAR > ERR).

This machine handles E001, E002 and E003 errors in the following manner to avoid service visits just to clear these errors:

Error	Error Detection	
	First time	Second and later times
E001	Displayed as E001 error (same as before)	Displayed as E001 error
E002	Displayed as 0CF1 JAM	Displayed as E002 error
E003		Displayed as E003 error

T-2-49

In either case, the error does not need to be cleared in service mode as replacing the Fixing Unit with a new one blows the fuse of the Fixing Fuse PCB and at the same time clears the error.

Pickup / Feed System

Overview

Features

- Support for envelopes
Envelopes can be fed from a cassette of the host machine.
- Improved Multi-purpose Tray usability
Automatic paper size recognition by the Multi-purpose Tray improves usability.

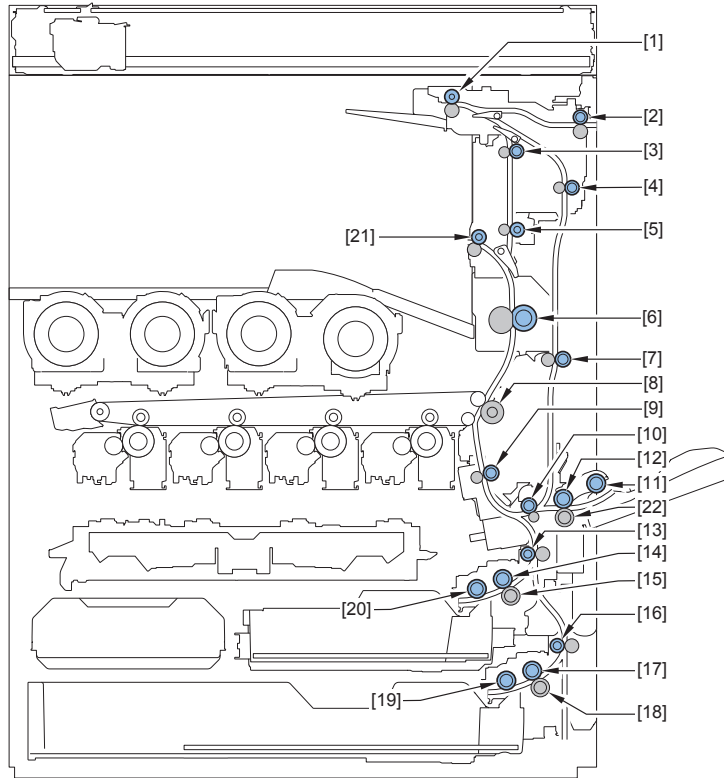
Specifications

Item		Description
Pickup method	Cassettes 1 and 2	Retard separation method (Pickup Roller + Feed Roller + Separation Roller)
	Multi-purpose Tray	Retard separation method (Pickup Roller + Feed Roller + Separation Roller)
Stacking capacity	Cassettes 1 and 2	550 sheets (80 g/m ² paper), 640 sheets (64 g/m ² paper)
	Multi-purpose Tray	100 sheets (80 g/m ² paper)
Paper Size	Cassette 1	A4, B5, A5R, Custom size (139.7 x 182 to 297 mm x 215.9 mm), Envelope (Nagagata 3, Yougatanaga 3, ISO-C5)
	Cassette 2	A3, B4, A4, A4R, B5, B5R, A5R, Custom size (139.7 x 182 to 304.8 x 457.2 mm), Envelope (Nagagata 3, Yougatanaga 3, Kakugata 2, Monarch, COM10 No.10, DL)
	Multi-purpose Tray	305 mm x 457 mm, 320 mm x 450 mm (SRA3), A3, B4, A4, A4R, B5, B5R, A5, A5R, Postcard, Reply Postcard, 4-on-1 Postcard, Custom size (98.4 x 139.7 mm to 320 x 457.2 mm), Envelope
Paper weight	Cassettes 1 and 2	52 to 220 g/m ²
	Multi-purpose Tray	52 to 256 g/m ²
Paper size switching	Cassettes 1 and 2	Automatic size detection
	Multi-purpose Tray	Automatic size detection
2-sided print method		Through-pass duplexing
Paper level display		Yes
Transparency detection		None
Leading edge margin	1-sided	4.0 mm +1.5/-1.0 mm
	2-sided	4.0 mm +1.5/-1.0 mm
Left edge margin	1-sided	2.5 mm ±1.5 mm
	2-sided	2.5 mm ±2.0 mm

T-2-50

Parts Configuration

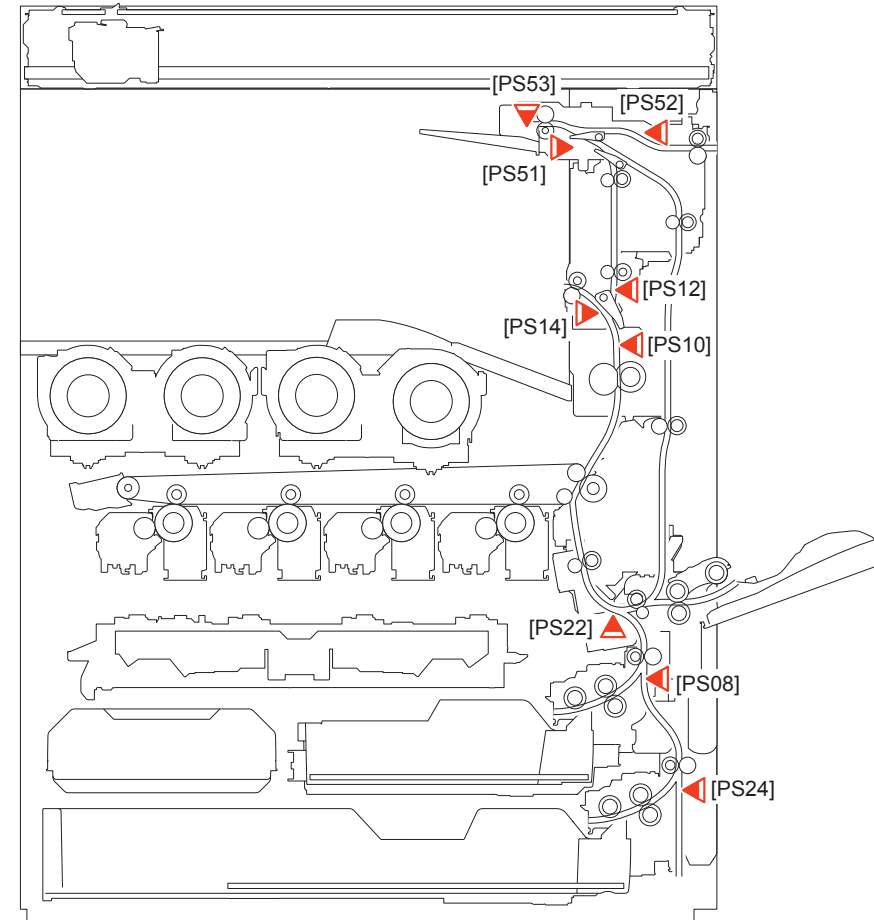
Layout Drawing of Rollers



F-2-88

- | | |
|---------------------------------------|---|
| [1] Second Delivery/Reverse Roller | [12] Multi-purpose Tray Separation Roller |
| [2] Third Delivery Roller | [13] Cassette 1 Vertical Path Roller |
| [3] Reverse Vertical Path Roller 1 | [14] Cassette 1 Feed Roller |
| [4] Duplex Roller | [15] Cassette 1 Separation Roller |
| [5] Reverse Vertical Path Roller 2 | [16] Cassette 2 Vertical Path Roller |
| [6] Fixing Pressure Roller | [17] Cassette 2 Feed Roller |
| [7] Duplex Roller | [18] Cassette 2 Separation Roller |
| [8] Secondary Transfer Outer Roller | [19] Cassette 2 Pickup Roller |
| [9] Registration Roller | [20] Cassette 1 Pickup Roller |
| [10] Duplex Merging Roller | [21] First Delivery Roller |
| [11] Multi-purpose Tray Pickup Roller | [22] Multi-purpose Tray Separation Roller |

Layout Drawing of Sensors

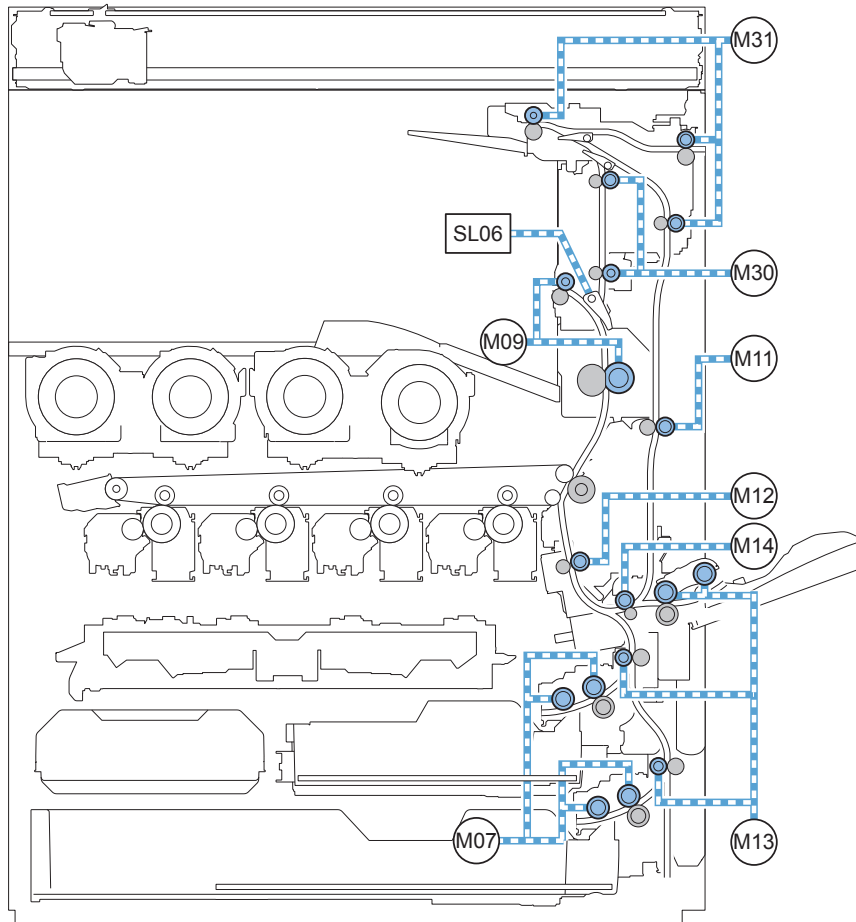


F-2-89

- | | |
|--------------------------------------|--|
| PS08 Cassette 1 Vertical Path Sensor | PS24 Cassette 2 Vertical Path Sensor |
| PS10 Fixing Outlet Sensor | PS51 Second Delivery Sensor |
| PS12 Reverse Sensor | PS52 Third Delivery Sensor |
| PS14 First Delivery Sensor | PS53 Second Delivery Paper Full Sensor |
| PS22 Pre-Registration Sensor | |

* PS51 and PS52 do not exist on models without 3-Way Unit.

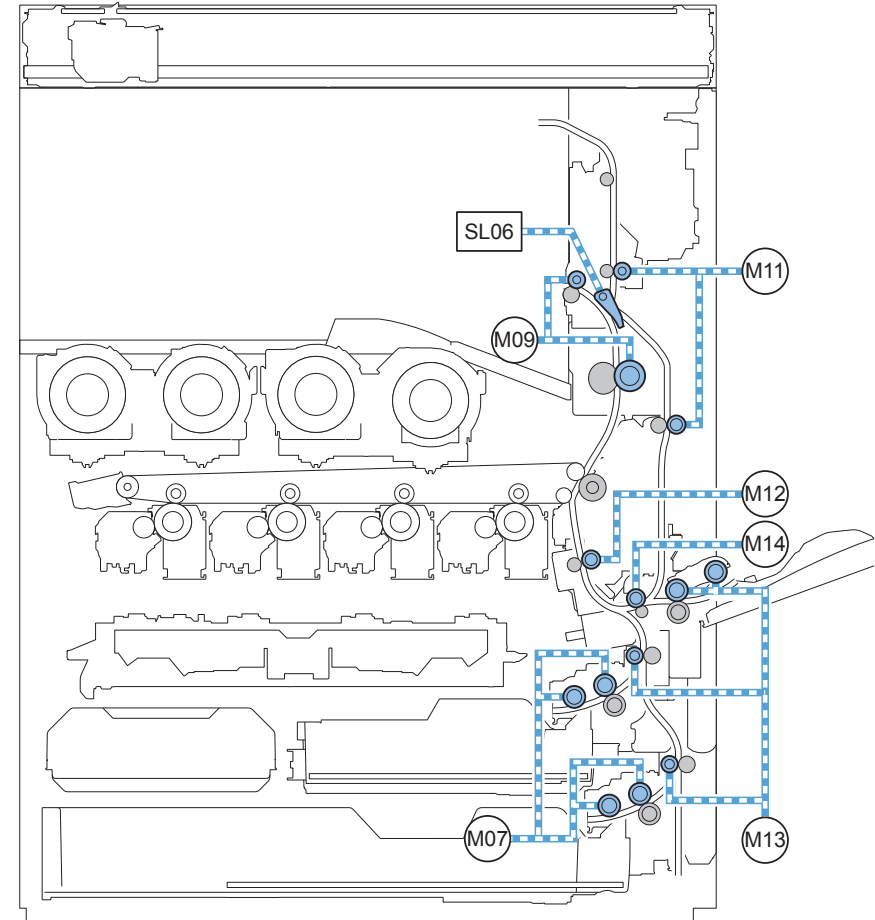
● Diagram of load drives
When the 3-Way Unit is connected



F-2-90

- | | | | |
|-----|---------------------------|------|--|
| M07 | Cassette 1,2 Pickup Motor | M13 | Cassette 1,2 Feed / Multi-purpose Pickup Motor |
| M09 | Fixing Motor | M14 | Duplex Merging Motor |
| M11 | Duplex Feed Motor | M30 | Duplex Reverse Motor |
| M12 | Registration Motor | M31 | Second Delivery Motor |
| | | SL06 | Duplex Reverse Solenoid |

Without 3-Way Unit

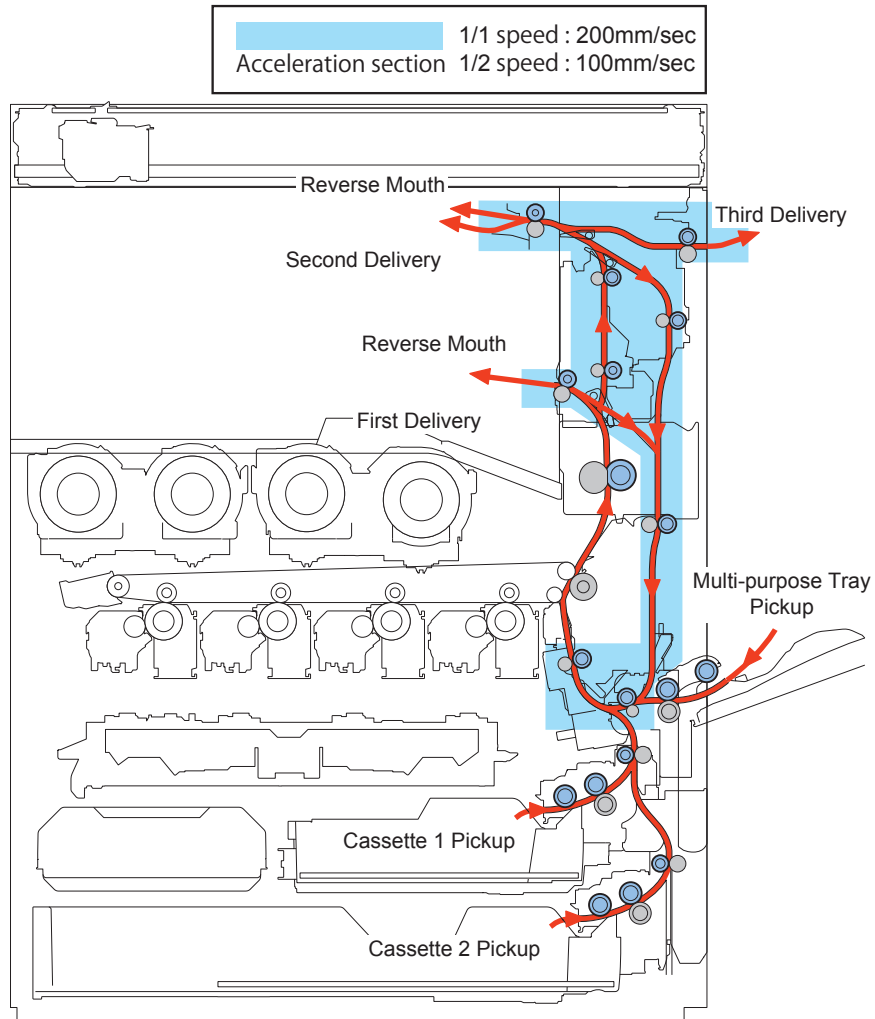


F-2-91

- | | | | |
|-----|--|------|-------------------------|
| M07 | Cassette 1,2 Pickup Motor | SL06 | Duplex Reverse Solenoid |
| M09 | Fixing Motor | | |
| M11 | Duplex Feed Motor | | |
| M12 | Registration Motor | | |
| M13 | Cassette 1,2 Feed / Multi-purpose Pickup Motor | | |
| M14 | Duplex Merging Motor | | |

Paper Path

When the 3-Way Unit is connected

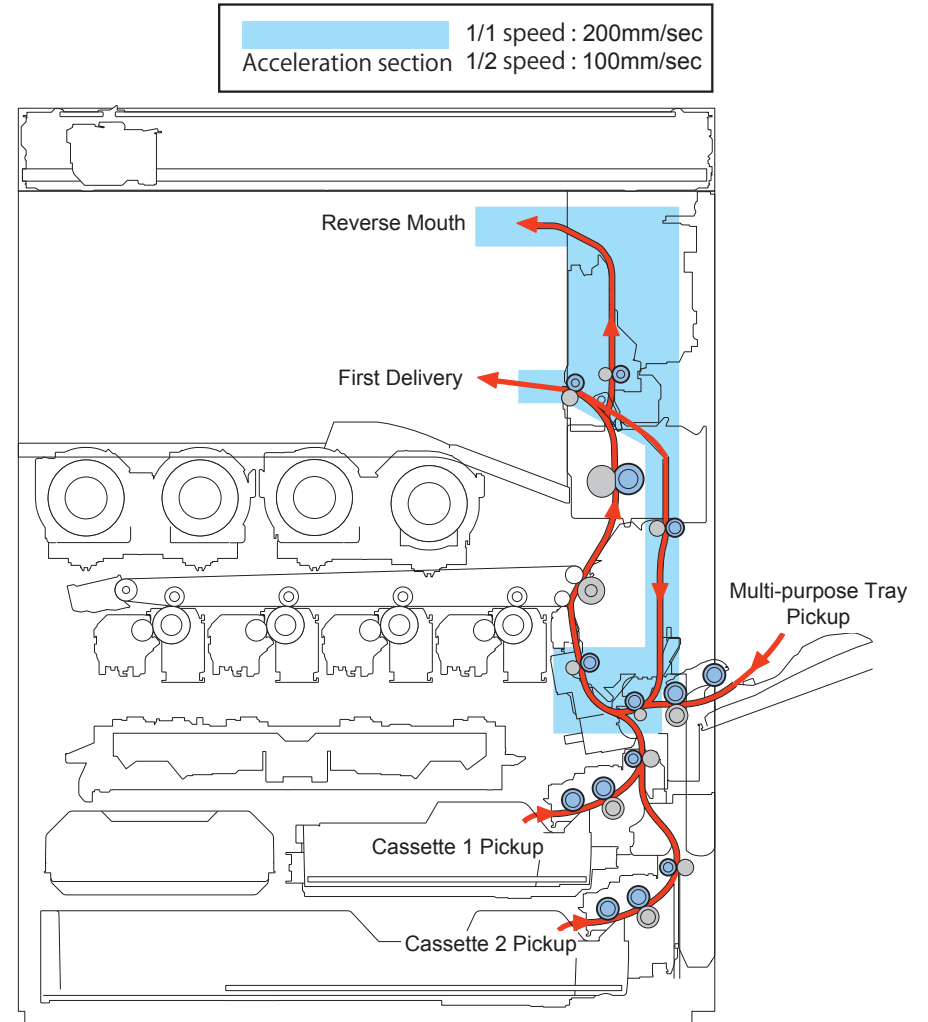


F-2-92

Section	1/1 speed	1/2 speed
Process speed	119.4 mm/s	59.7 mm/s
Section from the Cassette Vertical Path Roller to the point 25 mm short of the Secondary Transfer Outer Roller (The speed is variable according to the early or late paper arrival)	120.1 to 200 mm/s	60.1 to 100 mm/s

T-2-51

Without 3-Way Unit



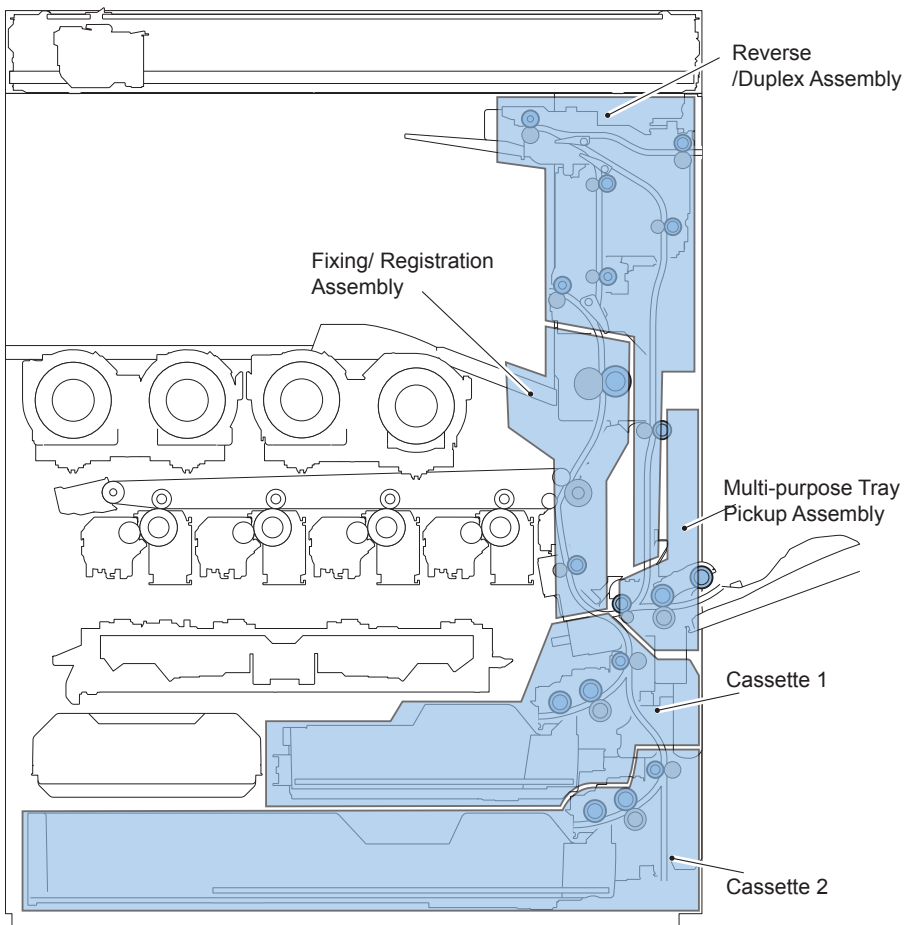
F-2-93

Section	1/1 speed	1/2 speed
Process speed	119.4 mm/s	59.7 mm/s
Section from the Cassette Vertical Path Roller to the point 25 mm short of the Secondary Transfer Outer Roller (The speed is variable according to the early or late paper arrival)	120.1 to 200 mm/s	60.1 to 100 mm/s

T-2-52

Controls

Overview



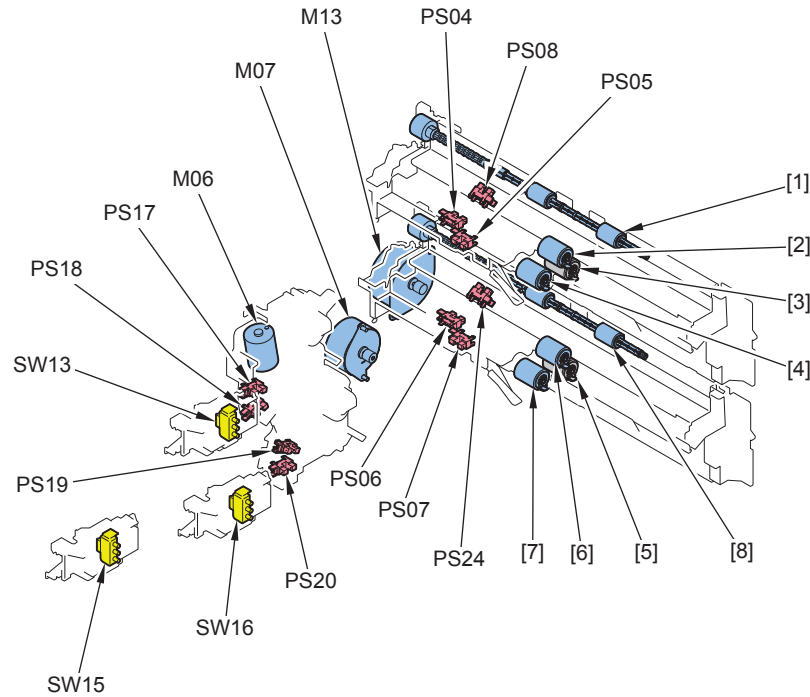
F-2-94

Area	Detection, Control
Cassette Pickup Assembly • Cassette 1 • Cassette 2	Lifter control
	Cassette Pickup Control
	Cassette Paper Size Detection/Cassette Detection
	Paper level/presence detection
Multi-purpose Tray Pickup Assembly	Multi-Purpose Tray Pickup Control
	Multi-purpose Tray paper detection
	Multi-purpose Tray Automatic Size Detection
Fixing/Registration Assembly	Registration Control
Reverse / Delivery Assembly	The number of circulating sheets, feed path and reverse/standby control at 1-sided/2-sided feeding
Jam Detection	Jam Detection

T-2-53

Cassette Pickup Assembly

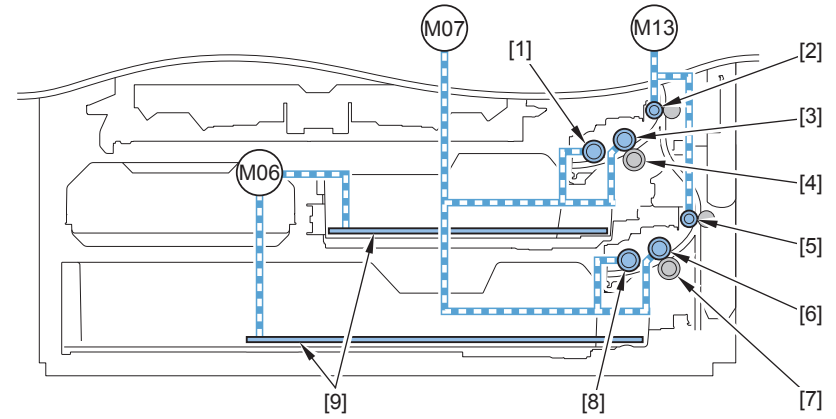
Parts Configuration



F-2-95

- | | |
|--|--------------------------------------|
| [1] Cassette 1 Vertical Path Roller | SW13 Cassette 1 Size Switch |
| [2] Cassette 1 Feed Roller | SW15 Cassette 2 Size Switch A |
| [3] Cassette 1 Separation Roller | SW16 Cassette 2 Size Switch B |
| [4] Cassette 1 Pickup Roller | PS04 Cassette 1 Lifter Sensor |
| [5] Cassette 2 Separation Roller | PS05 Cassette 1 Paper Sensor |
| [6] Cassette 2 Feed Roller | PS06 Cassette 2 Lifter Sensor |
| [7] Cassette 2 Pickup Roller | PS07 Cassette 2 Paper Sensor |
| [8] Cassette 2 Vertical Path Roller | PS08 Cassette 1 Vertical Path Sensor |
| M06 Cassette 1,2 Lifter Motor | PS17 Cassette 1 Paper Level Sensor A |
| M07 Cassette 1,2 Pickup Motor | PS18 Cassette 1 Paper Level Sensor B |
| M13 Cassette 1,2 Feed / Multi-purpose Pickup Motor | PS19 Cassette 2 Paper Level Sensor A |
| | PS20 Cassette 2 Paper Level Sensor B |
| | PS24 Cassette 2 Vertical Path Sensor |

Drive Configuration



F-2-96

- | | |
|-------------------------------------|--|
| [1] Cassette 1 Pickup Roller | M06 Cassette 1,2 Lifter Motor |
| [2] Cassette 1 Vertical Path Roller | M07 Cassette 1,2 Pickup Motor |
| [3] Cassette 1 Feed Roller | M13 Cassette 1,2 Feed / Multi-purpose Pickup Motor |
| [4] Cassette 1 Separation Roller | |
| [5] Cassette 2 Vertical Path Roller | |
| [6] Cassette 2 Feed Roller | |
| [7] Cassette 2 Separation Roller | |
| [8] Cassette 2 Pickup Roller | |
| [9] Middle Plate | |

● Lifter control

Paper inside a cassette is lifted up by the Lifting Plate.

The Middle Plate is lifted by the rotation of the Cassette Lifter Motor (M06/M102).

When the paper surface reaches the position of the Pickup Roller, the Cassette Lifter Sensors (PS04/PS06) are turned ON to detect that the paper has reached the pickup position.

Lifter Error Detection

If the Cassette Lifter Sensors are not turned ON for 5 seconds or more, no paper is displayed for the corresponding paper source and an alarm code is issued.

Related Alarm Code:

04-0001: Cassette 1 Lifter Error
 04-0002: Cassette 2 Lifter Error
 04-0003: Cassette 3 Lifter Error
 04-0004: Cassette 4 Lifter Error

● Cassette Pickup Control

Rotation of the Cassette Pickup Motor (M07) feeds paper to the Vertical Path Roller.

The Cassette 1/2 Pickup Roller and the Cassette 1/2 Feed Roller are driven by the Cassette 1,2 Pickup Motor (M07) while the Vertical Path Roller is operated by the rotation of the Cassette 1,2 Feed/Multi-purpose Tray Pickup Motor (M13).

Pickup Retry Error

Pickup retry is executed when a delay jam is detected by the Vertical Path Sensor of the respective paper source.

An alarm code is notified when pickup retry fails the predetermined number of times.

Related Alarm Code:

04-0011: Cassette 1 Pickup Retry Error
 04-0012: Cassette 2 Pickup Retry Error
 04-0013: Cassette 3 Pickup Retry Error
 04-0014: Cassette 4 Pickup Retry Error

● Cassette Paper Size Detection/Cassette Detection

Result of automatic size detection	Paper Size Group for Auto Recog. in Drawer*1			
	All Sizes	A/B-Size	Inch Size	A/K Size
A3	A3	A3	No corresponding size	A3
B4	B4	B4	No corresponding size	No corresponding size
A4R	A4R	A4R	No corresponding size	A4R
A4	A4	A4	No corresponding size	A4
B5R	B5R	B5R	No corresponding size	No corresponding size
B5	B5	B5	No corresponding size	No corresponding size
A5R	Depends on the setting*2	A5R	STMTR	A5R
11x17	11x17	No corresponding size	11x17	No corresponding size
LGL	LGL	No corresponding size	LGL	No corresponding size
LTR	LTR	No corresponding size	LTR	No corresponding size
LTRR	LTRR	No corresponding size	LTRR	No corresponding size
STMTR	Depends on the setting*2	A5R	STMTR	A5R
12x18	12x18	No corresponding size	12x18	No corresponding size
EXEC	Depends on the setting*3	No corresponding size	EXEC	K16
K8	K8	No corresponding size	No corresponding size	K8
K16	Depends on the setting*3	No corresponding size	EXEC	K16
K16R	K16R	No corresponding size	No corresponding size	K16R
Envelope	Blank unless "Paper Settings" is performed due to non-standard size			
Custom size				

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*1: The automatic detection size in Preferences > Paper Settings > Paper Size Group for Auto Recog. in Drawer > Paper Drawer

Country	US	CN	Destinations other than the above
Default Setting	Inch Size	A/K Size	A/B-Size

T-2-55

*2: Preferences > Paper Settings > A5R/STMTR Paper Selection

*3: Cassette 1: (Lv.2) COPIER > OPTION > CST > CST-K-SW

Cassettes 2 to 4: (Lv.2) COPIER > OPTION > CST > Cx-K-SW

Cassette 1

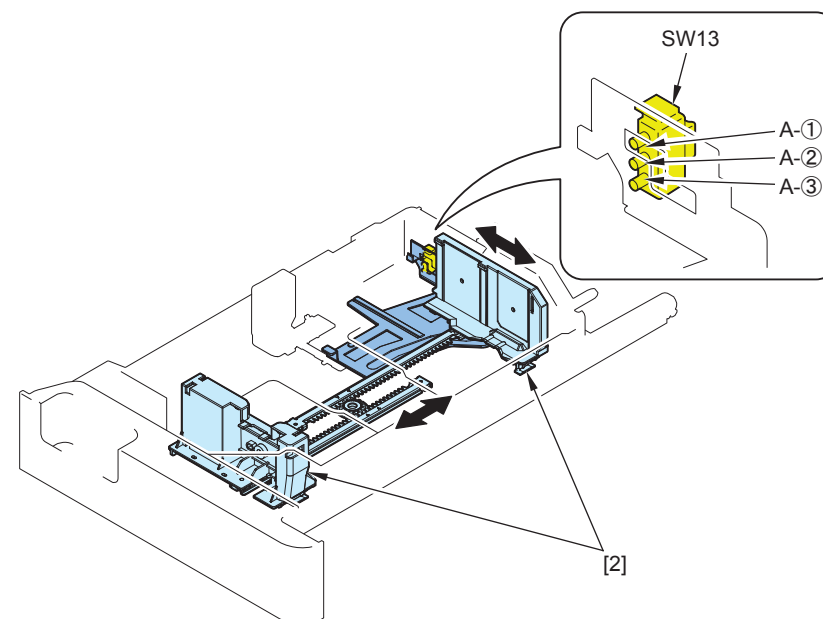
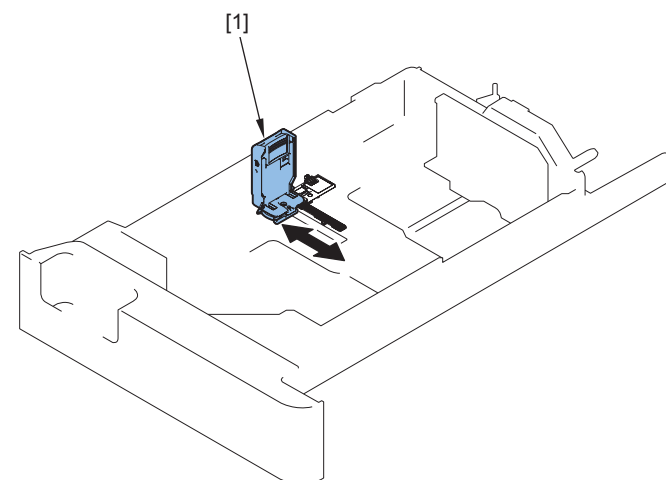
The Cassette 1 Size Switch detects the size of the paper loaded in the cassette. The switch consists of 3 microswitches, and the width is detected in accordance with the combination of ON/OFF. When the cassette presence/paper size is changed, the DC Controller notifies the Main Controller of the status change.

NOTE:

When an error in the lifter is detected, the cassette presence/absence and paper size status are not detected.

Paper size	Width	Length	Size Switch A (Width Detection)		
			(1)	(2)	(3)
A4	297.0	210.0	OFF	OFF	ON
B5	257.0	182.0	ON	ON	OFF
LTR	279.4	215.9	OFF	ON	ON
EXEC	266.7	184.1	ON	ON	ON
A5-R	148.0	210.0	ON	OFF	ON
K16	270.0	195.0	ON	ON	ON
STMTR	139.7	215.9	ON	OFF	ON

T-2-56



F-2-97

[1] Trailing Edge Guide Plate
[2] Side Guide Plate

SW13 Cassette 1 Size Switch

Cassette 2

The paper size in the cassette is automatically detected by the Cassette 2 Size Switch A/ B after the position of the Guide Plate is adjusted. The switch consists of 3 microswitches, and length and width are detected in accordance with the combination of ON/OFF. When the cassette presence/paper size is changed, the DC Controller notifies the Main Controller of the status change.

In addition, the distinction between A5-R and STMT-R is determined by the user while that between EXEC and K16 is determined by the service technician.

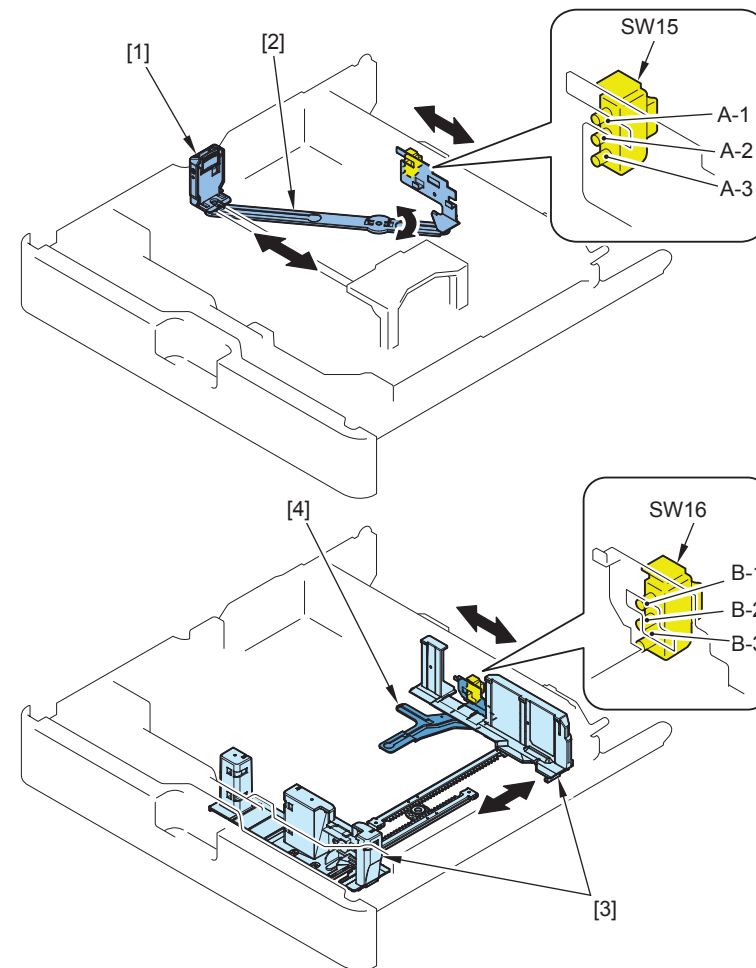
Paper size	Width	Length	Size Switch B (Width Detection)			Size Switch A (Length Detection)		
			(1)	(2)	(3)	(1)	(2)	(3)
A3	297.0	420.0	OFF	OFF	ON	ON	OFF	ON
B4	257.0	364.0	ON	ON	OFF	ON	ON	ON
A4-R	210.0	297.0	ON	OFF	OFF	ON	ON	OFF
B5-R	182.0	257.0	ON	OFF	ON	OFF	ON	ON
11×17	279.4	431.8	OFF	ON	ON	ON	OFF	OFF (or ON)
LGL	215.9	355.6	ON	OFF	OFF	ON	ON	ON
LTR-R	215.9	279.4	ON	OFF	OFF	OFF	ON	OFF
EXEC	267.0	184.0	ON	ON	ON	OFF	OFF	OFF (or ON)
A4	297.0	210.0	OFF	OFF	ON	OFF	OFF	ON
B5	257.0	182.0	ON	ON	OFF	OFF	OFF	OFF
LTR	279.4	215.9	OFF	ON	ON	OFF	OFF	ON
A5-R	148.5	210.0	ON	OFF	ON	OFF	OFF	ON
K8	270.0	390.0	ON	ON	ON	ON	OFF	ON
K16-R	195.0	270.0	ON	OFF	ON	OFF	ON	ON (or OFF)
K16	270.0	195.0	ON	ON	ON	OFF	OFF	ON
STMT-R	139.7	215.9	ON	OFF	ON	OFF	OFF	ON
12×18	304.8	457.2	OFF	OFF	ON	OFF	OFF	OFF

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In addition, presence of the cassette is detected when the size switch is pushed. (When no switch is pushed, it is judged that there is no cassette.)

NOTE:

- Selection between A5R and STMT-R
Settings/Registration > Preferences > Paper Settings > A5R/STMT-R Paper Selection
Setting value - Cassette 3: A5R, STMT-R Cassette 4: A5R, STMT-R
- Service Mode
(Lv.1) COPIER > OPTION > CST > CSTX-P1 (where 'X' is the cassette number (2 to 4))
Setting Value - 0: A5R, 1: STMT-R



F-2-98

- [1] Trailing Edge Guide Plate
- [2] Link Arm
- [3] Side Guide Plate
- [4] Size Detection Plate

- SW15 Cassette 2 Size Switch A
- SW16 Cassette 2 Size Switch B

Cassette Heater

See "Heater Control"(page 2-93).

Paper level/presence detection

The level and presence of paper in the cassette are detected by four sensors.

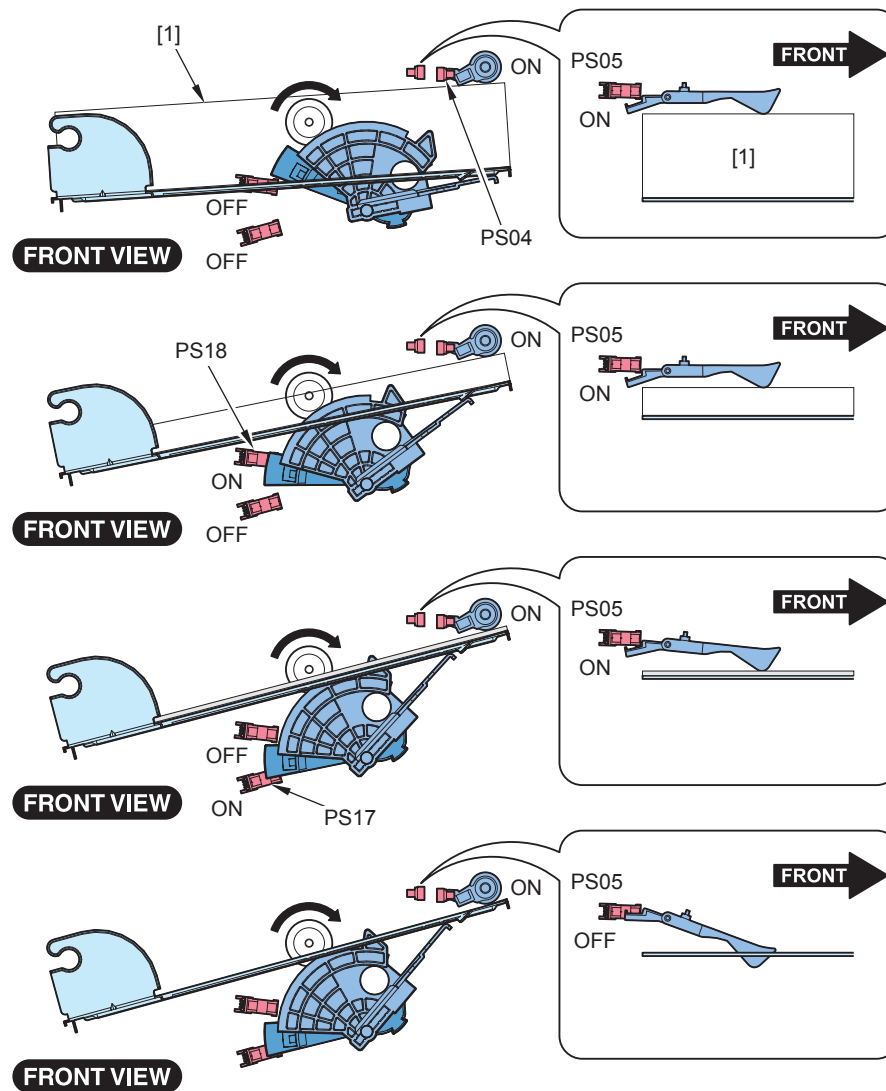
- Paper Level Sensor A
- Paper Level Sensor B
- Paper Sensor
- Cassette Lifter Sensor

The paper level is displayed in four levels in the Control Panel.

Level display

Level display	Level	Paper Level Sensor A	Paper Level Sensor B	Paper Sensor	Cassette Lifter Sensor
	100 to 50%	OFF	OFF	ON	ON
	50 to 10%	OFF	ON	ON	ON
	10 to 0%	ON	OFF	ON	ON
	0%	-	-	OFF	ON

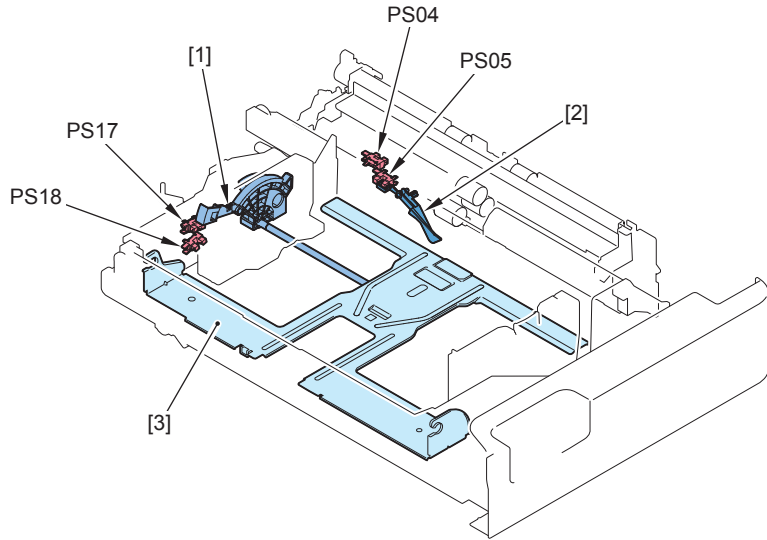
T-2-58



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- [1] Paper
- PS04 Cassette 1 Lifter Sensor
- PS05 Cassette 1 Paper Sensor
- PS17 Cassette 1 Paper Level Sensor A
- PS18 Cassette 1 Paper Level Sensor B

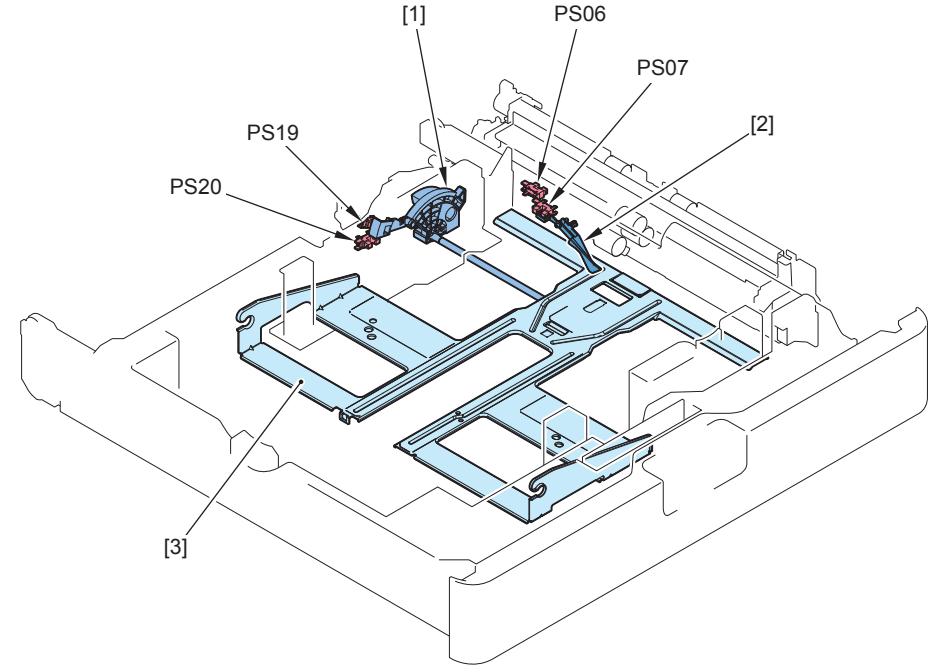
Cassette 1



F-2-100

- | | | | |
|-----|-----------------------|------|---------------------------------|
| [1] | Lifter Gear | PS04 | Cassette 1 Lifter Sensor |
| [2] | Paper Detection Lever | PS05 | Cassette 1 Paper Sensor |
| [3] | Middle Plate | PS17 | Cassette 1 Paper Level Sensor A |
| | | PS18 | Cassette 1 Paper Level Sensor B |

Cassette 2

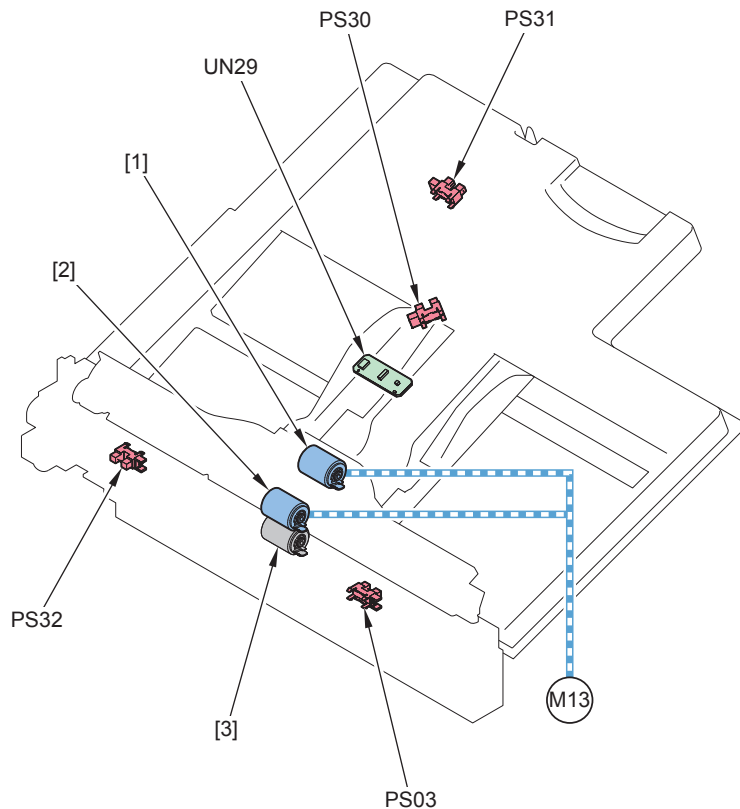


F-2-101

- | | | | |
|-----|-----------------------|------|---------------------------------|
| [1] | Lifter Gear | PS06 | Cassette 2 Lifter Sensor |
| [2] | Paper Detection Lever | PS07 | Cassette 2 Paper Sensor |
| [3] | Middle Plate | PS19 | Cassette 2 Paper Level Sensor A |
| | | PS20 | Cassette 2 Paper Level Sensor B |

Multi-purpose Tray Pickup Assembly

Parts / Drive Configuration



F-2-102

[1] Multi-purpose Tray Pickup Roller	PS03 Multi-purpose Tray Paper Sensor
[2] Multi-purpose Tray Feed Roller	PS30 Multi-purpose Tray Paper Length Sensor 1
[3] Multi-purpose Tray Separation Roller	PS31 Multi-purpose Tray Paper Length Sensor 2
	PS32 Multi-purpose Tray Pickup HP Sensor
	M13 Cassette 1,2 Feed / Multi-purpose Pickup Motor

Multi-Purpose Tray Pickup Control

Paper is picked up from the Multi-purpose Tray by the reverse rotation of the Cassette 1,2 Feed / Multi-purpose Pickup Motor (M13).

Multi-purpose Tray Pickup HP Sensor Error

When an error in the Cassette 1,2 Feed / Multi-purpose Pickup Motor (M13) or the Multi-purpose Tray Pickup HP Sensor (PS32) is detected, no paper is displayed for the the Multi-purpose Tray pickup, and an alarm code is issued.

Related Alarm Code:
04-0007: Multi-purpose Tray Pickup HP Sensor Error

Multi-purpose Tray Pickup Retry Error

Pickup retry is executed when a delay jam is detected by the Duplex Merging Sensor. An alarm code is notified when pickup retry fails the predetermined number of times.

Related Alarm Code:
04-0017: Multi-purpose Tray Pickup Retry Error

Multi-purpose Tray paper detection

Presence/absence of paper on the Multi-purpose Tray is detected by the Multi-purpose Tray Paper Sensor (PS03).

Multi-purpose Tray Automatic Size Detection

The paper size to be automatically detected which is mentioned above is determined by "Settings/Registration > Preferences > Paper Settings > Paper Size Group for Auto Recog. in Drawer".

The size that is displayed is determined by the settings of automatic paper size detection.

Paper Size	A/B-Size	Inch Size	A/K Size
A3	A3	12 x 18 / 11 x 17 / No corresponding size	A3
B4	B4	11 x 17 / No corresponding size	K8 / No corresponding size
A4R	A4R	LGL / LTRR / No corresponding size	A4R
A4	A4	LTR / No corresponding size	A4
B5R	B5R	No corresponding size	No corresponding size
B5	B5	LTR / EXEC / No corresponding size	K16 / No corresponding size
A5R	A5R	STMTR / No corresponding size	A5R
A5	A5	STMT / No corresponding size	A5
11x17	A3 / B4 / No corresponding size	11x17	A3 / K8 / No corresponding size
LGL	A4R / No corresponding size	LGL	A4R / No corresponding size
LTR	A4 / B5 / No corresponding size	LTR	A4 / K16 / No corresponding size
LTRR	A4R / No corresponding size	LTRR	A4R / No corresponding size
STMT	A5 / No corresponding size	STMT	A5 / No corresponding size
STMTR	A5R / No corresponding size	STMTR	A5R / No corresponding size
SRA3	No corresponding size	No corresponding size	No corresponding size
12x18	A3 / No corresponding size	No corresponding size	A3 / No corresponding size
EXEC	B5 / No corresponding size	EXEC	K16 / No corresponding size
K8	B4 / No corresponding size	11 x 17 / No corresponding size	K8
K16	B5 / No corresponding size	LTR / EXEC / No corresponding size	K16
Postcard	Blank unless "Paper Settings" is performed due to non-standard size		
Envelope			
Custom size			

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Country	US	CN	Destinations other than the above
Default Setting	Inch Size	A/K Size	A/B-Size

T-2-60

Automatic size detection is performed by three sensors.

- Multi-purpose Tray Width Sensing PCB (UN29): detects paper width
- Multi-purpose Tray Paper Length Sensor 1 (PS30): detects paper length
- Multi-purpose Tray Paper Length Sensor 2 (PS31): detects paper length

Paper Size	Paper Width (mm)	Settings of automatic paper size detection		
		Multi-purpose Tray Width Sensing PCB (UN29) Detection Width (mm)	Multi-purpose Tray Paper Length Sensor 1 (PS30)	Multi-purpose Tray Paper Length Sensor 2 (PS31)
SRA3	320	312.6 to 327.4	ON	ON
A3	297	289.6 to 304.4	ON	ON
A4	297	289.6 to 304.4	ON/OFF	OFF
B4	257	249.6 to 264.4	ON	ON
A4R	210	202.6 to 217.4	ON	ON/OFF
B5R	182	174.6 to 189.4	ON	OFF
A5R	148	140.6 to 155.4	OFF	OFF
A5	210	202.6 to 217.4	OFF	OFF
12x18	304.8	297.4 to 312.2	ON	ON
11x17	279.4	272.0 to 286.8	ON	ON
LTR	279.4	272.0 to 286.8	ON	OFF
EXEC	266.7	259.3 to 274.1	OFF	OFF
LGL	215.9	208.5 to 223.3	ON	ON
LTRR	215.9	208.5 to 223.3	ON	OFF
STMT	215.9	208.5 to 223.3	OFF	OFF
STMTR	139.7	132.3 to 147.1	OFF	OFF
K16	270	262.6 to 277.4	ON/OFF	OFF
K8	270	262.6 to 277.4	ON	ON

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Long Length Paper

This product supports long length paper.

A service mode setting allows use of long length paper (457.3 to 1200 mm) by the Multi-purpose Tray pickup.

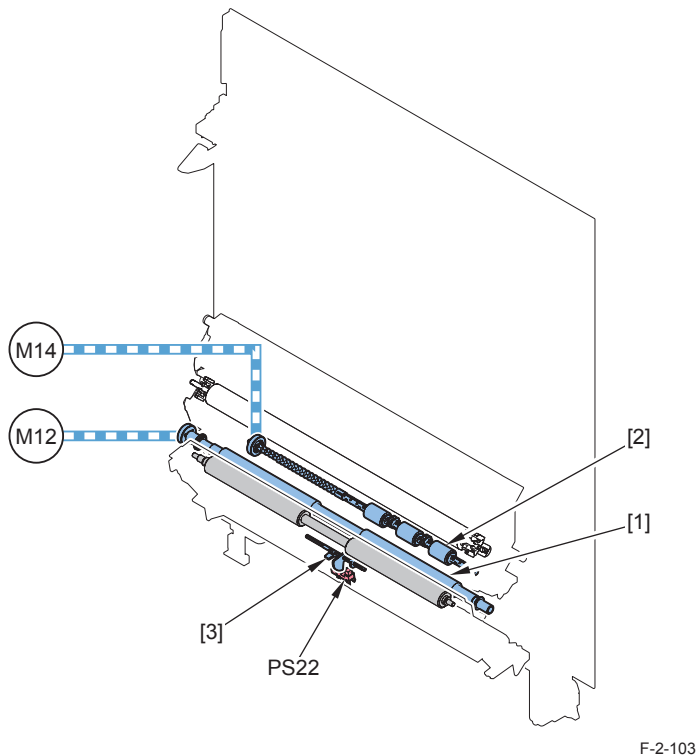
NOTE:

Setting of Long Original
Set (LV2) COPIER > OPTION > USER > MF-LG-ST = 1 (default value 0).
Copy > Other Functions > Long Original

When setting Long Original, paper cannot be delivered to the Third Delivery Outlet.

■ Fixing/Registration Assembly

● Parts / Drive Configuration



- | | |
|----------------------------------|------------------------------|
| [1] Registration Roller | PS22 Pre-Registration Sensor |
| [2] Duplex Merging Roller | M12 Registration Motor |
| [3] Pre-Registration Sensor Flag | M14 Duplex Merging Motor |

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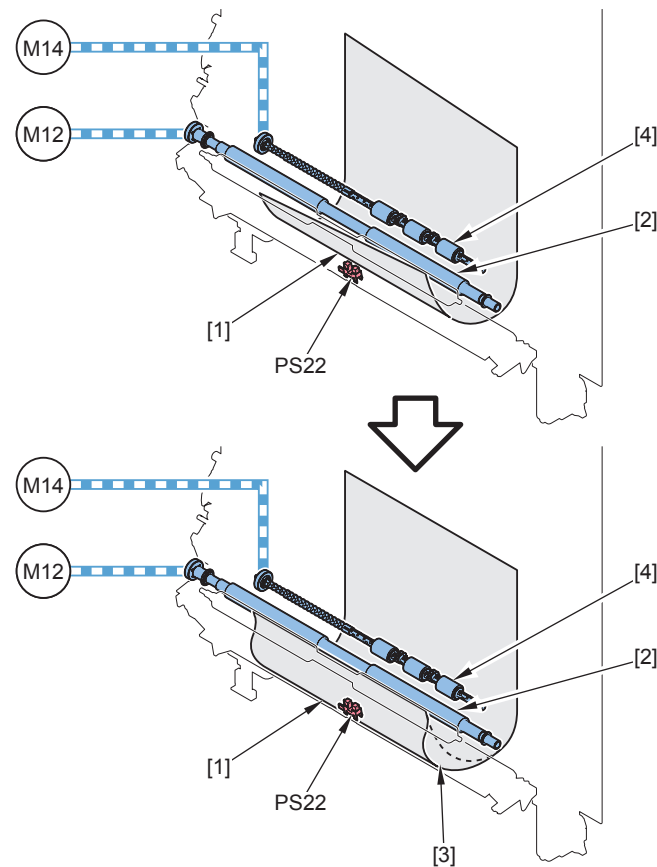
● Registration Control

Purpose: To correct paper skew / align the leading edges of image and paper

Skew correction control

The paper leading edge runs into the stopped Registration Roller, thereby generating an arch in order to correct the skew.

Then, non-stop registration control or stop registration control is executed according to the paper feed condition.



- | | |
|---------------------------|------------------------------|
| [1] Paper | PS22 Pre-Registration Sensor |
| [2] Registration Roller | M12 Registration Motor |
| [3] Slack | M14 Duplex Merging Motor |
| [4] Duplex Merging Roller | |

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The feed control to align the leading edge of paper with the leading edge of image uses the Pre-Registration Sensor as the reference for detecting the leading edge, by selectively applying non-stop registration control that accelerates and decelerates without stopping the feed, and stop registration control that temporarily stops paper feed, as appropriate.

Non-stop Registration Control

The control to align the leading edge of paper with the leading edge of image by accelerating and decelerating the feed speed.

Because paper is not stopped temporarily at the registration position, paper interval between sheets can be shortened to improve productivity.

- A feed delay jam (0190) occurs when paper feed is delayed at non-stop registration control due to the paper not arriving in time for the image.
- When the paper arrives too early at non-stop registration control, stop registration control is executed.

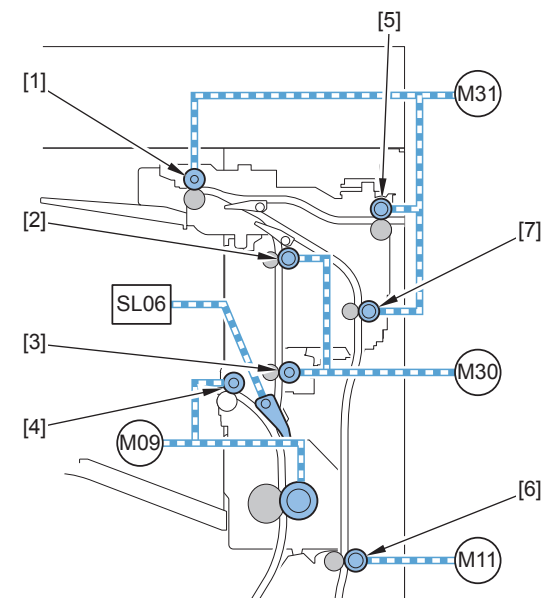
Stop Registration Control

This control is executed to stop paper using the Registration Roller, and resume feeding in accordance with the timing when the image reaches the secondary transfer processing.

Reverse / Delivery Assembly

Parts / Drive Configuration

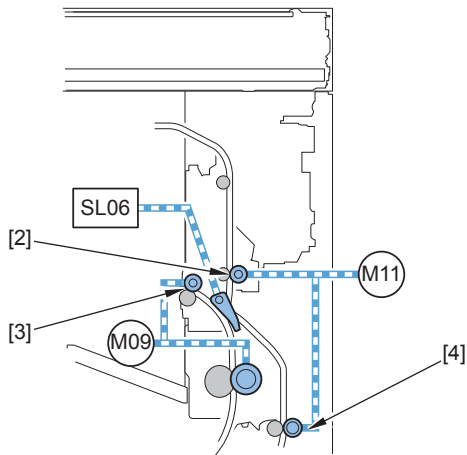
When the 3-Way Unit is connected



F-2-105

[1]	Second Delivery/Reverse Roller	M09	Fixing Motor
[2]	Reverse Vertical Path Roller 1	M11	Duplex Reverse Motor
[3]	Reverse Vertical Path Roller 2	M30	Reverse Motor
[4]	First Delivery Roller	M31	Second Delivery Motor
[5]	Third Delivery Roller		
[6]	Duplex Roller 2	SL06	Duplex Reverse Solenoid
[7]	Duplex Roller 1		

Without 3-Way Unit



F-2-106

- | | |
|------------------------------------|------------------------------|
| [1] Reverse Vertical Path Roller 1 | M09 Fixing Motor |
| [2] Reverse Vertical Path Roller 2 | M11 Duplex Reverse Motor |
| [3] First Delivery Roller | |
| [4] Duplex Roller 1 | SL06 Duplex Reverse Solenoid |

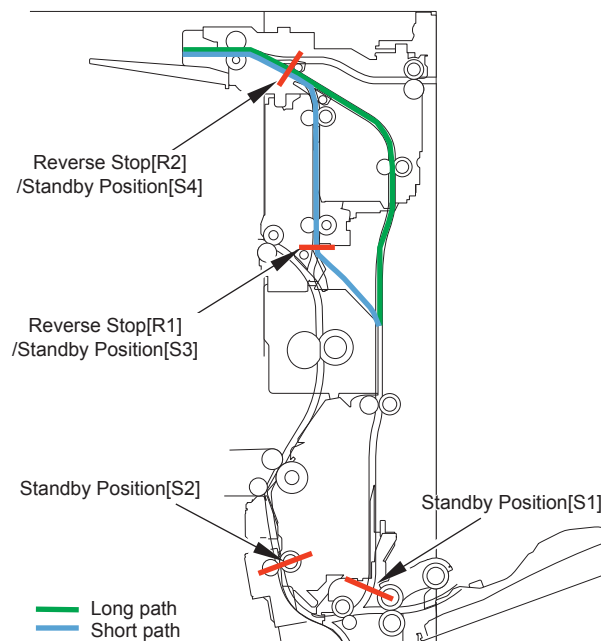
● The number of circulating sheets, feed path and reverse/standby control at 1-sided/2-sided feeding

With this machine, the number of circulating sheets, feed route, reverse position and standby position (1- and 2-sided) differ according to the set length of fixed size paper and delivery outlet.

Timing to wait at standby position (1-sided and 2-sided)

- When entering down sequence
- When executing auto adjustment
- When controller processing is delayed

< Reverse Position and Standby Position (1- and 2-sided) >



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< Standby Position and Stop Position >

Symbol	Standby Position			Reverse Stop Position		
	1-sided feed	2-sided feed		Symbol	1-sided feed	2-sided feed
[S1]	--	Yes		[R1]	--	Yes
[S2]	--	Yes		[R2]	--	Yes
[S3]	Yes	Yes		--	--	--
[S4]	--	Yes		--	--	--

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When 3-Way Unit-D1 is not installed

Feed route is only short path when the 3-Way Unit is not installed.

Fixed Size	Paper Length	Delivery	Number of circulating sheets	Feed Route	Reverse Position	Standby Position
STMT, A5	92 to 181.9 mm	First Delivery	Duplex not supported			
B5 to LTR	182 to 216 mm	First Delivery	3 sheets	Short path	[R1]	[S1], [S2], [S3]
Longer than LTR to 12 x 18 or shorter	216.1 to 457.2 mm	First Delivery	1 sheet	Short path	[R1]	[S1], [S2], [S3]

T-2-63

When 3-Way Unit-D1 is installed

Fixed Size	Paper Length	Delivery	Number of circulating sheets	Feed Route	Reverse Position	Standby Position				
STMT, A5	92 to 181.9 mm	First Delivery	Duplex not supported							
		Second delivery								
		Third delivery								
B5 to LTR	182 to 216 mm	First Delivery	3 sheets	Short path	[R1]	[S1], [S2], [S3]				
		Second delivery								
		Third delivery								
Longer than LTR to less than A4R	216.1 to 296.9 mm	First Delivery	3 sheets	Long path	[R2]	[S1], [S2], [S4]				
		Second delivery								
		Third delivery								
A4R or longer, shorter than A3	297 to 419.9 mm	First Delivery	3 sheets	Long path	[R2]	[S1], [S2], [S4]				
		Second delivery								
		Third delivery					1 sheet	Short path	[R1]	[S1], [S2], [S3]
A3 or longer, 11 x 17 or shorter	420 to 432 mm	First Delivery	3 sheets	Long path	[R2]	[S1], [S2], [S4]				
		Second delivery					1 sheet	Short path	[R1]	[S1], [S2], [S3]
		Third delivery								
Longer than 11 x 17 to 12 x 18 or shorter	432.1 to 457.2 mm	First Delivery	1 sheet	Short path	[R1]	[S1], [S2], [S3]				
		Second delivery								
		Third delivery					Delivery not supported			

T-2-64

Since the same drive is used for the delivery from the third delivery and the duplex path, the productivity is lower than that of the delivery from the first/second delivery.

Jam Detection

Code*	Symbol	Sensor name	Yes: Detected, No: Not detected					
			Jam Type (xx)*					IO > DCON
			01	02	07	0A	0B	1 = Paper present
xx01	PS08	Cassette 1 Vertical Path Sensor	Yes	No	No	Yes	No	P005 > bit 7 > 1: Paper present
xx02	PS24	Cassette 2 Vertical Path Sensor	Yes	No	No	Yes	No	P005 > bit 6 > 1: Paper present
xx03	PS101	Cassette 3 Vertical Path Sensor	Yes	No	No	Yes	No	P006 > bit 4 > 1: Paper present
xx04	PS106	Cassette 4 Vertical Path Sensor	Yes	No	No	Yes	No	P006 > bit 3 > 1: Paper present
xx06	PS10	Fixing Outlet Sensor	Yes	Yes	Yes	Yes	No	P005 > bit 2 > 1: Paper present
xx07	PS14	First Delivery Sensor	Yes	Yes	No	Yes	No	P005 > bit 1 > 1: Paper present
xx08	PS51	Second Delivery / Reverse Sensor	Yes	Yes	No	Yes	No	P006 > bit 2 > 1: Paper present
xx09	PS52	Third Delivery Sensor	Yes	Yes	No	Yes	No	P006 > bit 1 > 1: Paper present
xx0A	PS12	Reverse Sensor	Yes	Yes	No	Yes	No	P003 > bit 9 > 1: Paper present
xx0B	PS22	Pre-Registration Sensor	Yes	Yes	No	Yes	No	P005 > bit 5 > 1: Paper present
xx0C	PS11	Arch Sensor	-	-	-	Yes	-	P005 > bit 4 > 1: Paper present

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* : xx = 01: Delay, 02: Stationary, 07: Wrap, 0A: Power ON, 0B: Door open

External Auxiliary System

Controls

Software Counter Control

This machine has software counters which count the number of prints/copies according to the job type. Various counters are displayed by pressing the Check Counter key on the Control Panel. The default counters for each country (model) are listed below.

Target	Number displayed for each counter (in service mode)/Item							Target country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7 / 8	
Japan model type1	Total 1	Total (Black 1)	Copy (Full Color + Single Color/1)	Total A (Full Color + Single Color 1)	*1	*1	*1	JP
	101	108	232	149	000	000	000	
Japan model type2	Total 2	Copy (Full Color + Single Color/2)	Total A (Full Color + Single Color/2)	Copy (Black 2)	Total A (Black 2)	*1	*1	JP
	102	231	148	222	133	000	000	
Taiwan model	Total 1	Total (Black 1)	Copy + Print (Full Color/ Large)	Copy + Print (Full Color + Small)	Total (Single Color 1)	*1	*1	TW
	101	108	401	402	118	000	000	
UL model type1	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	US
	101	108	229	230	321	322	000	
UL model type2	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	US
	102	109	229	230	321	322	000	
General model	Total 1	Total (Black 1)	Copy + Print (Full Color/ Large)	Copy + Print (Full Color/ Small)	Total (Single Color 1)	Total 1 (2-sided)	*1	SG/KR/CN
	101	108	401	402	118	114	000	

Target	Number displayed for each counter (in service mode)/Item							Target country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7 / 8	
UK model type1	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	GB
	112	113	122	123	501	301	000	
240V UK model type2	Total 1	*1	*1	*1	*1	*1	*1	GB
	101	000	000	000	000	000	000	
CA model	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	AU
	101	108	229	230	321	322	000	
FRN model	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	FR
	112	113	122	123	501	301	000	
FRN model type2	Total 1	*1	*1	*1	*1	*1	*1	FR
	101	000	000	000	000	000	000	
GER model type1	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	DE
	112	113	122	123	501	301	000	
GER model type2	Total 1	*1	*1	*1	*1	*1	*1	DE
	101	000	000	000	000	000	000	
AMS model type1	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	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	000	

Target	Number displayed for each counter (in service mode)/Item							Target country code
	Counter 1	Counter 2	Counter 3	Counter 4	Counter 5	Counter 6	Counter 7 / 8	
AMS model type2	Total 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	000	000	000	000	000	000	
ITA model type1	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	IT
	112	113	122	123	501	301	000	
ITA model type2	Total 1	*1	*1	*1	*1	*1	*1	IT
	101	000	000	000	000	000	000	

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*1: Hidden by default. Can be changed in service mode.

<Description of symbols>

- Large: Large size paper (when paper length exceeds 364 mm in paper feed direction)
- Small: Small size paper (when paper length is 364 mm or less in paper feed direction)
- Total: When a piece of paper is delivered, the counter is advanced by 1
- 2-Sided: The counter is advanced by 1 for paper delivered in 2-sided mode
- Change the country code of CONFIG in (Lv.1) COPIER > OPTION > FNC-SW > CONFIG.
- The three-digit numbers in the counter column show the setting value of the following service mode items:
(Lv.1) COPIER > OPTION > USER > COUNTER 1 to 8
- Counters 2 to 8 can be changed in service mode (COPIER > OPTION > USER > COUNTER2 to 8).
- The type of counter display can be switched between the former and new methods in (Lv.1) service mode (COPIER > OPTION > USER > CNT-SW).

Country code	Country	Country code	Country	Country code	Country
JP	Japan	CN	China	CZ	Czech Republic
US	US	TW	Taiwan	SI	Slovenia
GB	Great Britain	ES	Spain	GR	Greece
FR	France	SE	Sweden	EE	Estonia
DE	Germany	PT	Portugal	RU	Russia
IT	Italy	NO	Norway	BG	Bulgaria
AU	Australia	DK	Denmark	HR	Croatia
SG	Singapore	FI	Finland	RO	Romania
NL	Netherlands	PL	Poland	SK	Slovakia
KR	Korea	HU	Hungary	TR	Turkey

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● Count-up Timing

Count-up timing differs according to the following:

- Print mode (1-sided/2nd side of 2-sided print, 1st side of 2-sided print)
- Delivery position (Finisher)

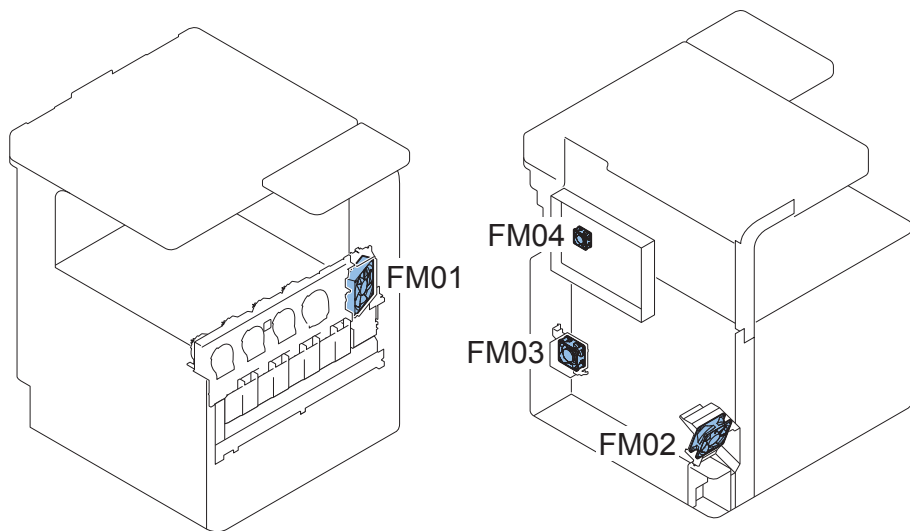
Delivery position		Print mode	
		1-sided print/ 2nd side of 2-sided print	1st side of 2-sided print
		Count-up timing	
1	Host machine	First Delivery Tray	First Delivery Sensor (PS14)
		Second Delivery Tray	Second Delivery / Reverse Sensor (PS51)
		Third Delivery Tray*	Third Delivery Sensor (PS52)
2	When the Finisher is installed	Finisher: Inlet Sensor (S1)	

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* When the 3-Way Unit-D1 is installed

Fan Control

Location of Fans



F-2-108

No.	Name	Function	Error codes
FM01	Front Fan	Cools paper delivered from the first delivery and second delivery, Drum Unit, and Toner Bottle	E806-0100 E806-0101
FM02	Power Supply Cooling Fan	Cools the Low-Voltage Power Supply and Main Controller	E804-0000
FM03	Motor Fan	Cools the Cassette Pickup Motor, Second Delivery Motor*, and Third Delivery Motor*	E806-0200 E806-0201
FM04	Controller Fan	Cools the Main Controller	E880-0001

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* Option

Speed Control

Of the fans installed in this machine, the Front Fan (FM01), the Motor Fan (FM03), the Power Supply Cooling Fan (FM02) and the Controller Fan (FM04) are subject to speed control. Each controller switches voltages to switch the fan rotation speed.

Fan Drive Sequence

Controlled by		DCON			MCON
Fan Name		Front Fan	Motor Fan	Power Supply Cooling Fan	Controller Fan
Standby		Half speed / Stopped*2	Half speed / Stopped*2	Stopped	75 %
At printing	1-sided	Half speed*1	Half speed*1	Full speed	Full speed
	2-sided	Full speed	Half speed	Full speed	Full speed
Reader operation		Half speed / Stopped*2	Half speed / Stopped*2	Half speed	Full speed
Sleep	Sleep1	Stopped	Stopped	Stopped	75 %
	Deep Sleep	Stopped	Stopped	Stopped	Stopped
Others	Warm-up rotation adjustment, etc.	Half speed	Half speed	Half speed	75 %
	JAM	Half speed / Stopped*2	Half speed / Stopped*2	Half speed	75 %
	Door open	Stopped	Stopped	Half speed	75 %
	DCON ERR	Stopped	Stopped	Half speed	75 %
	FIN-ERR	Half speed / Stopped*2	Half speed / Stopped*2	Half speed	75 %

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*1: When the environment temperature becomes high, the job is interrupted and the fan runs at full speed. Otherwise, it runs at half speed.

*2: The fan runs at half speed when the Buffer Path Unit is installed and the environment temperature becomes high. Otherwise, it stops.

Heater Control

Name	Function	Remarks
Cassette Heater (host machine)	Prevents paper in the Cassettes 1/2 from absorbing moisture	Option for EUR/USA/LTN
Cassette Heater (Cassette Pedestal)	Prevents paper in the Cassettes 3/4 from absorbing moisture	
Reader Heater	Prevents condensation on the Scanner Unit and the Reading Glass	Options
Inside Heater	Prevents condensation inside the machine	

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Conditions when each heater is turned ON

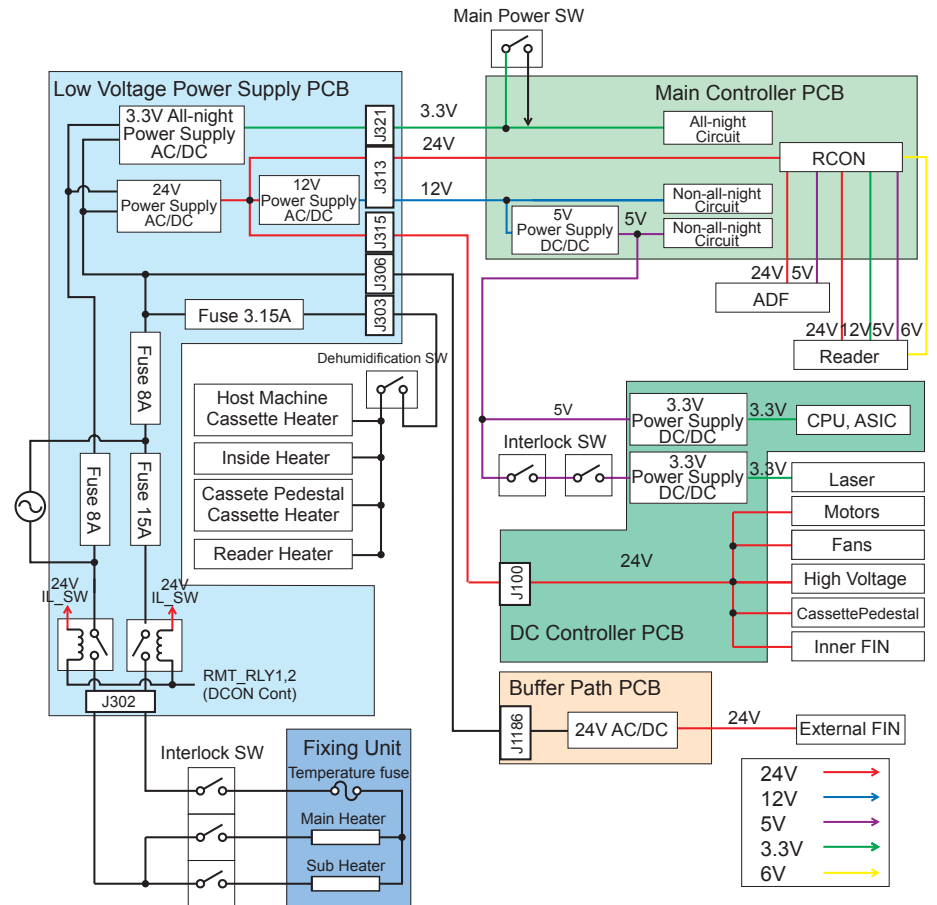
Main Power	Dehumidification Switch	
	ON	OFF
ON	ON*1	OFF
OFF	ON	OFF

T-2-72

*1: The Reader Heater is OFF during Sleep 1, printing and standby even when the Main Power Supply and Dehumidification Switch are turned ON.

Power supply

Internal power supply

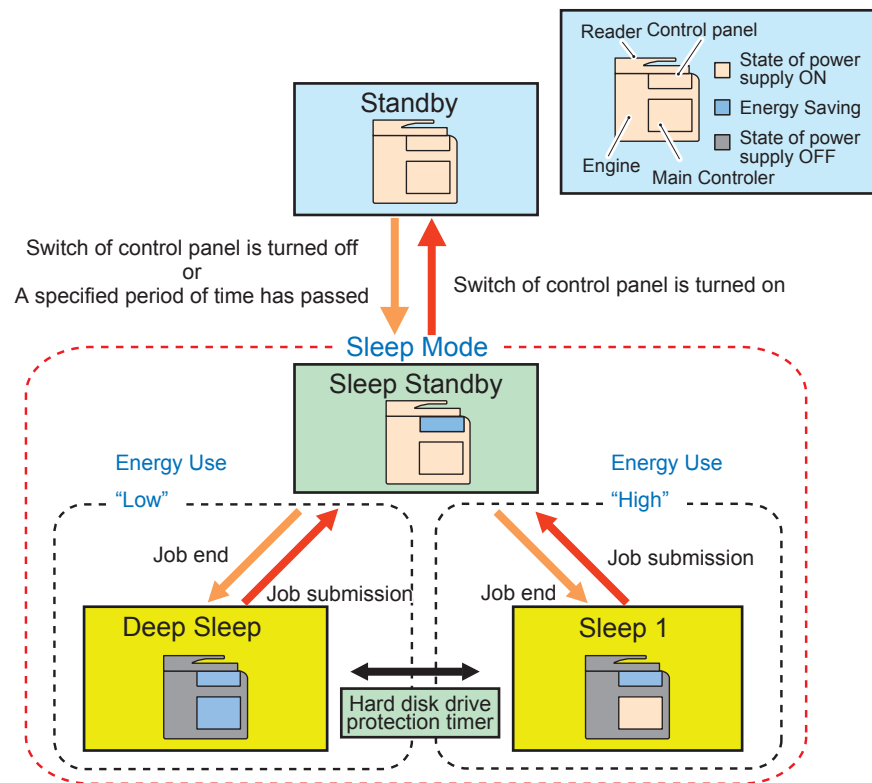


F-2-109

Energy Saving Function

Overview

There are "Standby" mode and "Sleep" mode as the power supply mode of this machine. Further, "Sleep" mode is divided into the followings: "Sleep Standby", "Sleep 1", and "Deep Sleep".



F-2-110

* The time specified in Settings/Registration > Preferences > Timer/Energy Settings > Auto Sleep Time

Standby Mode

The mode in which the machine is running or can start operation immediately and all power is supplied.

When turning OFF the Control Panel Power Switch or the specified period of time has passed, the mode is shifted to Sleep mode.

When turning ON the Control Panel Power Switch while in Sleep Standby mode, the mode is shifted to this mode.

Sleep Standby Mode

In this state, only the Control Panel is off while the power is supplied to all other parts.

Presence of a job is determined and if there is no job, the mode is shifted to Deep Sleep/ Sleep 1 mode.

When a job is submitted during sleep (Deep Sleep/Sleep 1 mode), the mode is shifted to this mode.

Sleep 1 Mode

In this state, the Control Panel is off and therefore power is not supplied to the printer or scanner, but all-night and non-all-night power is supplied.

When "High" is set in Settings/Registration > Preferences > Timer/Energy Settings > Sleep Mode Energy Use, the mode is shifted from Sleep Standby mode at sleep state.

The mode is shifted to Sleep Standby mode when a job is submitted during this mode, and is shifted to Standby mode when the Control Panel Power Switch is pressed.

Deep Sleep Mode

In this state, the Control Panel is off while only all-night power (3.3 V) is supplied.

During sleep, the mode is shifted to this mode from Sleep Standby mode.

The mode is shifted to Sleep Standby mode when a job is submitted during this mode, and is shifted to Standby mode when the Control Panel Power Switch is pressed.

When any of the check items in "Conditions for Not Entering Deep Sleep Mode (Check Items)" applies, the mode is not shifted to Deep Sleep mode.

● Conditions for Not Entering Deep Sleep Mode (Check Items)

Settings in Settings/Registration	
Preferences > Timer/Energy Settings	
	Sleep Mode Energy Use > High.
	During the time set in [Auto Sleep Time]
Preferences > Network	
	TCP/IP Settings > IP Address Settings > Auto IP > ON
	TCP/IP Settings > DNS Settings > mDNS Settings > ON
	AppleTalk Settings > Use AppleTalk > ON
	IEEE 802.1X Settings > Use IEEE 802.1X > ON
Function Settings	
	Time is specified in [Receive/Firwird > Common Settings > Set Fax/I-Fax Inbox > Memory Lock Start Time / Memory Lock End Time] (*1)
	Send > Common Settings > Communication Management Report > Specify Print Time > ON (*1)
	Send > Fax Settings > Modem Dial-in Settings > Set Line > Line 1 or Line 2 > ON.
	Send > Fax Settings > Fax Activity Report > Specify Print Time > ON (*1)
	10 minutes or less is specified in [Send > E-Mail/I-Fax Settings > Communication Settings > Next > POP Interval] (except when the interval is set to "0")

*1 The device may enter DeepSleep mode when there are still 10 minutes or more left until operation.

Hardware status	
	A coin vendor is connected.
	The device is connected to a USB Host.

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System Performance Status	
	An application is communicating via network (TCP connection on a port dedicated to CPCA / within 15 seconds after reception of UDP).
	Either of SNMP, DHCP, DHCP6 or eRDS communication is in progress.
	A job is being executed/in standby (Print/Copy/SEND/FAX/Report/Forward/Save, etc)
	During Fax / I-Fax communication
	During distribution of device information
	During export/import by Remote UI
	MEAP application is being executed (depending on the MEAP application)
	During backup of Mail Box documents
	A file is being opened (read/written) in Settings/Registration > Access Stored Files > Network. (*Common with WebDAV and SMB)
	The device is operating with the printer/scanner function stopped.
	The screen is shifting to service mode screen/download mode.

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The timer is running	
	The sleep mode exit timer is running (for 15 seconds after exiting Deep Sleep).
	The hard disk drive protection timer is running (for 10 minutes after exiting from Deep Sleep and the hard disk drive is powered ON. However, after a printing, scanning, and fax job is completed, this timer is disabled.)
	The network timer is running (for the number of seconds (default: 15 seconds) set by service mode (Level 2) > COPIER > OPTION > NETWORK > WUEN-LIV).
	The wake up timer is running (for 10 minutes after receiving a wake up packet).
	Timer is running after link-up (for 1 minute after network communication starts since machine power-on).

T-2-76

Quick Startup

For faster startup, the power configuration of this machine always supplies power to the Low Voltage Power Supply PCB and Main Controller PCB. Consequently, the Touch Panel can be operated after 7 seconds from turning ON the Main Power Switch.

Even when the Main Power Supply Switch is OFF, power is supplied to the following PCBs:

	Quick startup setting ON	Quick startup setting OFF
Low Voltage Power Supply PCB (Areas supplied with AC)	Powered	Powered
Low Voltage Power Supply PCB (All-night Power Supply)	Powered	OFF
Main Controller PCB	Powered	OFF

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Areas supplied with AC

+3.3V Areas all-night power supply

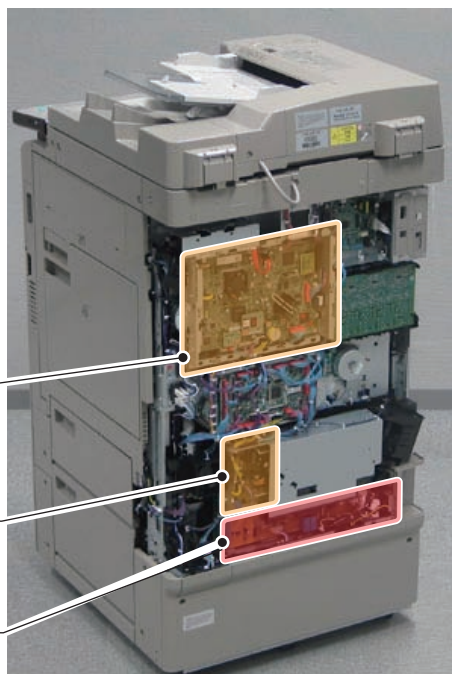
1) Quick Startup ON :
Power Supply SW_OFF
Energize to 1,2,3

2) Quick Startup OFF :
Power Supply SW_OFF
Energize only to 1

3 Main Controller PCB

2 Low Voltage Power Supply PCB
(All-night Power Supply)

1 Low Voltage Power Supply PCB
(Areas supplied with AC)



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NOTE:

The quick startup function can be set from "Settings/Registration".

- Settings/Registration > Preferences > Timer/Energy Settings > Quick Startup Settings for Main Power

[On]: Quick startup is executed (default)

[Off]: Quick startup is not executed

Disconnect the plug from outlet when performing work with the possibility to come in contact with the PCBs above. If a conductive material comes in contact with the PCB, short circuit may occur in the PCB, and may cause damage on it.

The following label is used at the place where attention is required.



F-2-112

In addition, quick startup is not performed under the following conditions:

At first startup after the power plug is connected to the outlet
Under the following conditions (settings), the machine always starts up normally (even if quick startup is enabled).
Either of the following devices is connected:
<ul style="list-style-type: none"> Serial I/F Coin Vendor
Network (under Settings/Registration > Preferences > Network)
<ul style="list-style-type: none"> TCP/IP Settings > IPsec Settings > Use IPsec is set to ON TCP/IP Settings > IPv6 Settings > Use IPv6 is set to ON AppleTalk Settings > Use AppleTalk is set to ON
Right after the machine is shut down under the following conditions, it starts up in normal mode (even if quick startup is ON).
Fax-Related
<ul style="list-style-type: none"> There is a scheduled fax transmission. Within a specified period of time (10 seconds) from disconnection of a fax line Within a specified period of time (10 seconds) from non-detection of reception from a fax line Within a specified period of time (10 seconds) from hanging up the fax sub device or handset
MEAP-related Information
<ul style="list-style-type: none"> During execution of MEAP application that prohibits entering Deep Sleep There is a scheduled processing on MEAP
Job process related
<ul style="list-style-type: none"> During print/scan job processing During SEND job processing During I-Fax communication/during job processing During report job processing During forward send job/receive job processing During data save job processing During fax communication/phone communication During distribution of device information During export/import by RUI A file is being opened/read/written in Access Stored Files > Network (common to SMB/ WebDAV) During rebuilding when the HDD Encryption Board is installed

Others
<ul style="list-style-type: none"> Accumulated time during which the machine is powered on as well as powered off (with quick startup turned ON) is 110 hours or more. -> At the time of shutdown, it will be normal shutdown. * This prevents UI freeze caused by memory leakage.
<ul style="list-style-type: none"> Within a specified period (20 seconds) after turning off the Main Power Supply Switch -> In such a case, the machine reboots and then starts up normally at startup. Therefore, it will take a few more seconds compared with the normal startup. * This is for starting up the machine normally at the time of failure (UI freeze, etc.).
<ul style="list-style-type: none"> After entering service mode or Settings/Registration screen of the RUI
<ul style="list-style-type: none"> After changing a Settings/Registration item that requires restart
<ul style="list-style-type: none"> After changing a service mode setting that requires restart
<ul style="list-style-type: none"> When the machine is shut down from RUI
<ul style="list-style-type: none"> When an error has occurred
<ul style="list-style-type: none"> When a jam has occurred
<ul style="list-style-type: none"> At limited functions mode
<ul style="list-style-type: none"> When starting safe mode
<ul style="list-style-type: none"> When resource downloader is active
<ul style="list-style-type: none"> In printer/scanner limited functions mode
<ul style="list-style-type: none"> When a login application is switched in SMS
<ul style="list-style-type: none"> When a license has been registered
<ul style="list-style-type: none"> Upon startup by pressing the Control Panel key (such as startup in safe mode)

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■ Effect of the Hub Which Supports Spanning Tree

When the network is connected in a loop, data transfer efficiency may be lowered due to data continuing to circulate inside this loop. To avoid this, a feature called spanning tree is provided in some hubs. When this feature is enabled, devices newly connected to the hub can perform data communication with the network after about 10 to 50 seconds (depending on conditions).

When entering and exiting Deep Sleep, this machine is electrically disconnected from the network. Therefore, when connected to a hub with the spanning tree feature, communication with the network is disabled for up to about one minute after exiting from Deep Sleep.

Therefore, immediately after exiting from Deep Sleep, symptoms such as not being able to acquire device status, print, or log in with a log-in application may occur. If these symptoms cause problems, take one of the following measures:

- Do not enter Deep Sleep from Settings/Registration.
Preferences > Timer/Energy Settings > Sleep Mode Energy Use > High.
- Disable the spanning tree feature in the hub.
- Request the user to install a hub supporting RSTP (Rapid Spanning-Tree Protocol) that resolves this issue.

MEAP

Function Overview

Overview of System

MEAP (Multifunctional Embedded Application Platform) is an application platform (execution platform) that allows the user to execute an application written in the Java language on a Java virtual machine installed on the device.

In this chapter, a device with MEAP is called a device supporting MEAP, and an application which runs on MEAP is called a MEAP application.

MEAP applications are installed on a MEAP device to provide various functions to the device.

Login Service and User Authentication Method

A login service is a service for authenticating users when they use a device that supports MEAP. An authentication method of a login service is called a "user authentication method".

Preinstalled Login Services

Login service	User authentication method	Contents
User Authentication	Local Device Authentication	An authentication method that can only be used by users registered in the database inside the device (enabled at the time of shipment).
	Server Authentication and Local Device Authentication	Authentication using an authentication server on a network can be used in addition to Local Device Authentication.
	No Authentication	All functions can be used without authentication, but since all settings can be used, a security risk is involved.
DepartmentID Authentication	Department ID	Authentication is performed with department ID.

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Login service management is performed on the [Enhanced System Application Management] screen of Service Management Service (hereinafter referred to as "SMS").

Management of user authentication method is performed on the user management screen of each login service.

User Authentication (UA)

Overview

It is a login service that consolidates the existing SSO-H, DA (Default Authentication), and AMS (Access Management System), and has the following features.

- The following two authentication methods can be selected.
 - "Server Authentication + Local Device Authentication"
 - "Local Device Authentication"
- An Active Directory or LDAP server can be used as the destination server for server authentication.

● PC Environment of Administrator Users and General Users

The environment required for using a device operated with User Authentication from a PC on a network is indicated below.

OS of the PC and Other Environments

Operating System	IPv6	Supported browser	Java Runtime Environment
Windows XP Professional SP3 Windows Vista SP2 Windows 7 SP1 Windows 8 Windows 8.1	✓	Internet Explorer 8 or later	Java Runtime Environment 7/ Java Runtime Environment 8
Mac OS X Lion Mac OS X Mountain Lion Mac OS X Mavericks Mac OS X Yosemite		Safari 5.1 or later	Java Platform Standard Edition 7

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Note: common to browsers

- The browser should support Java. (The environment such as Modern UI version of Internet Explorer on Windows 8 in which Java add-on cannot be used is not applicable.)
- JavaScript should be enabled.
- Refer to the website of JAVA (<http://java.com/>) for how to obtain the Java environment.

Note: Internet Explorer-related

Authentication cannot be performed from the Remote UI in environments that meet the following conditions because Java applets cannot be used.

- Server authentication is set as the user authentication method and Active Directory is set as the authentication server
- The operating system of the PC is the 64-bit version of Windows 8
- The browser being used is the 64-bit version of Internet Explorer
- The Java environment being used is the 64-bit version of JRE

Network ports used

Network Ports Used when Using Active Directory

Purpose	Port No.	Application
Connecting (server side)	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 (server side)	10000 - 10100	Kerberos (Active Directory) authentication from Web browsers not using SSL

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Network Ports Used when Using an LDAP Server

Port No.	Application
636 (server side)	Communication with the LDAP server using LDAP when using SSL
389 (server side)	Communication with the LDAP server using LDAP when not using SSL

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● Specification of User Authentication

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)
Availability of Department Management Linkage	Available only in local authentication

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● 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 UA 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

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The settings of the administrator can be changed on the following screen: remote UI > Settings/Registration > Management Settings > Authentication Management > Preferences (http://device's IP address:8000/userauth/Preference)

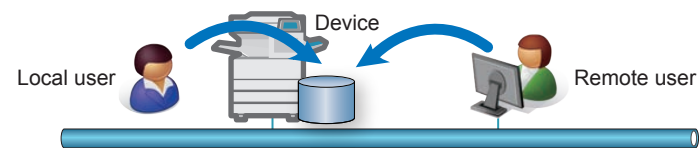
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● System Manager Linkage (automatic ID allocation to System Managers)

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, User authentication does not support this function.

● Local device authentication

It is one of the user authentication methods using User Authentication, and is used for an device on a stand-alone basis.



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Register the user to be authenticated on the database in the device.

The User Management screen can be changed on the [Settings/ Registration] > [Management Settings] > [User Management] > [Authentication Management] > [User Management] screen of the Remote UI (http://IP address of the device:8000/userauth/List).

User Management screen

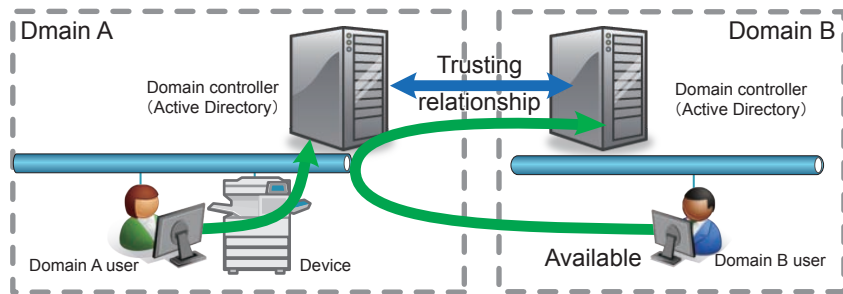
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● Server authentication (Active Directory authentication)

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 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 device usage.



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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.

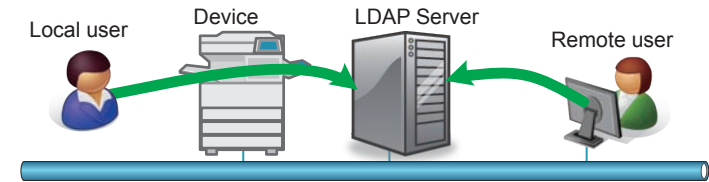
No. of supported domains: 200 (unchanged from SSO) Site access supported.

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.)

● Server Authentication (LDAP Authentication)

It is one of the user authentication methods using UA is performed with the device linked with the LDAP Server on the network in an LDAP environment.



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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 UA 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 UA, 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.

● User Management with Server Authentication

The environment required for using a server to authenticate users with User Authentication is indicated below.

The system requirements differ according to the authentication server.

The system requirements for using each authentication server are indicated below.

Active Directory authentication

With Active Directory authentication, the following servers are required, and servers constructed in the following system environment are supported.

<Required servers>

- KDC server (as the authentication server)
- LDAP server (to obtain attributes of the user that is logged in)
- DNS server (to search for the KDC and LDAP servers)

<Supported environment>

- Microsoft Windows Server 2003 SP2 (64-bit version is not supported.)
- Microsoft Windows Server 2003 R2 SP2 (64-bit version is not supported.)
- Microsoft Windows Server 2008 SP2 (64-bit version is not supported.)
- Microsoft Windows Server 2008 R2 SP1
- Microsoft Windows Server 2012
- Microsoft Windows Server 2012 R2

<Servers supporting IPv6 environments>

- Microsoft Windows Server 2008 SP2 (64-bit version is not supported.)
- Microsoft Windows Server 2008 R2 SP1
- Microsoft Windows Server 2012
- Microsoft Windows Server 2012 R2

CAUTION:

Make sure to set the time of the server and the time of the device to be within a certain difference.

With Kerberos authentication, the time of the authentication server (KDC) and authentication client must be synchronized within a certain difference. The allowed difference is whichever one of the following is shorter.

- 5 minutes (hard-coded User Authentication setting)
- [Maximum tolerance for computer clock synchronization] in the [Kerberos Policy] setting of the authentication server synchronization

To perform RLS authentication when SSL is disabled, the time of the client PC must be set to be synchronized with the authentication server.

LDAP authentication

When using LDAP authentication by SSO-H, the following conditions need to be satisfied.

<LDAP server>

- Novell eDirectory V8.8 SP7
- Lotus Domino V8.5

Note:

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 SP2 (x86)
- Microsoft Windows Server 2012 Microsoft Windows Server 2008 Enterprise SP2 (x86)

Settings Common to Active Directory Authentication and LDAP Authentication

<Device settings>

When using LDAP authentication, the following settings must be appropriately specified.

- TCP/IP settings
- DNS server settings (when using Active Directory as the authentication server)
- Date and time settings (when using Kerberos authentication with Active Directory)

<DNS server settings>

When setting the DNS server, the following conditions must be met.

- The DNS domain name of the authentication server can be resolved
- The port number used by LDAP/the Kerberos service can be obtained from the DNS server

with User Authentication

- The protocol used by the SRV record information of the LDAP service is "_tcp" and the service name is "_ldap"
- The protocol used by the SRV record information of the Kerberos service is "_udp" and the service name is "_kerberos"

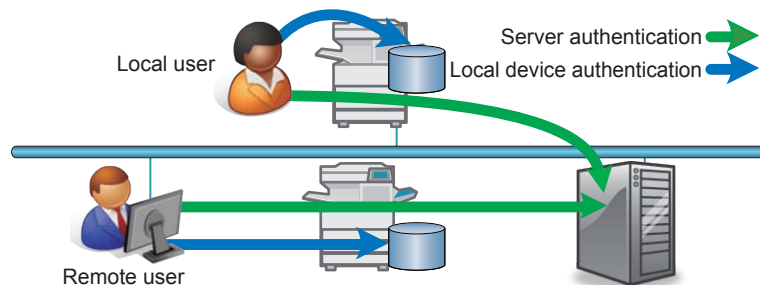
● User Authentication Methods

User Authentication includes Local Device Authentication and Server Authentication as user authentication methods. Local Device Authentication uses the user database registered in the device to perform authentication while Server Authentication uses an authentication server on a network to perform user authentication.

As the setting, either "Local Device Authentication" or "Local Device Authentication + Server Authentication" can be selected.

If "Local Device Authentication + Server Authentication" is selected, such operation is possible in which Server Authentication is used to authenticate users registered in the authentication server at normal times while Local Device Authentication is used when it is necessary to temporarily authenticate users that cannot be added to the authentication server. Also, if a problem occurs with the authentication server, Local Device Authentication can be used until the server recovers.

[Local Device Authentication + Server Authentication] Diagram



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■ 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 [Settings / Registration] 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.

● About SMS

■ Overview

MEAP has SMS (Service Management Service) as a service for managing login services and MEAP applications.

SMS is a servlet-type service which is used via a PC's browser.

Access SMS in a device from the browser of a PC connected to the network to manage MEAP applications, etc.

■ 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 user authentication.

Therefore, it is an authentication method that can be used when using User Authentication as the login service. The procedure for logging in is indicated below.

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 this device>:8443/sms/rls/>

Ex.) <https://172.16.188.240:8443/sms/rls/>

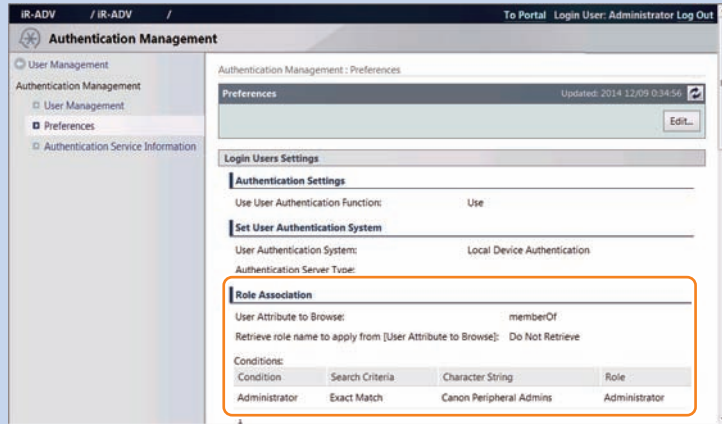
Note:

- To encrypt the password information input when logging in, SSL of the login screen was made effective.
- It is redirected to new URL (effective SSL) even when accessing with URL (non-SSL) before.
- 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".
- The user information is set as below for local device authentication by default. Both are case sensitive.
 - User Name: Administrator
 - Password: 7654321

Note:

Only the following users may use SMS via RLS.

- For local device authentication, users with Administrator or DeviceAdmin authority.
- In the case of Server Authentication, users belonging to the group set to "Administrator" in the [Role Association] setting on the [Settings/Registration] > [Management Settings] > [User Management] > [Authentication Management] > [Preferences] screen of the Remote UI (Canon Peripheral Admins by default).

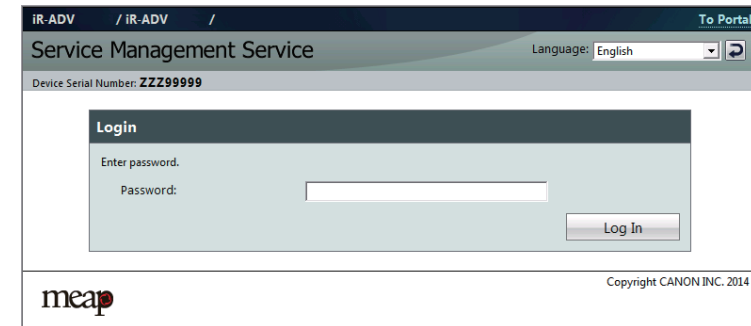


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Note:

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.

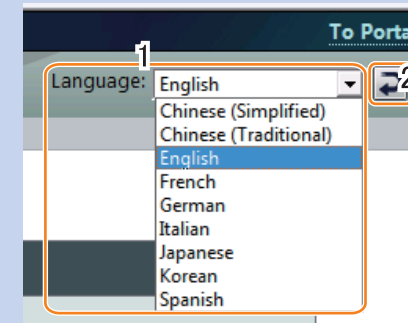
- 2) Enter the password in the password entry field, and click the [Log In]. The default password is "MeapSmsLogin." (The password is case-sensitive.)



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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.



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Note:

If the wrong password is entered, the error message 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.

■ 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.

Note:

From this device, password authentication is set to "Stopped" by default. To log in to SMS with password authentication, it is necessary to log in to SMS with RLS authentication and set [SMS Installer Service (Password Authentication)] to [Start] in [System Application Management]. For information on the procedure, refer to "Setting the method to login to SMS".

- 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/>

■ Preparation of PC for Accessing SMS

● Checking of operation environment

There are two methods for logging in to SMS; performing authentication with the user name and password of an administrator (RLS Authentication) and performing authentication with the dedicated password for SMS (Password Authentication).

< RLS authentication >

In order to access SMS using RLS authentication, the environment should comply with the environment for using User Authentication as the login service. (For details, refer to "PC Environment of Administrator Users and General Users".)

< Password authentication >

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	Windows XP Windows Vista Windows 7 Windows 8 Windows 8.1	Internet Explorer 7 or later
Mac OS	Mac OS X v10.5 Mac OS X v10.6 Mac OS X Lion Mac OS X Mountain Lion Mac OS X Mavericks	Safari 4.0.5 or later

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● 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.

■ Initial Display Languages of SMS

The SMS of this device supports English, Japanese, French, Italian, German, Spanish, Simplified Chinese, Traditional Chinese, and Korean.

Display language can be changed with selecting by the drop down list on a login page. The initial language displayed when SMS is accessed differs as indicated below.

● When SMS is accessed with Password Authentication

The initial language displayed when SMS is accessed with Password Authentication is determined in the following priority order.

- 1) The priority order of the language set in the browser being used
- 2) The order of display language set in [Settings/Registration]
- 3) If neither of the above languages is supported in SMS, English is used.

● When SMS is accessed with RLS Authentication

The initial language displayed when SMS is accessed with RLS Authentication is determined in the following priority order.

- 1) The language setting selected on the Remote UI screen
- 2) If the above language is not supported in SMS, the display language is selected according to method for when Password Authentication is used, as indicated above.

■ 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.

■ 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 Application Management

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.

■ 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.

CAUTION:

After deleting the license file which has been disabled, you can no longer download the license file.

● Reusable license

When reinstalling, Disable License file should be downloaded (see "Procedure Disabling a License File (suspending a license)" and see "Procedure 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.

■ System Information

● Outline

The device platform information and MEAP application system information are called the "System Information" of MEAP. The System Information can be checked on the SMS screen or by printing it out.

● 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 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.

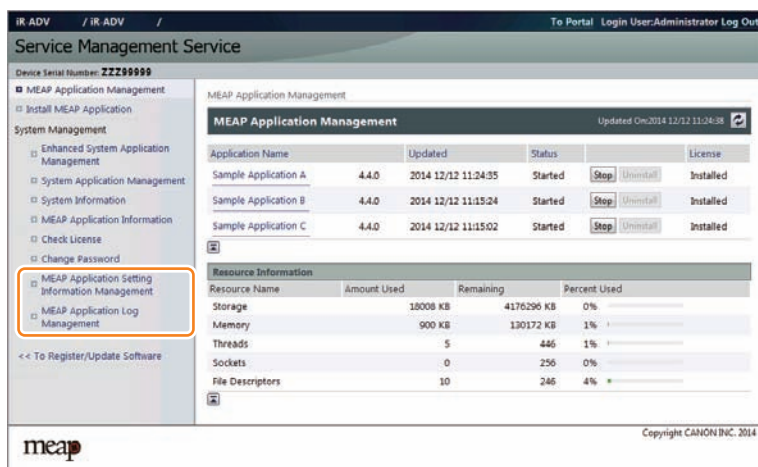
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item	content
Application Name	It is the name (bundle-name) declared in a statement within the application program. It may not necessarily be identical to the name of the program.

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 "MEAP Application Log Service" for managing log information respectively.



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MEAP Application Configuration Service

This service manages 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 Remote UI.

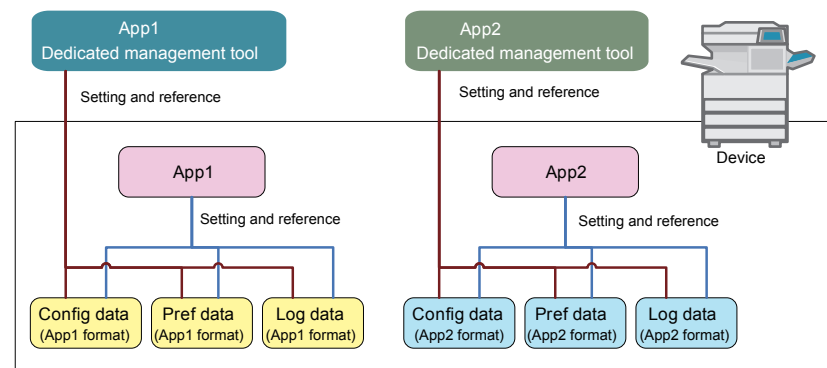
The settings such as the log level to be saved cannot be made from SMS.

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 Configuration Service and MEAP Application Log Service, as long as the MEAP application supports these services, you can perform data management tasks all together.

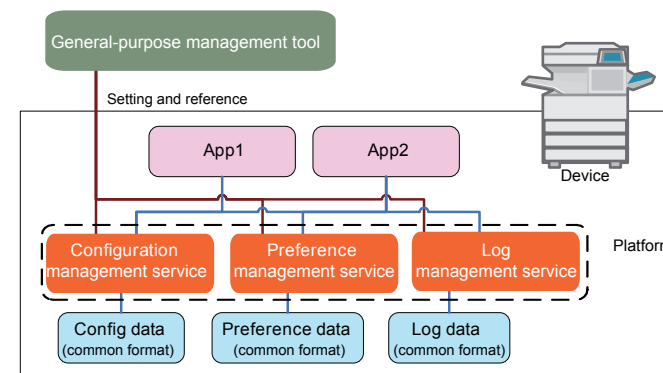
In case of devices and MEAP application that do not support the service



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As for devices and MEAP application that do not support the service, the setting information and log data are managed separately by application.

In case of devices and MEAP application that support the service



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As for devices and MEAP application that support the service, information can be managed all together.

■ 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

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● Setign Procedure

■ Preparation

● 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], select [Preferences] > [Network] > [TCP/IP Settings] > [Use HTTP] and press [On].

Note:

- With this device, items in [Network] on the [Settings/Registration] screen are grayed out unless you are logged in as an administrator.
Return to the top screen, press [Login] at the lower left of the screen, login as the system manager, and configure the settings.
The default setting for the User name is "Administrator", and the password is "7654321".
- When using SSL, press [Settings/ Registration], select [Management Settings]>[License / Other] > [MEAP Settings] > [SSL Settings] and press [On]. (This setting is applied to SSL setting on RemoteUI. Vice versa, [On] set for SSL on RemoteUI 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] for this message.

2) Press [OK] 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 open. 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.

CAUTION:

- 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 device.
For details, refer to [Top] > [Security]> [MEAP Settings] > [Using the SSL] in the e-Manual.

● Key pair and server certificate settings

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 this device, advance setting of the key pair and server certificate is not required.

To use an encryption key other than the default key, refer to the e-Manual to set the key pair and server certificate required to perform encrypted SSL communication.

Note:

As for SMS, by setting a Default Key, encrypted SSL communication is always executed regardless of the following setting: [Settings/Registration] > [Management Settings] > [License/Other] > [MEAP Settings] > [SSL Settings]: ON/OFF.

● Network Port Change Procedure

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.

The procedure to set the HTTP/HTTPS server port is indicated below.

1) Set the port numbers in the following service mode.

To set the HTTP server port

- (Level2) COPIER > Option > NETWORK > MEAP-PN

To set the HTTPS (SSL) server port

- (Level2) COPIER > Option > NETWORK > MEAP-SSL

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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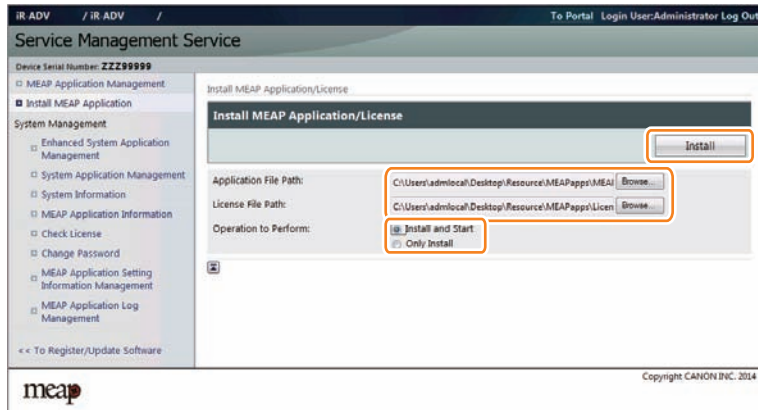
Note:

- If Print Server 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 device.)
- As for port on HTTPS server, it only applies to the device that supports SSL function.

2) Restart the device if the port number is set.

Procedure to Install Applications

- 1) Long on to SMS, and click [Install MEAP Application] on the menu.
- 2) Perform the following settings, and click [Install].
 1. Click [Browse], and select the application file and license file to install.
 2. On the same page, select either [Install and Start] or [Only Install] in [Operation to Perform].



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Note:
Application File: identified by the extension "jar".
License File: identified by the extension "lic".

CAUTION:

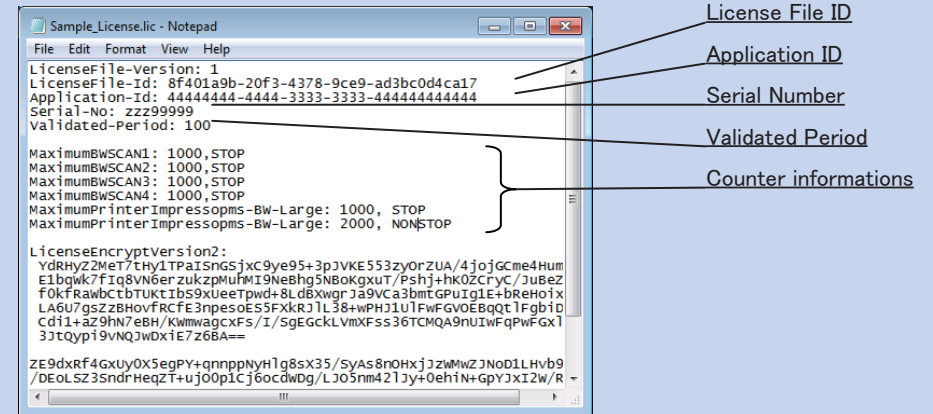
- You cannot install only the license.
- You will not be able to install the application without using the appropriate license. Be sure to select its license file.
- If you are adding a license to an existing application, see "Procedure Adding a License File".
- If you are updating an existing application, 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.

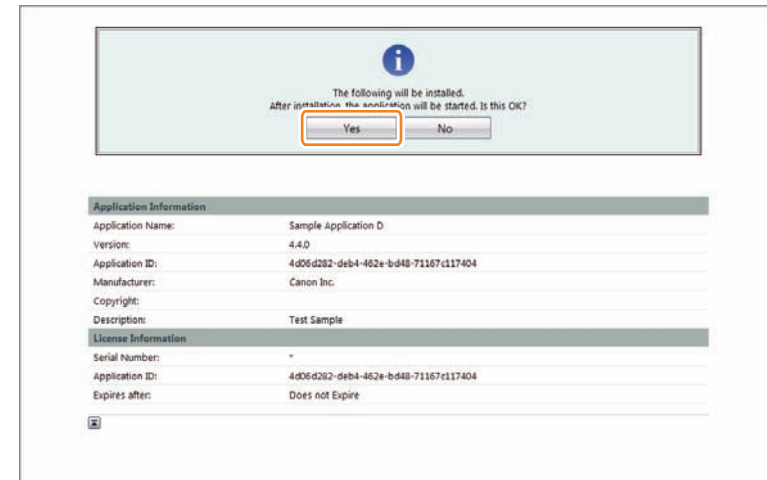
Note that any changes added to the license file may disable installation. Cares should be taken when confirming the contents of the license file.

Sample file



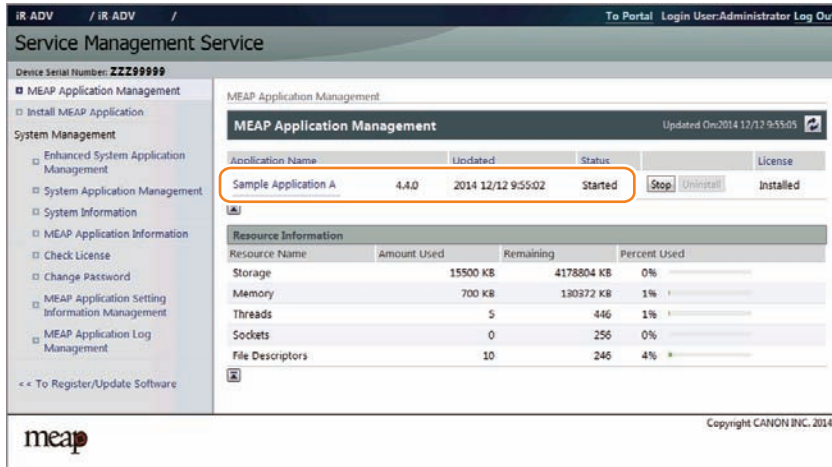
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- 3) Check the contents of the Confirm page; then, click [OK].



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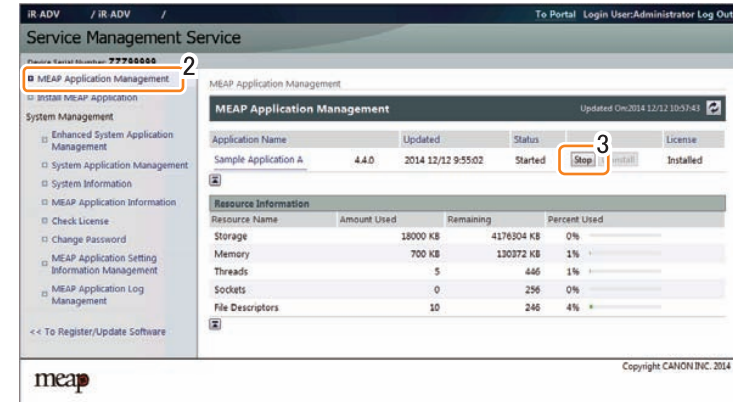
- 4) Some applications show a screen to indicate the terms of agreement. Read the terms, and click [OK].
- 5) When installation is complete, the MEAP application management page is displayed.



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Procedure to Start and Stop a MEAP Application

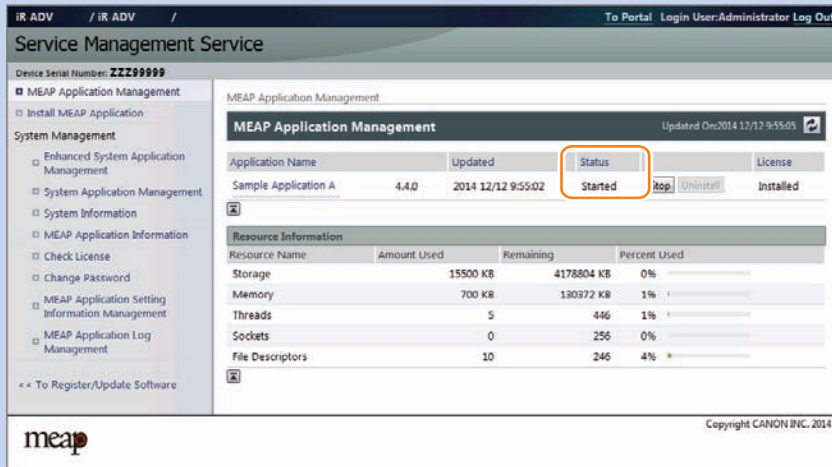
- 1) Log in to the SMS, and click [MEAP Application Management].
- 2) Click [Start] or [Stop] shown for the MEAP application to be started or stopped.



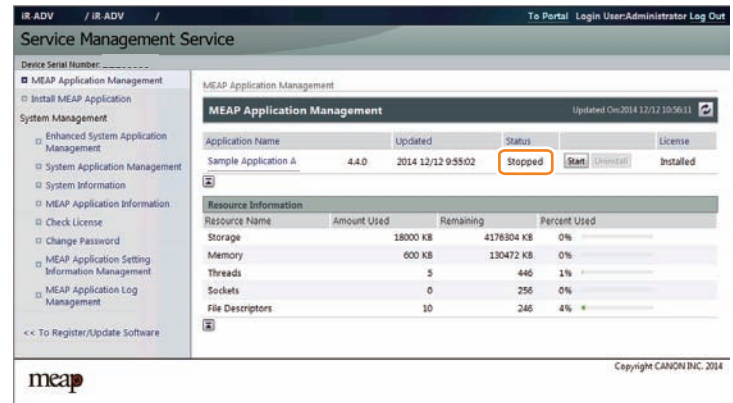
F-2-130

- 3) Check to see that the status of the MEAP application in question is either [Started] or [Stopped].

Note:
 Since the status of applications installed with [Only Install] selected in [Operation to Perform:] is set to [Installed], it is necessary to click [Start] to change their status to [Started].



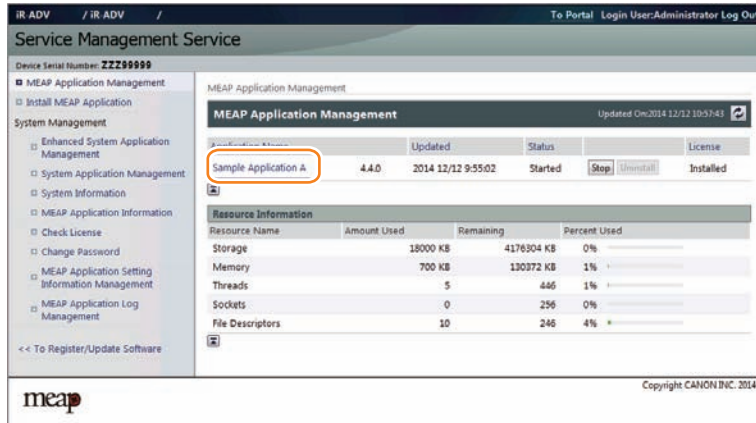
F-2-129



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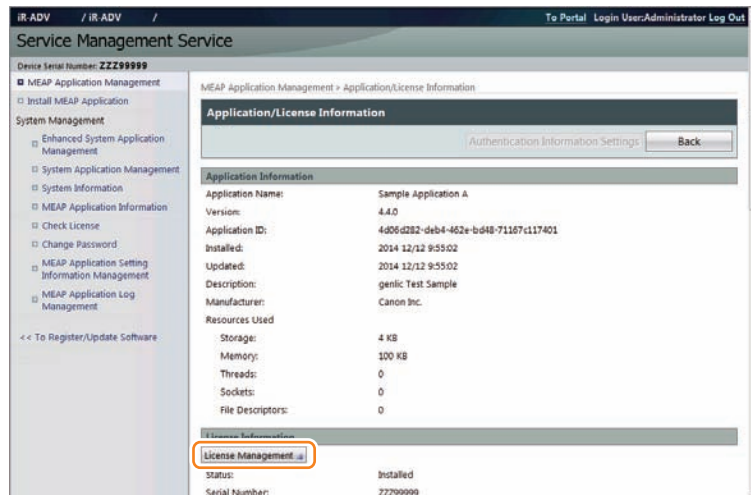
Procedure Adding a License File

- 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.



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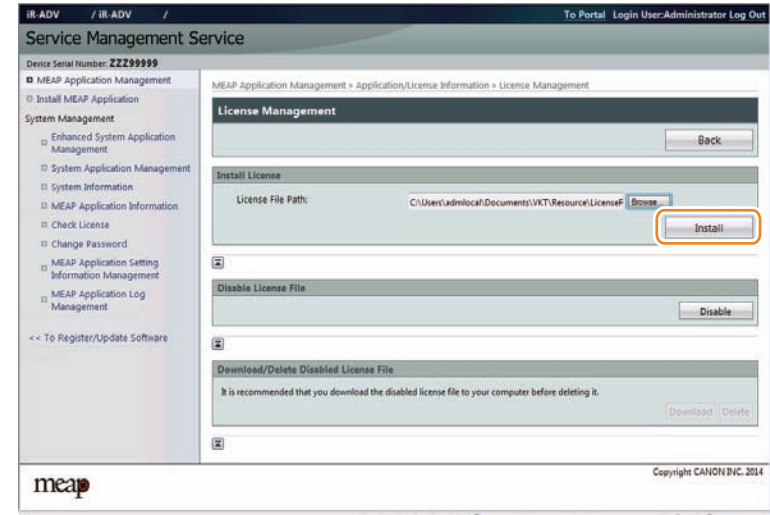
- 3) Click [License Management].



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- 4) Click [Browse], and select the license file you want to install.

- 5) Click [Install].



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- 6) Check the content of the confirmation page, and click [OK].

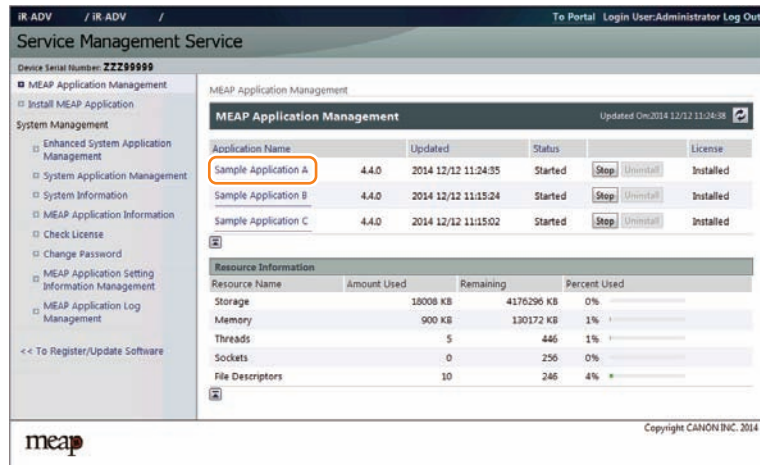
Procedure Disabling a License File (suspending a license)

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")

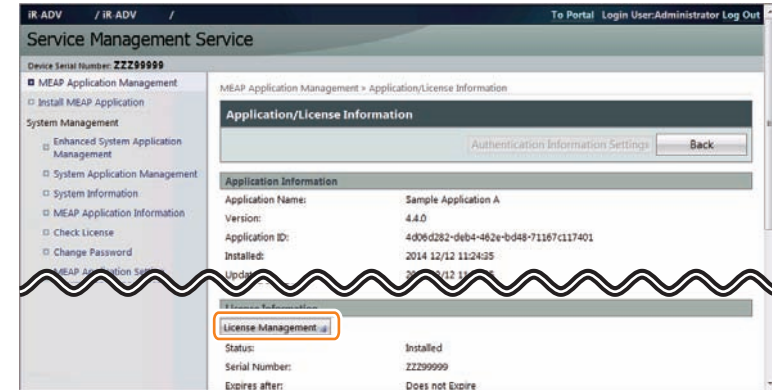
1) Log on to SMS

2) Stop the application you want to uninstall, and click the name of the application.



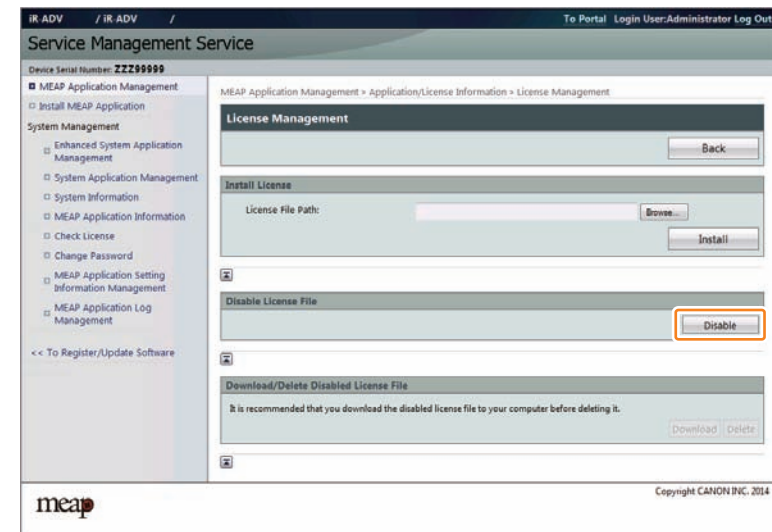
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3) On Application/ License Information page, click [License Management].



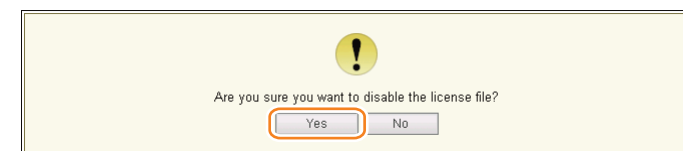
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4) License Management page appears. Click [Disable].



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5) Click [Yes].



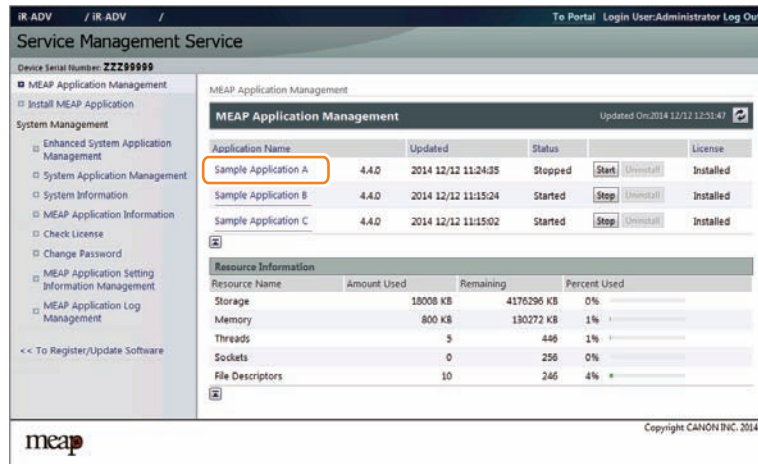
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Procedure Downloading/ Removing an Invalidated License File

Note:

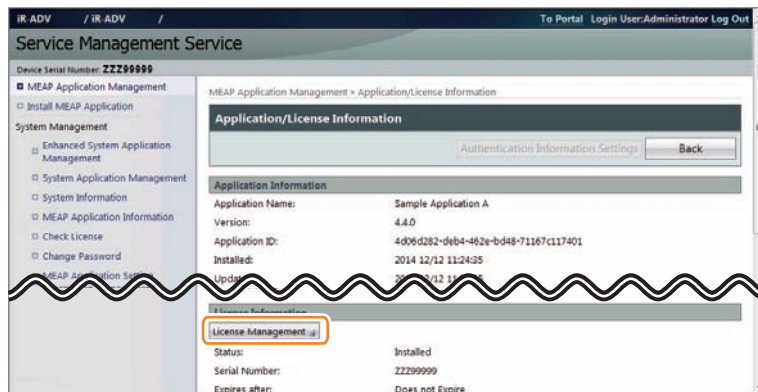
The downloaded license file can be used for reinstallation only in the same device (with the same device serial number).

1) Login to SMS, and click the name of the application you want.



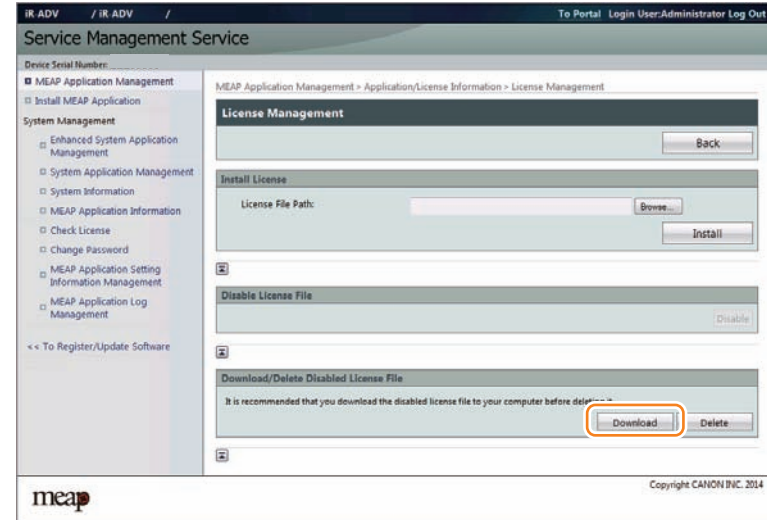
F-2-139

2) On Application / License Information page, click [License Management].



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3) License Management page appears. To download, click [Download].



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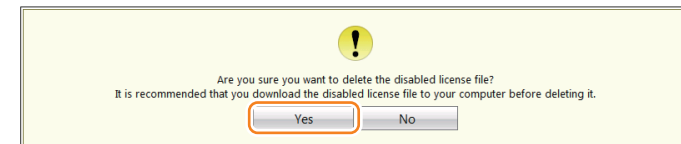
4) When you have selected [Download], specify where you want to store the file by following the instructions on the screen.

5) To delete, click [Delete].



F-2-142

6) When the dialog to confirm deletion is shown, click [Yes].



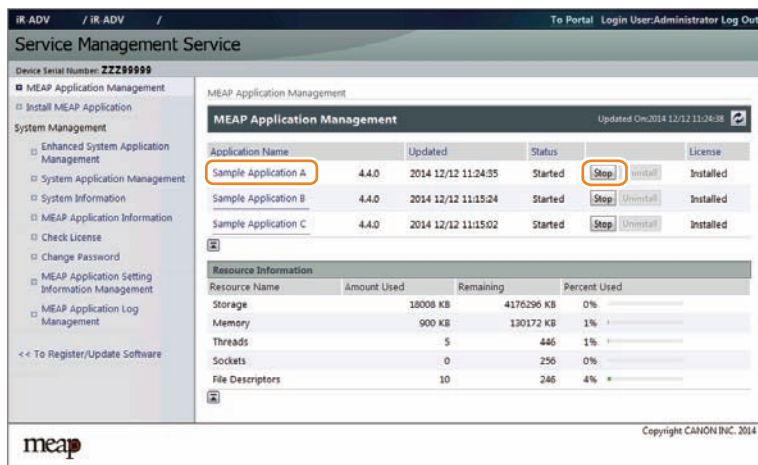
F-2-143

CAUTION:

Without the license file, an application cannot be reinstalled even to the MEAP device that the application had been installed last time. Download and save the license file before deleting the application.

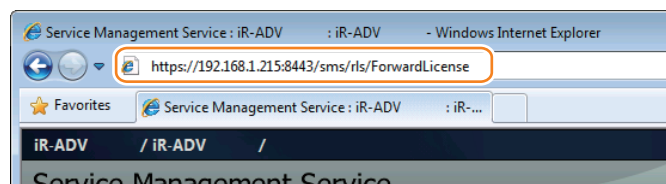
Procedure for Downloading a License for Forwarding

1) Log in to SMS, stop the application to be forwarded. (see Chapter 2, "Procedure to Start and Stop a MEAP Application".)



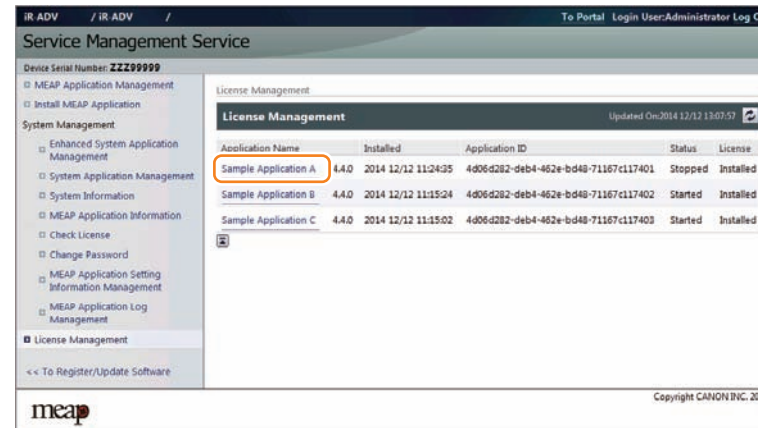
F-2-144

2) Move to the download page of license forwarded for the device as sender ([https:// IP address of device: 8443/sms/ForwardLicense](https://IP address of device: 8443/sms/ForwardLicense)).



F-2-145

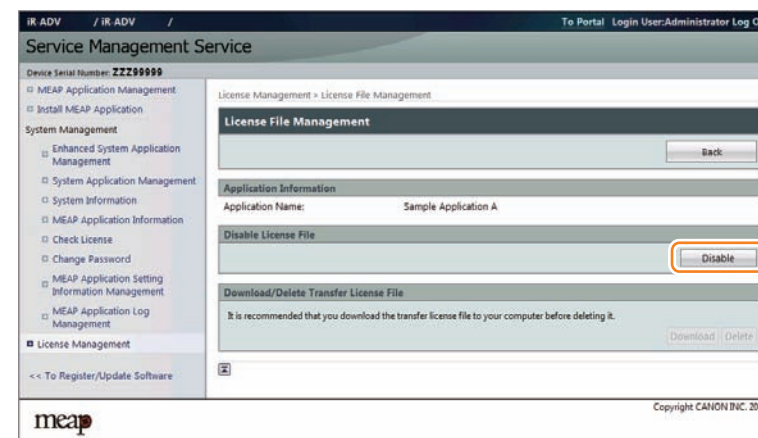
3) Specify the application to be forwarded.



F-2-146

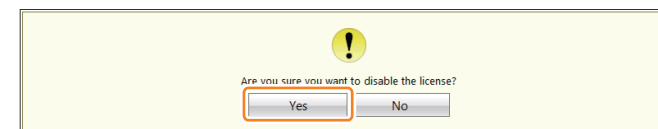
4) On Application / License Information page, click [License Management].

5) Click [Disable] on the [Disable License File].



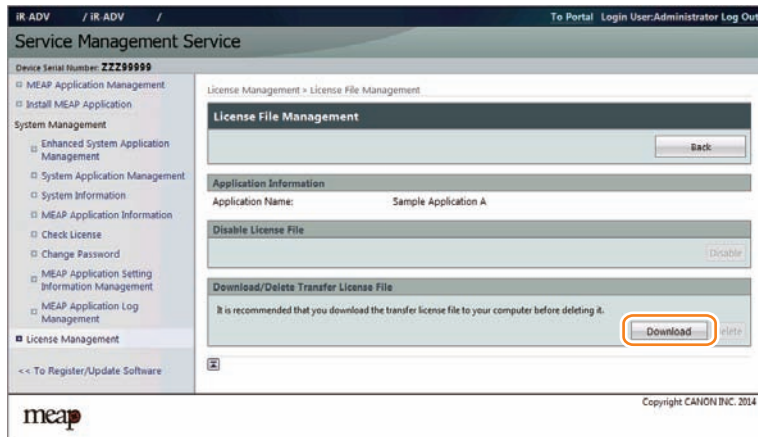
F-2-147

6) The window to confirm whether to create a transfer licence will be displayed. Click [Yes].



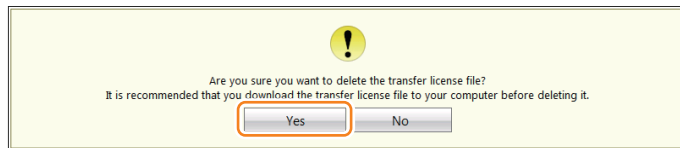
F-2-148

- 7) When [Download] on the [Download / Delete Transfer License File] becomes effective, click [Download].



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- 8) Specify the preservation place of the file according to the instruction of the screen.
 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-2-150

- 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.

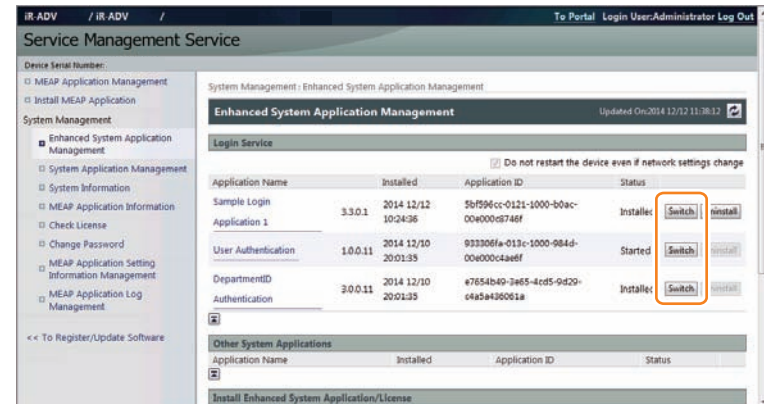
Note:

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.

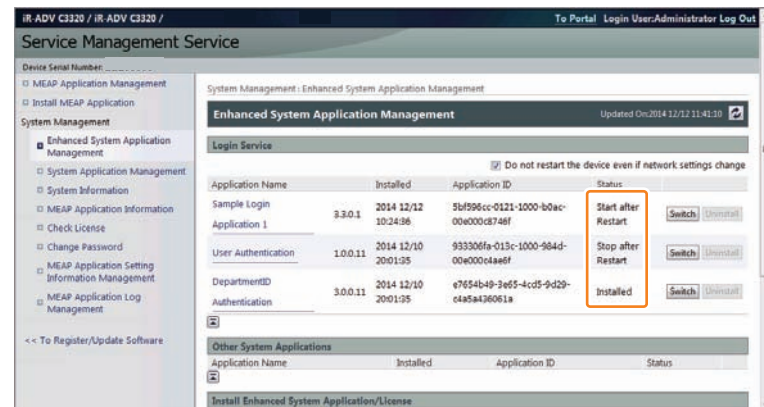
Steps to Change Login Services

- 1) Log on to SMS, click [Enhanced System Application Management].
- 2) Click [SWITCH] for the login service to be used.



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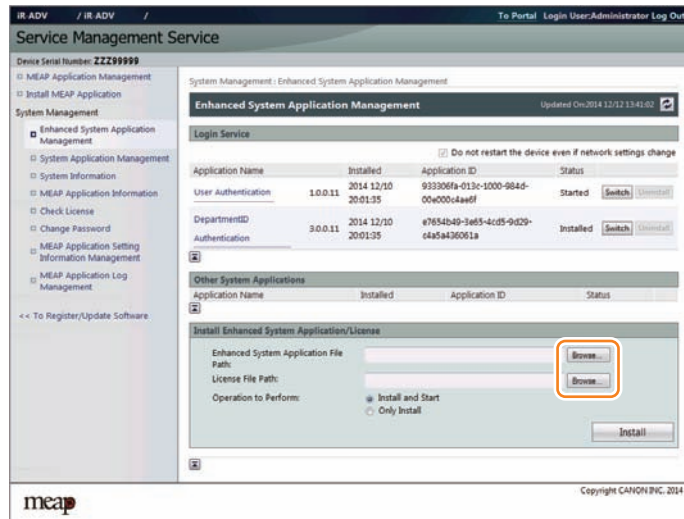
- 3) When login service application you have selected turns to Start after Restart, restart the device.



F-2-152

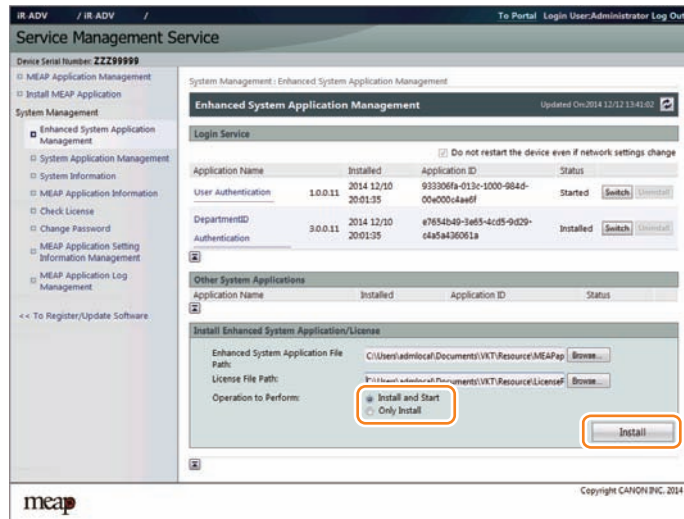
■ Login Service Installation Procedure

- 1) Log on to SMS, and click the [Browse], and specify the enhanced system application file and license file.



F-2-153

- 2) Select [Install and Start] or [Only Install] in [Operation to Perform], and click [Install].

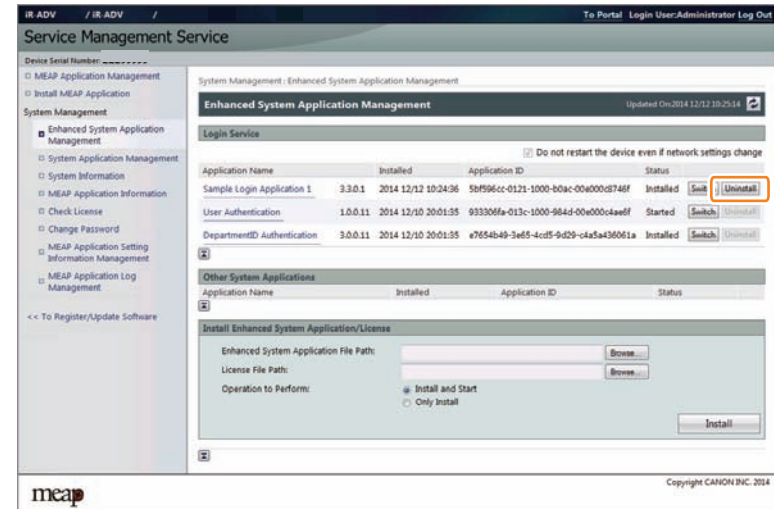


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■ Login Service Uninstallation Procedure

In order to uninstall a login service, the service needs to be stopped ("Installed" status). User Authentication and DepartmentID Authentication cannot be uninstalled even when the service is stopped.

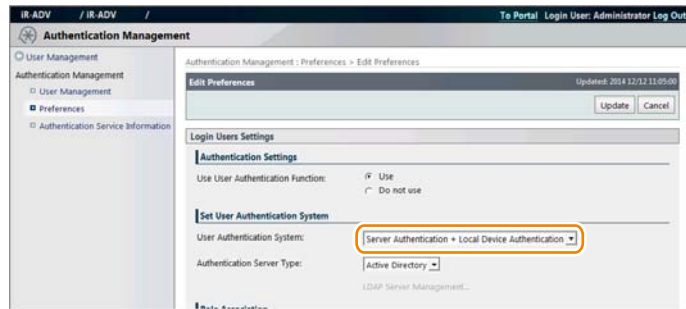
- 1) Access SMS, and select [Enhanced System Application Management].
- 2) Click the [Uninstall] of the login service you want to uninstall.



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Setting the User Authentication Method

In the case of User Authentication, it is possible to use a combination of multiple authentication methods. The combination can be changed from the User Authentication setting screen. (For details, refer to e-Manual > Authentication > Setting the User Authentication Function Environment > Using the Remote UI > Preference Settings.)



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Note:

The default user authentication method is "Local Device Authentication".

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.

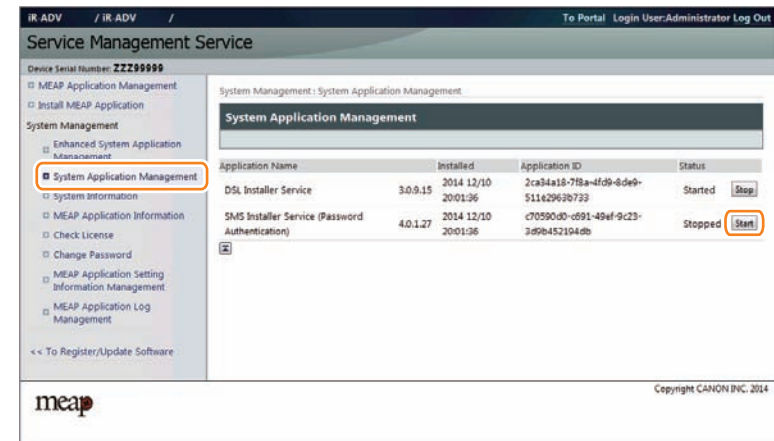
Setting the method to login to SMS

The procedure for changing the login method for SMS is indicated below.

The procedures for changing the password authentication Start/ stop settings are as follows.

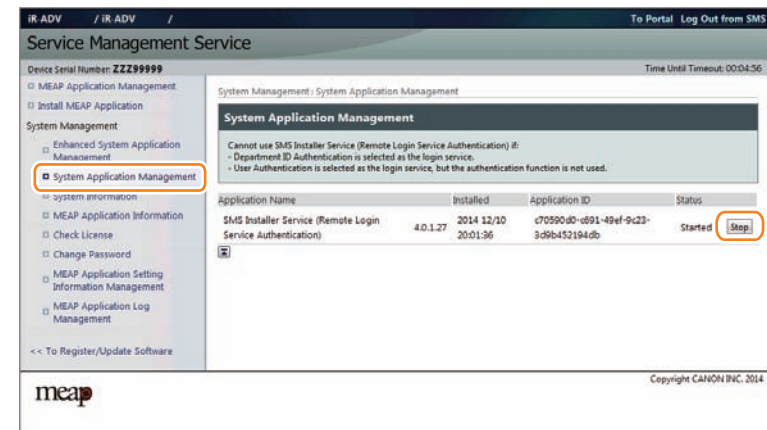
- Log on to SMS, click [Start] or [Stop] shown in Status field of SMS Installer Service to check if the status is changed.

Example screen when logged in with RLS



F-2-157

Example screen when logged in with password authentication



F-2-158

- Logout once and login again to check to see that the setting is applied properly.

Changing SMS Login Password

- 1) Log in to SMS, and select [Change Password].
- 2) Enter the current password and a new password, and then click the [Change].

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Note:
The [Reset] 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.

Disabling the Integrated Authentication Function

Service mode

The location of the service mode setting for disabling integrated authentication:

- [SERVICE MODE] LEVEL1 > [COPIER] > [Option] > [FNC-SW] > [UA-OFFSW]
Setting value: 0 = Disabled, 1 = Enabled

Display	I/O	Adjust	Function	Option	Test	Counter
< FNC-SW > < 3/ 4 > < READY > < LEVEL 1 >						
AUTO-OUT	0	<<	(0)	{ 0 - 1 }		
PDL-Z-LG	0	<<	(0)	{ 0 - 3 }		
CDS-LVUP	0	<<	(0)	{ 0 - 2 }		
AMSOFFSW	1	<<	(1)	{ 0 - 1 }		
UA-OFFSW	0	<<	(0)	{ 0 - 1 }		
MIB-NVTA	0	<<	(0)	{ 0 - 3 }		
SVC-RUI	0	<<	(0)	{ 0 - 65535 }		
LCDSFLG	0	<<	(0)	{ 0 - 1 }		

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Remote UI

Access [Authentication Management] screen to disable integrated authentication from the Remote UI.

- 1) Access the following menu and click the [Edit...] button.
 - Remote UI > Settings/Registration > Management Settings > User Management > Authentication Management > Preferences

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- 2) Select the setting items in [Setting to Disable Integrated Authentication] on the bottom of the screen as necessary, and click [Update].

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Setting Items

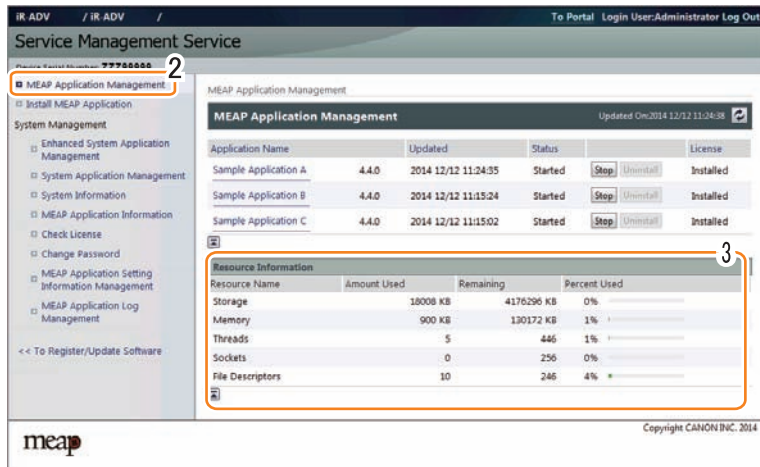
Item code	Description
Disable integrated authentication	The integrated authentication function is disabled regardless of the authentication method.
Disable integrated authentication using credentials for local device authentication	The integrated authentication function is disabled only at the time of 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.

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Check Procedure

Device Resource

- 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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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.)

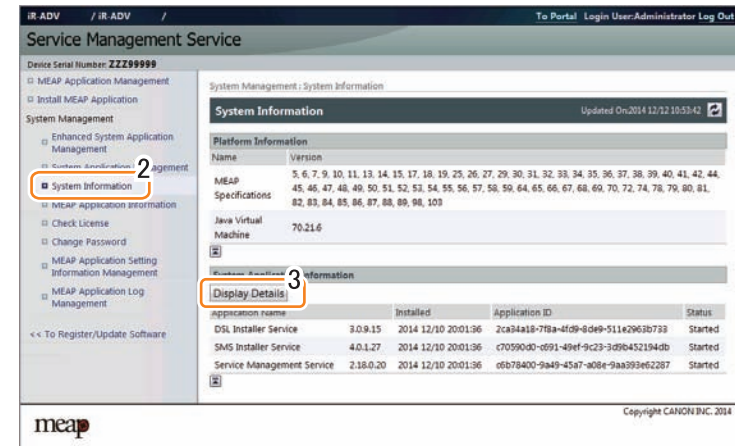
CAUTION:

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/>

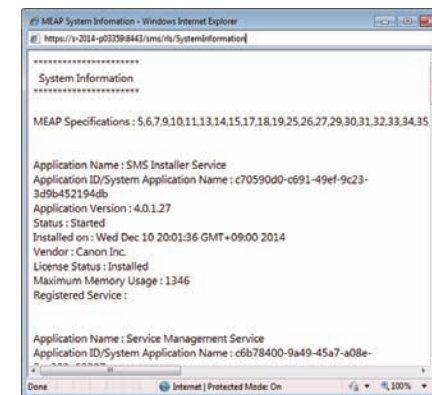
System Information

- 1) Log in to SMS, and select [System Info] on System Management menu.
- 2) Click [Display Details].



F-2-164

- 3) 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-2-165

● Printing the System Information of a MEAP Application

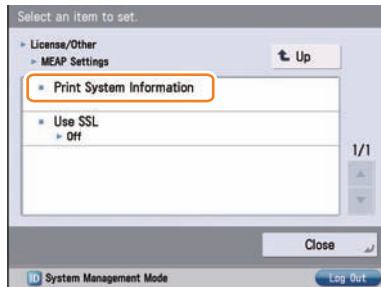
MEAP system information can be printed out with device for confirmation.

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] .

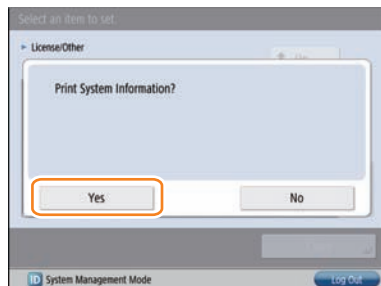


F-2-166

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].



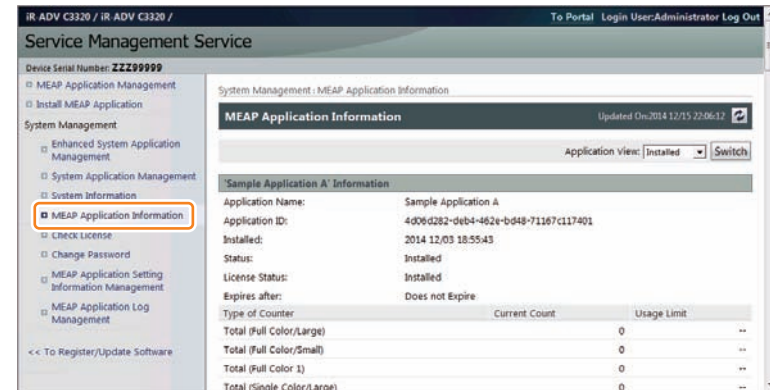
F-2-167

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 devices without PDL installation to print out information (iR C3220 and later).

● MEAP Application Information

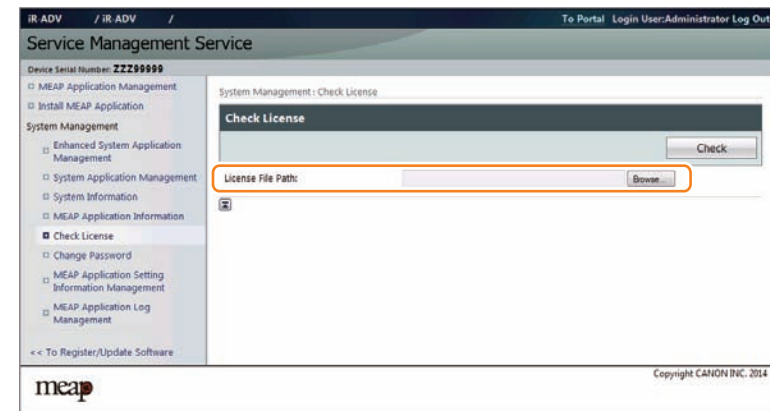
- 1) Log in to SMS, select [MEAP Application Information].
- 2) The MEAP application information screen appears. Scroll the screen and check the information of the target application.



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● License File

- 1) Log in to SMS, select [Check License].
- 2) Click the [Browse], specify a license file, and click the [Check].



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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 device has the same serial number.

CAUTION:

- 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.
- Do not disable the license during the period from backup using SST to restoration of data.
It is not necessary to reinstall the license file when restoring the backup data.

Backup Item Automatically Copied

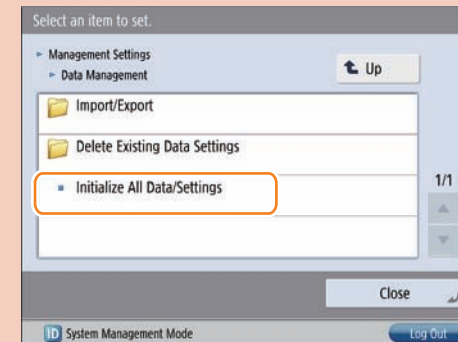
The following data are backed up using SST:

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 User Authentication.
- SMS password

CAUTION:

Do not execute [Initialize All Data/Settings] in [Settings/Registration] during the period from backup using SST to recovery of the data.



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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 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

● Procedure for Backing Up/Restoring the MEAP Application Area

For information on backing up/restoring the MEAP data, refer to Chapter 6, "Backup/Restore."

■ 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/Restoring the MEAP Application Area" 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.

● 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/ Restoring the MEAP Application Area".

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 device and executing formatting from the displayed menu.

● HDD replacement procedure

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 device 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 installed 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)Restoring the backup file

Restore the backup data referring to Chapter 6, "Backup/Restore."

5)Importing user information

As necessary, make login service selections and import user information.

■ Using USB Devices

● USB Driver

Two types of USB drivers

With this device, both a dedicated USB driver for installing MEAP applications (hereinafter referred to as "MEAP driver") and a USB system driver (hereinafter referred to as "system driver") can be used.

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):

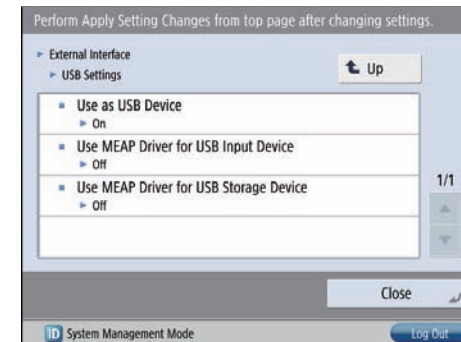
System driver is active by default in iR-ADV series.

The driver can be changed in [Settings/Registration].

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.



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Note:

The [Use USB Host] menu is hidden at the time of shipment. To display the menu, set "1" in the following service mode.

- (Level 2) COPIER > Option > USER > USBH-DSP

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.

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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 idVendor(VID) and idProduct(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 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

YES: USB device available NO: USB device not available

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Availability for MEAP applications of USB devices B and C (either HID keyboard or Mass Storage) plugged to 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

YES: USB device available NO: USB device not available

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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 device, 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] in [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) Execute the following service mode.
 - COPIER > Function > CLEAR > USBM
- 2) Restart this device.

● 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 report print.

Steps to output the USB Device report print

- 1) Execute the following service mode.
 - COPIER > Function > MISC-P > USBH-PRT
- 2) When [OK] is shown on the status field, the status print is output. Check the contents of the print.

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: Manufacturer=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(l) Atr=02(Bulk) MxPS=512 lvl=0ms
E: Ad=01(O) Atr=02(Bulk) MxPS=512 lvl=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 flash drive 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.

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E:Endpoint

The Endpoint information of a USB device is shown.

Right or wrong of report output

Connecting device		Report printing
HID		Yes
Storage		Yes
FAX		No
USB Device Port	IrDA	Yes
	Multimedia Card Reader	Yes
	IC Card Reader	Yes
Image Data Analyzer Board-A1		No
Hub	Internal Hub*	No
	External Hub	Yes

* USB Device Port-B1 Hub for device ports installed at the introduction

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Note:

Some connecting devices such as the Image Data Analyzer Board and USB Device Port are not installed depending on the model.

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.

Troubleshooting

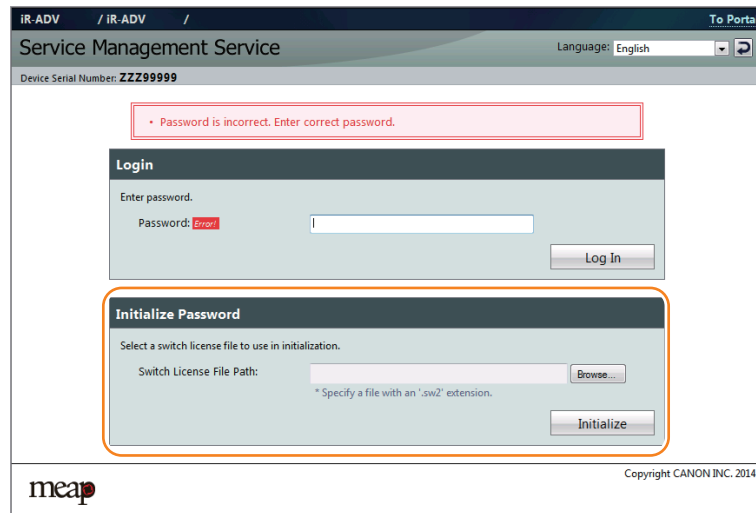
When SMS Cannot Be Accessed

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) 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) With nothing entered, click the [Log in] to display the area for specifying a switch license file for password initialization.



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- 3) Click the [Browse] and specify the switch license file.
- 4) Click the [Initialize] to display an initialization confirmation page, and click the [OK].

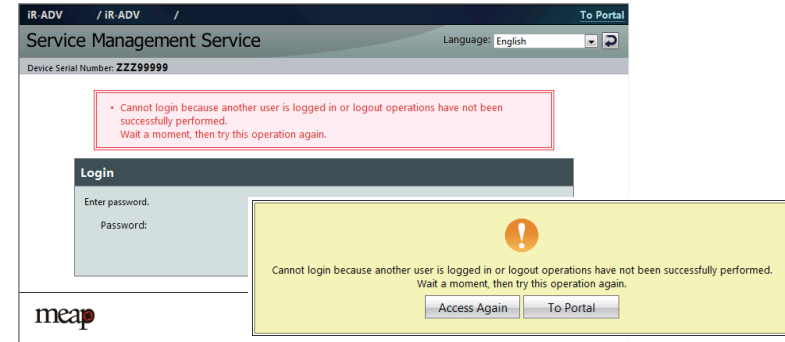
Note:

- The default password is "MeapSmsLogin." (The password is case-sensitive.)
- If you click [Cancel], 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 device.

An example of the exclusive control message



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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 settings" 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 this case, perform the procedure indicated in [Top] > [Security] > [Key Pair and Server Certificate Settings for Encrypted SSL Communication] in the e-Manual to resolve the error.

Note:

The IP address of the device (or the FQDN in environments where name resolution is enabled) can be entered in the [Common Name] column to prevent the "Certificate Error" that is displayed when accessing with Internet Explorer 7 or later.

■ 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 "Procedure Adding a 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.

■ 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.

Some MEAP applications do not process a task at a specified time after quick startup. In this case, the application executes the task at an unintended timing because the elapsed time during standby for quick startup is not counted. Problems may occur in the following two cases.

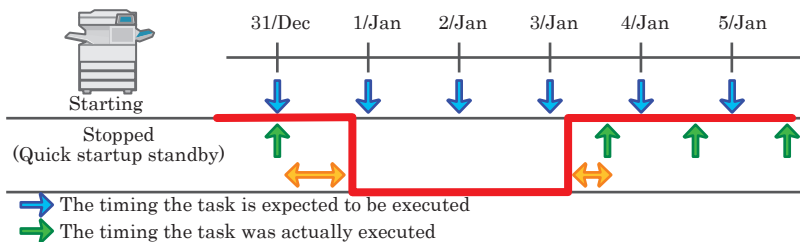
In the case of "Schedule: Execute the task every 24 hours"

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: The task is executed when the total time excluding the standby for quick startup has reached 24 hours.

=> The task may be executed at a timing other than the time the user expects it to be executed.



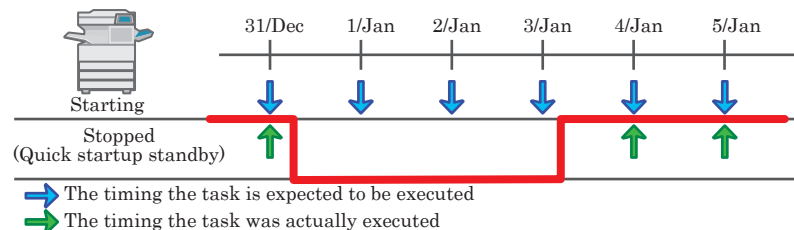
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In the case of "Schedule: Execute the task at 00:00 every day"

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.



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■ MEAP Safe Mode

● Outline

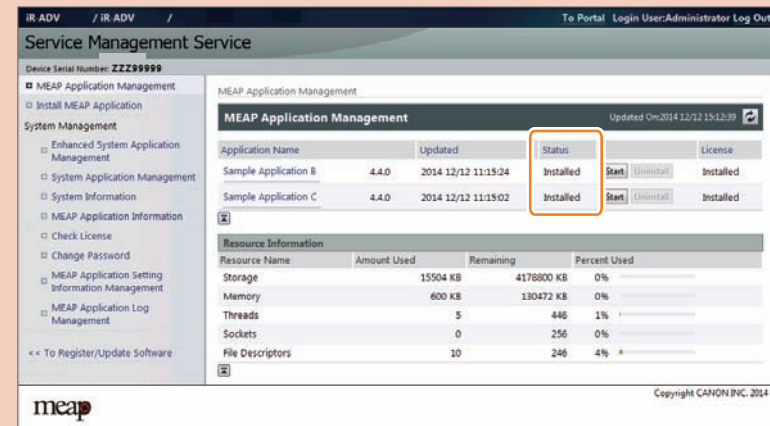
Use safe mode if you need to start up the system without worrying about extra applications. It will start up only those system software files (including SMS) that normally start up as default files while preventing MEAP applications and the like from starting up.

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.

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.



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Starting in Safe Mode

1) Starting in Safe Mode

- (Level 2) COPIER > Option > USER > MEAPSAFE.

2) Check that the notation "MPS" has appeared in the upper left corner of the screen; then, restart the device.



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How to cancel MEAP SAFE mode

1) Set "1" in the following service mode.

- (Level 2) COPIER > Option > USER > MEAPSAFE.

2) Start service mode again after rebooting the device, and check that [MPS] is no longer displayed at the upper left of the screen.

Collection of MEAP Console Logs

When debugging a MEAP application, console logs need to be collected in some cases.

MEAP console logs can be obtained with the Device DebugLog Utility. Make sure to use it.

For details, see the instruction manual of the Device DebugLog Utility.

Embedded RDS

Product Overview

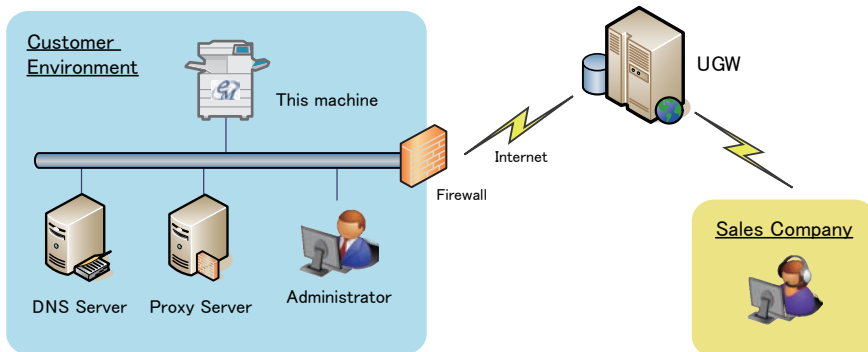
Overview

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 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.	COPIER	Display	ANALOG	No
Alarm codes for transmission: 0x060002, // Fixing 0x060004 - 0x069999, // Fixing 0x090005 - 0x099999, // Dram 0x100006 - 0016, 0x100022 - 0099, 0x100101 - 9900, // Development 0x300001 - 0x309999 // High voltage			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 HV-ST5 CCD DPOT DENS FIXING SENSOR MISC HT-C HV-TR P-PASCAL	No
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 HV-ST5 CCD DPOT DENS FIXING SENSOR MISC HT-C HV-TR P-PASCAL	Yes
		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

- 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.
- 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.
- 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.)
- 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, 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

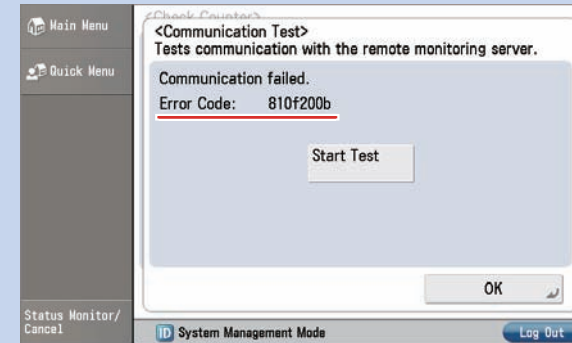
3) If the e-Maintenance/ imageWARE Remote contract of the device is invalid, be sure to turn OFF the E-RDS setting (E-RDS : 0).

4) With this machine, a communication test can be conducted from the [Counter Check] on the Control Panel.* When conducting a communication test from the [Counter Check] on the Control Panel, pay attention on the following points:

- During a communication test, 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 from the [Counter Check] on the Control Panel, 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.

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

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 turn OFF and then ON the main power of this machine.

Steps to E-RDS settings

1) In the following service modes, initialize a set value of E-RDS.

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".

2) Perform installation or deletion of the CA certificate if necessary, and turn OFF and then ON the main power of 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.

(a) Select (LEVEL2) COPIER > Function > CLEAR > CA-KEY and touch the [OK] button.

"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.

(b) Turn OFF and then ON the main power of this machine.

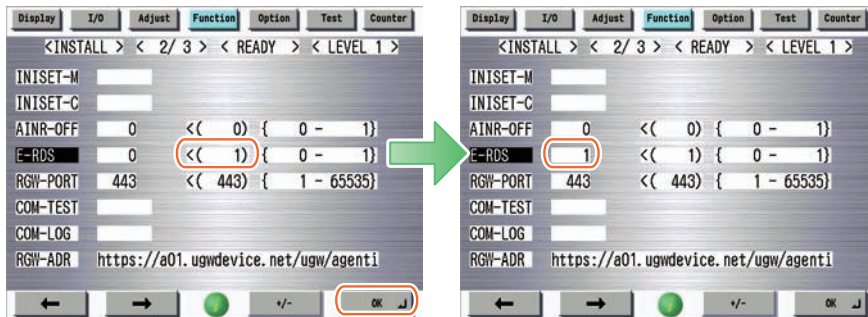
CAUTION:

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.

3) Enable E-RDS function and execute communication test.

(a) Select COPIER > Function > INSTALL > E-RDS.

(b) Press the numeric key [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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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.

NOTE:

This initiates the communication test between the device and the UGW.

4) Select [COM-TEST] and then touch [OK].

The communication test with UGW will be executed.

If the communication is successful, "OK!" is displayed. If "NG!" (failed) appears, refer to the "Troubleshooting" and repeat until "OK!" is displayed.

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 Browser settings

1) In the following service modes, enable a service browser.

Select COPIER > Function > INSTALL > BRWS-ACT and then touch [OK].

NOTE:

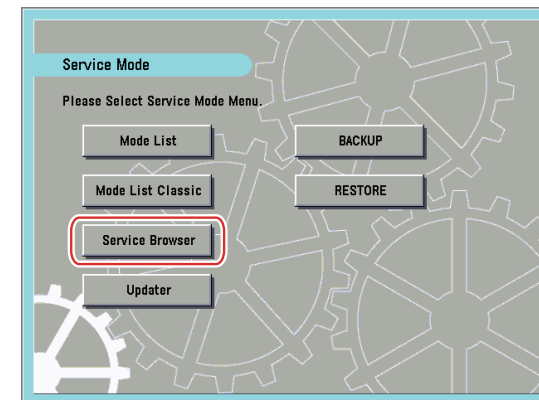
When the status of the service browser is changed to enabled, E-RDS sends the browser information to the UGW at this timing.

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.

2) Turn OFF and then ON the main power of this machine.

3) Make sure that "1 (: ACTIVE)" is set under COPIER > Display > USER > BRWS-STTS.

4) 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, to stop the service browsing, execute BRWS-ACT again, turn OFF and then ON the main power of this machine.

■ Initializing E-RDS settings

It is possible to clear the FLASH 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].

● 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.

- Name resolution was failed due to an incorrect host name or DNS server has been halted.
- Network cable is blocked off.
- 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 turn OFF and then ON the main power of 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: 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.13

Q: What is the number of the network port used by E-RDS?

A: The port number used by E-RDS for communication with UGW is "443".

If this setting is changed, an error occurs during communication with UGW. Therefore this setting should not be changed unless otherwise instructed.

No.14

Q: After the setting for E-RDS was made, the IP address of the host machine was changed. In that case, is it necessary to execute COM-TEST again?

A: It is not necessary to execute COM-TEST again because the IP address used by E-RDS is automatically changed. However, it is necessary to turn OFF and then ON the main power of this machine to reflect the change in the setting of the IP address

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 > Preferences > Network > TCP/IP Settings > IPv4 Settings > PING Command, enter "127.0.0.1", and touch the [Start] button.

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.

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 > 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.

(b) Touch the [Up] button.

(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."?

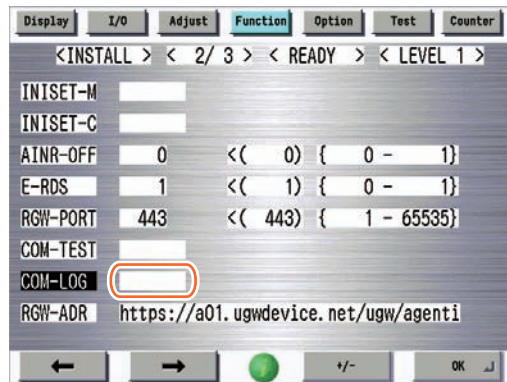
YES: Proceed to Remedy 2.

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.

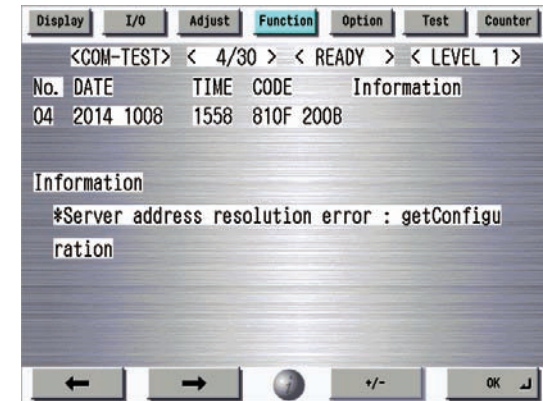


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NOTE:

- 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. 04)



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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: Registration information of the E-RDS machine was deleted from the device information on Web Portal, and then registered again. After that, if a communication test is left unperformed, the device setting in the UGW becomes invalid.

Cause: When the registration information of the E-RDS machine is deleted, information related to E-RDS is also deleted.

Therefore, when 7 days have passed without performing a communication test after registering the E-RDS machine again, the device setting becomes invalid.

Remedy: Perform a communication test before the device setting becomes invalid.

No.4

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.5

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.6

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.7

Symptom: The display indicates that the service browser is enabled (BRWS-STTS: 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 turning OFF and then ON the main power of this machine.

Remedy: Turn OFF and then ON the main power of this machine.

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: 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.

[*] [Character strings] [Functional classification (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	Character 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.	Turning OFF and then ON the main power of this machine 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 unmatched!	Improper value is written in at the head of the NVMEM domain (nonvolatile memory domain) of E-RDS.	Turn the device OFF/ ON.

No.	Code	Character strings	Cause	Remedy
8	8700 0306	SRAM AeRDS version unmatched!	Improper value is written in at the head of the NVMEM domain (nonvolatile memory domain) of Ae-RDS.	Turn the device OFF/ ON.
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.

No.	Code	Character strings	Cause	Remedy
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 turning OFF and then ON the main power of this machine 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	<ul style="list-style-type: none"> TCP/IP communication fault The IP address of device is not set. 	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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	Character strings	Cause	Remedy
27	8xxx 2028	Server certificate error	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.

No.	Code	Character strings	Cause	Remedy
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

Functional Overview

Overview

Updater provides functions that enable network communication with Content Delivery System (hereinafter CDS) to install firmware, MEAP applications and system options.

- Firmware Installation**
 Updater function enables users to distribute firmware through 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.

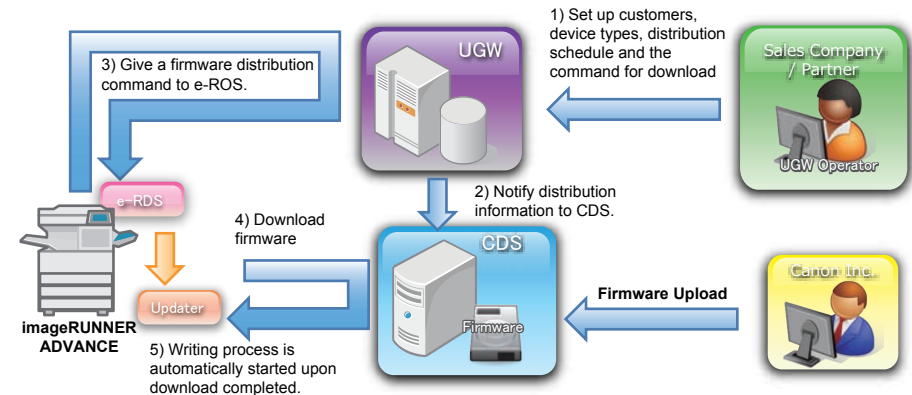
Distribution Method	Download Commanded by:	Update Timing	Downloadable Firmware Versions		
			Previous Ver	Current Ver	Newer Ver
UGW-linked Download / Update (Full-remote update)	UGW	Auto	No	Yes	Yes*1
UGW-linked Download (Remote Distribution / Update)	UGW	Manual	Yes	Yes	Yes
Manual Download / Update (On-site Update via Service mode)	Local UI	Auto	No	Yes	Yes*1
		Manual	Yes	Yes	Yes

*1: You can select the version allowed Remote Update.

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UGW-linked Download and Update (Full-Remote Update)

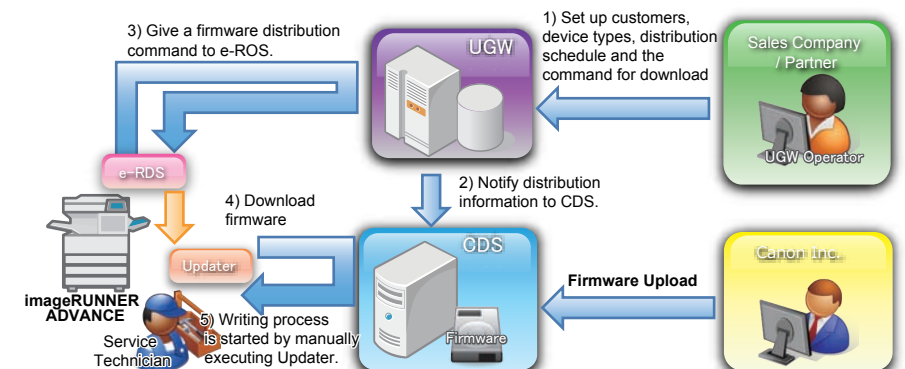
If the device is linked to UGW and the distribution schedule and update setting are registered on UGW in advance, full remote firmware update is available on this device. Upon downloaded from CDS, the firmware is updated on the device.



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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 this 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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Manual Download and Update (On-site Update via Service Mode)

If this 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:
Users are able to gain firmware distribution in the following 3 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)		

*1: Only the latest version of Remote update-enabled version is downloadable.

List of Functions

The matrix below shows the list of functions provided by Updater.

Category	Function	Service Mode	[Settings/Registration]	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
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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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

Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button	Enabling [Manual Update] Button of Remote UI
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

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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.

- 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

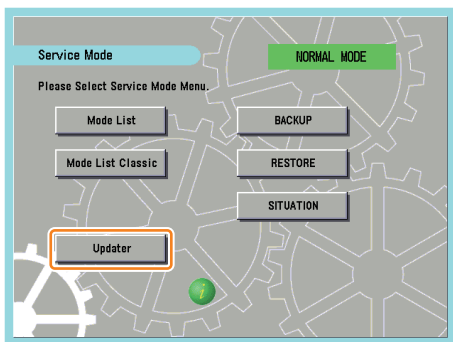
The method of connecting to external network is similar to a normal network connection method. Refer to user manual of the device for details.

NOTE:

- See User Manual for how to connect the device to the external network.
- Before using UGW link or [Settings/Registratoin] screen, see the sections below to prepare as required.
 - "Enabling UGW Link"
 - Enabling [Update Firmware] Button
 - Enabling [Install Application/Options] Button

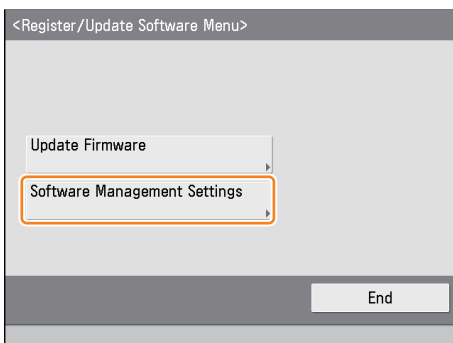
● Confirming URL Setting of Distribution Server

1) Press [Updater] in the service mode menu.



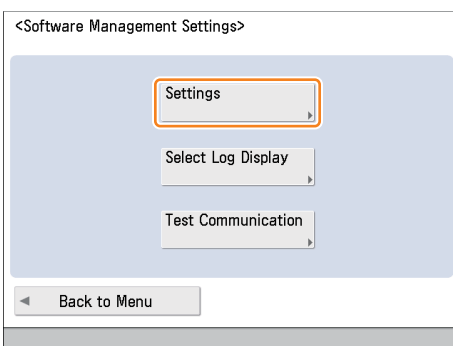
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3. Press [Software Management Settings] button.



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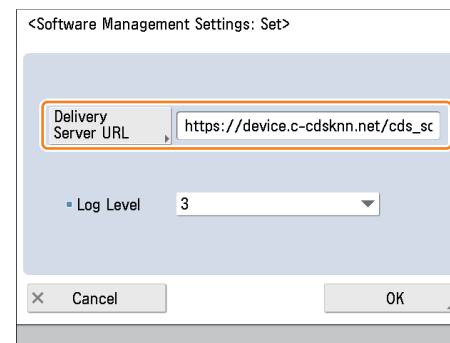
4. Press [Settings] button.



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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.



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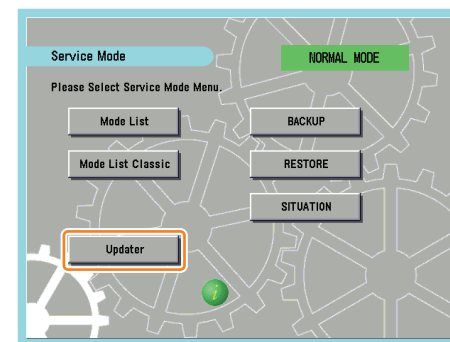
6. Press [OK] to set the entered items. Now the URL of the distribution server is successfully set.

● Communication Test

NOTE:

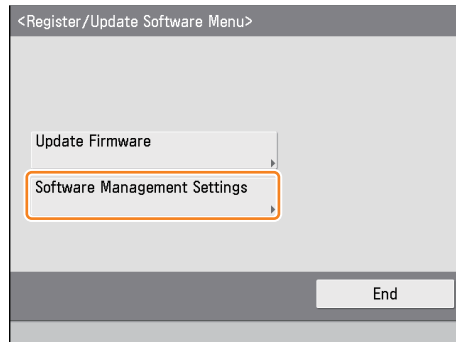
Carry out the communication test with both Embedded RDS and CDS.

1) Press [Updater] in the service mode menu.



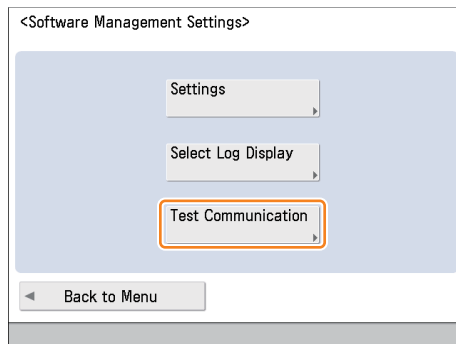
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3. Press [Software Management Settings] button.



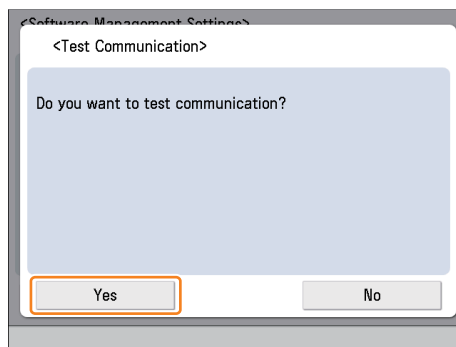
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4. Press [Test Communication] button.



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5. Press [Yes] button.

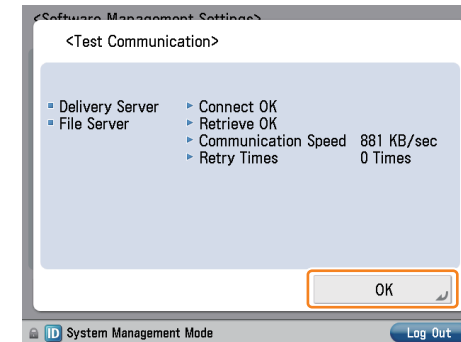


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Obtain the download file information for communication test from the distribution server (to execute the communication test to the distribution server).

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

To execute [UGW-linked Download and Update] or [UGW-linked Download] when installing the firmware, the service technician must specify the following settings to link with UGW in advance.

Set "1" in the following service mode.

- COPIER >Option >FNC-SW >CDS-UGW

Specify "Set" for the following settings.

- [Firmware Distribution] on the [Customer Management] screen of the UGW WebPortal settings

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.

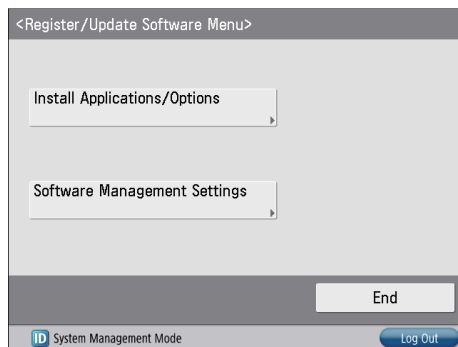
■ Enabling [Update Firmware] Button

To allow users to install firmware using Updater, the setting of firmware installation should be set to ON for users in advance.

Set "1" in the following service mode.

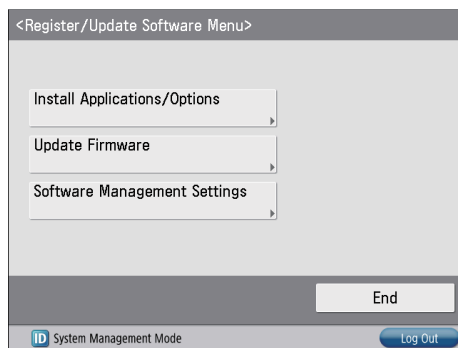
- COPIER >Option >FNC-SW > CDS-FIRM

- [Settings/Registration] screen for Updater when the setting is not enabled (CDS-FIRM(0)):



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- [Settings/Registration] screen for Updater when the setting is enabled (CDS-FIRM(1)):



F-2-199

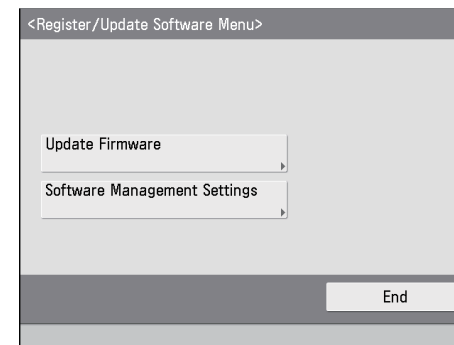
■ Enabling [Install Application/Options] Button

To allow users to install applications using Updater, the setting of application installation should be set to ON for users in advance.

Set "1" in the following service mode.

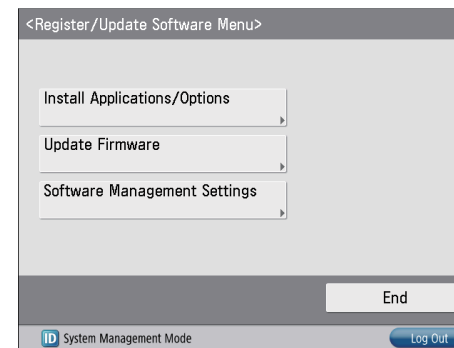
- COPIER >Option >FNC-SW >CDS-MEAP

- [Settings/Registration] screen of Updater when the setting is not enabled (CDS-MEAP(0)):



F-2-200

- [Settings/Registration] screen of Updater when the setting is enabled (CDS-MEAP(1)):



F-2-201

■ Enabling [Manual Update] Button of 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.

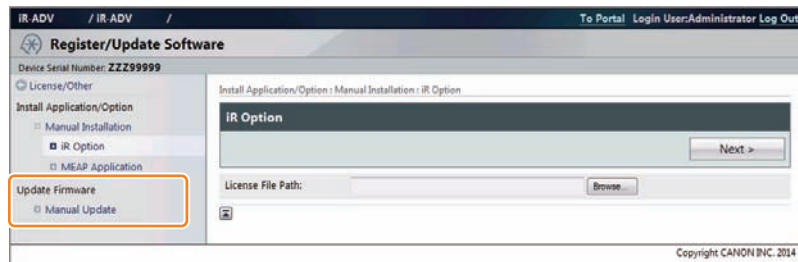
Set "1" in the following service mode.

- COPIER >Option >FNC-SW >LOCLFIRM
- Remote UI screen of Updater when the setting is not enabled (LOCLFIRM (0)):



F-2-202

- Remote UI screen of Updater when the setting is enabled (LOCLFIRM (1)):

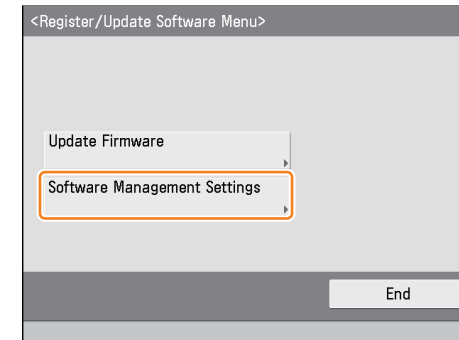


F-2-203

● System Management Operations

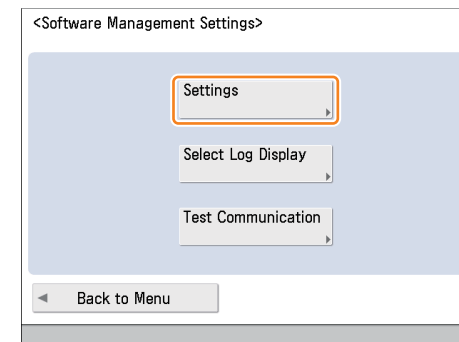
■ Setting Log Level

- 1) Press [Updater] in the service mode menu.
- 2) Press [Software Management Settings] button.



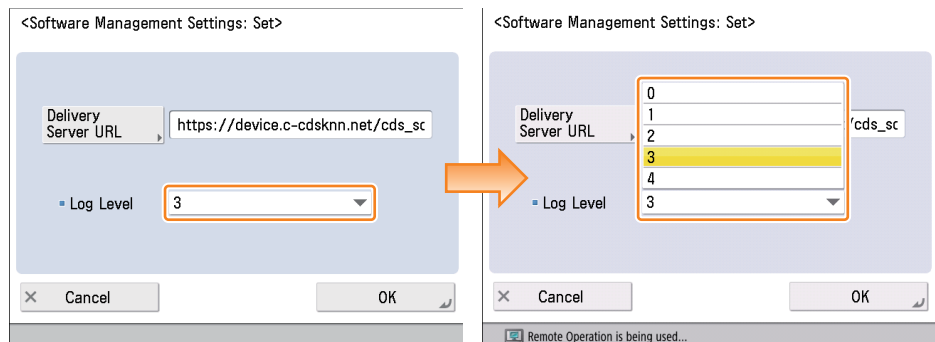
F-2-204

- 3) Press [Settings] button.



F-2-205

4) Select a log level from [Log Level] dropdown list.



F-2-206

[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

T-2-105

NOTE:

This list shows the contents of the Log Output.

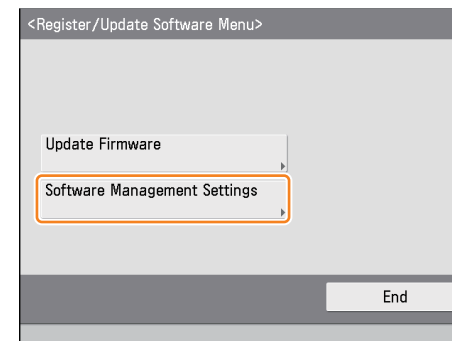
Log Output	Description
Trace	Detailed logs for debug
Information	Logs related to operations done on the system
Important Message	Update logs output by firmware type Installation logs by MEAP application Logs related to enabled functions by system option
Ordinary Error	Logs for ordinary errors
System Error	Logs for internal system errors

5) Press [OK] button to set the selected log level. Now the log level is successfully set.

■ Displaying Logs

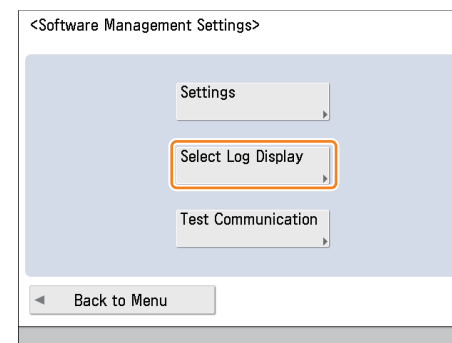
● Update Logs

- 1) Press [Updater] in the service mode menu.
- 2) Press [Software Management Settings] button.



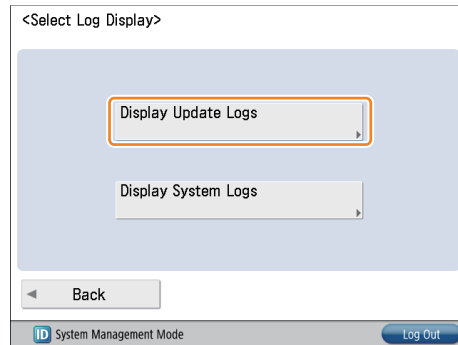
F-2-207

- 3) Press [Select Log Display] button.



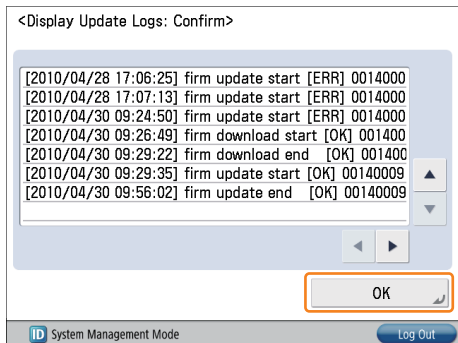
F-2-208

4) Press [Display Update Logs] button.



F-2-209

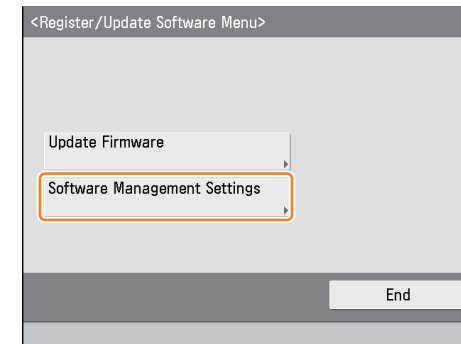
5) System Option/MEAP Application Installation Logs and Firmware Update Logs are shown.
Press [OK] button to exit this operation.



F-2-210

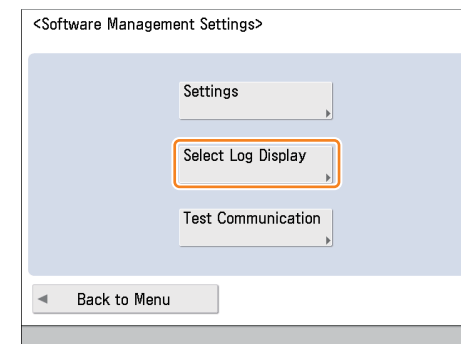
System Logs

- 1) Press [Updater] in the service mode menu.
- 2) Press [Software Management Settings] button.



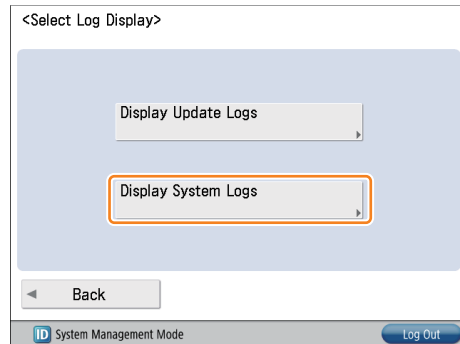
F-2-211

3) Press [Select Log Display] button.



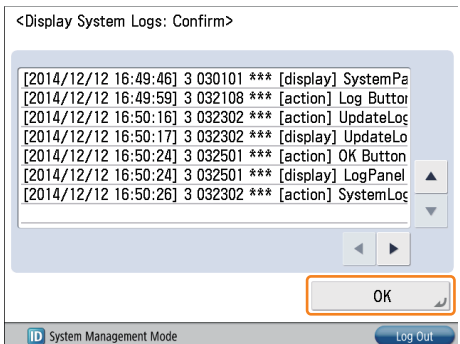
F-2-212

4) Press [Display System Logs] button.



F-2-213

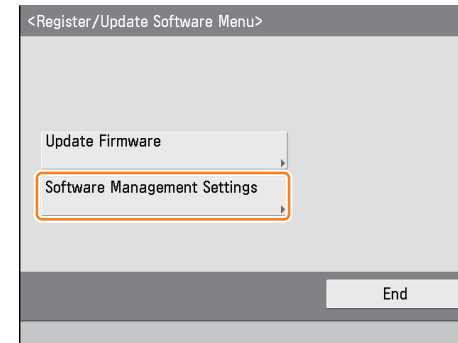
5) Updater internal logs are displayed.
Press [OK] button to exit this operation



F-2-214

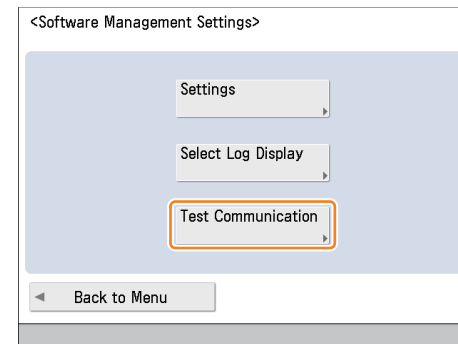
Communication Test

- 1) Press [Updater] in the service mode menu.
- 2) Press [Software Management Settings] button.



F-2-215

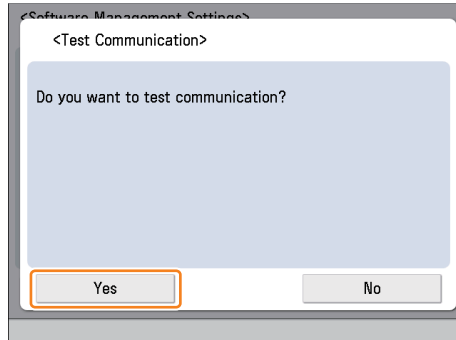
3) Press [Test Communication] button.



F-2-216

NOTE:
See the section of "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" for more detailed information.

4) Press [Yes] button.

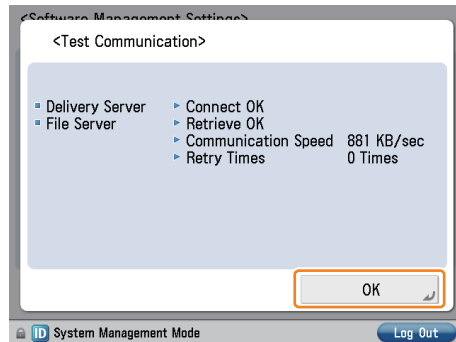


F-2-217

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).

5) Upon the communication test completed, the communication test result screen is shown. Press [OK] button to exit this operation.



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NOTE:

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" for more detailed information. Setting information and logs (update logs/system logs) are carried over.

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 Chapter 6 Troubleshooting > Backup/ Restore.

The settings initialized in format or replacement should be restored. See the section of "Preparation" for more detailed information.

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

- Main Controller Board PCB

Since the network and service mode settings return to their default values, it is necessary to specify them again.

See the section of "Preparation" for more detailed information.

How to Replace Devices

All settings should be set again because no data are inherited. See the section of "Preparation" for more detailed information.



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 [Settings/Registration] screen, 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 this 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 the section of "Troubleshooting on Firmware Installation" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual for more detailed information.

No.8

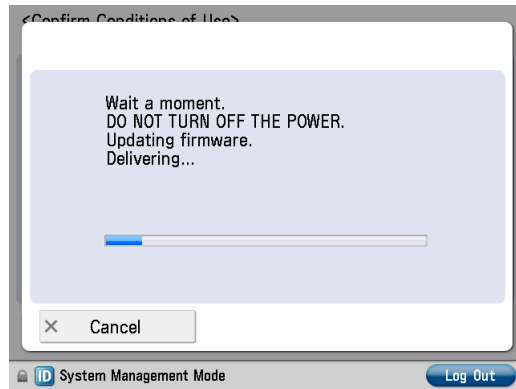
Q: If this device is down during firmware download, is it possible to download the firmware again?

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 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

Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button	Enabling [Manual Update] Button of Remote UI
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

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- For install Application

Installation Method	Network Settings	Enabling [Install Application/Options] Button
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.

DCM



Overview

DCM (Device Configuration Management) is a function to migrate the device settings information (e.g.: Settings/Registration Basic Information and Service Mode Settings). In terms of the description in the User's Guide, it is synonymous with "Import/Export All". Service mode setting values can be exported from the screen of service mode.

While the existing method supported only the case of backing up setting values for the same machine, DCM now supports the following 3 cases:

- 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)

Method of Import/Export

The following shows the methods to import/export DCM files.

- Import/Export (Remote UI/ touch panel display) by "Settings/ Registration".
- Import/Export by service mode
- Import/Export using imageWARE Enterprise Management Console DCM Plug-in

Store the backup data in the following location.

- Export by "Settings/ Registration" > PC(Remote UI/ USB device (Touch panel display)
- Export by service mode > USB device/internal HDD

Even if data has been exported by one method, it can be exported by another one.
(E.g.: Data which was exported by remote UI can be imported by service mode)

For details of imageWARE Enterprise Management Console DCM Plug-in, refer to the e-Manual of imageWARE Enterprise Management Console DCM Plug-in.

Items to be Exported

The following shows the items to be exported.

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

	Export by remote UI	Touch panel display	Export by service mode
Settings/Registration Basic Information	Yes	Yes	-
Paper Type Management Settings	Yes	Yes	-
Forwarding Settings	Yes	Yes	-
Box Settings	Yes	Yes	-
Department ID Management Settings	Yes	Yes	-
Key Settings	Yes	Yes	-
Certificate/Certificate Revocation List (CRL) Settings	Yes	Yes	-
Main Menu Settings	Yes	Yes	-
Favorite Settings	Yes	Yes	-
Address Book	Yes	Yes	-
Authentication User Management	Yes	Yes	-
Personal Setting Information	Yes	Yes	-
Quick Menu Settings	Yes	Yes	-
MEAP Application Setting Information	Yes	Yes	-
Web Access Settings	Yes	Yes	-
Workflow Composer Settings	Yes	Yes	-
Service Mode Settings	Yes *	Yes *	Yes

* Not exported by default in the case of export by remote UI

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For items to be imported, refer to "List of items which can be imported".

Note:

If "User Setting Information" exported from an existing device is imported to this device, it is imported as Personal Setting Information".

Also, if "User Access Control for the Advanced Space" exported from an existing device is imported to this device, it is imported as "Authentication User Management".

■ Limitations on DCM General

- With DCM, stored data in Box, 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 oldest file are deleted.
- After importing a file, the machine must be restarted. If executing import without restart, NG is displayed and a file is not imported. This operation is not guaranteed.
- When importing DCM file including "Service Mode Settings" and "Settings/Registration Basic Information" separately, perform it in the following procedures.
 - 1) Perform the import of the DCM file including "Service Mode Settings" earlier
 - 2) Restart the host machine
 - 3) Import the DCM file including "Settings/Registration Basic Information"
- As include "Service Mode Settings", 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.
- DCM files to which no password is set when exporting by service mode cannot be loaded from collective import by remote UI. When assuming to perform collective import by remote UI, password must be set to data to be exported.
- Following limitations are applied to password for DCM file.
 - 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 export by service mode)
 - No space is allowed in the middle of a password
 - Password is case sensitive
- At the time of following setting, host machine does not recognize USB device. The DCM function is not usable, too.

[Settings/Registration] > [Preferences] > [External Interface] > [USB Settings] > [Use MEAP Driver for External USB Device] = "On"

● Limitations about Import/Export by "Settings/ Registration"

■ Overview

Changing the value of a related service mode item can include items of "Service Mode Settings" in a DCM file that is to be exported by "Settings/ Registration".

A DCM file exported by "Settings/ Registration" can also be imported by service mode without using remote UI.

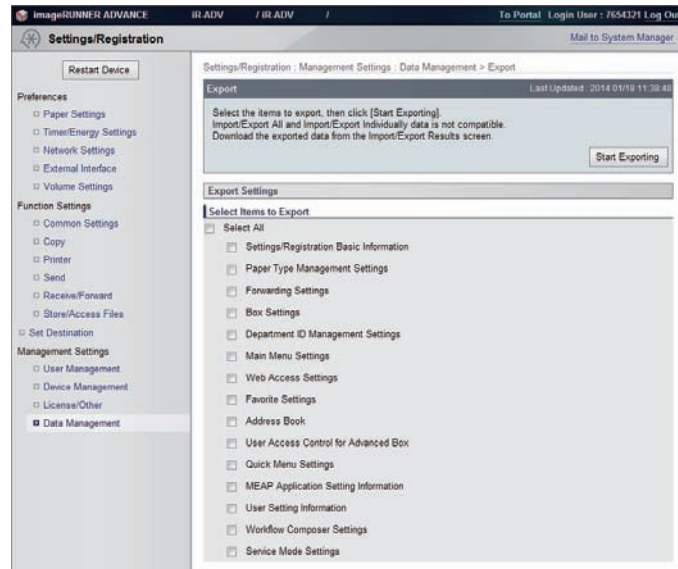
For details of import/export by remote UI, refer to the this machine's e-Manual.

■ Limitation

- 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 restart after import. So it requires careful operation.
- A device rejects an import/ export request during shutdown.
- If this function is executed with device information distribution or remote UI import/ export (Individually) 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 restart.
- When error code is issued, this function ends with error.
- If the display language before import differs from that after 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.

Overall flow

- 1) Complete the device setting as a reference machine.
2. Set "1" in the following service mode to display "Service Mode Settings".
 - Copier > Option > USER > SMD-EXPT
 - [0]: Hide the "Service Mode Settings" (Def.)
 - [1]: Display the "Service Mode Settings"
- 3) Export including "Service Mode Settings" from remote UI / touch panel display.



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- 4) Copy the DCM file to the root folder of the USB device using a PC.
- 5) Connect the USB device to the copy destination machine.
- 6) Execute import by specifying the target files from [RESTORE] in service mode. (Refer to "Import Procedure" of "Import/Export by Service Mode (External)")

Import/Export by Service Mode (External)

Import/export by service mode allows the selection between USB device and internal HDD for the save destination of DCM files.

The procedure of import/export when USB device is selected is shown below.

The DCM files to be exported contain only the items of "Service Mode Settings"

The DCM files to be imported can have been exported either by service mode or by "Settings/registration."

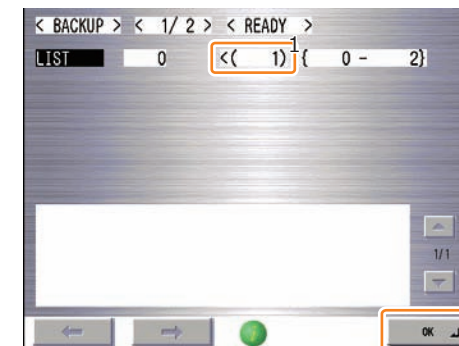
Export Procedure

- 1) Connect the USB device.
- 2) Log in to service mode and press [BACKUP].



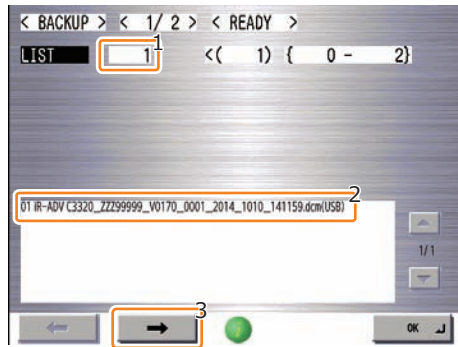
F-2-221

- 3) Select [LIST], and enter "1" and press [OK].



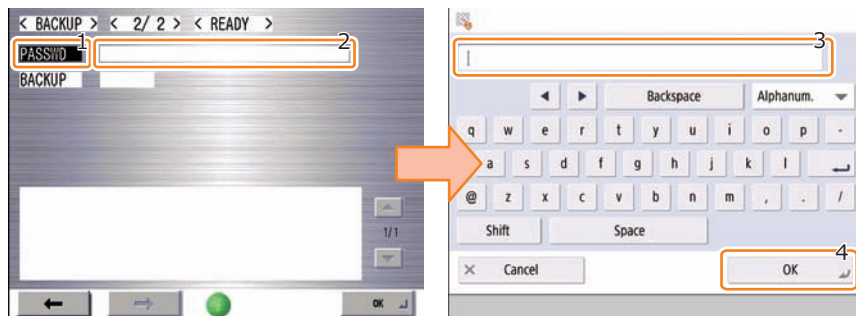
F-2-222

4) The names of DCM files saved in USB device are displayed. Press [->].



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5) Select [PASSWD], enter a password.



F-2-224

Note:

Limitations regarding the password

- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered
- No space is allowed in the middle of a password
- Password is case sensitive

Limitations regarding the DCM file no password

DCM files exported without password can only be imported by service mode. They cannot be imported by #Settings/ Registration.

6) Select [BACKUP]. Press [OK] to execute export.



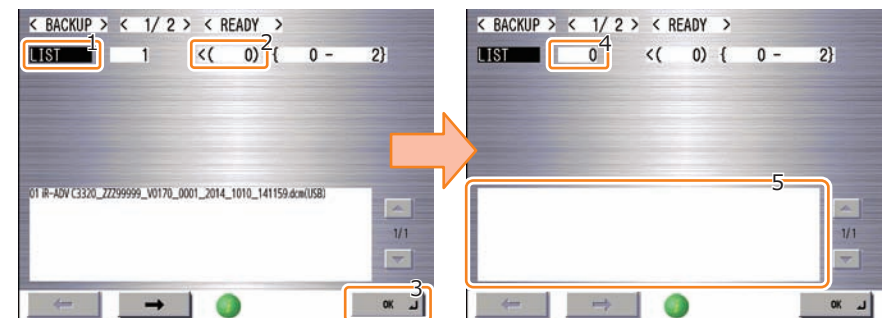
F-2-225

7) "OK!" is displayed in the status column when the processing is successfully completed. Press [->].



F-2-226

8) Select [LIST], enter "0" and press [OK].



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Note:

The specification of the name of the exported file is shown below.

iR-ADV CXXXX_ZZZ99999_V0170_0001_YYYY_MMDD_HHMMSS.dcm

Model name

Serial Number

Export YYYY_MMDD_HHMMSS

Main Controller firm ware version

DCM Job management number

DCM file format

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Import Procedure

Note:

- 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 device
- Do not change the extension from ".dcm" (only ".dcm" files can be recognized)
- It is desirable to connect the USB device before entering service mode

1) Connect the USB device.

2) Log in to service mode and press [RESTORE].



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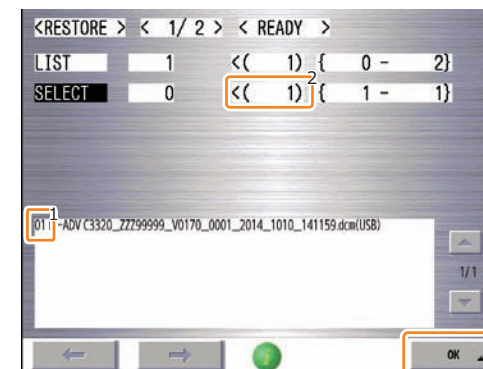
3) Select [LIST], enter "1" and press [OK].



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4) The DCM file saved on the USB device is displayed.

Select [SELECT], enter the number displayed on the left side of the file name to select, and press [OK].



F-2-231

Note:

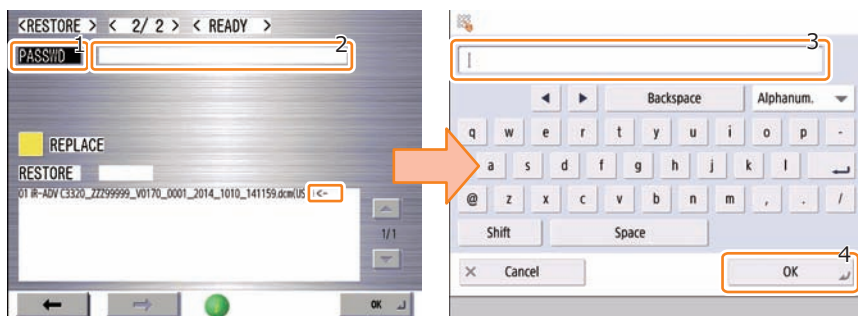
Up to 8 DCM files are displayed in one screen. It is necessary to switch screens when there are more than 8 files.

5) Confirm that "*" is displayed on the right side of the selected file, and press [->].



F-2-232

6) Select [PASSWD], enter the password, and press [OK].



F-2-233

Note:

"<" 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.

Note:

You can select [REPLACE] to import a file exported from another machine as a file exported from this machine.

The following items are imported.

- Preferences > Network > TCP/IP Settings > IPv4 Settings > IP Address Settings > IP Address
- Preferences > Network > TCP/IP Settings > IPv6 Settings > Manual Address Settings
- Preferences > Network > TCP/IP Settings > DNS Settings > DNS Host/Domain Name Settings
- Preferences > Network > AppleTalk Settings
- Function Settings > Send > E-Mail/I-Fax Settings > Communication Settings > E-Mail Address
- Function Settings > Send > E-Mail/I-Fax Settings > Communication Settings > POP Login Name
- Function Settings > Send > E-Mail/I-Fax Settings > Communication Settings > POP Pssword
- Function Settings > Send > Fax Settings > Set Line > Line n > Register Unit Telephone Number
- Function Settings > Send > Fax Settings > Set Line > Line n > Register Unit Telephone Number > ISDN Subaddress
- Function Settings > Send > Fax Settings > Set Line > Register Unit Name
- Management Settings > Device Management > Device Information Settings

7) Select [RESTORE] and press [OK] to execute the import process.



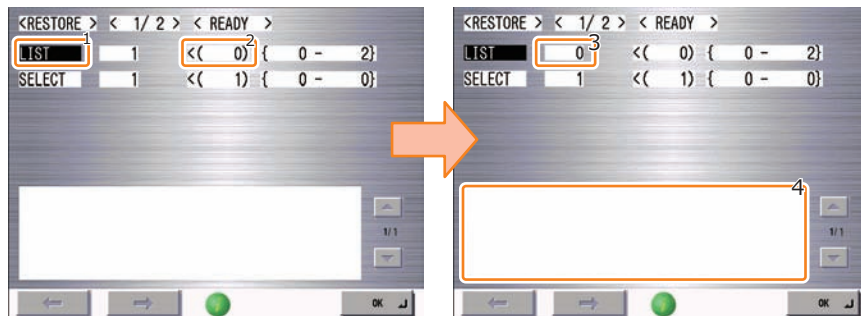
F-2-234

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



F-2-235

- 9) Select [LIST], enter "0" and press [OK].



F-2-236

Note:
Make sure to restart the device after importing a file.

Import/Export by Service Mode (Internal)

Import/export by service mode allows the selection between USB device and internal HDD for the save destination of DCM files.

The procedure of import/export when internal HDD is selected is shown below.

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 PCBs. Be sure to perform backup of DCON/ RCON in service mode
- Maximum of 2 files can be saved in the host machine's HDD

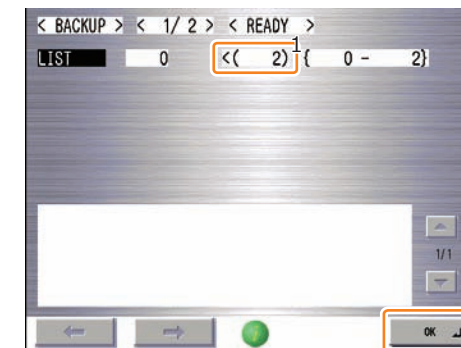
Export Procedure

- 1) Log in to service mode and press [BACKUP].



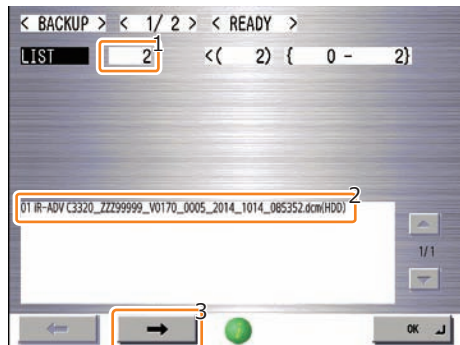
F-2-237

- 2) Select [LIST], enter "2" and press [OK].



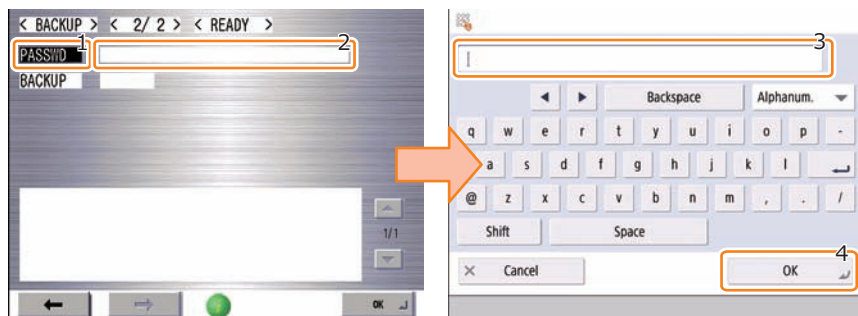
F-2-238

3) The names of DCM files saved in internal HDD are displayed. Press [->].



F-2-239

4) Select [PASSWD], enter a password from the software keyboard, and then press [OK].



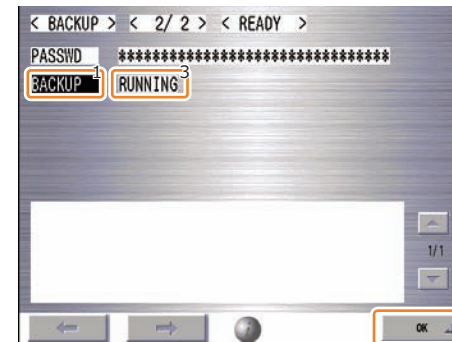
F-2-240

Note:

Limitations regarding the password

- Character string of software keyboard: 0 to 32 characters
- No password is set when 0 character is entered
- No space is allowed in the middle of a password
- Password is case sensitive

5) Select [BACKUP] and press [OK] to execute the export process.



F-2-241

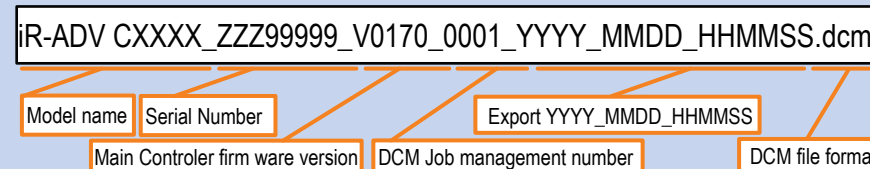
6) When [OK!] is displayed in the status column upon completion, press [->].



F-2-242

Note:

The specification of the name of the exported file is shown below.



F-2-243

Import Procedure

1) Log in to service mode and press [RESTORE].



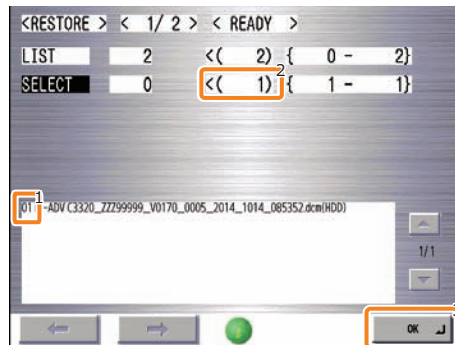
F-2-244

2) Select [LIST], enter "2" and press [OK].



F-2-245

3) When the settings are reflected, the DCM file saved on the hard disk of the device is displayed. Select [SELECT], enter the number displayed on the left side of the file name to select, and press [OK].



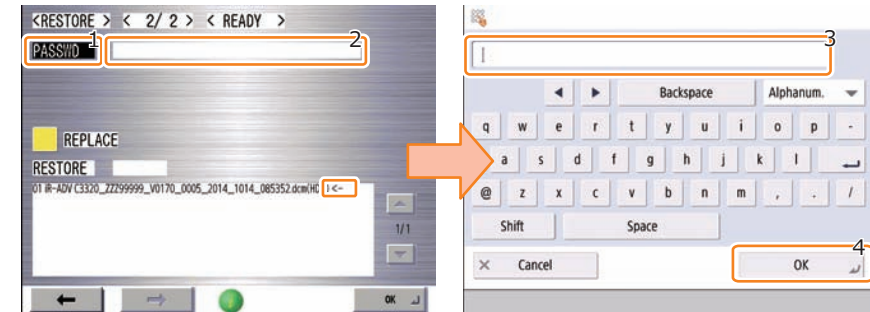
F-2-246

4) Confirm that "*" is displayed on the right side of the selected file, and press [->].



F-2-247

5) Select [PASSWD], enter a password, and then press [OK].

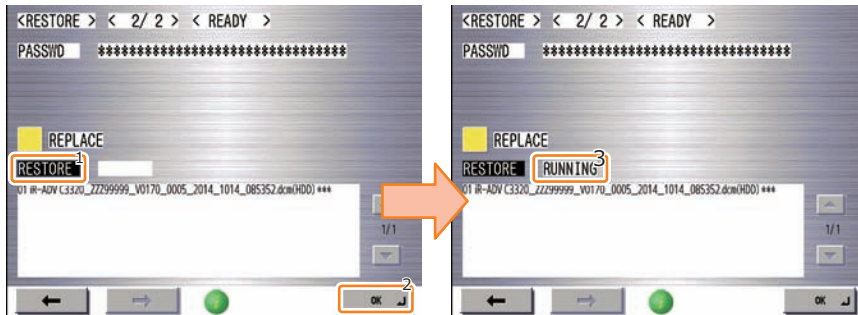


F-2-248

Note:

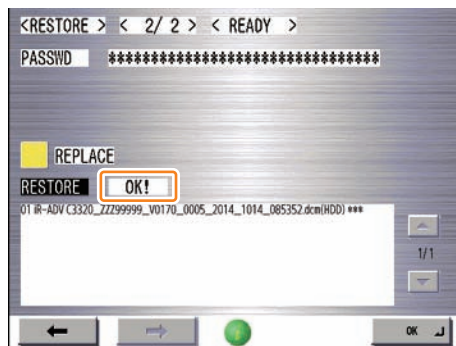
- "<" is displayed on the right side of the file to indicate that the selection of the file has been confirmed.
- "****" is displayed after the password is entered.
- You can select [REPLACE] to import a file exported from another machine as a file exported from this machine. The target items for importing are changed. (Refer to "List of items which can be imported")

6) After selecting [RESTORE], press [OK] to execute import.



F-2-249

7) "OK!" is displayed in the status column when the processing is successfully completed.



F-2-250

Note:
Make sure to restart the device after importing a file.

List of items which can be imported

The following shows the items to be imported for this model.

Note that the setting values are not imported in cases such as below:

- Items which are originally not included in a DCM file (E.g.: "Settings/Registration Basic Information" of a DCM file exported by service mode)
- Items not defined in the target import range (below cases A through C)
- The options and functions related to the setting values do not exist

The following cases may be possible for the Import function.

	Target import range	Description
Case A	The same machine	Import to the same machine (on the assumption of backup and restoration)
Case B	The same model	Import to a different machine of the same model (the same series)
Case C	Different model	Import to a different machine of a different model (a different series)

T-2-110

Settings/Registration Basic Information

Setting Information	Case		
	A	B	C
Preferences			
Paper Settings			
Paper Settings	✓	✓	-
Paper Size Group for Auto Recog. in Drawer	✓	✓	-
A5R/STMTR Paper Selection	✓	✓	-
Register Favorite Paper (Multi-Purpose Tray)	✓	✓	✓
Multi-Purpose Tray Defaults	✓	✓	✓
Register Custom Size	✓	✓	-
Display Settings			
Default Screen after Startup/Restoration	✓	✓	✓
Default Screen (Status Monitor/Cancel)	✓	✓	✓
Display Fax Function	✓	✓	✓
Store Location Display Settings	✓	✓	✓
Switch Language/Keyboard	✓	✓	✓
Use Keyboard Shift Lock Feature	✓	✓	✓
Display Remaining Paper Message	✓	✓	✓
No. of Copies/Job Duration Status	✓	✓	✓
Notify to Clean Original Scanning Area	✓	✓	✓
Paper Type Selection Screen Priority	✓	✓	✓
Switch Millimeter/Inch Entry	✓	✓	✓
ID/User Name Display On/Off	✓	✓	✓
Display Remaining Toner Error Message	✓	✓	✓
IP Address Display Settings	✓	✓	✓

Setting Information		Case A	Case B	Case C
Preferences				
Timer/Energy Settings				
Date/Time Settings		✓	✓	✓
Time Format		✓	✓	✓
Quick Startup Settings for Main Power		✓	✓	✓
Auto Reset Time		✓	✓	✓
Restrict Auto Reset Time		✓	✓	✓
Function After Auto Reset		✓	✓	✓
Auto Shutdown Time		✓	✓	✓
Auto Shutdown Weekly Timer		✓	✓	✓
Auto Sleep Time		✓	✓	✓
Sleep Mode Energy Use		✓	✓	✓
Auto Sleep Weekly Timer		✓	✓	✓
Sleep Mode Exit Time Settings		✓	✓	✓
Network				
Confirm Network Connection Set. Changes		✓	✓	✓
TCP/IP Settings		✓	✓	✓
IPv4 Settings				
Use IPv4		✓	✓	✓
IP Address Settings				
IP Address		✓	-	-
Subnet Mask		✓	✓	✓
Gateway Address		✓	✓	✓
DHCP		✓	✓	✓
Auto IP		✓	✓	✓
DHCP Option Settings		✓	✓	✓
IPv6 Settings				
Use IPv6		✓	✓	✓
Stateless Address Settings		✓	✓	✓
Manual Address Settings		✓	-	-
Use DHCPv6		✓	✓	✓
Only Retrieve Stateful Address Prefix		✓	✓	✓
DNS Settings				
DNS Server Address Settings		✓	✓	✓
DNS Host/Domain Name Settings		✓	-	-
DNS Dynamic Update Settings		✓	✓	✓
mDNS SettingsUse mDNS/mDNS Name		✓	✓	✓
Computer Name/Workgroup Name Settings		✓	-	-
WINS Settings		✓	✓	✓
LPD Print Settings		✓	✓	✓
RAW Print Settings		✓	✓	✓
SNTP Settings		✓	✓	✓
FTP Print Settings		✓	✓	✓

Setting Information		Case A	Case B	Case C
Preferences				
Network				
TCP/IP Settings				
Use UTF-8 to Display Name of FTP Print Job		✓	✓	✓
WSD Settings		✓	✓	✓
Use FTP PASV Mode		✓	✓	✓
IPP Print Settings		✓	✓	✓
Multicast Discovery Settings		✓	✓	✓
Use HTTP		✓	✓	✓
Proxy Settings		✓	✓	✓
Confirm Dept. ID PIN		✓	✓	✓
IPSec Settings		✓	✓	✓
AppleTalk Settings		✓	-	-
SNMP Settings		✓	✓	✓
Format Host Resources MIB to RFC2790		✓	✓	✓
Dedicated Port Settings		✓	✓	✓
Use Spool Function		✓	✓	✓
Waiting Time for Connection at Startup		✓	✓	✓
Ethernet Driver Settings		✓	✓	✓
IEEE 802.1X Settings		✓	✓	✓
Firewall Settings		✓	✓	✓
External Interface				
USB Settings		✓	✓	✓
Accessibility				
Key Repetition Settings		✓	✓	✓
Reversed Display (Color)		✓	✓	✓
Adjustment/Maintenance				
Adjust Image Quality				
Correct Density		✓	✓	✓
Full Color Printing Vividness Settings		✓	-	-
Fine Adjust Zoom		✓	-	-
Adjust Toner Volume Used for Color Printing		✓	-	-
Fill Area Image Adjustment Mode		✓	✓	-
Adjust Action				
Time Until Stapling Starts in Stapler Mode		✓	✓	✓
Function Settings				
Common				
Paper Feed Settings				
Paper Drawer Auto Selection On/Off		✓	✓	-
Feed Method Switch		✓	✓	-
Suspended Job Timeout		✓	✓	✓

Setting Information	Case A	Case B	Case C
Function Settings			
Common			
Paper Output Settings			
Output Tray Settings*	✓	-	-
Use Optional Output Tray	✓	-	-
Offset Jobs	✓	✓	✓
Job Separator Between Jobs	✓	✓	✓
Job Separator Between Copies	✓	✓	✓
Print Settings			
Print Priority	✓	✓	✓
Text/Photo Prty. When Recog as B&W by ACS	✓	✓	✓
Output Report Default Settings	✓	✓	✓
Register Characters for Page No./Watermark	✓	✓	✓
Copy Set Numbering Option Settings	✓	✓	-
Secure Watermark/Document Scan Lock			
Forced Secure Watermark/Document Scan Lock	✓	✓	✓
Printer Driver Secure Watermark	✓	✓	✓
Adjust Background/Character Contrast			
Relative Contrast	✓	✓	✓
Standard Value Set.	✓	✓	✓
Latent Area Density	✓	✓	✓
Adjust TL Code			
Dot Size	✓	✓	✓
Dot Density	✓	✓	✓
Scan Settings			
Feeder Jam Recovery Method	✓	✓	-
Scanner Noise Settings	✓	✓	-
LTRR/STMT Original Selection	✓	✓	-
Remote Scan Gamma Value	✓	✓	-
Auto Online	✓	✓	✓
Auto Offline	✓	✓	✓
Generate File			
Image Quality Level for Compact	✓	✓	✓
OCR (Text Searchable) Settings	✓	✓	✓
Trace & Smooth Settings	✓	✓	-
OOXML Settings	✓	✓	✓
Include Background Images in Word File	✓	✓	✓
Specify Minimum PDF Version	✓	✓	✓
Format PDF to PDF/A	✓	✓	✓
Optimize PDF for Web	✓	✓	✓
256-bit AES Settings for Encrypted PDF	✓	✓	✓
Document Scan Lock Operational Settings	✓	✓	✓
Set Authentication Method	✓	✓	✓

Setting Information	Case A	Case B	Case C
Function Settings			
Copy			
Auto Collate	✓	✓	-
Auto Recognize Original Orientation	✓	✓	✓
Select Color Settings for Copy	✓	✓	✓
Send			
Common Settings	✓	✓	✓
E-Mail/I-Fax Settings			
Register Unit Name	✓	✓	✓
Communication Settings			
E-Mail Address	✓	-	-
SMTP Server	✓	✓	✓
POP Server	✓	✓	✓
POP Login Name	✓	-	-
POP Password	✓	-	-
POP Interval	✓	✓	✓
Allow SSL	✓	✓	✓
Authentication Settings	✓	✓	✓
Confirm SSL Certificate for SMTP TX	✓	✓	✓
Confirm SSL Certificate for POP RX	✓	✓	✓
Maximum Data Size for Sending	✓	✓	✓
Default Subject	✓	✓	✓
Specify Authentication User Dest. to Reply	✓	✓	✓
Set Authentication User Destination to Sender	✓	✓	✓
Allow Unregistered Users to Send E-Mail	✓	✓	✓
Full Mode TX Timeout	✓	✓	✓
Print MDN/DSN upon Receipt	✓	✓	✓
Use Send via Server	✓	✓	✓
Allow MDN Not via Server	✓	✓	✓
Restrict TX Destination Domain	✓	✓	✓
Auto Complete for Entering E-Mail Addresses	✓	✓	✓
Fax Settings			
Default Screen	✓	✓	✓
Change Default Settings	✓	✓	✓
Register Options Shortcuts	✓	✓	✓
Register Sender Name (TTI)	✓	✓	✓
Use Auth. User Name as Sender Name	✓	✓	✓
ECM TX	✓	✓	✓
Set Pause Time	✓	✓	✓
Auto Redial	✓	✓	✓
Check Dial Tone Before Sending	✓	✓	✓
Fax TX Report	✓	✓	✓
Fax Activity Report	✓	✓	✓

Setting Information		Case A	Case B	Case C
Function Settings				
Send				
Set Line				
Line 1 to Line 2				
Register Unit Telephone Number		✓	-	-
Register Unit Name		✓	-	-
Select Line Type		✓	✓	✓
Edit Line Name for Select Line Screen		✓	✓	✓
Default Address List When Selecting Line		✓	✓	✓
Select TX Line		✓	✓	✓
TX Start Speed		✓	✓	✓
R-Key Setting		✓	✓	✓
Confirm Entered Fax Number		✓	✓	✓
Allow Fax Driver TX		✓	✓	✓
Confirm Before Sending When Fax Dest. Incl.		✓	✓	✓
Restrict Seq. Broadcast When Fax Dest. Incl.		✓	✓	✓
Remote Fax TX Settings		✓	✓	✓
Receive/Forward				
Common Settings				
Print on Both Sides		✓	✓	✓
Select Drawer		✓	✓	✓
Reduce Fax RX Size		✓	✓	✓
2 on 1 Log		✓	✓	✓
Print RX Page Footer		✓	✓	✓
Interrupt and Print RX Jobs		✓	✓	-
Handle Files with Forwarding Errors		✓	✓	✓
Set Fax/I-Fax Inbox		✓	✓	✓
Always Send Notice for RX Errors		✓	✓	✓
Fax Settings		✓	✓	✓
Store/Access Files				
Common Settings				
Limit Box PIN to 7 Digits/Restrict Access		✓	✓	✓
Mail Box Settings				
Box Security Settings		✓	✓	✓
Network Settings				
Memory Media Settings		✓	✓	✓
Secure Print				
Simple Authentication Settings		✓	✓	✓
Only Allow Encrypted Print Jobs		✓	✓	✓

Setting Information		Case A	Case B	Case C
Set Destination				
Change Default Display of Address Book		✓	✓	✓
Address Book PIN		✓	✓	✓
Manage Address Book Access Numbers		✓	✓	✓
Include Pswd. When Exporting Address Book		✓	✓	✓
Register LDAP Server		✓	✓	-
Auto Search When Using LDAP Server		✓	✓	✓
Register/Edit LDAP Search Conditions		✓	✓	-
Acquire Remote Address Book				
Acquire Address Book		✓	✓	✓
Remote Address Book Server Address		✓	✓	✓
Communication Timeout		✓	✓	✓
Fax TX Line Auto Select Adjustment		✓	✓	✓
Management Settings				
User Management				
Authentication Management		✓	✓	✓
Device Management				
Device Information Settings		✓	-	-
Device Information Distribution Settings				
Register Destinations		✓	✓	-
Set Auto Distribution		✓	✓	-
Restrict Receiving Device Information		✓	✓	✓
Restrict Receiving for Each Function		✓	✓	✓
Report Settings		✓	✓	✓
Set MEAP Authentication		✓	✓	✓
Use MEAP Auth. When Receive		✓	✓	✓
Display Job Status Before Authentication		✓	✓	✓
Restrict Access to Other User Jobs		✓	✓	✓
Display Job Log		✓	✓	✓
Save Audit Log		✓	✓	✓
Audit Log Collection*		✓	✓	-
Store Key Operation Log		✓	✓	✓
License/Other				
Message Board/Support Link		✓	✓	✓
Remote Operation Settings		✓	✓	✓
Use ACCESS MANAGEMENT SYSTEM		✓	✓	✓
Data Management				
Import/Export				
Restrict Import/Export from Web Service		✓	✓	✓
Back Up/Restore Settings*				
Backup Location Settings		✓	✓	✓
Auto Backup Settings		✓	✓	✓
Delete Existing Data Settings		✓	✓	✓

Setting Information		Case A	Case B	Case C
Management Settings				
Security Settings		✓	✓	✓

T-2-111

● Box Settings

Setting Information		Case A	Case B	Case C
Function Settings				
Receive/Forward				
Common Settings				
Set Fax/I-Fax Inbox				
Set/Register Confidential Fax Inboxes		✓	✓	✓
Memory RX Inbox PIN		✓	✓	✓
Store/Access Files				
Mail Box Settings				
Set/Register Mail Boxes		✓	✓	✓

T-2-112

● Department ID Management Settings

Setting Information		Case A	Case B	Case C
Management Settings				
User Management				
System Manager/Contact Person Information Settings		✓	✓	✓
Department ID Management				
Register PIN		✓	✓	✓

T-2-113

● Key Settings

Setting Information		Case A	Case B	Case C
Key Pair		✓	✓	✓
Key Pair (Device Certificate)		✓	✓	✓

T-2-114

- * Only algorithms that can be imported with the Remote UI are supported by batch importing.
- * The key pair is exported in the PKCS#12 format.

● Certificate/Certificate Revocation List (CRL) Settings

Setting Information		Case A	Case B	Case C
CA Certificate		✓	✓	✓
Certificate Revocation List (CRL)		✓	✓	✓

T-2-115

- * Only algorithms that can be imported with the Remote UI are supported by batch importing.
- * The key pair is exported in the PKCS#12 format.

● Main Menu Settings

Setting Information		Case A	Case B	Case C
Main Menu Settings				
Setting File		✓	✓	✓

T-2-116

● Favorite Settings

Setting Information		Case A	Case B	Case C
Function Settings				
Copy				
Register/Edit Favorite Settings		✓	✓	-
Change Default Settings		✓	✓	-
Register Options Shortcuts		✓	✓	-
Send				
Common Settings		✓	✓	✓
E-Mail/I-Fax Settings		✓	✓	✓
Fax Settings		✓	✓	✓
Store/Access Files				
Common Settings		✓	✓	-
Copy Basic Features Screen				
Color Balance (Options)		✓	✓	-
Access Stored Files				
Mail Box (Print)				
Color Balance (Options)		✓	✓	-

T-2-117

● Address Book

Setting Information		Case A	Case B	Case C
Set Destination				
Register Destinations		✓	✓	✓
Rename Address List		✓	✓	✓
Register One-Touch		✓	✓	✓

T-2-118

● Forwarding Settings

Setting Information	Case A	Case B	Case C
Function Settings			
Receive/Forward			
Common Settings	✓	✓	✓

T-2-119

* If an address registered in the Remote Address Book is specified as the forwarding destination, the forwarding destination information of that address is not imported. However, if the exporting machine and importing machine use the same Remote Address Book, the importing machine can use the same forwarding settings.

● Quick Menu Settings

Setting Information	Case A	Case B	Case C
Quick Menu Settings			
Button File	✓	✓	-

T-2-120

● iW Function Flow Settings

Setting Information	Case A	Case B	Case C
Flow Data File	✓	✓	✓
Operating Setting File	✓	✓	✓

T-2-121

* When the user management settings of an Advanced Space are imported, they are imported as authentication user management settings.

● Authentication User Management

Setting Information	Case A	Case B	Case C
Authentication Management	✓	✓	✓
User Management	✓	✓	✓
Role Management	✓	✓	✓
Group Management	✓	✓	✓
System Management Service	✓	✓	✓
Application Authentication Information	✓	✓	✓

T-2-122

* When the user management settings of an Advanced Space are imported, they are imported as authentication user management settings.

● Personal Setting Information

Setting Information	Case A	Case B	Case C
MEAP User Setting Information	✓	✓	✓
Password information used for encrypted PDF	✓	✓	-
User name and password information used for SMTP Authentication	✓	✓	-
User name and password used for LDAP server authentication	✓	✓	-
User name and password used for File TX/Browsing authentication	✓	✓	-
User name and password used for the Personal Folder authentication	✓	✓	-

T-2-123

● MEAP Application Setting Information

Setting Information	Case A	Case B	Case C
MEAP Application Setting Information			
Data	✓	✓	✓

T-2-124

● Paper Type Management Settings

Setting Information	Case A	Case B	Case C
Preferences			
Paper Settings			
Paper Type Management Settings	✓	✓	✓

T-2-125

● Web Access Settings

Setting Information	Case A	Case B	Case C
Web Access Settings			
Favorites	✓	✓	✓
Settings	✓	✓	✓

T-2-126

● Service Mode

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	ADJUST	ADJ-XY	ADJ-X	Yes	No	No
			ADJ-Y	Yes	No	No
			ADJ-S	Yes	No	No
			ADJ-Y-DF	Yes	No	No
			STRD-POS	Yes	No	No
			ADJ-X-MG	Yes	No	No
			BLANK	BLANK-T	Yes	No
		BLANK-L		Yes	No	No
		BLANK-R		Yes	No	No
		BLANK-B		Yes	No	No
		BLANK-B2		Yes	No	No
		CCD	W-PLT-X	Yes	No	No
			W-PLT-Y	Yes	No	No
			W-PLT-Z	Yes	No	No
			100-RG	Yes	No	No
			100-GB	Yes	No	No
			DFTAR-R	Yes	No	No
			DFTAR-G	Yes	No	No
		COLOR	ADJ-Y	Yes	No	No
			ADJ-M	Yes	No	No
			ADJ-C	Yes	No	No
			ADJ-K	Yes	No	No
			OFST-Y	Yes	No	No
			OFST-M	Yes	No	No
			OFST-C	Yes	No	No
			OFST-K	Yes	No	No
			LD-OFS-Y	Yes	No	No
			LD-OFS-M	Yes	No	No
			LD-OFS-C	Yes	No	No
			LD-OFS-K	Yes	No	No
			MD-OFS-Y	Yes	No	No
			MD-OFS-M	Yes	No	No
			MD-OFS-C	Yes	No	No
			MD-OFS-K	Yes	No	No
			HD-OFS-Y	Yes	No	No
			HD-OFS-M	Yes	No	No
			HD-OFS-C	Yes	No	No
			HD-OFS-K	Yes	No	No
		PL-OFS-Y	Yes	No	No	

Initial screen	Large	Middle	Small	Case A	Case B	Case C	
COPIER	ADJUST	COLOR	PL-OFS-M	Yes	No	No	
			PL-OFS-C	Yes	No	No	
			PL-OFS-K	Yes	No	No	
			PM-OFS-Y	Yes	No	No	
			PM-OFS-M	Yes	No	No	
			PM-OFS-C	Yes	No	No	
			PM-OFS-K	Yes	No	No	
			PH-OFS-Y	Yes	No	No	
			PH-OFS-M	Yes	No	No	
			PH-OFS-C	Yes	No	No	
			PH-OFS-K	Yes	No	No	
			CST-ADJ	MF-MAX	Yes	No	No
				MF-MIN	Yes	No	No
		DENS	SGNL-Y	Yes	No	No	
			SGNL-M	Yes	No	No	
			SGNL-C	Yes	No	No	
			REF-Y	Yes	No	No	
			REF-M	Yes	No	No	
			REF-C	Yes	No	No	
			SGNL-K	Yes	No	No	
			HLMT-PTY	Yes	No	No	
			HLMT-PTM	Yes	No	No	
			HLMT-PTC	Yes	No	No	
			LLMT-PTY	Yes	No	No	
			LLMT-PTM	Yes	No	No	
			LLMT-PTC	Yes	No	No	
			T-SPLY-Y	Yes	No	No	
			T-SPLY-M	Yes	No	No	
			T-SPLY-C	Yes	No	No	
			T-SPLY-K	Yes	No	No	
			DMAX-Y	Yes	No	No	
			DMAX-M	Yes	No	No	
			DMAX-C	Yes	No	No	
			P-TG-Y	Yes	No	No	
			P-TG-M	Yes	No	No	
			P-TG-C	Yes	No	No	
			P-TG-K	Yes	No	No	
			DMAX-K	Yes	No	No	
			HLMT-PTK	Yes	No	No	
			LLMT-PTK	Yes	No	No	

Initial screen	Large	Middle	Small	Case A	Case B	Case C	
COPIER	ADJUST	DENS	REF-K	Yes	No	No	
			CONT-Y	Yes	No	No	
			CONT-M	Yes	No	No	
			CONT-C	Yes	No	No	
			CONT-K	Yes	No	No	
			D-Y-LVL	Yes	No	No	
			D-M-LVL	Yes	No	No	
			D-C-LVL	Yes	No	No	
			D-K-LVL	Yes	No	No	
			PALPHA-F	Yes	No	No	
			PALPHA-R	Yes	No	No	
			EXP-LED	PR-EXP-Y	Yes	No	No
				PR-EXP-M	Yes	No	No
				PR-EXP-C	Yes	No	No
				PR-EXP-K	Yes	No	No
				PR-EXPY2	Yes	No	No
				PR-EXPM2	Yes	No	No
				PR-EXPC2	Yes	No	No
				PR-EXPK2	Yes	No	No
		INTEXP-Y		Yes	No	No	
		INTEXP-M		Yes	No	No	
		INTEXP-C		Yes	No	No	
		INTEXP-K		Yes	No	No	
		FEED-ADJ		REGIST	Yes	No	No
				ADJ-C1	Yes	No	No
			ADJ-C2	Yes	No	No	
			ADJ-C3	Yes	No	No	
			ADJ-C4	Yes	No	No	
			ADJ-MF	Yes	No	No	
			ADJ-C1RE	Yes	No	No	
			ADJ-C2RE	Yes	No	No	
			ADJ-C3RE	Yes	No	No	
			ADJ-C4RE	Yes	No	No	
			ADJ-MFRE	Yes	No	No	
			REG-THCK	Yes	No	No	
			REG-DUP1	Yes	No	No	
			REG-DUP2	Yes	No	No	
		LP-FEED1	Yes	No	No		
		LP-FEED2	Yes	No	No		
		LP-MULT1	Yes	No	No		

Initial screen	Large	Middle	Small	Case A	Case B	Case C	
COPIER	ADJUST	FEED-ADJ	LP-MULT2	Yes	No	No	
			LP-DUP1	Yes	No	No	
			LP-DUP2	Yes	No	No	
			REG-SPD	Yes	No	No	
			LP-FEED3	Yes	No	No	
			LP-DUP3	Yes	No	No	
			LP-MULT3	Yes	No	No	
			HV-TR	TR-PPR1	Yes	No	No
				TR-PPR2	Yes	No	No
				TR-PPR3	Yes	No	No
				TR-PPR4	Yes	No	No
		TR-PPR5		Yes	No	No	
		TR-PPR6		Yes	No	No	
		TR-PPR7		Yes	No	No	
		TR-PPR8		Yes	No	No	
		TR-ENV1		Yes	No	No	
		TR-ENV2		Yes	No	No	
		TR-ENV3		Yes	No	No	
		TR-ENV4		Yes	No	No	
		TR-ENV5		Yes	No	No	
		TR-ENV6		Yes	No	No	
		TR-ENV7		Yes	No	No	
		TR-ENV8		Yes	No	No	
		TR-DUP1		Yes	No	No	
		TR-DUP2		Yes	No	No	
		TR-DUP3		Yes	No	No	
		TR-DUP4		Yes	No	No	
		TR-DUP5		Yes	No	No	
		TR-DUP6		Yes	No	No	
		TR-DUP7		Yes	No	No	
		TR-DUP8		Yes	No	No	
		1TR-TGY		Yes	No	No	
		1TR-TGM		Yes	No	No	
		1TR-TGC		Yes	No	No	
		1TR-TGK1		Yes	No	No	
		2TR-OFF		Yes	No	No	
		1TR-TGY2		Yes	No	No	
		1TR-TGM2	Yes	No	No		
		1TR-TGC2	Yes	No	No		
		T2TR-LNG	Yes	No	No		

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	ADJUST	HV-TR	B2TR-LNG	Yes	No	No
			1ATVCTMG	Yes	No	No
			TR-PPR9	Yes	No	No
			TR-PPR10	Yes	No	No
			TR-PPR11	Yes	No	No
			TR-PPR12	Yes	No	No
			TR-PPR13	Yes	No	No
			TR-PPR14	Yes	No	No
			TR-PPR15	Yes	No	No
			TR-PPR16	Yes	No	No
			TR-ENV9	Yes	No	No
			TR-ENV10	Yes	No	No
			TR-ENV11	Yes	No	No
			TR-ENV12	Yes	No	No
			TR-ENV13	Yes	No	No
			TR-ENV14	Yes	No	No
			TR-ENV15	Yes	No	No
			TR-ENV16	Yes	No	No
			TR-DUP9	Yes	No	No
			TR-DUP10	Yes	No	No
			TR-DUP11	Yes	No	No
			TR-DUP12	Yes	No	No
			TR-DUP13	Yes	No	No
			TR-DUP14	Yes	No	No
			TR-DUP15	Yes	No	No
			TR-DUP16	Yes	No	No
			TR-VL1	Yes	No	No
			TR-VL2	Yes	No	No
			TR-VL3	Yes	No	No
			TR-VL4	Yes	No	No
			TR-VL5	Yes	No	No
			TR-VL6	Yes	No	No
			TR-VL7	Yes	No	No
			TR-VL8	Yes	No	No
			TR-VL9	Yes	No	No
			TR-VL10	Yes	No	No
			TR-VL11	Yes	No	No
			TR-VL12	Yes	No	No
			TR-VL13	Yes	No	No
			TR-VL14	Yes	No	No

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	ADJUST	HV-TR	TR-VL15	Yes	No	No
			TR-VL16	Yes	No	No
			1TR-TGK2	Yes	No	No
		IMG-REG	REG-H-Y	Yes	No	No
			REG-H-C	Yes	No	No
			REG-H-K	Yes	No	No
			REG-HS-Y	Yes	No	No
			REG-HS-C	Yes	No	No
			REG-HS-K	Yes	No	No
			REG-V-Y	Yes	No	No
			REG-V-C	Yes	No	No
			REG-V-K	Yes	No	No
			REG-H-M	Yes	No	No
			REG-V-M	Yes	No	No
			REG-HS-M	Yes	No	No
			MAG-H	Yes	No	No
			MAG-V	Yes	No	No
			DRM-SPD1	Yes	No	No
			LS-H-YL	Yes	No	No
			LS-H-YC	Yes	No	No
			LS-H-YR	Yes	No	No
			LS-H-ML	Yes	No	No
			LS-H-MC	Yes	No	No
			LS-H-MR	Yes	No	No
			LS-H-KL	Yes	No	No
			LS-H-KC	Yes	No	No
			LS-H-KR	Yes	No	No
			LS-V-YL	Yes	No	No
			LS-V-YC	Yes	No	No
			LS-V-YR	Yes	No	No
			LS-V-ML	Yes	No	No
			LS-V-MC	Yes	No	No
			LS-V-MR	Yes	No	No
			LS-V-KL	Yes	No	No
			LS-V-KC	Yes	No	No
			LS-V-KR	Yes	No	No
		SLOP-Y	Yes	No	No	
		MISC	SEG-ADJ	Yes	No	No
			K-ADJ	Yes	No	No
			ACS-ADJ	Yes	No	No

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	ADJUST	MISC	ACS-EN	Yes	No	No
			ACS-CNT	Yes	No	No
			ACS-EN2	Yes	No	No
			ACS-CNT2	Yes	No	No
			SH-ADJ	Yes	No	No
		PASCAL	OFST-P-Y	Yes	No	No
			OFST-P-M	Yes	No	No
			OFST-P-C	Yes	No	No
			OFST-P-K	Yes	No	No
		V-CONT	VCONT-Y	Yes	No	No
			VCONT-M	Yes	No	No
			VCONT-C	Yes	No	No
			VCONT-K	Yes	No	No
			VBACK-Y	Yes	No	No
			VBACK-M	Yes	No	No
			VBACK-C	Yes	No	No
			VBACK-K	Yes	No	No
			VBACK2-Y	Yes	No	No
			VBACK2-M	Yes	No	No
			VBACK2-C	Yes	No	No
	VBACK2-K		Yes	No	No	
	FUNCTION	INSTALL	E-RDS	Yes	Yes	Yes
			RGW-PORT	Yes	Yes	Yes
			RGW-ADR	Yes	Yes	Yes
			CDS-CTL	Yes	Yes	Yes
			BIT-SVC	Yes	Yes	Yes
	OPTION	CLEANING	OHP-PTH	Yes	No	No
			ITB-CL-L	Yes	No	No
			ITB-CL-T	Yes	No	No
		CUSTOM	TEMP-TBL	Yes	No	No
			SC-L-CNT	Yes	Yes	No
			ABK-TOOL	Yes	Yes	Yes
			DEV-SP1	Yes	No	No
			DEV-SP2	Yes	No	No
			DEV-SP3	Yes	No	No
			DEV-SP4	Yes	No	No
			DEV-SP5	Yes	No	No
			DEV-SP6	Yes	No	No
	DEV-SP7	Yes	No	No		
	DEV-SP8	Yes	No	No		

Initial screen	Large	Middle	Small	Case A	Case B	Case C	
COPIER	OPTION	CUSTOM	EXT-TBOX	Yes	No	No	
			DFEJCLED	Yes	No	No	
		DSPLY-SW	UI-COPY	Yes	Yes	Yes	
			UI-BOX	Yes	Yes	Yes	
			UI-SEND	Yes	Yes	Yes	
			UI-FAX	Yes	Yes	Yes	
			T-LW-LVL	Yes	No	No	
			NWERR-SW	Yes	Yes	Yes	
			FXMSG-SW	Yes	Yes	Yes	
			UI-PRINT	Yes	Yes	Yes	
			UI-RSCAN	Yes	Yes	Yes	
			UI-WEB	Yes	Yes	Yes	
			TNR-WARN	Yes	Yes	Yes	
			HPFL-DSP	Yes	Yes	Yes	
			RMT-CNSL	Yes	Yes	Yes	
			UI-SBOX	Yes	Yes	Yes	
			UI-MEM	Yes	Yes	Yes	
			UI-NAVI	Yes	Yes	Yes	
			ITB-DSP	Yes	Yes	No	
			UI-CUSTM	Yes	Yes	Yes	
			CLN-SEL	Yes	Yes	No	
			USER-DSP	Yes	Yes	Yes	
			SDTM-DSP	Yes	Yes	Yes	
			WT-WARN	Yes	Yes	Yes	
			DF-DSP	Yes	Yes	Yes	
			2TR-DSP	Yes	Yes	Yes	
			COM10-DL	Yes	Yes	No	
			LOCAL-SZ	Yes	Yes	No	
			ENV-SET	ENVP-INT	Yes	Yes	Yes
				AINR-TM	Yes	No	No
				INTRTMPL	Yes	No	No
				INTRTMPH	Yes	No	No
			FEED-SW	LES-CNDS	Yes	No	No
				EVL-SPD	Yes	No	No
				PINT-REG	Yes	No	No
		FNC-SW	EVL-FS	Yes	No	No	
			MODEL-SZ	Yes	No	No	
			SCANSLCT	Yes	No	No	
			DH-SW	Yes	No	No	
		SENS-CNF	Yes	No	No		

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	OPTION	FNC-SW	CONFIG	Yes	No	No
			W/SCNR	Yes	No	No
			ORG-LGL	Yes	Yes	No
			ORG-LTR	Yes	Yes	No
			ORG-LTRR	Yes	Yes	No
			ORG-LDR	Yes	Yes	No
			INTROT-2	Yes	No	No
			DMAX-SW	Yes	No	No
			MODELSZ2	Yes	No	No
			SVMD-ENT	Yes	Yes	Yes
			FXWRNLVL	Yes	No	No
			KSIZE-SW	Yes	Yes	No
			ORG-A4R	Yes	Yes	No
			PDF-RDCT	Yes	Yes	Yes
			SJB-UNW	Yes	Yes	Yes
			CARD-RNG	Yes	Yes	No
			ARCDT-SW	Yes	Yes	Yes
			SJOB-CL	Yes	Yes	Yes
			MIBCOUNT	Yes	Yes	Yes
			PSWD-SW	Yes	Yes	Yes
			SM-PSWD	Yes	Yes	Yes
			RPT2SIDE	Yes	Yes	Yes
			STND-PNL	Yes	Yes	No
			INVALPDL	Yes	Yes	No
			IMGCNTPR	Yes	Yes	No
			CDS-FIRM	Yes	Yes	Yes
			CDS-MEAP	Yes	Yes	Yes
			CDS-UGW	Yes	Yes	Yes
			LOCLFIRM	Yes	Yes	Yes
			MC-FANSW	Yes	Yes	Yes
			BXNUPLOG	Yes	Yes	Yes
			SDLMTWRN	Yes	Yes	Yes
			AUTO-OUT	Yes	No	No
			JLK-PWSC	Yes	Yes	Yes
			FAX-INT	Yes	Yes	Yes
			PDL-Z-LG	Yes	Yes	No
			CDS-LVUP	Yes	Yes	Yes
			AMSOFFSW	Yes	Yes	Yes
			UA-OFFSW	Yes	Yes	Yes
			MIB-NVTA	Yes	Yes	No

Initial screen	Large	Middle	Small	Case A	Case B	Case C			
COPIER	OPTION	FNC-SW	SVC-RUI	Yes	Yes	No			
			LCDSFLG	Yes	Yes	Yes			
			NO-LGOUT	Yes	Yes	Yes			
			T-DLV-BK	Yes	No	No			
			D-DLV-BK	Yes	No	No			
			D-DLV-CL	Yes	No	No			
			JM-ERR-D	Yes	No	No			
			JM-ERR-R	Yes	No	No			
			ASLPMAX	Yes	Yes	Yes			
			SEND-SPD	Yes	Yes	Yes			
			TNNEWQCK	Yes	No	No			
			2TR-TBLS	Yes	Yes	No			
			VER-CHNG	Yes	Yes	Yes			
			CST-MDL	Yes	No	No			
			INTR-TML	Yes	No	No			
			PREXP-SW	Yes	No	No			
			IMG-DEV			DRM-IDL	Yes	Yes	Yes
						AUTO-DH	Yes	No	No
						PCHINT-V	Yes	No	No
		DELV-THY				Yes	No	No	
		DELV-THC				Yes	No	No	
		DELV-THM				Yes	No	No	
		DELV-THK				Yes	No	No	
		ADJ-VPP				Yes	No	No	
		ADJ-BLNK				Yes	No	No	
		DMX-OF-Y				Yes	No	No	
		DMX-OF-M				Yes	No	No	
		DMX-OF-C				Yes	No	No	
		DMX-OF-K				Yes	No	No	
		ADJ-VPPN				Yes	No	No	
		IMG-FIX			TNNEWCNT	Yes	No	No	
					TNENDCNT	Yes	No	No	
					D-PTN	Yes	No	No	
					DELV-DNS	Yes	No	No	
					FX-S-TMP	Yes	No	No	
					TMP-TBL2	Yes	No	No	
					TMP-TBL3	Yes	No	No	
					TMP-TBL4	Yes	No	No	
		TMP-TBL5	Yes	No	No				
		TMP-TBL6	Yes	No	No				

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	OPTION	IMG-FIX	FXS-TMP2	Yes	No	No
			FXS-TMP3	Yes	No	No
			FXS-TMP4	Yes	No	No
			FXS-TMP5	Yes	No	No
			FXS-TMP6	Yes	No	No
			FXST2-N2	Yes	No	No
			FXST2-UH	Yes	No	No
			FLYING	Yes	No	No
			TMP-TBL7	Yes	No	No
			TMP-TBL8	Yes	No	No
			TMP-TBL9	Yes	No	No
			TMP-TB10	Yes	No	No
			FXS-TMP7	Yes	No	No
			FXS-TMP8	Yes	No	No
			FXS-TM10	Yes	No	No
			FIXMIXBD	Yes	Yes	No
			FXS-TMP9	Yes	No	No
			THIN-LP	Yes	No	No
			PRE-FXRL	Yes	No	No
			FX-WNKL	Yes	Yes	No
			TMP-TB12	Yes	No	No
			TMP-TB13	Yes	No	No
			TMP-TB11	Yes	No	No
			FXS-TM11	Yes	No	No
			PLN-LP	Yes	No	No
			TRC-LP	Yes	No	No
			FXS-TM12	Yes	No	No
			FXS-TM13	Yes	No	No
			FXS-TM14	Yes	No	No
			TMP-TB17	Yes	No	No
			FXS-TM15	Yes	No	No
			FXS-TM16	Yes	No	No
			FXS-TM17	Yes	No	No
			FXS-TM18	Yes	No	No
FXS-TM19	Yes	No	No			
TMP-TB18	Yes	No	No			
TMP-TB19	Yes	No	No			
TMP-TB20	Yes	No	No			
TMP-TB21	Yes	No	No			
TMP-TB22	Yes	No	No			

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	OPTION	IMG-FIX	FXS-TM20	Yes	No	No
			TMP-TB23	Yes	No	No
		IMG-MCON	PASCAL	Yes	No	No
			SCR-SLCT	Yes	Yes	No
			TMC-SLCT	Yes	No	No
			PRN-FLG	Yes	Yes	No
			SCN-FLG	Yes	Yes	No
			TNR-DWN	Yes	No	No
			TMIC-BK	Yes	Yes	No
			DH-MODE	Yes	No	No
			REDU-CNT	Yes	No	No
			VP-ART	Yes	No	No
			VP-TXT	Yes	No	No
			PASCL-TY	Yes	Yes	No
			AST-SEL	Yes	No	No
			PSCL-TBL	Yes	No	No
			BGE-OFS	Yes	No	No
			IMG-RDR	DFDST-L1	Yes	No
		DFDST-L2		Yes	No	No
		IMG-SPD	FX-D-TMP	Yes	No	No
			FIX-ROT	Yes	No	No
			ARC-INT1	Yes	No	No
		NETWORK	ARC-INT2	Yes	No	No
			RAW-DATA	Yes	Yes	Yes
			IFAX-LIM	Yes	Yes	Yes
			SMTPTXPN	Yes	Yes	Yes
			SMTPRXPN	Yes	Yes	Yes
			POP3PN	Yes	Yes	Yes
			FTPTXPN	Yes	Yes	Yes
			STS-PORT	Yes	Yes	Yes
			CMD-PORT	Yes	Yes	Yes
			NS-CMD5	Yes	Yes	Yes
			NS-GSAPI	Yes	Yes	Yes
			NS-NTLM	Yes	Yes	Yes
			NS-PLNWS	Yes	Yes	Yes
			NS-PLN	Yes	Yes	Yes
			NS-LGN	Yes	Yes	Yes
			MEAP-PN	Yes	Yes	Yes
		CHNG-ST5	Yes	Yes	Yes	
		CHNG-CMD	Yes	Yes	Yes	

Initial screen	Large	Middle	Small	Case A	Case B	Case C	
COPIER	OPTION	NETWORK	MEAP-SSL	Yes	Yes	Yes	
			LPD-PORT	Yes	Yes	Yes	
			WUEV-SW	Yes	Yes	Yes	
			WUEV-INT	Yes	Yes	Yes	
			WUEV-POT	Yes	Yes	Yes	
			WUEV-RTR	Yes	Yes	Yes	
			WUEN-LIV	Yes	Yes	Yes	
			IFX-CHIG	Yes	Yes	Yes	
			DNSTRANS	Yes	Yes	Yes	
			PROXYRES	Yes	Yes	Yes	
			WOLTRANS	Yes	Yes	Yes	
			802XTOUT	Yes	Yes	Yes	
			IKERETRY	Yes	Yes	Yes	
			NCONF-SW	Yes	Yes	Yes	
			IKEINTVL	Yes	Yes	Yes	
			IPSDEBLV	Yes	Yes	Yes	
			SP-LINK	Yes	Yes	Yes	
			AFS-JOB	Yes	Yes	Yes	
			AFC-EVNT	Yes	Yes	Yes	
			ILOGMODE	Yes	Yes	Yes	
			ILOGKEEP	Yes	Yes	Yes	
			IPTBROAD	Yes	Yes	Yes	
			PWFFTPRT	Yes	Yes	Yes	
			IPMTU	Yes	Yes	Yes	
			DDNSINTV	Yes	Yes	Yes	
			PRCLTYPE	Yes	Yes	Yes	
			VLAN-SW	Yes	Yes	Yes	
			VLAN-PKT	Yes	Yes	Yes	
			FTPMODE	Yes	Yes	Yes	
			SSLMODE	Yes	Yes	Yes	
			SSLSTRNG	Yes	Yes	Yes	
			ACC	COIN	Yes	No	No
				CARD-SW	Yes	No	No
		OUT-TRAY		Yes	No	No	
		CC-SPSW		Yes	No	No	
		UNIT-PRC		Yes	No	No	
		IN-TRAY		Yes	No	No	
		MIN-PRC		Yes	No	No	
		MAX-PRC		Yes	No	No	
		MIC-TUN	Yes	No	No		

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	OPTION	ACC	SRL-SPSW	Yes	No	No
			PDL-THR	Yes	No	No
			CR-TYPE	Yes	Yes	No
			MEAP-SRL	Yes	Yes	No
			CST	CST1-P1	Yes	Yes
		CST2-P1		Yes	Yes	No
		CST3-P1		Yes	Yes	No
		CST4-P1		Yes	Yes	No
		CST-K-SW		Yes	Yes	Yes
		C2-K-SW		Yes	Yes	Yes
		C3-K-SW		Yes	Yes	Yes
		C4-K-SW		Yes	Yes	Yes
		INT-FACE		NWCT-TM	Yes	No
		USER	COPY-LIM	Yes	Yes	No
			SLEEP	Yes	Yes	Yes
			SIZE-DET	Yes	No	No
			COUNTER2	Yes	Yes	Yes
			COUNTER3	Yes	Yes	Yes
			COUNTER4	Yes	Yes	Yes
			COUNTER5	Yes	Yes	Yes
			COUNTER6	Yes	Yes	Yes
			DATE-DSP	Yes	Yes	Yes
			MB-CCV	Yes	No	No
			CONTROL	Yes	No	No
			B4-L-CNT	Yes	Yes	No
			TRY-STP	Yes	No	No
			MF-LG-ST	Yes	Yes	Yes
			CNT-DISP	Yes	Yes	Yes
			COPY-JOB	Yes	Yes	No
			OP-SZ-DT	Yes	Yes	No
			P-CRG-LF	Yes	No	No
			CPRT-DSP	Yes	Yes	Yes
			PCL-COPY	Yes	Yes	Yes
CNT-SW	Yes		Yes	Yes		
PRJOB-CP	Yes		Yes	Yes		
DFLT-CPY	Yes		Yes	Yes		
DFLT-BOX	Yes		Yes	Yes		
DOC-REM	Yes		Yes	Yes		
DPT-ID-7	Yes		Yes	Yes		
RUI-RJT	Yes		Yes	Yes		

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	OPTION	USER	FREG-SW	Yes	Yes	Yes
			IFAX-SZL	Yes	Yes	Yes
			IFAX-PGD	Yes	Yes	Yes
			MEAPSAFE	Yes	Yes	No
			AFN-PSWD	Yes	Yes	Yes
			PTJAM-RC	Yes	Yes	Yes
			PDL-NCSW	Yes	Yes	No
			PS-MODE	Yes	Yes	Yes
			CNCT-RLZ	Yes	Yes	Yes
			COUNTER7	Yes	Yes	Yes
			COUNTER8	Yes	Yes	Yes
			2C-CT-SW	Yes	Yes	Yes
			LDAP-SW	Yes	Yes	Yes
			FROM-OF	Yes	Yes	Yes
			DOM-ADD	Yes	Yes	Yes
			FILE-OF	Yes	Yes	Yes
			MAIL-OF	Yes	Yes	Yes
			IFAX-OF	Yes	Yes	Yes
			LDAP-DEF	Yes	Yes	Yes
			FREE-DSP	Yes	No	No
			TNRB-SW	Yes	Yes	Yes
			CLR-TIM	Yes	Yes	Yes
			HDCR-DSW	Yes	Yes	Yes
			BWCL-DSP	Yes	Yes	Yes
			SCALL-SW	Yes	Yes	Yes
			SCALLCMP	Yes	Yes	Yes
			USBH-DSP	Yes	Yes	Yes
			USBM-DSP	Yes	Yes	Yes
			USBI-DSP	Yes	Yes	Yes
			CTCHKDSP	Yes	Yes	Yes
			USBB-DSP	Yes	Yes	Yes
			USBR-DSP	Yes	Yes	Yes
			POL-SCAN	Yes	Yes	Yes
			JA-SBOX	Yes	Yes	Yes
			JA-DFAX	Yes	Yes	Yes
JA-REP	Yes	Yes	Yes			
JA-FREP	Yes	Yes	Yes			
JA-BOX	Yes	Yes	Yes			
JA-FORM	Yes	Yes	Yes			
JA-PREV	Yes	Yes	Yes			

Initial screen	Large	Middle	Small	Case A	Case B	Case C
COPIER	OPTION	USER	JA-PULL	Yes	Yes	Yes
			JA-PDLB	Yes	Yes	Yes
			JA-JOBK	Yes	Yes	Yes
			JA-JDF	Yes	Yes	Yes
			JA-RUI	Yes	Yes	Yes
			JA-WEB	Yes	Yes	Yes
			EXP-CRYP	Yes	Yes	Yes
			SNDSTREN	Yes	Yes	Yes
			FAXSTREN	Yes	Yes	Yes
			SJ-UNMSK	Yes	No	No
			SJ-CLMSK	Yes	No	No
			PRTDP-SW	Yes	Yes	Yes
			PDFD-MSW	Yes	Yes	Yes
			SFT-OUT	Yes	Yes	Yes
			FEEDER	ADJUST		DOCST
LA-SPEED	Yes	No				No
SORTER	ADJUST		STP-F1	Yes	No	No
			STP-F2	Yes	No	No
			STP-R1	Yes	No	No
			STP-R2	Yes	No	No
			STP-2P	Yes	No	No
			SDL-STP	Yes	No	No
			SDL-ALG	Yes	No	No
			ST-ALG1	Yes	No	No
			SW-UP-RL	Yes	No	No
			PRCS-RET	Yes	No	No
			UP-CL	Yes	No	No
			DW-CL	Yes	No	No
			THC-CL	Yes	No	No
			THC-PUSH	Yes	No	No
			OFST-STC	Yes	No	No
			STP-P-CH	Yes	No	No
			TRY-NIS	Yes	No	No
			TRY-SU	Yes	No	No
			FIN-NIS	Yes	No	No
			1SHT-SHF	Yes	No	No
SDL-SWCH	Yes	No	No			
SDL-ALM	Yes	No	No			
INSTP-F1	Yes	No	No			
INSTP-R1	Yes	No	No			

Initial screen	Large	Middle	Small	Case A	Case B	Case C	
SORTER	ADJUST		THN-STCL	Yes	No	No	
			FR-ST-PS	Yes	Yes	No	
			FR-STP-X	Yes	No	No	
			FR-STP-Y	Yes	No	No	
			RBLT-PRS	Yes	No	No	
			MSTP-2P	Yes	No	No	
			INF-ALG1	Yes	No	No	
			INF-ALG2	Yes	No	No	
			CENT-ALG	Yes	No	No	
		OPTION		MD-SPRTN	Yes	No	No
				STCR-DWN	Yes	No	No
				PRCS-SP3	Yes	No	No
				NSRT-STC	Yes	No	No
				THN-TRSW	Yes	No	No
				SWGUP-SW	Yes	No	No
				MSTP-TMG	Yes	Yes	Yes
				DWCL-BND	Yes	No	No
				FR-ST-PO	Yes	Yes	No
				MSTP-WT	Yes	Yes	No
				TRY-PSTN	Yes	Yes	No
		TRY-CRNT	Yes	Yes	No		
		PADL-TM	Yes	Yes	No		

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● FAX

Large	Case A	Case B	Case C
SSSW	✓	✓	-
Menu	✓	✓	-
Num	✓	✓	-
Ncu	-	-	-
Type	✓	✓	-
ISDN	✓	✓	-
IPFAX	✓	✓	-
Print	✓	✓	-

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3

Periodical Service

- List of periodically replacement parts, consumable parts and locations for cleaning
- Cleaning Parts

List of periodically replacement parts, consumable parts and locations for cleaning

Consumable parts

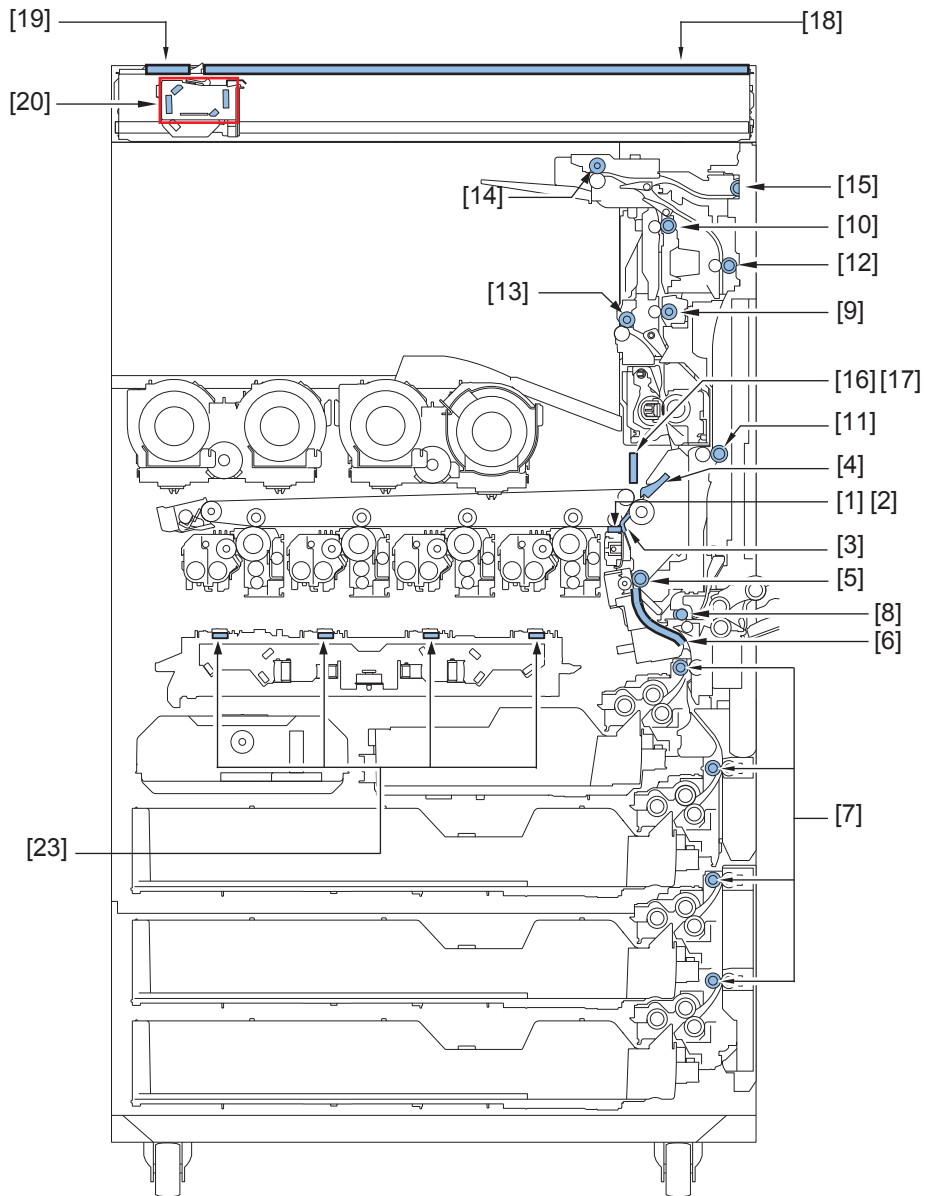
No.	Type	Item	Parts number *1	Q'ty	Estimated life *2	Service Task	Parts counter (Service Mode)		Alarm code when counters are cleared	Remarks	Reference
							Intermediate item	Small Item			
1	Main Body	ITB Unit	FM1-A605	1	180,000 pages	Replace	DRBL-1	TR-UNIT	35-0006 (ALARM-3)	-	p. 4-59
2		ITB Cleaning Blade	FM1-B271	1	180,000 pages	Replace	DRBL-1	T-CLN-BD	-	Parent Unit : ITB Unit	p. 4-62
3		ITB	FL0-0222	1	180,000 pages	Replace	DRBL-1	TR-BLT	-	Parent Unit : ITB Unit	p. 4-63
4		Primary Transfer Roller (BK)	FE3-0986	1	180,000 pages	Replace	DRBL-1	TR-ROLK	-	Parent Unit : ITB Unit	p. 4-65
5		Primary Transfer Roller (Y,M,C)		3	180,000 pages	Replace	DRBL-1	TR-ROLC	-	Parent Unit : ITB Unit	
6		Secondary Transfer Outer Roller	FE3-4783	1	180,000 pages	Replace	DRBL-1	2TR-ROLL	35-0013 (ALARM-3)	-	p. 4-58
7		Drum Unit (Y)	-	1	-	Replace	DRBL-1	PT-DR-Y	35-0070 (ALARM-3)	-	-
8		Drum Unit (M)	-	1	-	Replace	DRBL-1	PT-DR-M	35-0071 (ALARM-3)	-	-
9		Drum Unit (C)	-	1	-	Replace	DRBL-1	PT-DR-C	35-0072 (ALARM-3)	-	-
10		Drum Unit (Bk)	-	1	-	Replace	DRBL-1	PT-DRM	35-0073 (ALARM-3)	-	-
11		Developing Unit (Y)	FM1-B264	1	240,000 images	Replace	DRBL-1	DV-UNT-Y	-	-	p. 4-55
12		Developing Unit (M)	FM1-B265	1	240,000 images	Replace	DRBL-1	DV-UNT-M	-	-	
13		Developing Unit (C)	FM1-B266	1	240,000 images	Replace	DRBL-1	DV-UNT-C	-	-	
14		Developing Unit (Bk)	FM1-B267	1	240,000 images	Replace	DRBL-1	DV-UNT-K	-	-	
15		Fixing Unit	FM1-A613 (100V) FM1-D276 (120V) FM1-D277 (230V)	1	180,000 pages	Replace	DRBL-1	FX-UNIT	35-0076 (ALARM-3)	-	p. 4-72
16		Fixing Film Unit	FM1-B260	1	180,000 pages	Replace	DRBL-1	FX-UP-FR	-	Parent Unit : Fixing Unit	p. 4-72
17		Fixing Pressure Roller Unit	FM1-K441	1	180,000 pages	Replace	DRBL-1	FX-LW-RL	-	Parent Unit : Fixing Unit	p. 4-76
18		Fixing Pressure Roller Shaft Support	FE3-1210	2	180,000 pages	Replace	DRBL-1	FX-LW-BS	-	Parent Unit : Fixing Unit	
19		Waste Toner Container	FM1-A606	1	100,000 images	Replace	DRBL-1	WST-TNR	-	Intermittent printing of 3 sheets (A4 plain paper) per job, 5% image duty (each color), 30% color ratio	p. 4-58
20	DADF	Pickup Roller Unit (DADF)	FM1-D470	1	80,000 sheets	Replace	DRBL-2	DF-PU-RL	35-0091 (ALARM-3)	-	-
21		Separation Roller (DADF)	FM1-D471	1	80,000 sheets	Replace	DRBL-2	DF-SP-RL	35-0092 (ALARM-3)	-	-
22		Stamp	FB5-9410	1	7,000 times	Replace	DRBL-2	STAMP	-	-	-
23		Hinge Unit (Left)	FE3-5484	1	150,000 times	Replace	DRBL-2	DF-HNG-L	-	-	-

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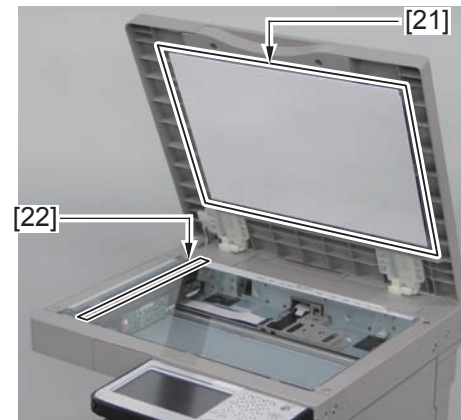
*1 The parts numbers may change according to engineering change.

*2 The values included in this section are all estimated life values in the case of A4-size paper. The estimated life is a reference value in the case of usage in a typical office. The actual value varies depending on the customer environment, field operation status, etc.

Cleaning Parts



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No.	Name	Cleaning Method	Timing
[1]	Patch Sensor	Clean with a blower. Clean with a tightly-wrung cotton swab when soiling or foreign matter cannot be removed.	As needed When ITB Unit replacement
[2]	Pre-transfer Cover Sheet	When there is soiling or foreign matter, clean with lint-free paper moistened with alcohol.	As needed
[3]	Pre-transfer Guide		
[4]	Secondary Transfer Roller Guide Assembly		
[5]	Registration Roller		
[6]	Registration Assembly		
[7]	Vertical Path Roller		
[8]	Duplex Merging Roller		
[9]	Reverse Vertical Path Roller 2		
[10]	Reverse Vertical Path Roller 1		
[11]	Duplex Roller 1		
[12]	Duplex Roller 2		
[13]	First Delivery Roller		
[14]	Second Delivery Roller		
[15]	Third Delivery Roller		
[16]	Rowel Block Assembly		
[17]	Tray Duct Assembly, Lower		
[18]	Copy Board Glass (Both side)		
[19]	Stream Reading Glass(Both side)		
[20]	Scanner Mirror (1 to 4)		
[21]	White Plate		
[22]	Vertical Size Plate		
[23]	Dustproof Glass	Cleaning with Dust-blocking glass Cleaning tool	

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4

Disassembly/Assembly

- Preface
- Parts replacement procedures list
- List of Parts
- List of Connectors
- External Cover/Interior System
- Controller System
- Laser Exposure System
- Image Formation System
- Fixing System
- Pickup/Feed System

Preface

Outline

This chapter describes disassembly and reassembly procedures of the printer.

The service technician is to identify the cause of printer failures according to the "Chapter 6 TROUBLESHOOTING" and to follow the disassembly procedures of each part to replace the defective parts or the consumable parts.

Note the following precautions when working on the printer.

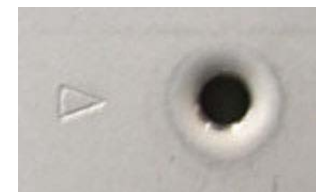
- 1) CAUTION: Before disassembling or reassembling the printer, be sure to disconnect its power cord from the electrical outlet
- 2) When having removed the Drum Unit from the host machine before disassembling and assembling the machine, be sure to put the Photosensitive Drum in a protective bag even in a short period of time to prevent the adverse effect of light.
- 3) Reassembling procedures are followed by the reverse of disassembly unless otherwise specified.
- 4) Note the length, diameters, and locations of screws as you remove them. When reassembling the printer, be sure to use them in their original locations.
- 5) Do not run the printer with any parts removed as a general rule.
- 6) Ground yourself by touching the metal part of the printer before handling the PCB to reduce the possibility of damage caused by static electricity.
- 7) When you replace the part that the rating plate or the product code label is attached, be sure to remove the rating plate or the product code label and put it to the new part.

Points to Note when Tightening a Screw

For reduction in weight, thin plates are used in some parts of this machine.

In the case of a screw hole with a triangle mark near it as shown in the figure below, strongly tightening the screw may damage or deform the screw hole.

In the case of a screw hole with a triangle mark, carefully tighten the screw, taking care not to apply too much force.



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The recommended torque value is shown below as a reference value.

		Types of screws							
		Screw (RS tightening)		W Sems		Binding		TP	
Fastened member		Metal	Resin	Metal	Resin	Metal	Resin	Metal	Resin
Tightening torque (N*m)	M4	Approx. 1.6	Approx. 1.6	Approx. 1.6	Approx. 0.8	Approx. 1.6	Approx. 0.8	Approx. 1.6	Approx. 0.8
	M3	Approx. 0.8	Approx. 0.8	Approx. 0.6	Approx. 0.6	Approx. 0.6	Approx. 0.6	Approx. 0.6	Approx. 0.6

T-4-1

* For PCB, refer to the tightening torque value of resin (fastened member).

Type of Screws			
RS tight	W Sems	Binding	TP

F-4-2

Parts replacement procedures list

Category	Description
List of Parts	External Cover
	Motor
	Fan
	Clutch
	Solenoid
	Heater
	Sensor
	Switch
	PCB
	External Cover/ Interior System
Removing the Front Door	
Removing the Front Fan	
Removing the Power Supply Cooling Fan	
Removing the Primary Transfer High Voltage PCB	
Removing the Motor Fan	
Removing the Low Voltage Power Supply Unit	
Removing the Secondary Transfer High Voltage PCB	
Removing the Control Panel	
Removing the Control Panel CPU PCB	
Removing the Touch Panel/LCD Unit and the Control Panel Key Switch PCB	
Original Exposure System	Removing the Reader Scanner Unit
	Cleaning the Reader Scanner Unit Scanner Mirror
Controller System	Removing the Controller Cover
	Removing the HDD
	Removing the Main Controller PCB
	Removing the DC Controller PCB
Laser Exposure System	Removing the Fax Unit
	Removing the Laser Scanner Unit
	Cleaning the Dustproof Glass

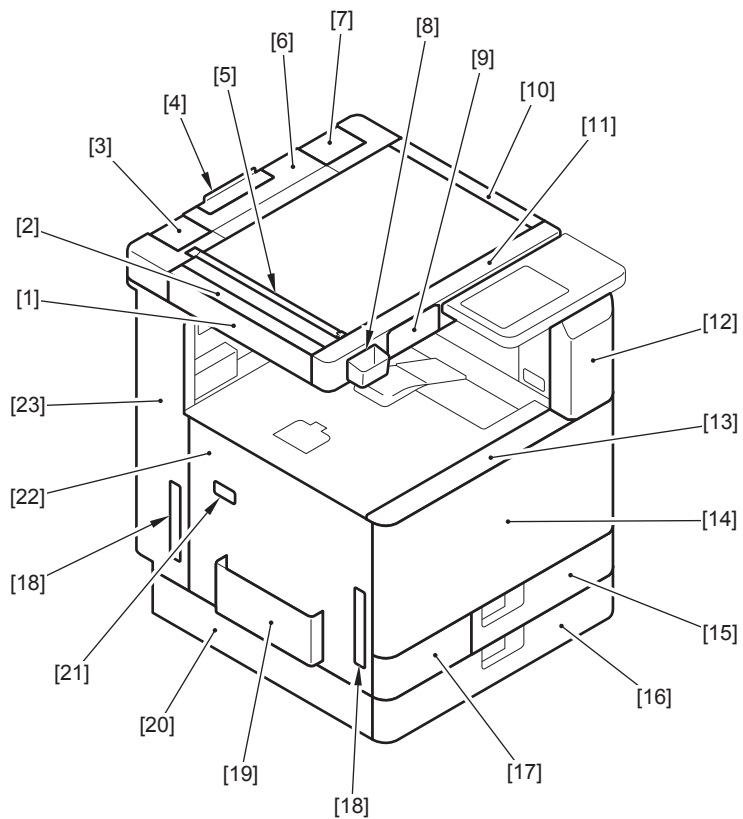
Category	Description
Image Formation System	Removing the Drum Unit
	Removing the Developing Unit
	Installing the Developing Unit
	Removing the Waste Toner Container
	Removing the Secondary Transfer Outer Roller
	Removing the ITB Unit
	Removing the ITB Cleaning Blade
	Removing the ITB
	Removing the Primary Transfer Roller (Y/M/C/BK)
	Removing the Patch Sensor Unit
	Removing the Waste Toner Drive Unit
	Removing the Registration Drive Unit / Duplex Merging Motor / Registration Motor
	Removing the Main Drive Unit
Removing the Drum Cleaning Pre-exposure LED Unit	
Fixing System	Removing the Fixing Unit
	Removing the Fixing Film Unit
	Removing the Fixing Pressure Roller / Fixing Pressure Roller Shaft Support
	Removing the Fixing Drive Unit
Pickup/Feed System	Removing the Pickup/Feed/Separation Roller (Cassette 1/2, Cassette 3/4 (Option))
	Removing the Multi-purpose Tray / Feed / Separation Roller
	Removing the Right Door Unit
	Removing the First Delivery Unit
	Removing the Second Delivery Unit
	Removing the Third Delivery Unit
	Removing the Cassette 1 Pickup Unit
	Removing the Cassette 2 Pickup Unit
	Removing the Cassette 3/4 Pickup Unit (Option)
	Removing the Cassette 1 Vertical Path Roller
	Removing the Registration Roller
	Removing the Registration Guide Unit

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List of Parts

External Cover

Host Machine (Front view, Left side)

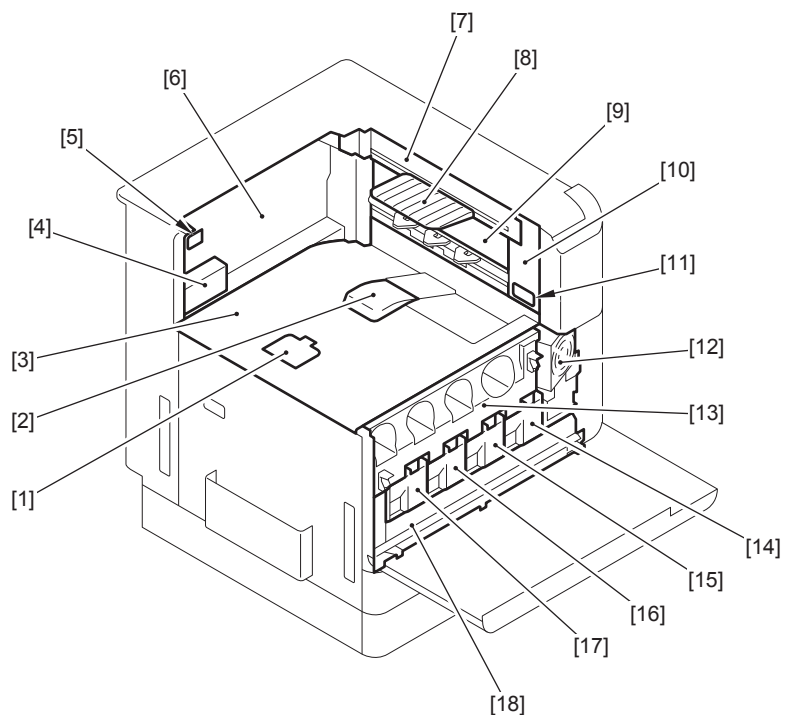


F-4-3

No.	Parts Name	No.	Parts Name
[1]	Reader Left Cover	[2]	Reader Left Retaining Cover
[3]	Reader Hinge Lower Cover (Left)	[4]	Reader PCB Cover
[5]	Reader Glass Support Cover	[6]	Reader Rear Cover
[7]	Reader Hinge Lower Cover (Right)	[8]	Glass Cleaning Sheet Storage Box
[9]	Reader Front Cover (Small)	[10]	Reader Right Retaining Cover
[11]	Reader Front Cover	[12]	Right Front Upper Cover
[13]	Front Cover (Upper)	[14]	Front Cover
[15]	Cassette 1 Front Cover	[16]	Cassette 2 Front Cover
[17]	Waste Toner Assembly Cover	[18]	Handle Cover
[19]	Service Book Holder	[20]	Left Cover (Lower)
[21]	Blind Cover	[22]	Left Cover (Upper)
[23]	Left Cover Assembly (Rear)		

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Host Machine (Inside the machine)

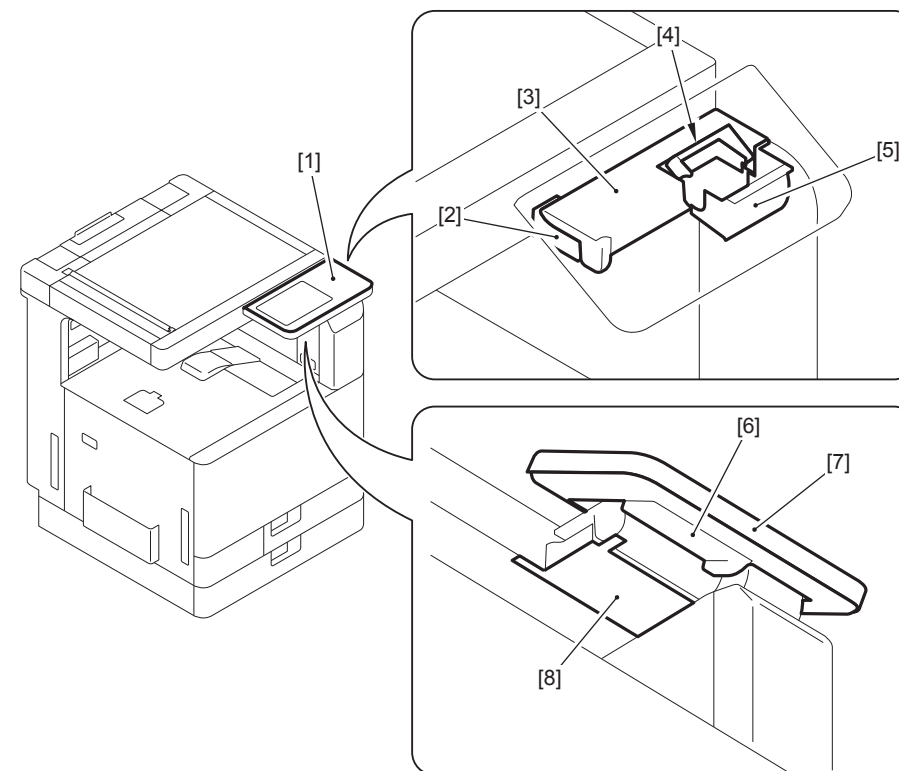


F-4-4

No.	Parts Name	No.	Parts Name
[1]	Push-out Stopper	[2]	Tray Guide
[3]	First Delivery Tray	[4]	Inner Connector Cover
[5]	Second Delivery Tray Support Plate	[6]	Inner Delivery Cover
[7]	Inner Cover (Right Upper)	[8]	Reverse Trailing Edge Guide
[9]	Reverse Guide Cover	[10]	Inner Right Cover
[11]	Inner Blind Cover	[12]	Fan Holder
[13]	Front Inner Upper Cover	[14]	Drum Unit Retaining Cover (Bk)
[15]	Drum Unit Retaining Cover (C)	[16]	Drum Unit Retaining Cover (M)
[17]	Drum Unit Retaining Cover (Y)	[18]	Front Inner Lower Cover

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Host Machine (Control Panel)

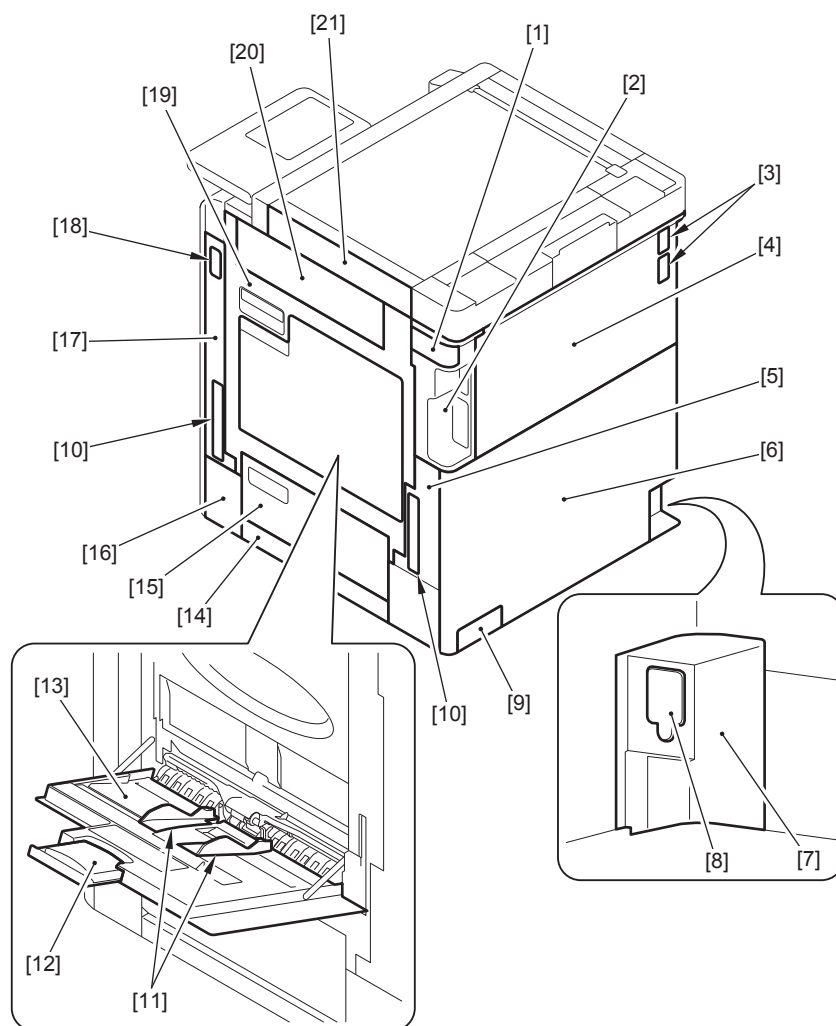


F-4-5

No.	Parts Name	No.	Parts Name
[1]	Control Panel Upper Cover	[2]	Control Panel Cover (Lower)
[3]	Control Panel Cover (Rear)	[4]	Control Panel Hinge Inner Cover
[5]	Control Panel Hinge Cover (Right)	[6]	Control Panel Lower Cover
[7]	Control Panel Cover Base (Upper)	[8]	Control Panel Lower Cover (Small)

T-4-5

Host Machine (Rear view, Right side)

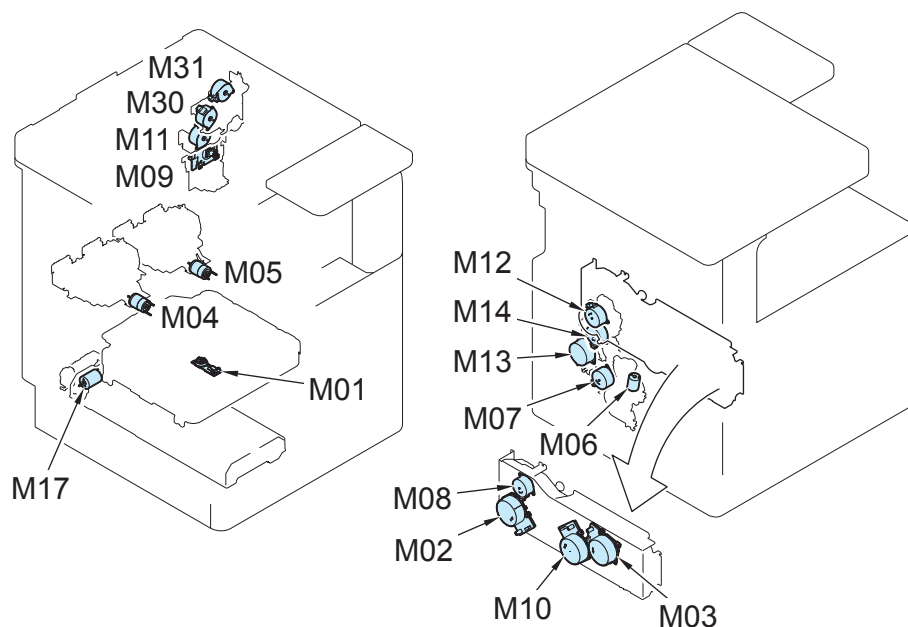


No.	Parts Name	No.	Parts Name
[1]	HDD Cover	[2]	Right Cover (Rear Upper)
[3]	Blind Cover (Rear)	[4]	Cover (Rear Upper)
[5]	Right Cover Assembly (Rear Lower)	[6]	Cover (Rear Lower)
[7]	Power Supply Cord Cover	[8]	Environment Heater Switch Cover
[9]	Connector Cover	[10]	Handle Cover
[11]	Multi-purpose Tray Pickup Side Guide Plate	[12]	Multi-purpose Tray Pickup Sub Tray
[13]	Multi-purpose Tray Pickup Tray Assembly	[14]	Right Cover (Lower)
[15]	Right Door (Lower)	[16]	Right Cover (Front Lower)
[17]	Right Cover (Front Upper)	[18]	Main Power Supply Switch Cover
[19]	Right Door	[20]	Third Delivery Outlet Cover
[21]	Reader Right Cover		

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F-4-6

Motor

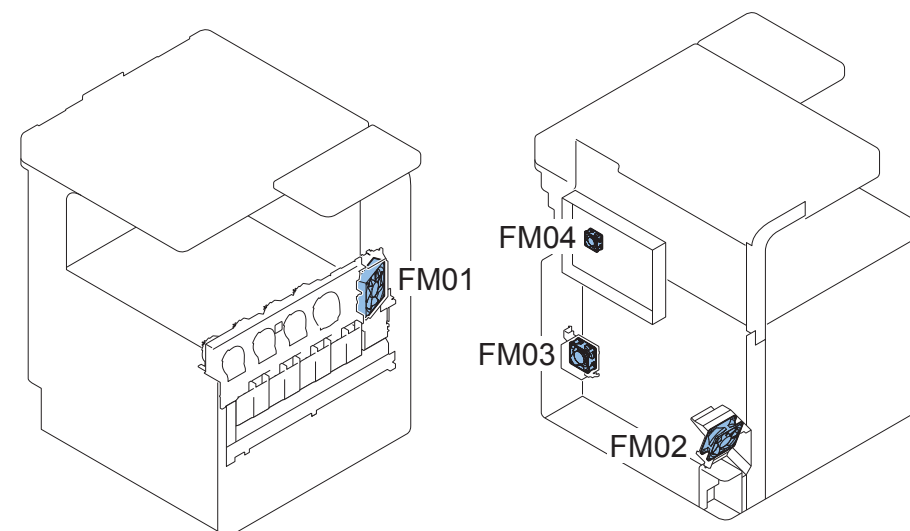


F-4-7

No.	Parts Name	Main Unit	Reference
M01	Laser Scanner Motor	Laser Scanner Unit	
M02	Bk Drum _ ITB Motor	Main Drive Unit	
M03	CL Drum Motor	Main Drive Unit	
M04	Bottle Motor (YM)	Bottle Drive Unit (YM)	
M05	Bottle Motor (CK)	Bottle Drive Unit (CBk)	
M06	Cassette 1,2 Lifter Motor	Lifter Drive Unit	
M07	Cassette 1,2 Pickup Motor	-	
M08	Primary Transfer Roller Disengagement Motor	Main Drive Unit	
M09	Fixing Motor	Fixing Drive Unit	
M10	Developing Motor	Main Drive Unit	
M11	Duplex Reverse Motor	Reverse Duplexing Drive Unit	
M12	Registration Motor	-	
M13	Cassette 1,2 Feed / Multi-purpose Pickup Motor	-	
M14	Duplex Merging Motor	-	
M17	Waste Toner Feed Motor	-	
M30	Reverse Motor	-	
M31	Second Delivery Motor	Second Delivery Unit	

T-4-7

Fan

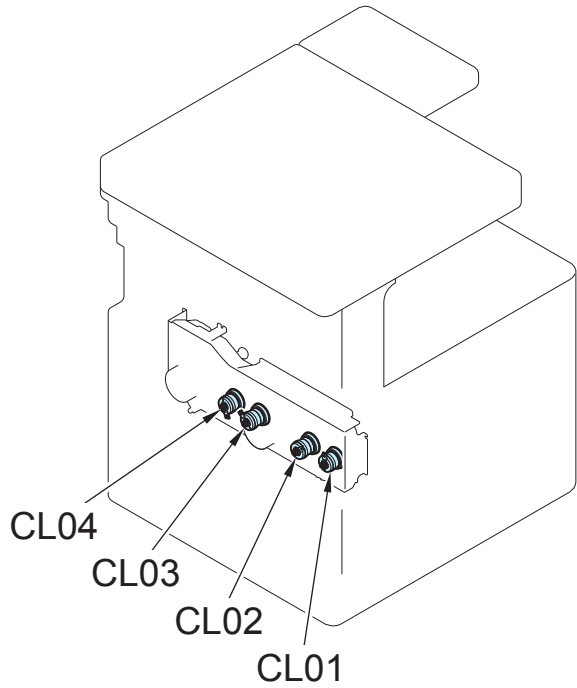


F-4-8

No.	Parts Name	Main Unit	Reference
FM01	Front Fan	Front Fan Unit	p. 4-28
FM02	Power Supply Cooling Fan	Power Supply Fan Unit	p. 4-30
FM03	Motor Fan	-	p. 4-32
FM04	Controller Fan	Main Controller PCB	

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Clutch

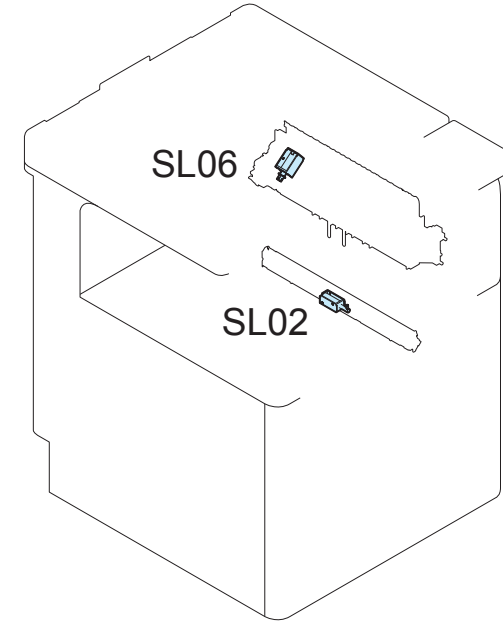


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No.	Parts Name	Main Unit	Reference
CL01	Developing Cylinder Clutch (Y)	Main Drive Unit	
CL02	Developing Cylinder Clutch (M)	Main Drive Unit	
CL03	Developing Cylinder Clutch (C)	Main Drive Unit	
CL04	Developing Cylinder Clutch (Bk)	Main Drive Unit	

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Solenoid

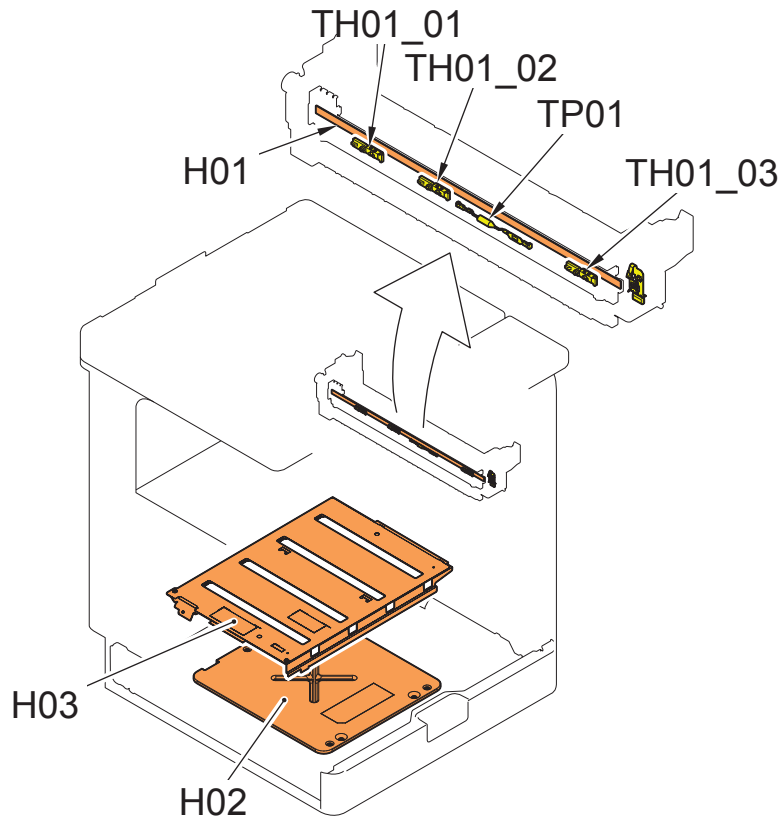


F-4-10

No.	Parts Name	Main Unit	Reference
SL02	Registration Shutter Solenoid	Registration Patch Sensor Unit	
SL06	Duplex Reverse Solenoid	First Delivery	

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Heater

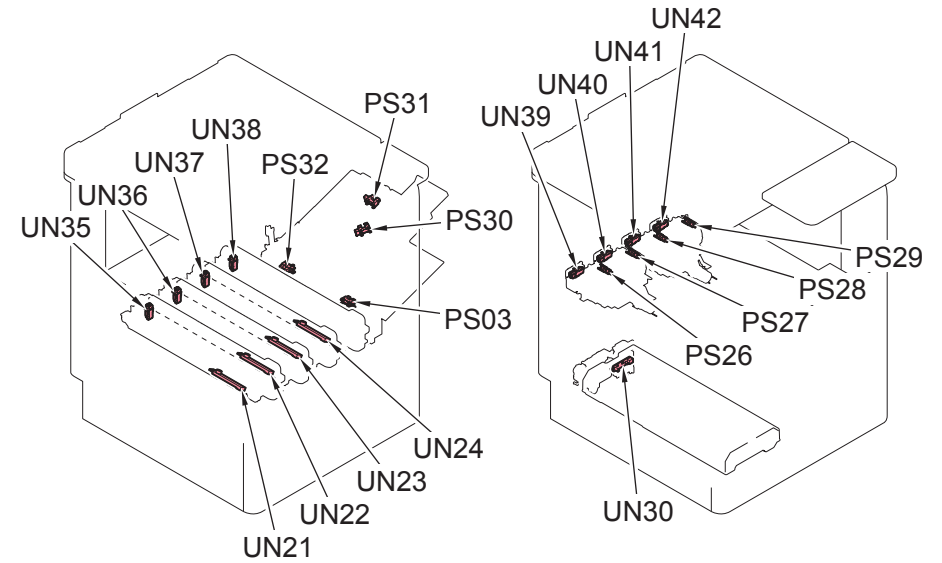


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No.	Parts Name	Main Unit	Reference
H01	Fixing heater	Fixing Unit	
H02	Cassette Heater	Cassette Heater Unit	
H03	Inside Heater	Inside Heater	
TH01_02	Main Thermistors 1	Fixing Unit	
TH01_03	Sub Thermistors 2	Fixing Unit	
TH01_01	Sub Thermistors 1	Fixing Unit	
TP01	Fixing Temperature fuse	Fixing Unit	

T-4-11

Sensor

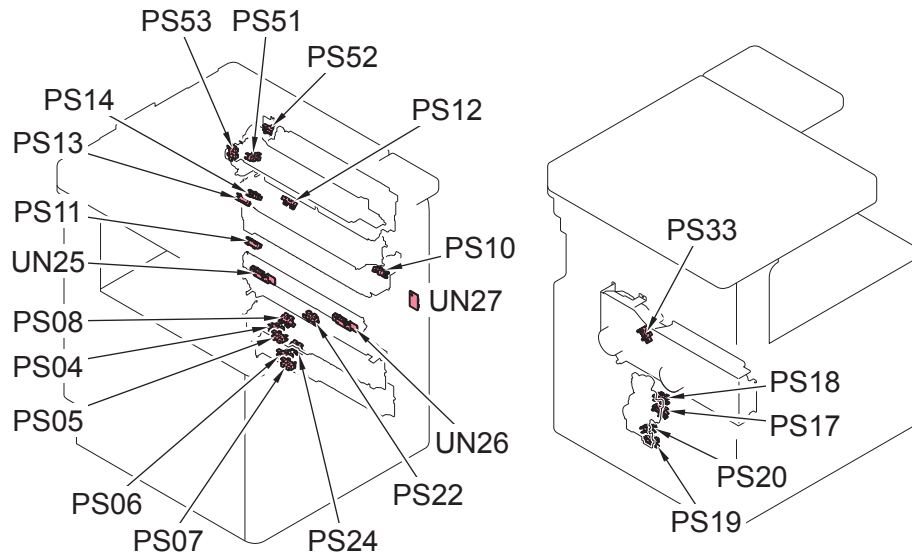


F-4-12

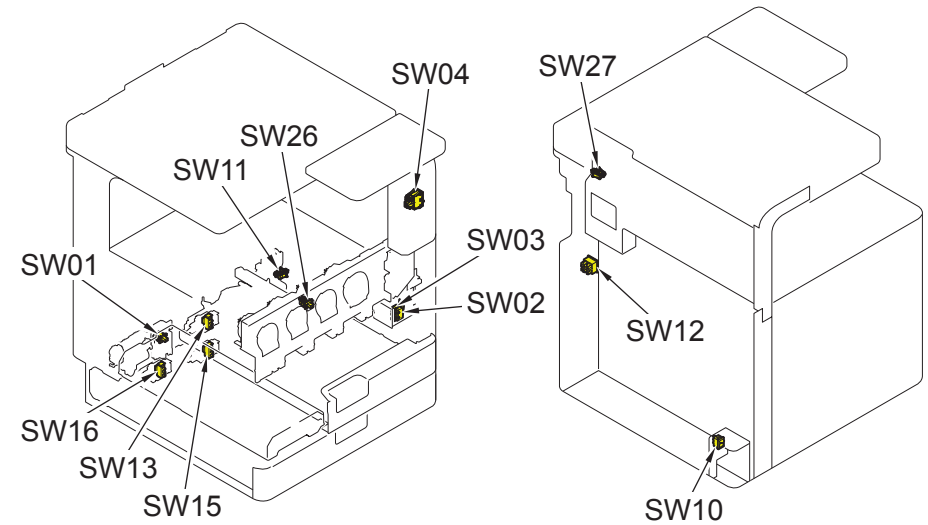
No.	Parts Name	Main Unit	Reference
PS03	Multi-purpose Tray Paper Sensor	Multi-purpose Tray Pickup Unit	
PS26	Toner supply sensor (Y)	Bottle Drive Unit (YM)	
PS27	Toner supply sensor (M)	Bottle Drive Unit (YM)	
PS28	Toner supply sensor (C)	Bottle Drive Unit (CBk)	
PS29	Toner supply sensor (Bk)	Bottle Drive Unit (CBk)	
PS30	Multi-purpose Tray Paper Length Sensor 1	Multi-purpose Tray Pickup Unit	
PS31	Multi-purpose Tray Paper Length Sensor 2	Multi-purpose Tray Pickup Unit	
PS32	Multi-purpose Tray HP Sensor	Multi-purpose Tray Pickup Unit	
UN21	Toner Density Sensor (Y)	Drum Unit (Y)	
UN22	Toner Density Sensor (M)	Drum Unit (M)	
UN23	Toner Density Sensor (C)	Drum Unit (C)	
UN24	Toner Density Sensor (Bk)	Drum Unit (Bk)	
UN30	Waste Toner Sensor PCB	Waste Toner Full Detection Unit	
UN35	Drum Unit New/Old Sensor (Y)	New Old Sensing Holder Unit	
UN36	Drum Unit New/Old Sensor (M)	New Old Sensing Holder Unit	
UN37	Drum Unit New/Old Sensor (C)	New Old Sensing Holder Unit	

T-4-12

Switch



F-4-13



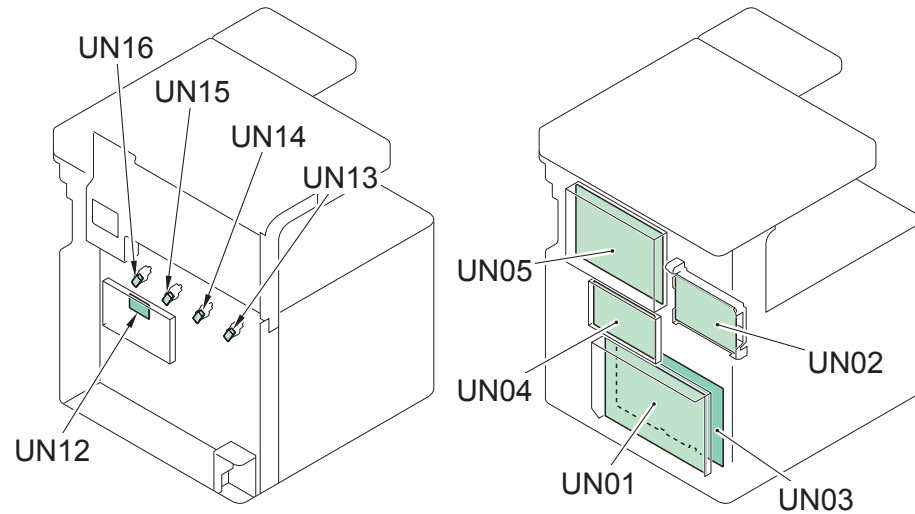
F-4-14

No.	Parts Name	Main Unit	Reference
PS04	Cassette 1 Lifter Sensor	Cassette 1 Pickup Unit	
PS05	Cassette 1 Paper Sensor	Cassette 1 Pickup Unit	
PS06	Cassette 2 Lifter Sensor	Cassette 2 Pickup Unit	
PS07	Cassette 2 Paper Sensor	Cassette 2 Pickup Unit	
PS08	Cassette 1 Vertical Path Sensor	Cassette 1 Pickup Unit	
PS10	Fixingt Delivery Sensor	-	
PS11	Arch sensor	-	
PS12	Reverse Sensor	First Delivery	
PS13	Fixing pressure release sensor	First Delivery	
PS14	First Delivery Sensor	First Delivery	
PS17	Cassette 1 Paper Level Sensor A	-	
PS18	Cassette 1 Paper Level Sensor B	-	
PS19	Cassette 2 Paper Level Sensor A	-	
PS20	Cassette 2 Paper Level Sensor B	-	
PS22	Pre-Registration Sensor	Shutter Registration Unit	
PS24	Cassette 2 Vertical Path Sensor	Cassette 2 Pickup Unit	
PS33	Primary Transfer Roller Disengagement HP Sensor	Main Drive Unit	
PS51	Second delivery / Reverse sensor	Second / Third Delivery	
PS52	Third delivery sensor	Third Delivery Unit	
PS53	Second Delivery Paper Full Sensor	Second / Third Delivery	
UN25	Registration Patch Sensor Unit (Rear)	Registration Patch Sensor Unit	
UN26	Registration Patch Sensor Unit (Front)	Registration Patch Sensor Unit	
UN27	Environment Sensor	Environment Sensor Unit	

T-4-13

No.	Parts Name	Main Unit	Reference
SW01	Waste toner container detection switch	-	
SW02	Interlock Switch 1	Front Fan Unit	
SW03	Interlock Switch 2	Front Fan Unit	
SW04	Main Power Supply Switch	-	
SW10	Dehumidification Switch	-	
SW11	Right Door Open/Close Detection Switch	-	
SW12	AC Interlock Switch	-	
SW13	Cassette 1 Size Switch	-	
SW15	Cassette 2 size switch A	-	
SW16	Cassette 2 size switch B	-	
SW26	Front Door Switch	Front Upper Inner Cover Unit	
SW27	Right Upper Door Open/Close Detection Switch	-	

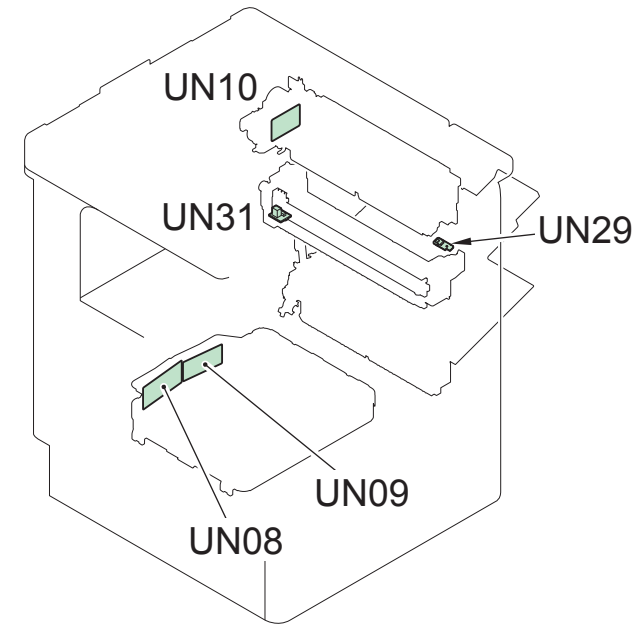
T-4-14

 PCB


F-4-15

No.	Parts Name	Main Unit	Reference
UN01	Low Voltage Power Supply PCB	-	p. 4-33
UN02	Primary Transfer High Voltage PCB	-	p. 4-31
UN03	Secondary Transfer High Voltage PCB	-	p. 4-34
UN04	DC Controller PCB	-	p. 4-50
UN05	Main Controller PCB	-	p. 4-48
UN12	Pre-exposure LED Driver PCB	-	
UN13	Pre-exposure LED PCB (Y)	Pre-exposure LED Unit	
UN14	Pre-exposure LED PCB (M)	Pre-exposure LED Unit	
UN15	Pre-exposure LED PCB (C)	Pre-exposure LED Unit	
UN16	Pre-exposure LED PCB (Bk)	Pre-exposure LED Unit	

T-4-15

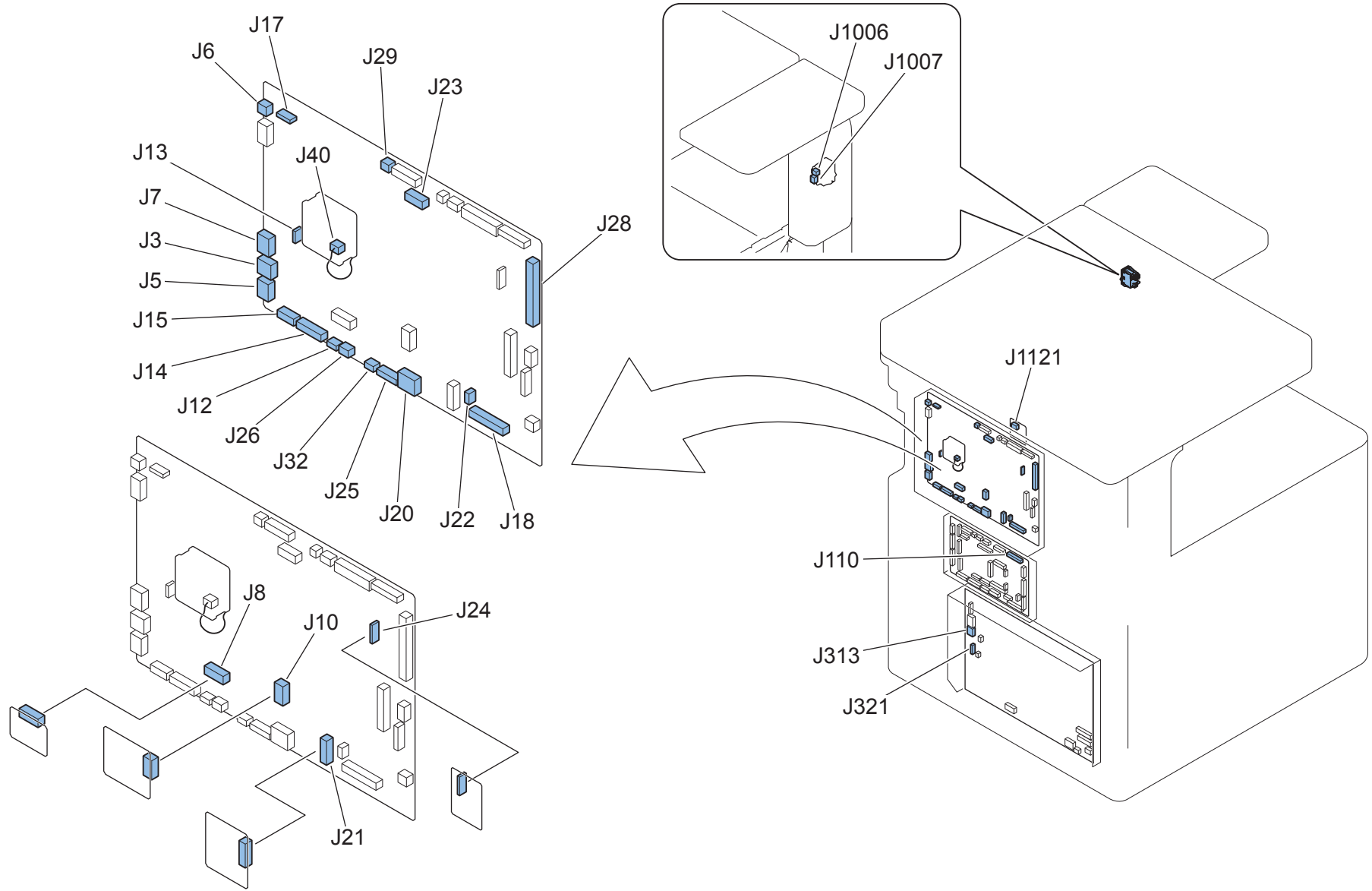


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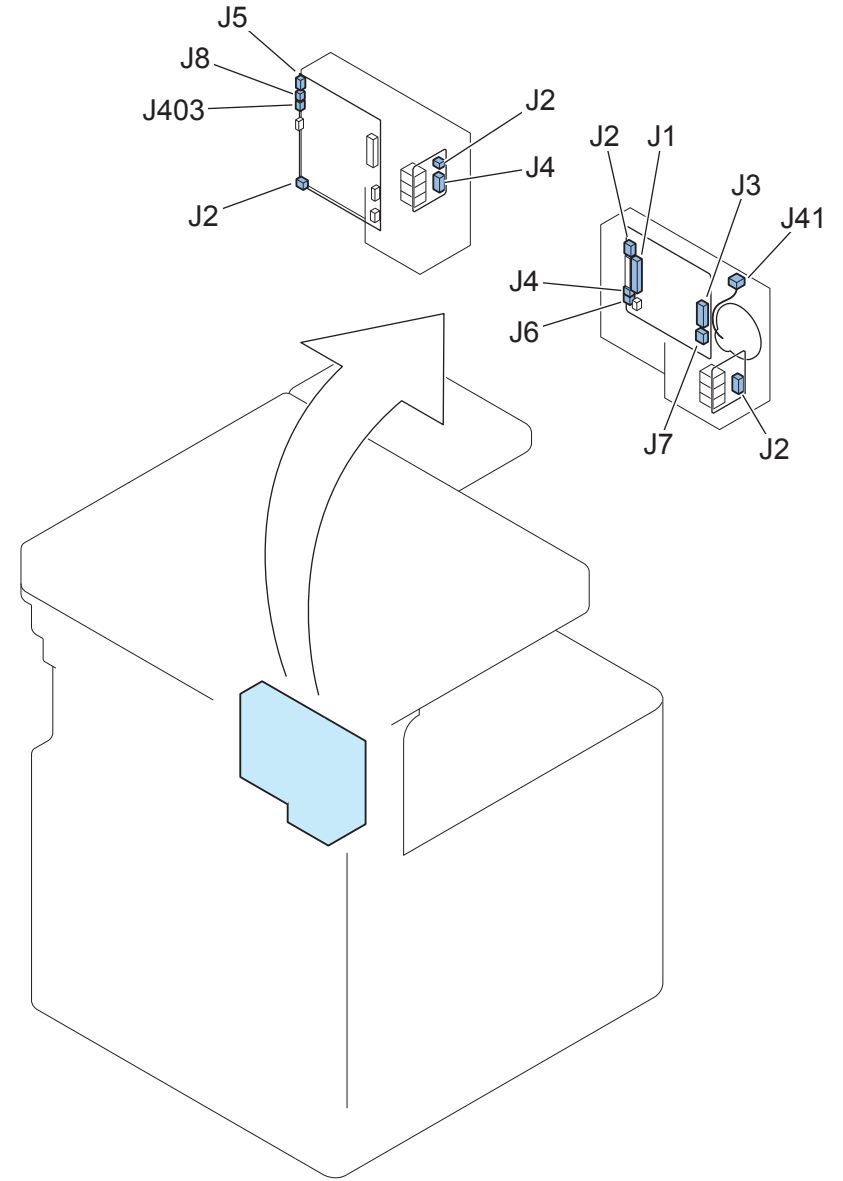
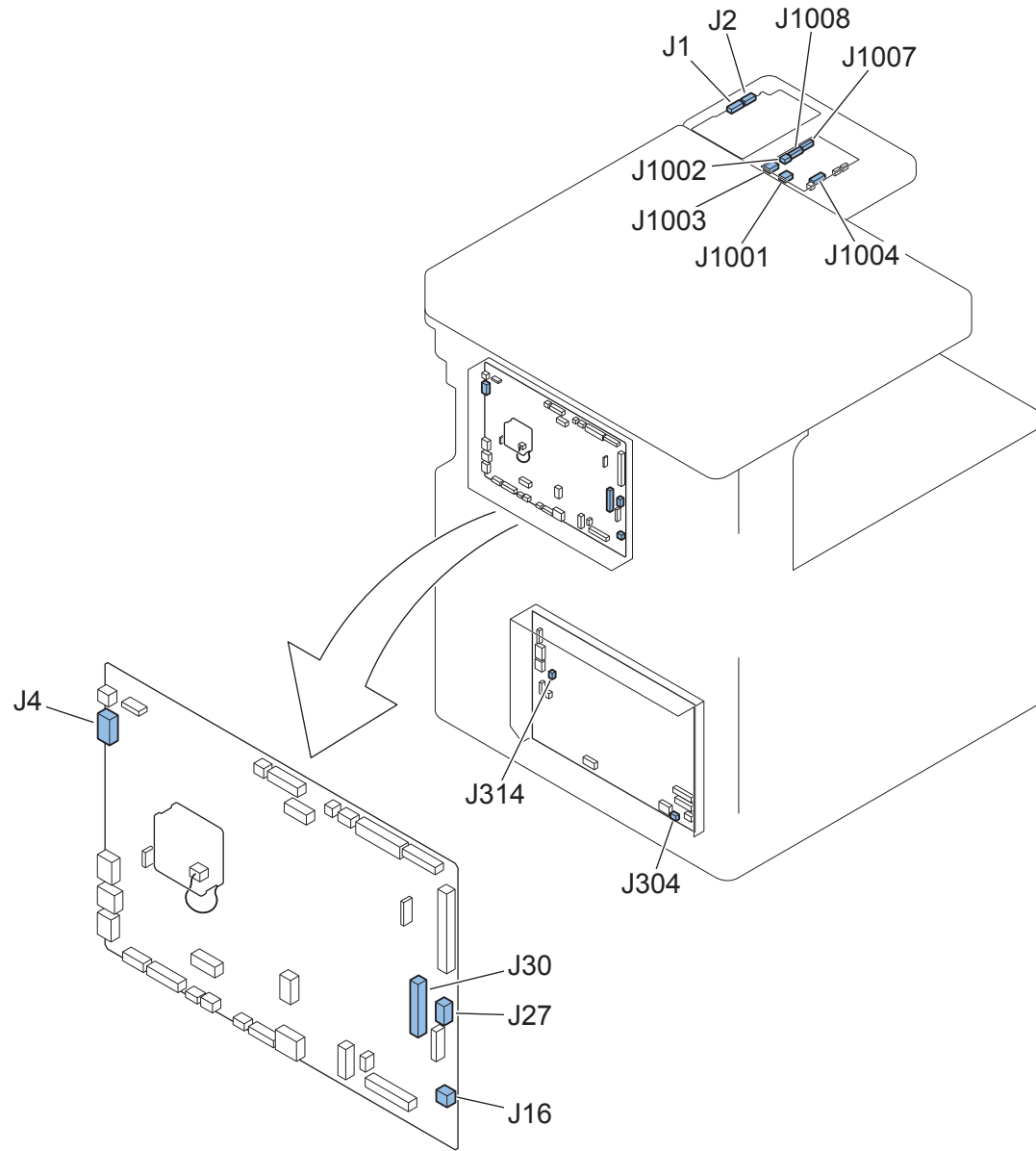
No.	Parts Name	Main Unit	Reference
UN08	Y/M Laser Driver PCB	Laser Scanner Unit	
UN09	C/Bk Laser Driver PCB	Laser Scanner Unit	
UN10	3 Way Unit Driver PCB	Second Delivery Unit	
UN29	Multi-purpose Tray Width Sensing PCB	Multi-purpose Tray Pickup Unit	
UN31	Fixing Fuse PCB	Fixing Unit	

T-4-16

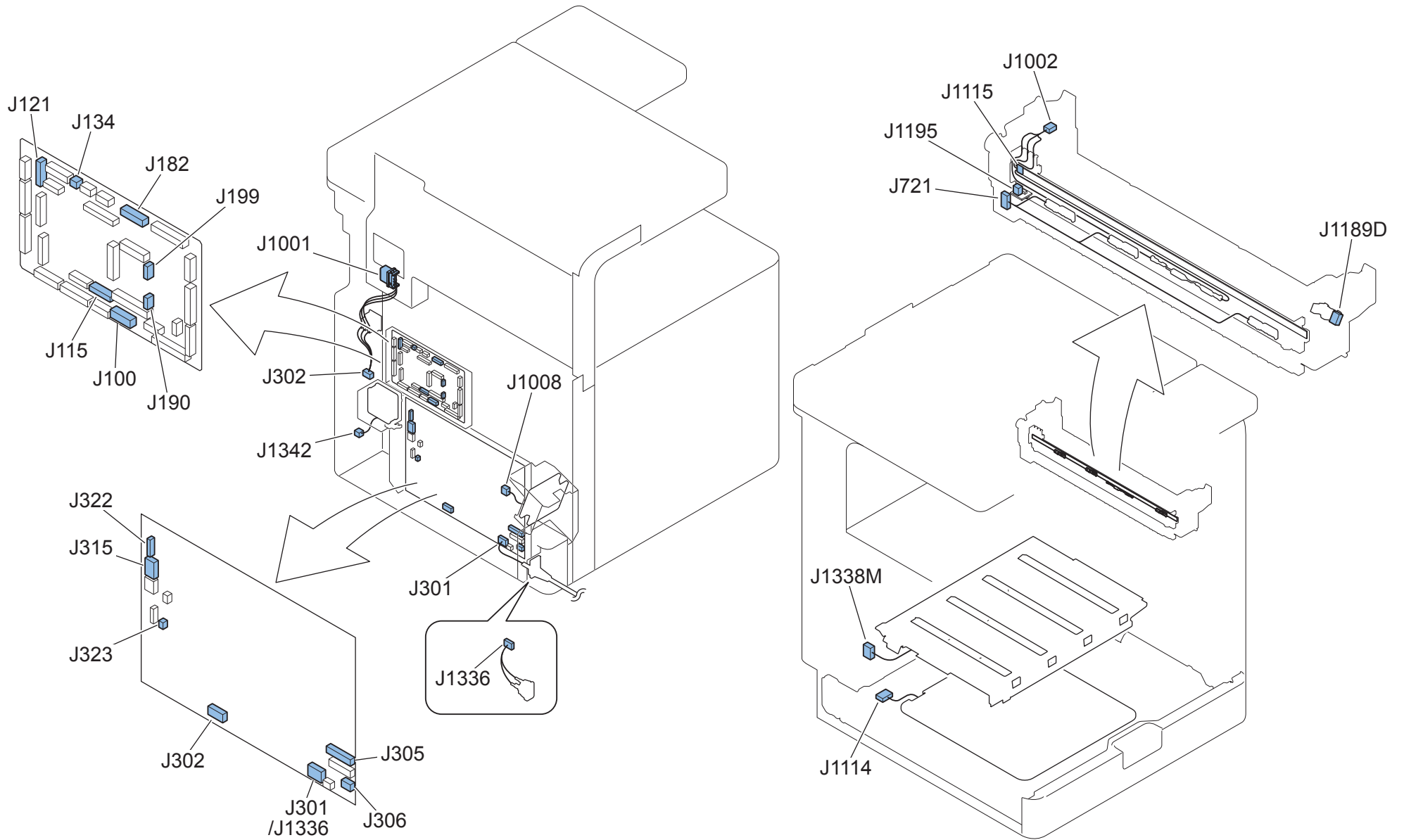
List of Connectors

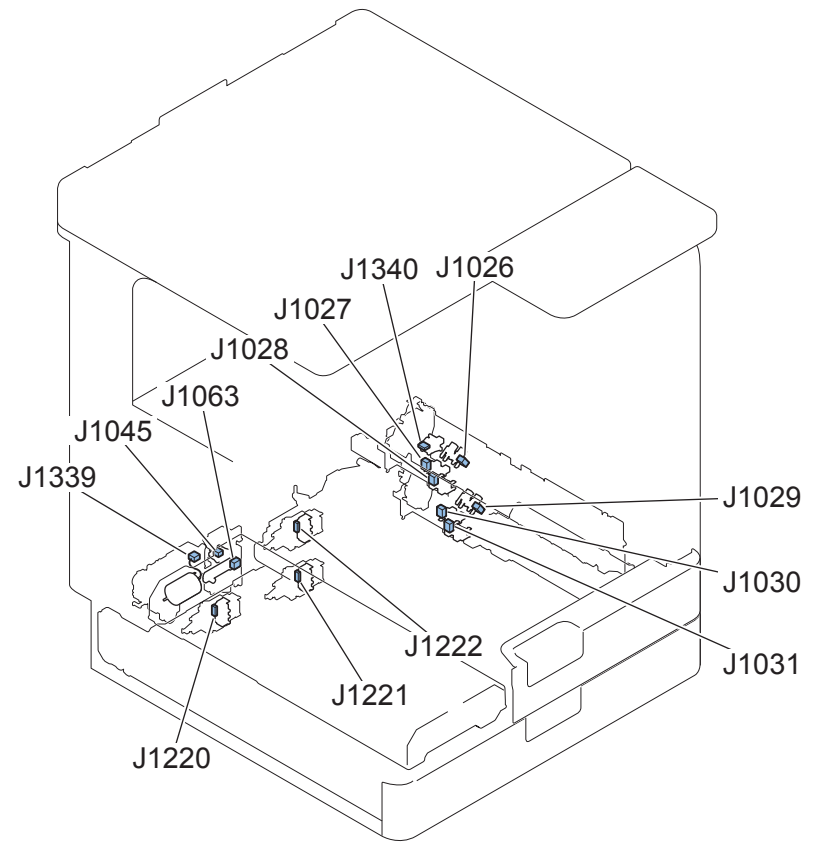
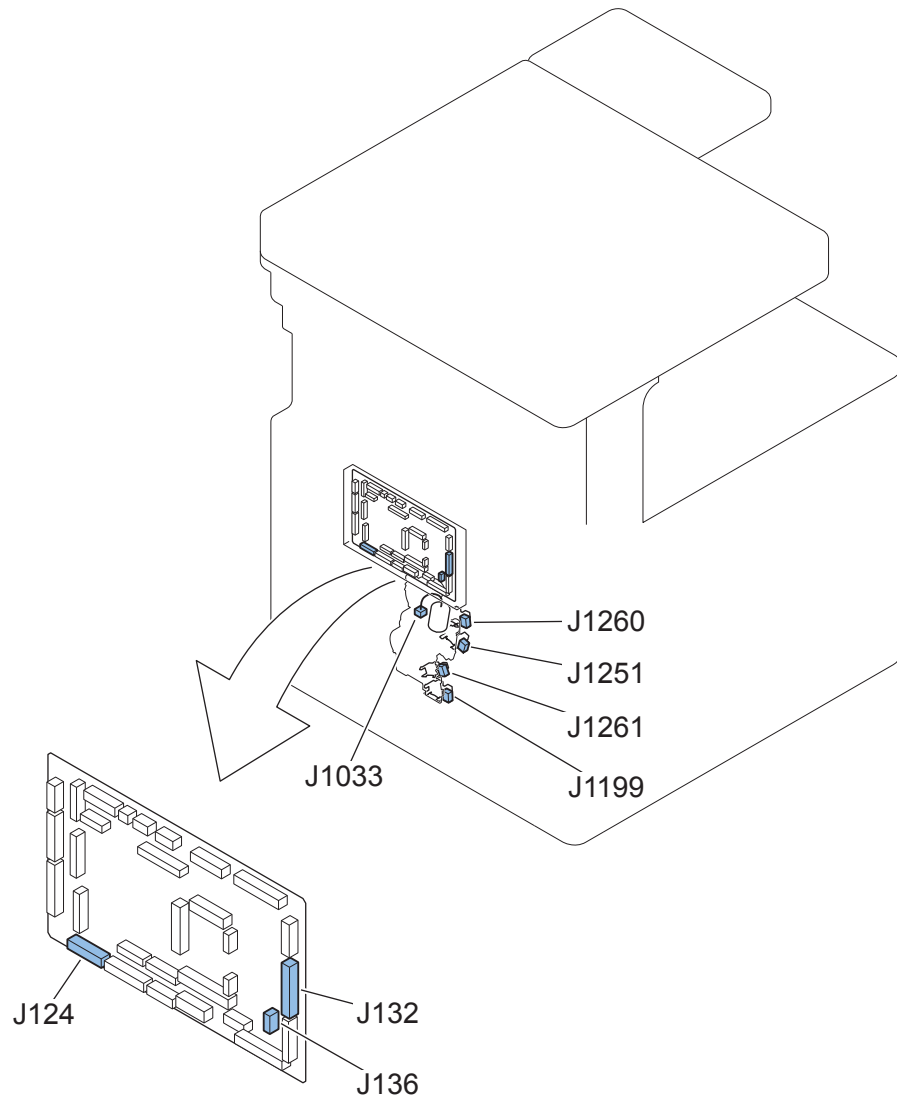


F-4-17

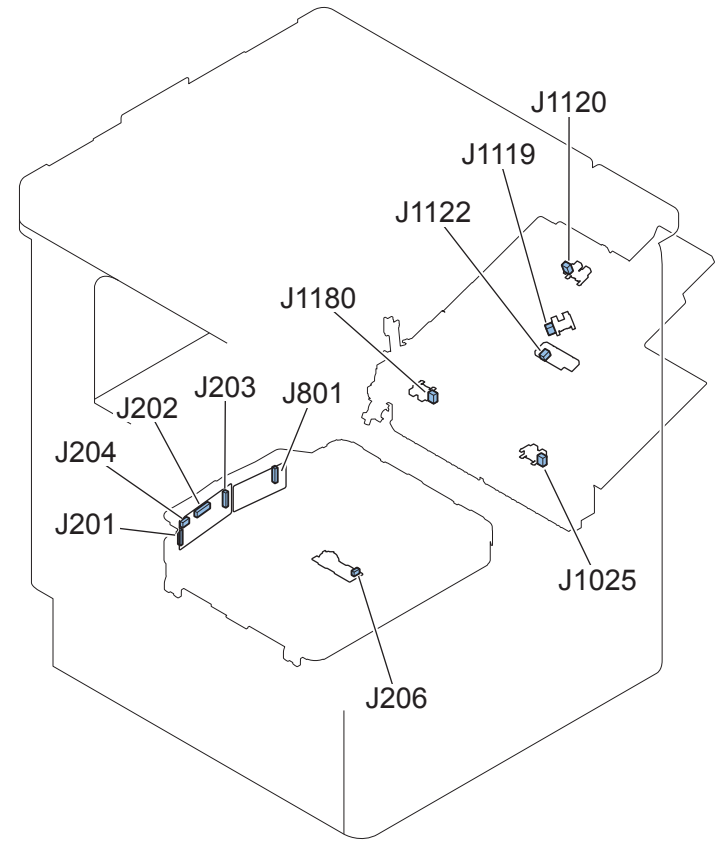
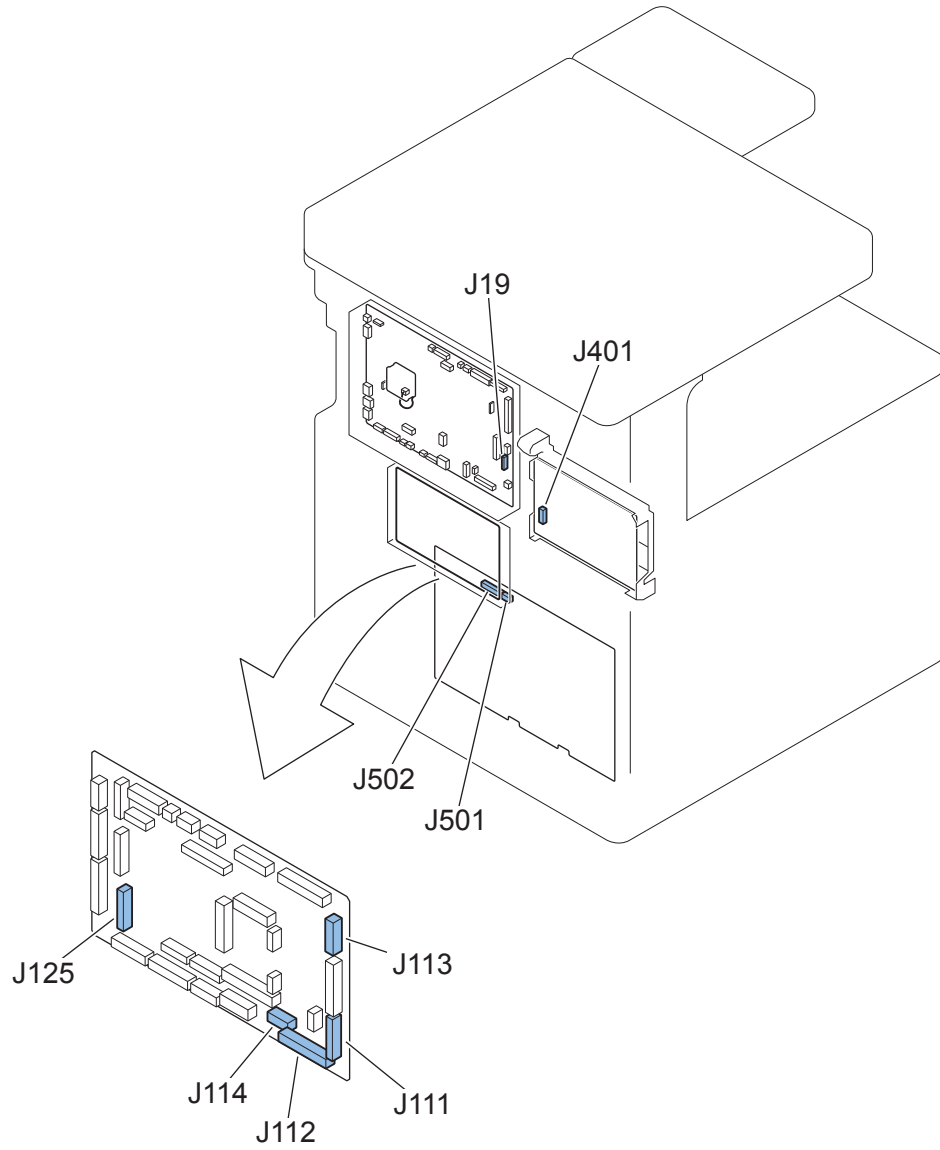


F-4-18

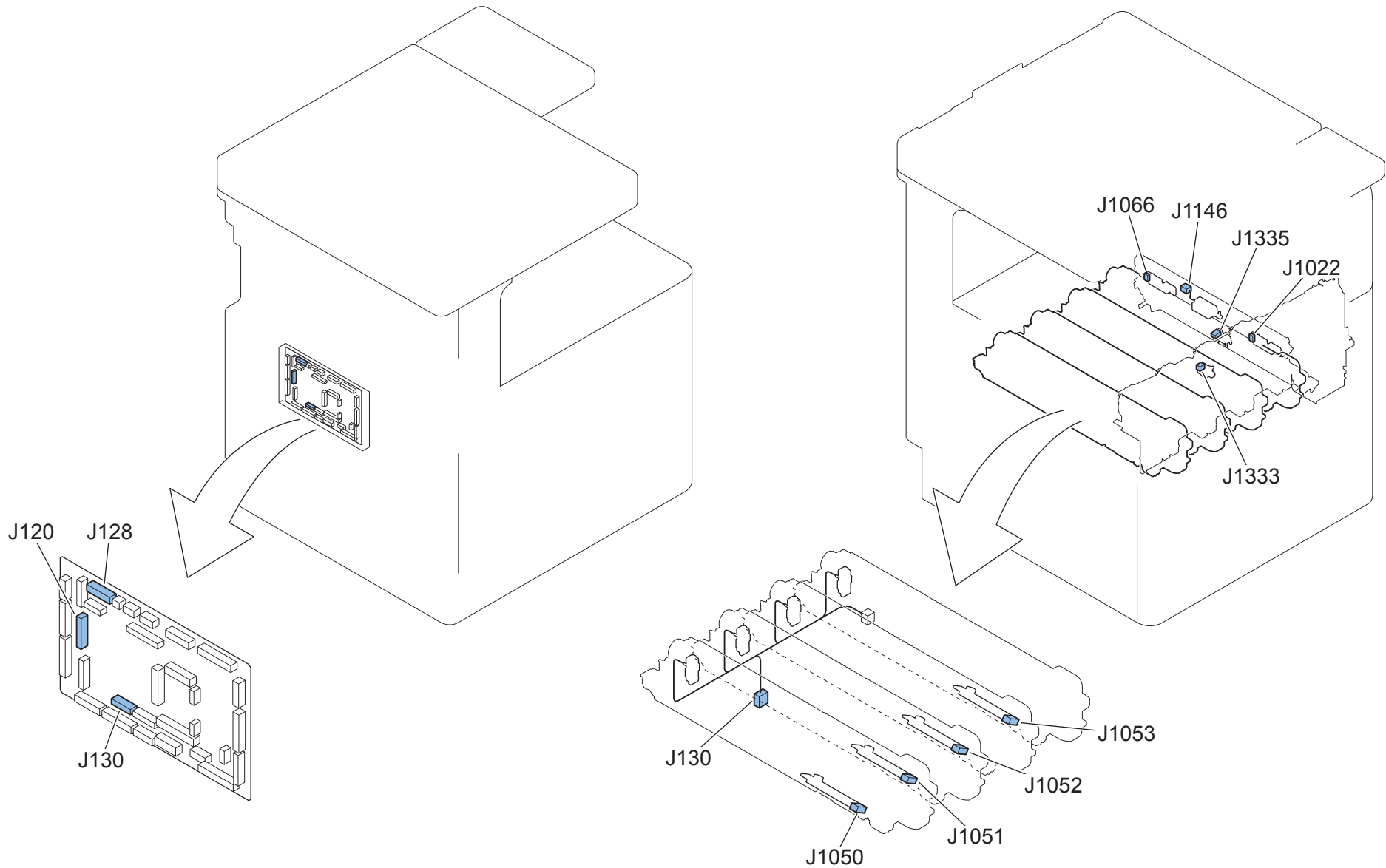




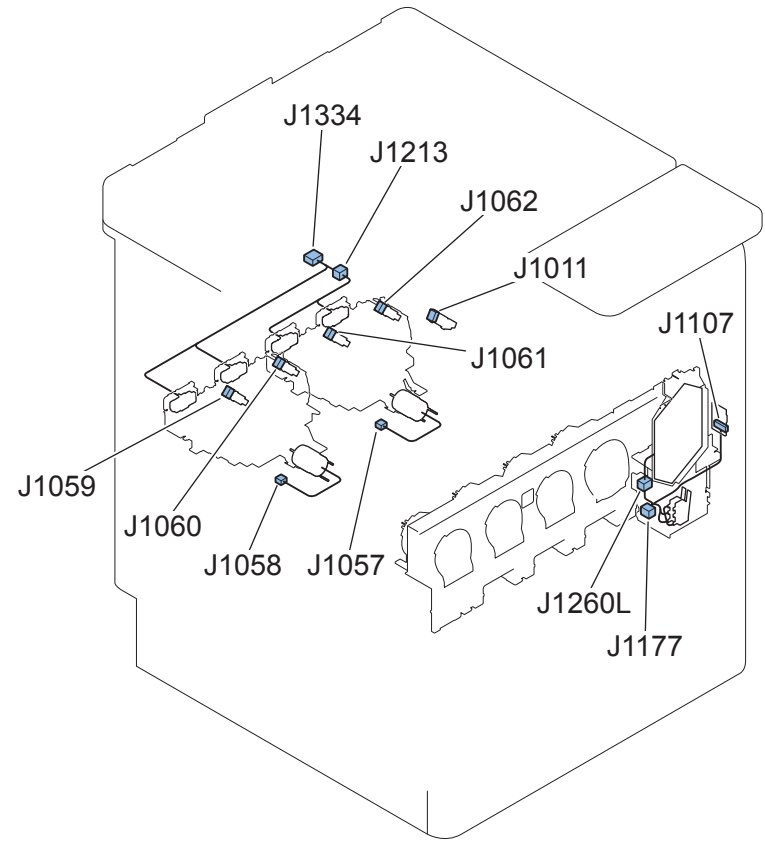
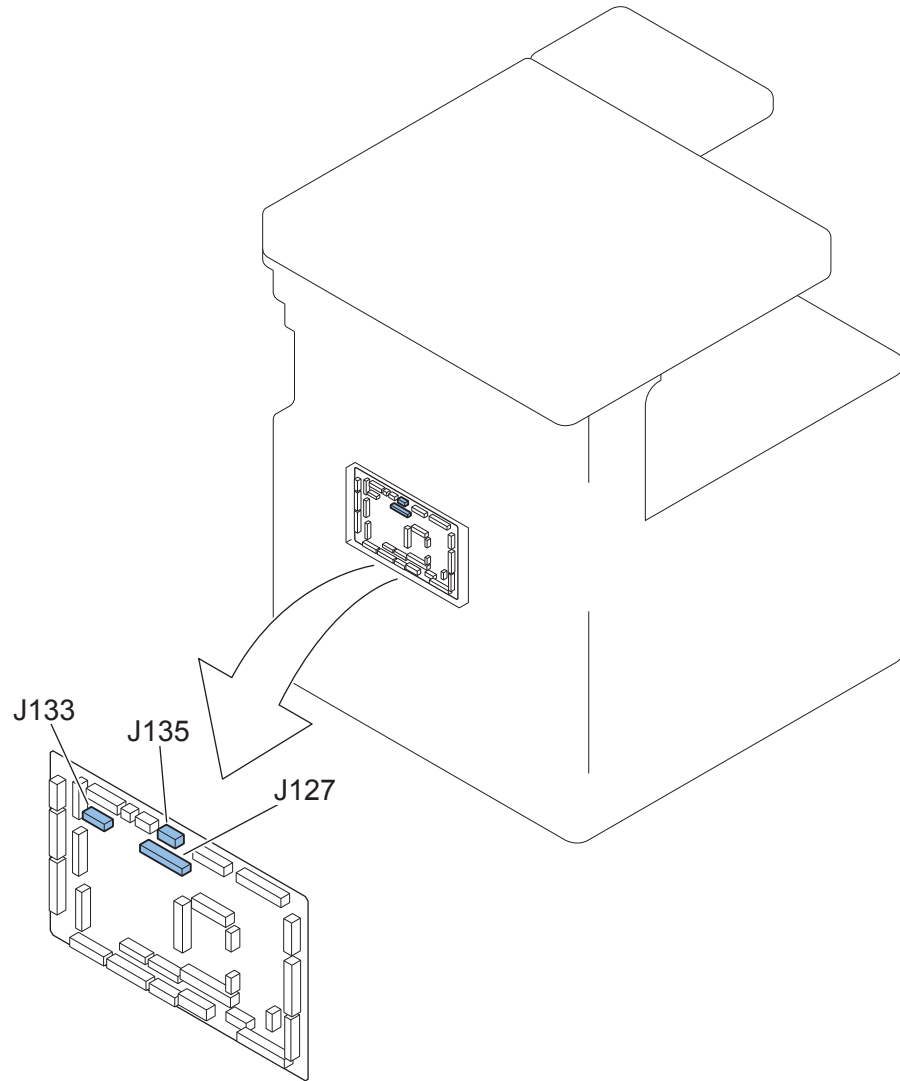
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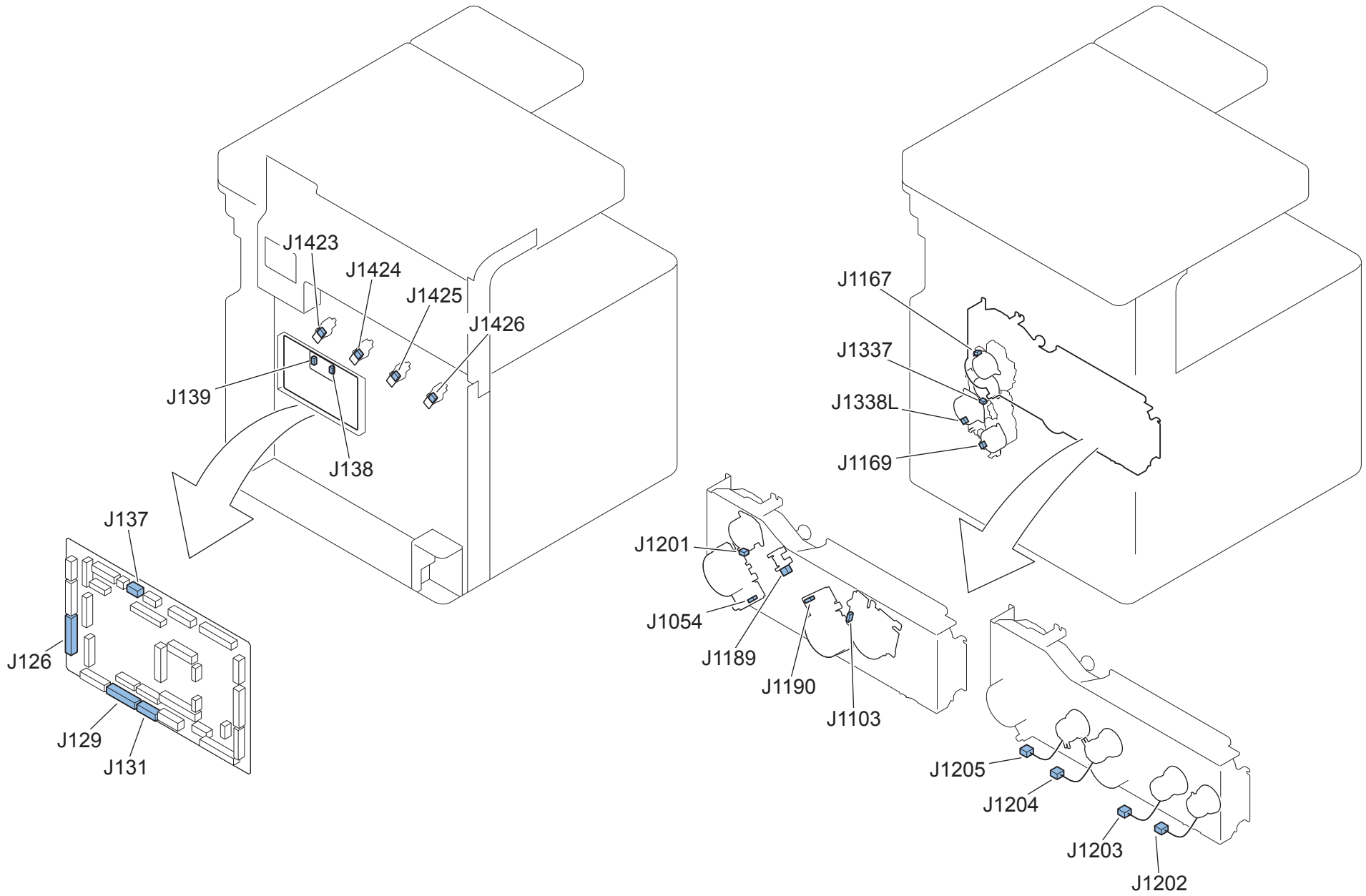
F-4-21



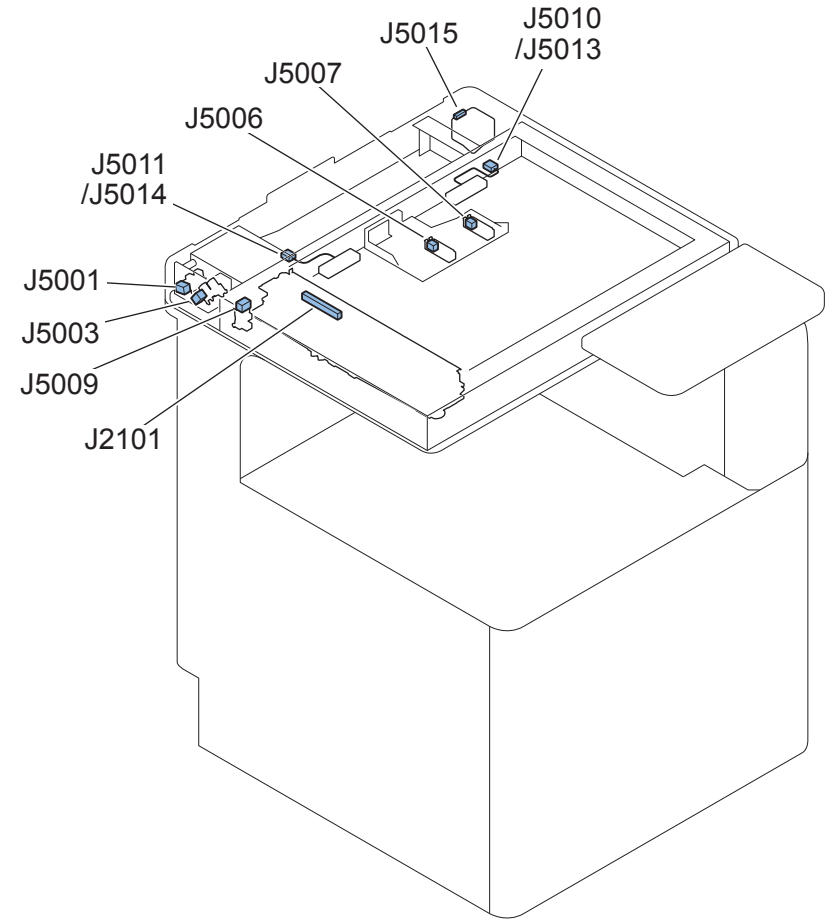
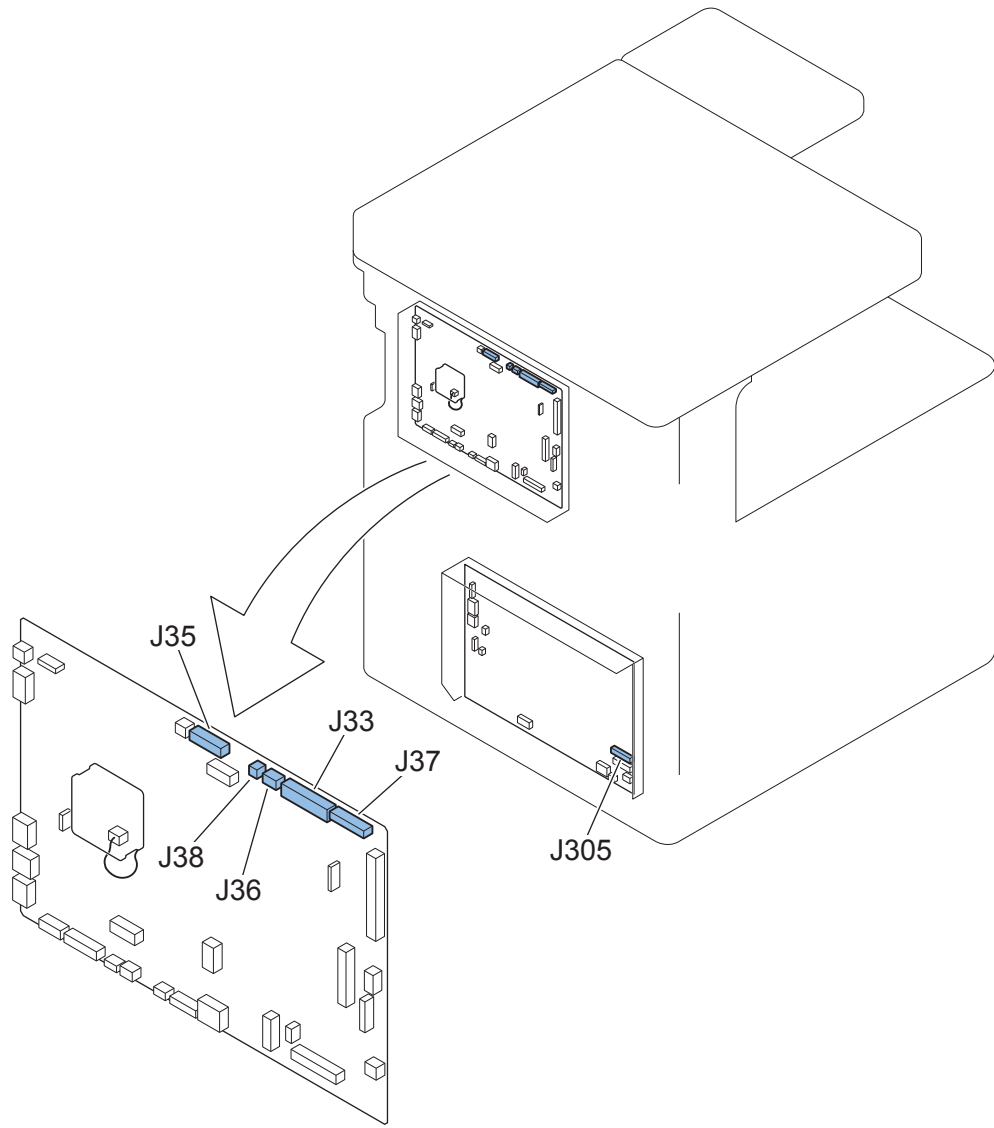
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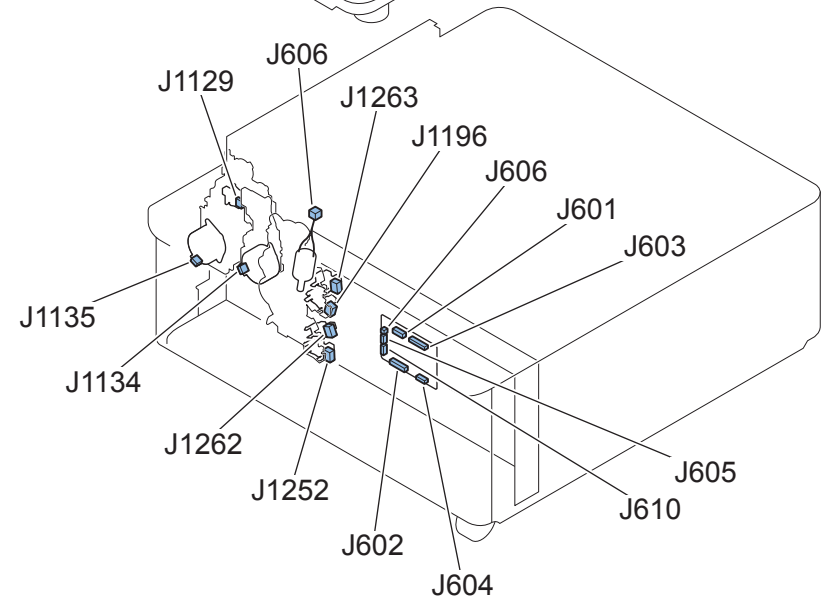
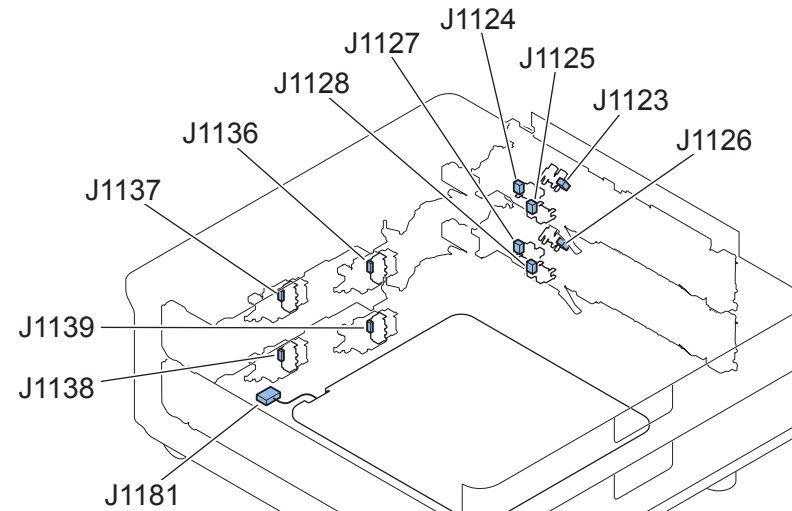
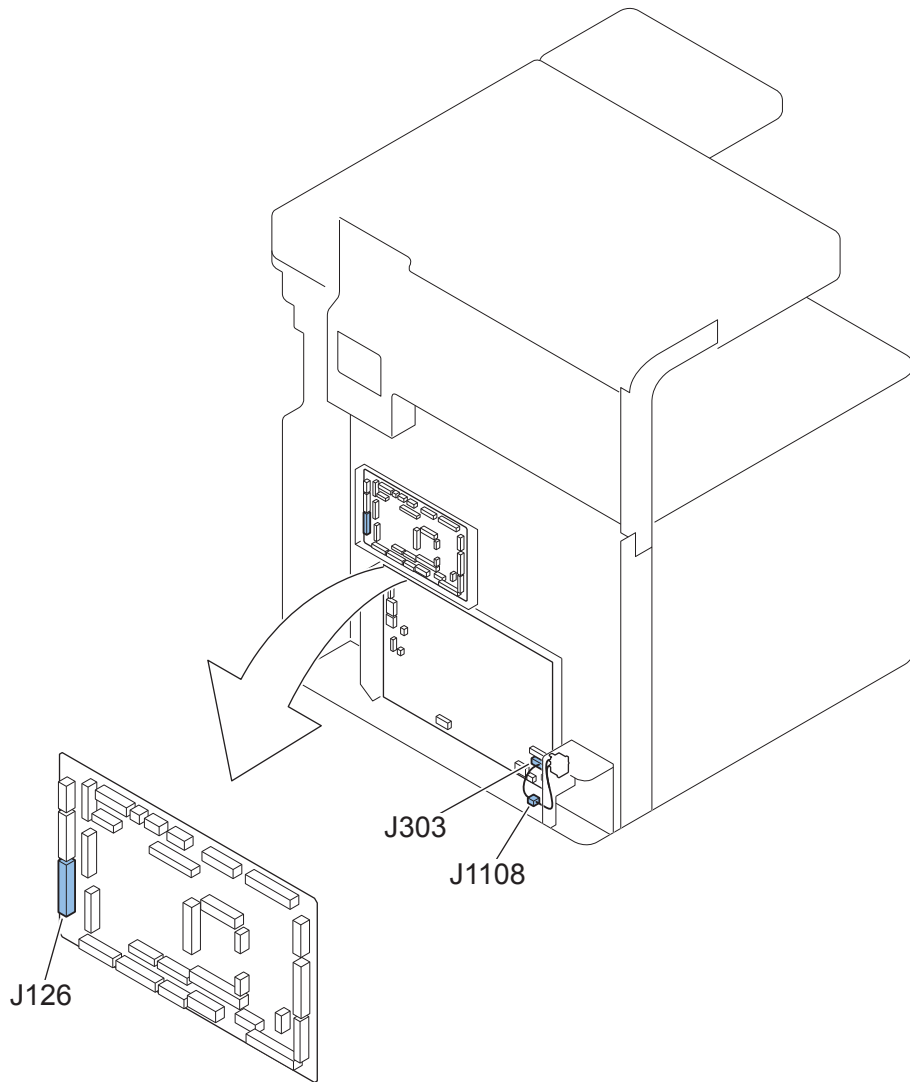
F-4-23



F-4-25



F-4-26



F-4-27

J No.	Symbol	Name	Relay connector		J No.	Symbol	Name	Remarks
J1336	UN01	Low Voltage Power Supply PCB	-	-	J1336	INL01	INLET	-
J301	UN01	Low Voltage Power Supply PCB	-	-	J301	PLG1	Outlet	-
J302	UN01	Low Voltage Power Supply PCB	-	-	-	SW12	AC Interlock Switch	-
J302	UN01	Low Voltage Power Supply PCB	J1001	-	J1002	TP01	Fixing Temperature fuse	-
J302	UN01	Low Voltage Power Supply PCB	J1001	J1002	J1115	H01	Fixing heater	-
J303	UN01	Low Voltage Power Supply PCB	J1108	-	J1108	SW10	Environment Switch	-
J303	UN01	Low Voltage Power Supply PCB	J1003	-	J1181	-	Cassette Pedestal Heater	Cassette Feeding Unit
J305	UN01	Low Voltage Power Supply PCB	-	-	J1004	HTR1	Reader Heater	Reader
J305	UN01	Low Voltage Power Supply PCB	-	-	J1338	H03	Inside Heater	-
J305	UN01	Low Voltage Power Supply PCB	-	-	J1114	H02	Cassette Heater	-
J306	UN01	Low Voltage Power Supply PCB	-	-	J1186	-	Buffer Path	Buffer Path
J323	UN01	Low Voltage Power Supply PCB	J1008	-	J1008	FM02	Power Supply Cooling Fan	-
J314	UN01	Low Voltage Power Supply PCB	-	-	J1118	UN20	Control Panel	-
J314	UN01	Low Voltage Power Supply PCB	-	-	J1194	-	USB Device Port	-
J321	UN01	Low Voltage Power Supply PCB	-	-	J25	UN05	Main Controller PCB	-
J313	UN01	Low Voltage Power Supply PCB	-	-	J20	UN05	Main Controller PCB	-
J32	UN05	Main Controller PCB	-	-	J1006	SW04	Main Power Supply Switch	-
J32	UN05	Main Controller PCB	-	-	J1007	SW04	Main Power Supply Switch	-
J315	UN01	Low Voltage Power Supply PCB	-	-	J100	UN04	DC Controller PCB	-
J322	UN01	Low Voltage Power Supply PCB	-	-	J115	UN04	DC Controller PCB	-
J120	UN04	DC Controller PCB	J1145	-	J1022	UN26	Registration Patch Sensor Unit (Rear)	-
J120	UN04	DC Controller PCB	J1145	-	J1066	UN25	Registration Patch Sensor Unit (Front)	-
J120	UN04	DC Controller PCB	J1145	J1146	J1146	SL02	Registration Shutter Solenoid	-
J121	UN04	DC Controller PCB	J1001B	J1096	J1189	PS10	Fixingt Delivery Sensor	-
J121	UN04	DC Controller PCB	J1001B	-	J1195	UN31	Fixing Fuse PCB	-
J121	UN04	DC Controller PCB	J1001A	J721	J721	TH01	Fixing Thermistors	-
J122	UN04	DC Controller PCB	-	-	J1168	M11	Duplex Reverse Motor	-
J122	UN04	DC Controller PCB	J1155	-	J1019	M09	Fixing Motor	-
J122	UN04	DC Controller PCB	-	-	J1046	SW27	Right Upper Door Open/Close Detection Switch	-
J122	UN04	DC Controller PCB	J1161	J1017	J1017	SL06	Duplex Reverse Solenoid	-
J122	UN04	DC Controller PCB	J1161	-	J1012	PS13	Fixing pressure release sensor	-
J122	UN04	DC Controller PCB	J1161	-	J1079	PS14	First Delivery Sensor	-
J122	UN04	DC Controller PCB	J1161	-	J1250	PS12	Reverse Sensor	-
J124	UN04	DC Controller PCB	J1032	-	J1340	SW11	Right Door Open/Close Detection Switch	-
J124	UN04	DC Controller PCB	J1104	-	J1026	PS08	Cassette 1 Vertical Path Sensor	-
J124	UN04	DC Controller PCB	J1104	-	J1027	PS04	Cassette 1 Lifter Sensor	-
J124	UN04	DC Controller PCB	J1104	-	J1028	PS05	Cassette 1 Paper Sensor	-
J124	UN04	DC Controller PCB	J1105	-	J1029	PS24	Cassette 2 Vertical Path Sensor	-
J124	UN04	DC Controller PCB	J1105	-	J1030	PS06	Cassette 2 Lifter Sensor	-
J124	UN04	DC Controller PCB	J1105	-	J1031	PS07	Cassette 2 Paper Sensor	-
J125	UN04	DC Controller PCB	J1148	-	J1122	UN29	Multi-purpose Tray Width Sensing PCB	-
J125	UN04	DC Controller PCB	J1148	-	J1119	PS30	Multi-purpose Tray Paper Length Sensor 1	-
J125	UN04	DC Controller PCB	J1148	-	J1120	PS31	Multi-purpose Tray Paper Length Sensor 2	-
J125	UN04	DC Controller PCB	J1148	J7777	J1025	PS03	Multi-purpose Tray Paper Sensor	-
J125	UN04	DC Controller PCB	J1148	J7777	J1180	PS32	Multi-purpose Tray HP Sensor	-

J No.	Symbol	Name	Relay connector	J No.	Symbol	Name	Remarks	
J126	UN04	DC Controller PCB	J1097	-	J601	UN11	Cassette Pedestal Driver PCB	Cassette Feeding Unit
J126	UN04	DC Controller PCB	-	-	J1169	M07	Cassette 1,2 Pickup Motor	-
J126	UN04	DC Controller PCB	-	-	J1167	M12	Registration Motor	-
J126	UN04	DC Controller PCB	J1174	-	J1338	M13	Cassette 1,2 Feed / Multi-purpose Pickup Motor	-
J126	UN04	DC Controller PCB	-	-	J1337	M14	Duplex Merging Motor	-
J127	UN04	DC Controller PCB	J1058	-	J1058	M04	Bottle Motor (YM)	-
J127	UN04	DC Controller PCB	J1057	-	J1057	M05	Bottle Motor (CK)	-
J127	UN04	DC Controller PCB	-	-	J1059	PS26	Toner supply sensor (Y)	-
J127	UN04	DC Controller PCB	-	-	J1060	PS27	Toner supply sensor (M)	-
J127	UN04	DC Controller PCB	-	-	J1061	PS28	Toner supply sensor (C)	-
J127	UN04	DC Controller PCB	-	-	J1062	PS29	Toner supply sensor (Bk)	-
J127	UN04	DC Controller PCB	-	-	J1011	PS11	Arch sensor	-
J128	UN04	DC Controller PCB	J1255	J1040	J1050	UN21	Toner Density Sensor (Y)	-
J128	UN04	DC Controller PCB	J1256	J1041	J1051	UN22	Toner Density Sensor (M)	-
J128	UN04	DC Controller PCB	J1257	J1042	J1052	UN23	Toner Density Sensor (C)	-
J128	UN04	DC Controller PCB	J1258	J1043	J1053	UN24	Toner Density Sensor (Bk)	-
J128	UN04	DC Controller PCB	-	-	J1333	SW26	Front Door Switch	-
J133	UN04	DC Controller PCB	J1177	J1260	J1260	FM01	Front Fan	-
J133	UN04	DC Controller PCB	J1177	-	J1107	UN27	Environment Sensor	-
J133	UN04	DC Controller PCB	J1177	-	J1177	SW02	Interlock Switch 1	-
J133	UN04	DC Controller PCB	J1177	-	J1177	SW03	Interlock Switch 2	-
J131	UN04	DC Controller PCB	-	-	J1201	M08	Primary Transfer Roller Disengagement Motor	-
J131	UN04	DC Controller PCB	J1202	-	J1202	CL01	Developing Cylinder Clutch (Y)	-
J131	UN04	DC Controller PCB	J1203	-	J1203	CL02	Developing Cylinder Clutch (M)	-
J131	UN04	DC Controller PCB	J1204	-	J1204	CL03	Developing Cylinder Clutch (C)	-
J131	UN04	DC Controller PCB	J1205	-	J1205	CL04	Developing Cylinder Clutch (Bk)	-
J131	UN04	DC Controller PCB	J1090	-	J1189	PS33	Primary Transfer Roller Disengagement HP Sensor	-
J129	UN04	DC Controller PCB	-	-	J1054	M02	Bk Drum _ ITB Motor	-
J129	UN04	DC Controller PCB	-	-	J1103	M03	CL Drum Motor	-
J129	UN04	DC Controller PCB	-	-	J1190	M10	Developing Motor	-
J130	UN04	DC Controller PCB	-	-	J130	UN35	Drum Unit New/Old Sensor (Y)	-
J130	UN04	DC Controller PCB	-	-	J130	UN36	Drum Unit New/Old Sensor (M)	-
J130	UN04	DC Controller PCB	-	-	J130	UN37	Drum Unit New/Old Sensor (C)	-
J130	UN04	DC Controller PCB	-	-	J130	UN38	Drum Unit New/Old Sensor (Bk)	-
J130	UN04	DC Controller PCB	J1024	-	J1335	PS22	Pre-Registration Sensor	-
J132	UN04	DC Controller PCB	J1117	-	J1045	SW01	Waste toner container detection switch	-
J132	UN04	DC Controller PCB	J1117	J1044	J1339	M17	Waste Toner Feed Motor	-
J132	UN04	DC Controller PCB	J1117	-	J1063	UN34	Waste Toner Sensor PCB	-
J132	UN04	DC Controller PCB	J1117	J1038	J1220	SW16	Cassette 2 size switch B	-
J132	UN04	DC Controller PCB	J1036	-	J1221	SW15	Cassette 2 size switch A	-
J132	UN04	DC Controller PCB	J1035	-	J1222	SW13	Cassette 1 Size Switch	-
J132	UN04	DC Controller PCB	J1033	-	J1033	M06	Cassette 1,2 Lifter Motor	-
J132	UN04	DC Controller PCB	J1033	-	J1251	PS17	Cassette 1 Paper Level Sensor A	-
J132	UN04	DC Controller PCB	J1033	-	J1199	PS19	Cassette 2 Paper Level Sensor A	-
J136	UN04	DC Controller PCB	J1039	-	J1260	PS18	Cassette 1 Paper Level Sensor B	-

J No.	Symbol	Name	Relay connector	J No.	Symbol	Name	Remarks
J136	UN04	DC Controller PCB	J1039	-	J1261	PS20	Cassette 2 Paper Level Sensor B
J135	UN04	DC Controller PCB	J1334	-	J1334	UN39	Bottle New/Old Sensor (Y)
J135	UN04	DC Controller PCB	J1334	-	J1334	UN40	Bottle New/Old Sensor (M)
J135	UN04	DC Controller PCB	J1334	J1213	J1213	UN41	Bottle New/Old Sensor (C)
J135	UN04	DC Controller PCB	J1334	J1213	J1213	UN42	Bottle New/Old Sensor (Bk)
J110	UN04	DC Controller PCB	-	-	J18	UN05	Main Controller PCB
J26	UN05	Main Controller PCB	-	-	J1121	UN06	ECO-ID PCB
J19	UN05	Main Controller PCB	-	-	J201	UN08	Y/M Laser Driver PCB
J111	UN04	DC Controller PCB	-	-	J202	UN08	Y/M Laser Driver PCB
J203	UN08	Y/M Laser Driver PCB	-	-	J801	UN09	C/Bk Laser Driver PCB
J204	UN08	Y/M Laser Driver PCB	-	-	J206	M01	Laser Scanner Motor
J204	UN08	Y/M Laser Driver PCB	-	-	J204	TH04	Laser Thermistors
J113	UN08	Y/M Laser Driver PCB	-	-	J401	UN02	Primary Transfer High Voltage PCB
J112	UN08	Y/M Laser Driver PCB	-	-	J502	UN03	Secondary Transfer High Voltage PCB
J114	UN08	Y/M Laser Driver PCB	-	-	J501	UN03	Secondary Transfer High Voltage PCB
J123	UN04	DC Controller PCB	-	-	J701	UN10	3 Way Unit Driver PCB
J702	UN10	3 Way Unit Driver PCB	-	-	J1111	PS52	Third delivery sensor
J702	UN10	3 Way Unit Driver PCB	J1345	-	J1341	PS53	Second Delivery Paper Full Sensor
J702	UN10	3 Way Unit Driver PCB	-	-	J1110	PS51	Second delivery / Reverse sensor
J702	UN10	3 Way Unit Driver PCB	-	-	J1112	M30	Reverse Motor
J702	UN10	3 Way Unit Driver PCB	-	-	J1113	M31	Second Delivery Motor
J182	UN04	DC Controller PCB	-	-	J1099	-	Buffer Path Inner Finisher
J137	UN04	DC Controller PCB	-	-	J1420	UN12	Pre-exposure LED Driver PCB
J1421	UN12	Pre-exposure LED Driver PCB	J1422	-	J1423	UN16	LED PCB(Bk)
J1421	UN12	Pre-exposure LED Driver PCB	J1422	-	J1424	UN15	LED PCB(C)
J1421	UN12	Pre-exposure LED Driver PCB	J1422	-	J1425	UN14	LED PCB(M)
J1421	UN12	Pre-exposure LED Driver PCB	J1422	-	J1426	UN13	LED PCB(Y)
J134	UN04	DC Controller PCB	J1342	-	J1342	FM03	Motor Fan
J190	UN04	DC Controller PCB	-	-	J1101	-	-
J199	UN04	DC Controller PCB	-	-	J1069	-	-
J604	UN11	Cassette Pedestal Driver PCB	-	-	J1135	M103	Cassette 3, 4 Feed Motor
J604	UN11	Cassette Pedestal Driver PCB	-	-	J1134	M101	Cassette 3, 4 Pickup Motor
J606	UN11	Cassette Pedestal Driver PCB	-	-	J606	M102	Cassette 3, 4 Lifter Motor
J603	UN11	Cassette Pedestal Driver PCB	J1131	-	J1136	SW102	Cassette 3 size switch A
J603	UN11	Cassette Pedestal Driver PCB	J1130	-	J1137	SW103	Cassette 3 size switch B
J603	UN11	Cassette Pedestal Driver PCB	J1132	-	J1138	SW105	Cassette 4 size switch B
J603	UN11	Cassette Pedestal Driver PCB	J1133	-	J1139	SW104	Cassette 4 size switch A
J602	UN11	Cassette Pedestal Driver PCB	J1187	-	J1123	PS101	Cassette 3 Vertical Path Sensor
J602	UN11	Cassette Pedestal Driver PCB	J1187	-	J1124	PS104	Cassette 3 Lifter Sensor
J602	UN11	Cassette Pedestal Driver PCB	J1187	-	J1125	PS102	Cassette 3 Paper Sensor
J602	UN11	Cassette Pedestal Driver PCB	-	-	J1129	SW101	Cassette Right Door Open/Close Detection Switch
J602	UN11	Cassette Pedestal Driver PCB	J1188	-	J1126	PS106	Cassette 4 Vertical Path Sensor
J602	UN11	Cassette Pedestal Driver PCB	J1188	-	J1127	PS105	Cassette 4 Lifter Sensor
J602	UN11	Cassette Pedestal Driver PCB	J1188	-	J1128	PS103	Cassette 4 Paper Sensor

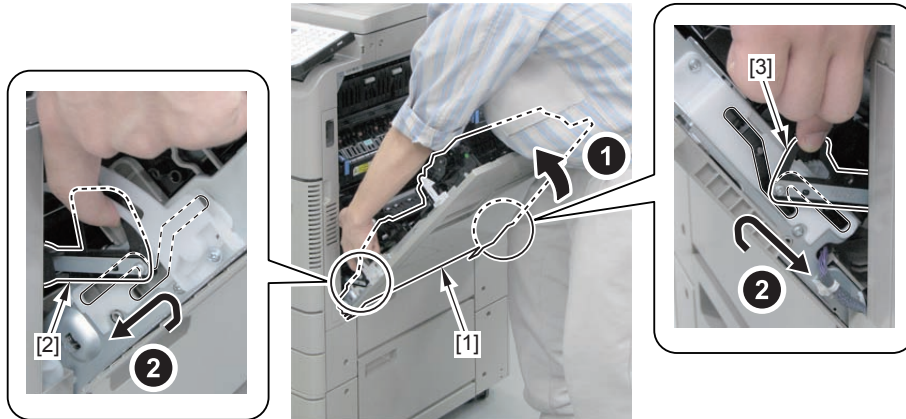
J No.	Symbol	Name	Relay connector		J No.	Symbol	Name	Remarks
J605	UN11	Cassette Pedestal Driver PCB	-	-	J1252	PS108	Cassette 4 Paper Level Sensor A	Cassette Feeding Unit
J605	UN11	Cassette Pedestal Driver PCB	-	-	J1196	PS107	Cassette 3 Paper Level Sensor A	Cassette Feeding Unit
J610	UN11	Cassette Pedestal Driver PCB	-	-	J1262	PS110	Cassette 4 Paper Level Sensor B	Cassette Feeding Unit
J610	UN11	Cassette Pedestal Driver PCB	-	-	J1263	PS109	Cassette 3 Paper Level Sensor B	Cassette Feeding Unit
J6	UN05	Main Controller PCB	-	-	-	-	USB Device Port	-
J4	UN05	Main Controller PCB	-	-	J1003	UN20	Control Panel	-
J23	UN05	Main Controller PCB	-	-	-	-	HDD	-
J29	UN05	Main Controller PCB	-	-	-	-	HDD	-
J35	UN05	Main Controller PCB	J1408	-	J1410	PCB1	ADF Laser Driver PCB	ADF
J38	UN05	Main Controller PCB	J1409	-	J1411	PCB1	ADF Laser Driver PCB	ADF
J37	UN05	Main Controller PCB	-	-	J5001	PS_N2	Copyboard Cover Open/Closed Sensor (rear)	Reader
J37	UN05	Main Controller PCB	J5002	J5008	J5009	PS_A1	Scanner Unit HP Sensor	Reader
J37	UN05	Main Controller PCB	-	-	J5003	PS_N1	Copyboard Cover Open/Closed Sensor (front)	Reader
J37	UN05	Main Controller PCB	J5004	J5005	J5006	PS_R1	Original Size Sensor(AB)	Reader
J37	UN05	Main Controller PCB	J5004	J5005	J5007	PS_R2	Original Size Sensor(INCH)	Reader
J36	UN05	Main Controller PCB	-	-	J5015	STM1	Scanner Motor	Reader
J33	UN05	Main Controller PCB	-	-	J2101	-	Scanner Unit	Reader
J28	UN05	Main Controller PCB	-	-	-	-	Image Analysis Board	-
J24	UN05	Main Controller PCB	-	-	-	-	Counter PCB	-
J17	UN05	Main Controller PCB	-	-	-	-	Voice Operation / Voice Guidance	-
J15	UN05	Main Controller PCB	-	-	-	-	Control I/F	-
J10	UN05	Main Controller PCB	-	-	-	UN61	Flash PCB	-
J8	UN05	Main Controller PCB	-	-	-	UN62	TPM PCB	-
J14	UN05	Main Controller PCB	-	-	-	-	Card Reader / Serial I/F	-
J7	UN05	Main Controller PCB	-	-	-	-	Ethernet	-
J5	UN05	Main Controller PCB	-	-	-	-	USB(HOST)	-
J3	UN05	Main Controller PCB	-	-	-	-	USB(DEVICE)	-
J40	UN05	Main Controller PCB	-	-	J40	FM04	Controller Fan	-
J1002	UN64	Control Panel CPU PCB	-	-	-	-	TTP	Control Panel
J1004	UN64	Control Panel CPU PCB	-	-	-	-	LCD	Control Panel
J1008	UN64	Control Panel CPU PCB	-	-	J1	UN65	Control Panel Numeric Keypad PCB	Control Panel
J1007	UN64	Control Panel CPU PCB	-	-	J2	UN65	Control Panel Numeric Keypad PCB	Control Panel
J30	UN05	Main Controller PCB	-	-	J1	UN66	Fax PCB (1line)	FAX
J27	UN05	Main Controller PCB	-	-	J2	UN66	Fax PCB (1line)	FAX
J27	UN05	Main Controller PCB	-	-	J5	UN68	Fax PCB (2line)	FAX
J16	UN05	Main Controller PCB	-	-	J403	UN68	Fax PCB (2line)	FAX
J4	UN66	Fax PCB (1line)	J41	-	J41	SP1	#N/A	FAX
J3	UN66	Fax PCB (1line)	-	-	J4	UN67	Fax Interface PCB (1line)	FAX
J6	UN66	Fax PCB (1line)	-	-	J8	UN68	Fax PCB (2line)	FAX
J4	UN68	Fax PCB (2line)	-	-	J4	UN69	Fax Interface PCB (2line)	FAX
J7	UN66	Fax PCB (1line)	J1116	-	J304	UN01	Low Voltage Power Supply PCB	FAX
J2	UN69	Fax Interface PCB (2line)	J1116	-	J304	UN01	Low Voltage Power Supply PCB	FAX

T-4-17

External Cover/Interior System

● Fully open the Right Door

- 1) Open the Right Door.
- 2) Lift up the Right Door [1], slide the Right Door Guide (Left) [2] and Right Door Guide (Right) [3] in the direction in the figure below to fully open it.

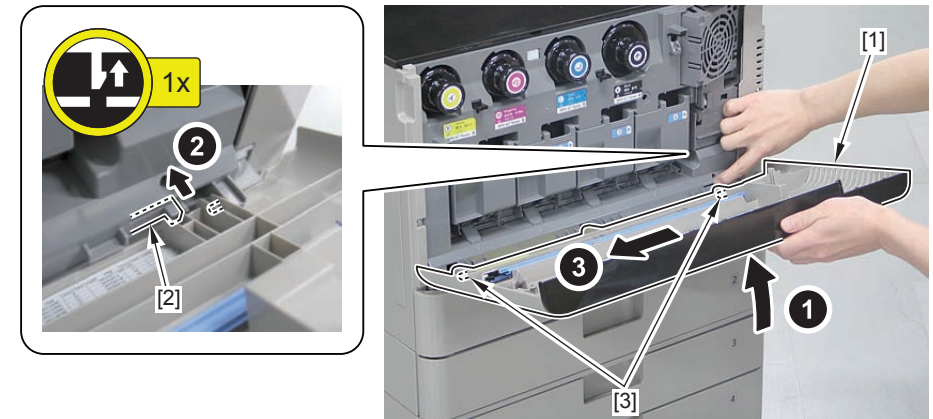


F-4-28

● Removing the Front Door

■ Preparation

- 1) Open the Front Door.
- 2) Remove the Front Door [1] while lifting it up slightly and pushing the claw [2].
 - 1 Claw [2]
 - 2 Bosses [3]



F-4-29

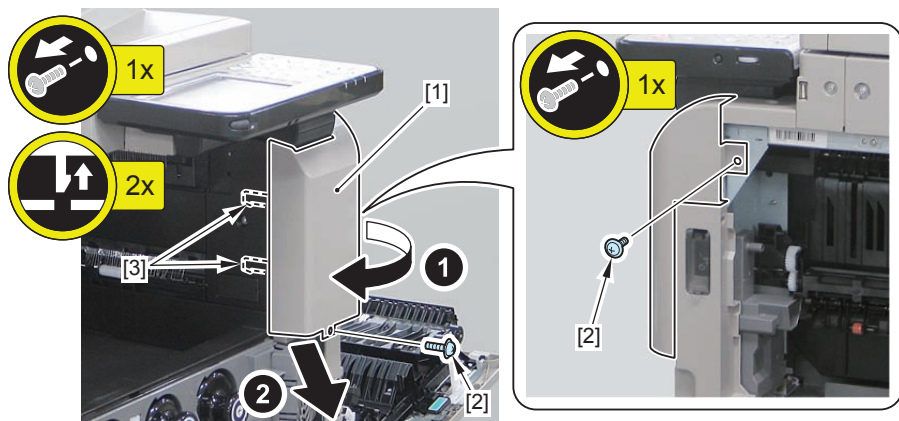
Removing the Front Fan

Preparation

- 1) Open the Front Door.(Refer to page 4-27)
- 2) Fully open the Right Door.(Refer to page 4-27)
- 3) Remove the Fixing Unit.(Refer to page 4-72)
- 4) Remove the Drum Unit (Bk).

Procedure

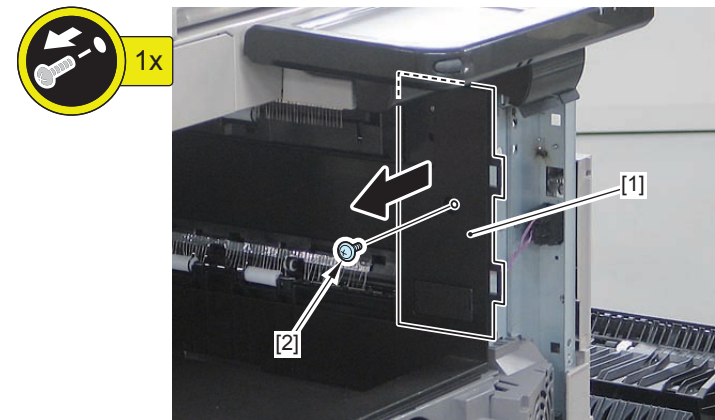
- 1) Remove the Control Panel Lower Cover [1].
 - 2 Screws [2]
 - 2 Claws [3]



F-4-30

Remove the Delivery Outlet Side Cover [1].

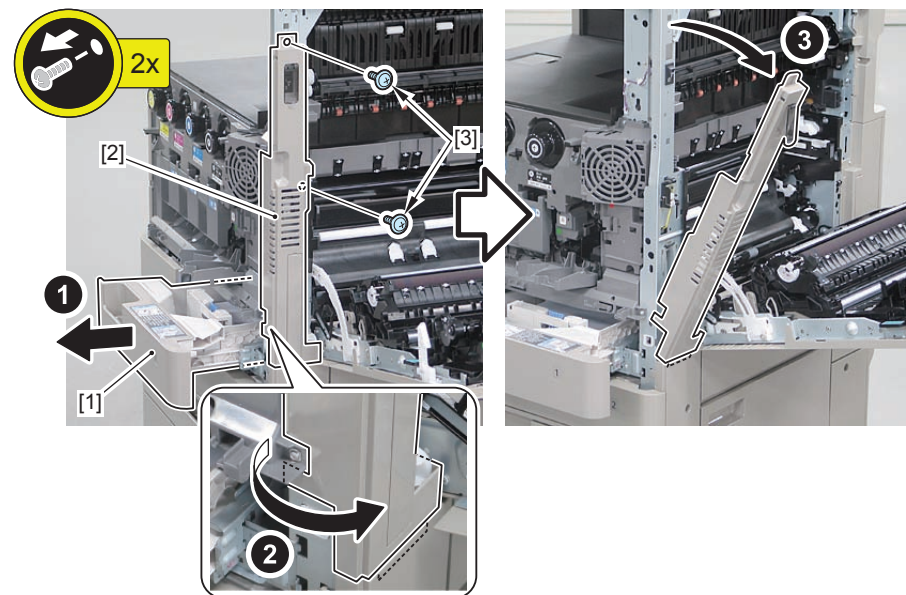
- 1 Screw [2]



F-4-31

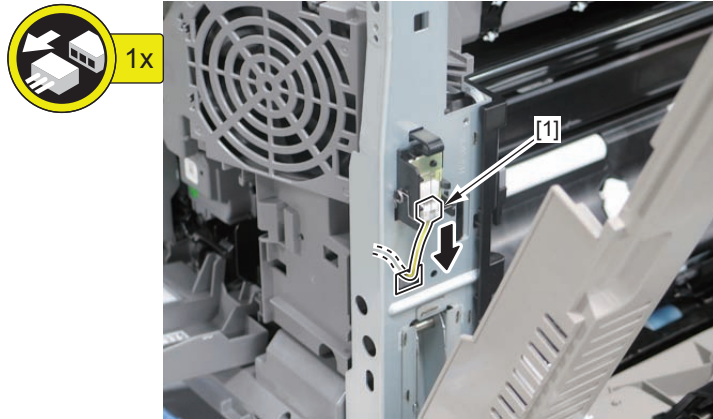
2) Pull out the cassette [1] and open the Cassette Side Cover [2].

- 2 Screws [3]



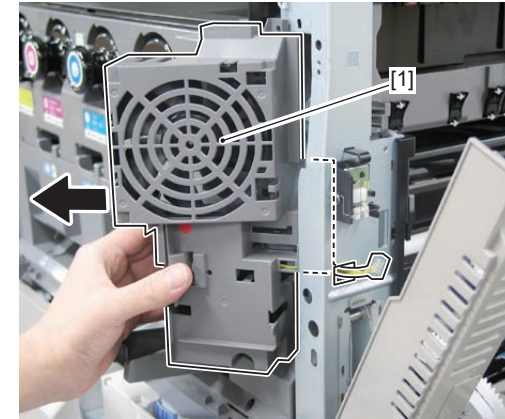
F-4-32

3) Remove the connector [1] of the Front Fan.



F-4-33

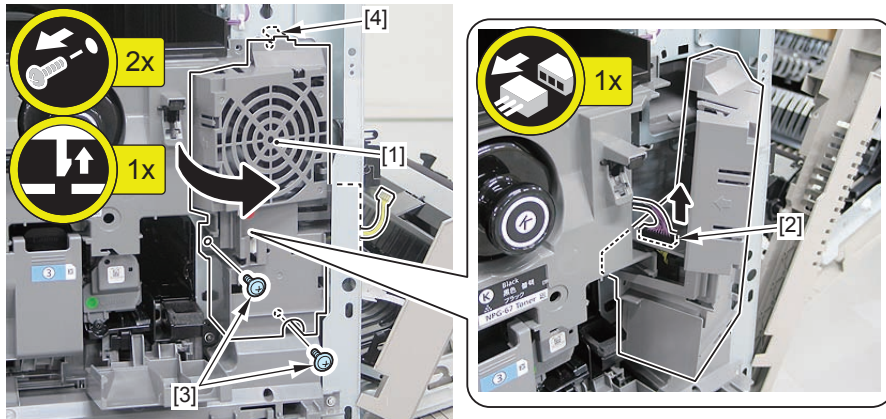
5) Remove the Front Fan.



F-4-35

4) Open the Front Fan [1], and remove the connector [2].

- 2 Screws [3]
- 1 Claws [4]



F-4-34

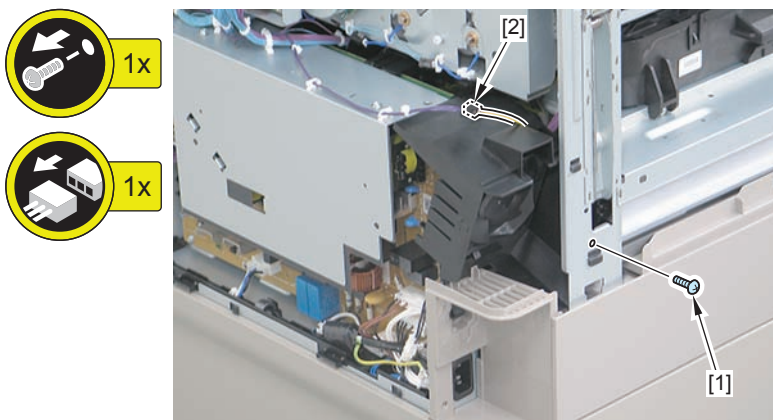
Removing the Power Supply Cooling Fan

Preparation

- 1) Remove the Cover (Rear Upper).
- 2) Remove the Cover (Rear Lower).
- 3) Remove the Left Cover (Upper).
- 4) Remove the Left Cover Assembly (Rear)

Procedure

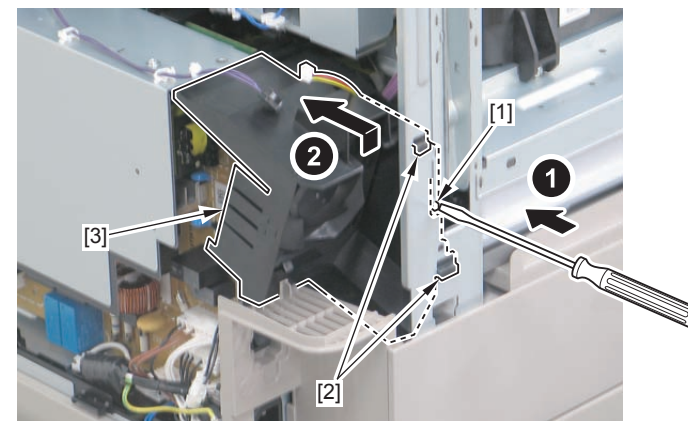
- 1) Remove the screw [1] and disconnect the connector [2].
 - 1 Screw [1]
 - 2 Connectors [2]



F-4-36

- 2) Release the 2 hooks [2] while pushing down the boss [1] with a screwdriver, and remove the Power Supply Cooling Fan [3].

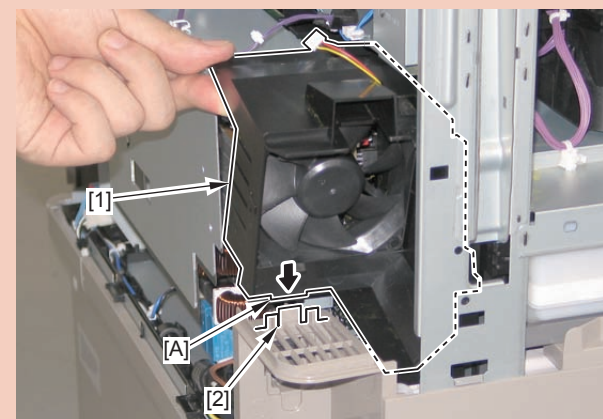
- 1 Boss [1]
- 2 Hooks [2]



F-4-37

Points to Note at Installation

Be sure to insert the [A] part of the Power Supply Cooling Fan [1] into the guide [1] in the cover to install the fan.



F-4-38

Removing the Primary Transfer High Voltage PCB

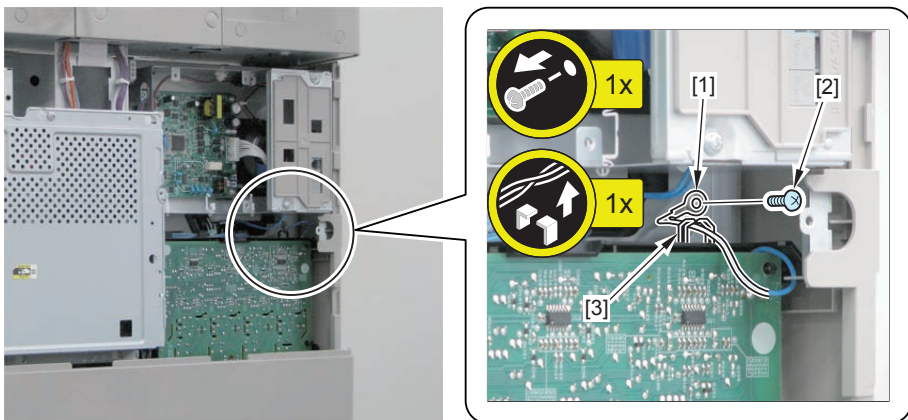
Preparation

1) Remove the Cover (Rear Upper).

Procedure

1) Remove the grounding [1].

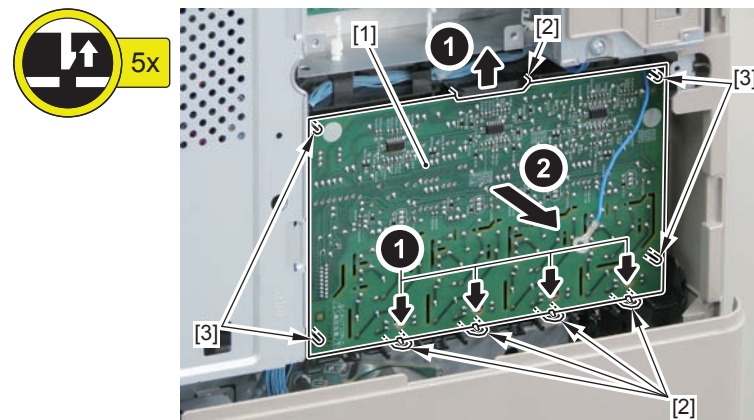
- 1 Screw [2]
- 1 Harness Guide [3]



F-4-39

2) Remove the Primary Transfer High Voltage PCB [1] from the guide.

- 5 Claws [2]
- 4 Bosses [3]



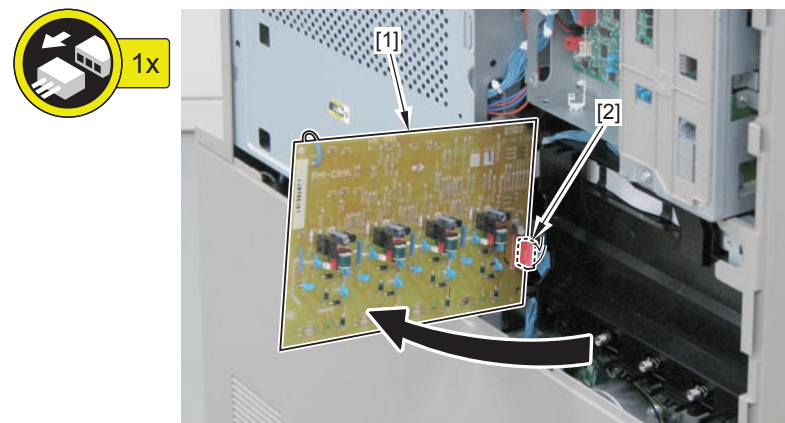
F-4-40

CAUTION:

Since there is a connector connected to the back side of the Primary Transfer High Voltage PCB, do not remove it abruptly.

3) Remove the Primary Transfer High Voltage PCB [1].

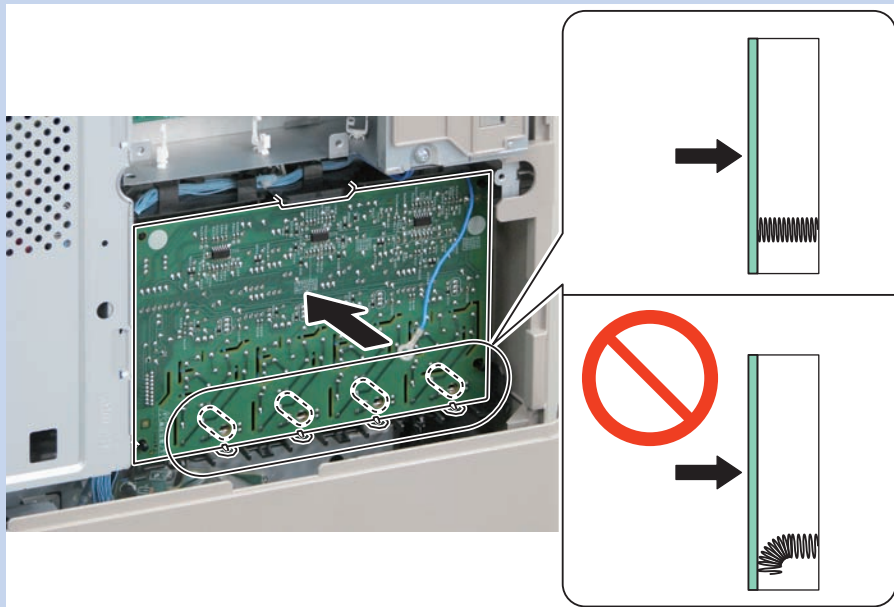
- 1 Connector [2]



F-4-41

NOTE:
When installing the PCB, be sure to fit it with the 4 claws on the bottom side.

NOTE:
Be sure that the Contact Spring is in the correct position.



F-4-42

Removing the Motor Fan

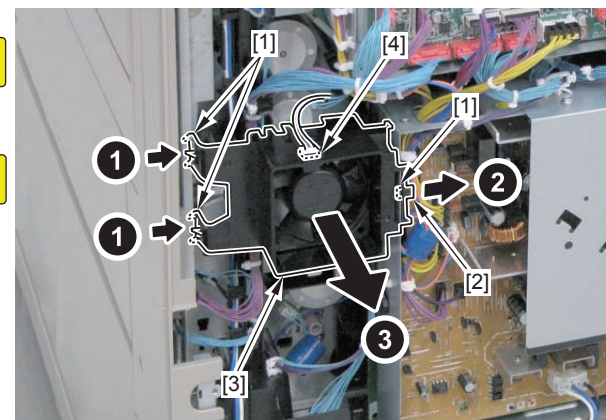
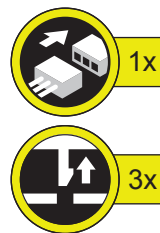
Preparation

- 1) Remove the Cassette Connector Cover.
- 2) Remove the Cover (Rear Lower).

Procedure

- 1) Release the 2 claws [1], and pull the tab [2] to remove the Motor Fan [3].

- 1 Connector [4]
- 3 Claws [1]



F-4-43

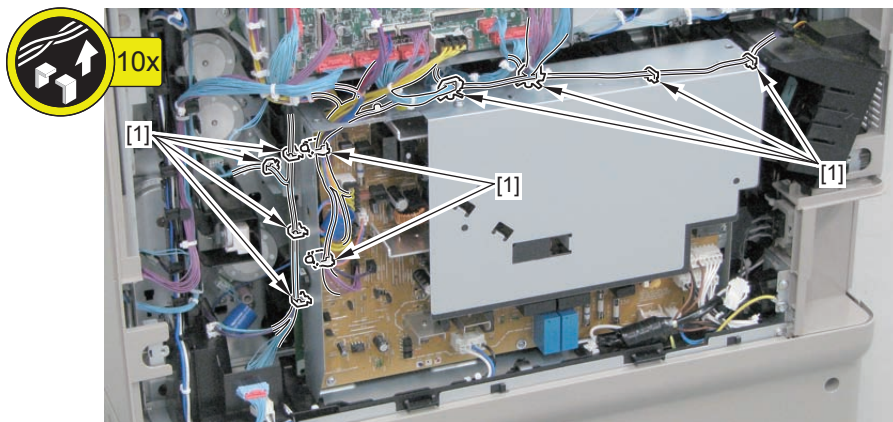
Removing the Low Voltage Power Supply Unit

Preparation

- 1) Remove the Cassette Connector Cover.
- 2) Remove the Cover (Rear Lower).
- 3) Remove the Motor Fan. (Refer to page 4-32)

Procedure

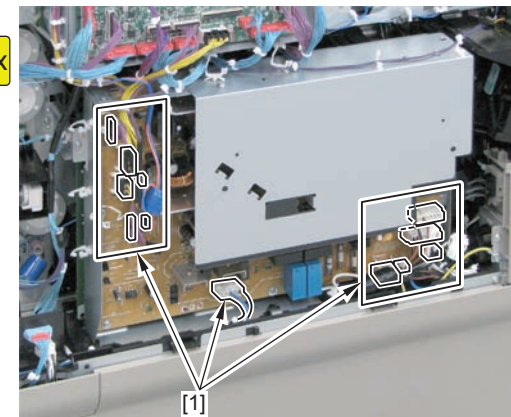
- 1) Remove the Wire Saddles [1].
 - 10 Wire Saddles [1]



F-44

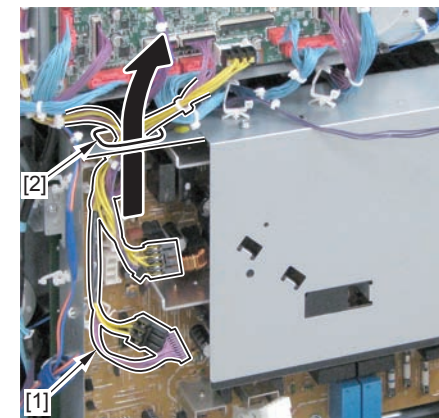
- 2) Disconnect the connectors [1], Clamp [2].

- 12 Connectors [1]
- 1 Clamp [2]



F-445

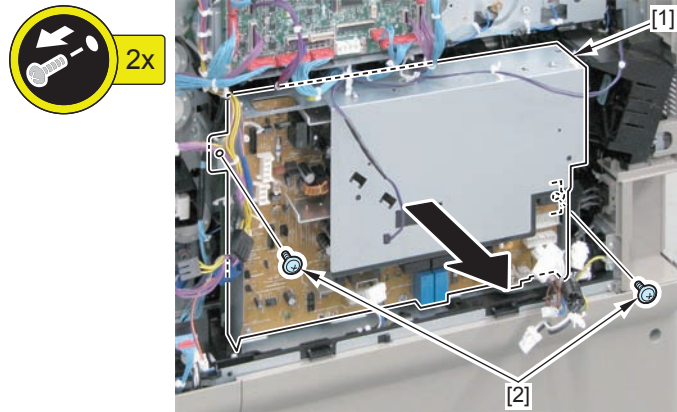
- 3) Free the harness [1] from the hole [2] in the Low Voltage Power Supply Unit.



F-446

4) Remove the Low Voltage Power Supply Unit [1].

- 2 Screws [2]



F-4-47

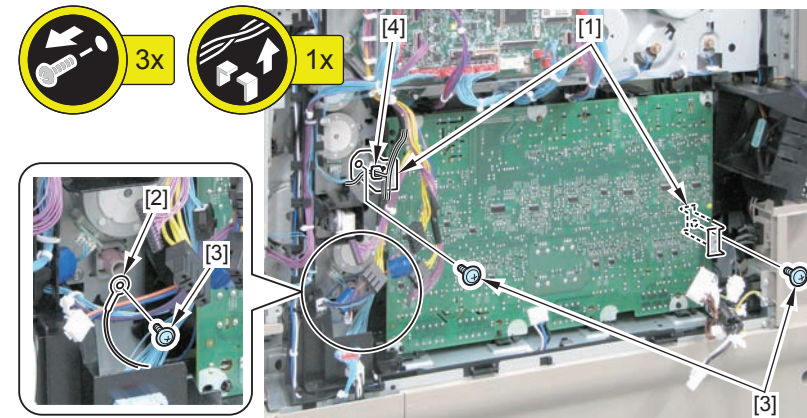
Removing the Secondary Transfer High Voltage PCB

Preparation

- 1) Remove the Cassette Connector Cover.
- 2) Remove the Cover (Rear Lower).
- 3) Remove the Motor Fan. (Refer to page 4-32)
- 4) Remove the Low Voltage Power Supply Unit. (Refer to page 4-33)

Procedure

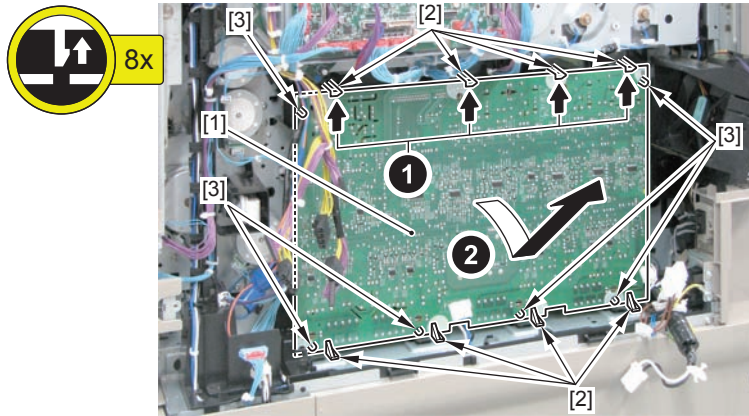
- 1) Remove the 2 Support Plates [1] and the grounding [2].
 - 3 Screws [3]
 - 1 Wire Saddle [4]



F-4-48

2) Remove the Secondary Transfer High Voltage PCB [1] from the guide.

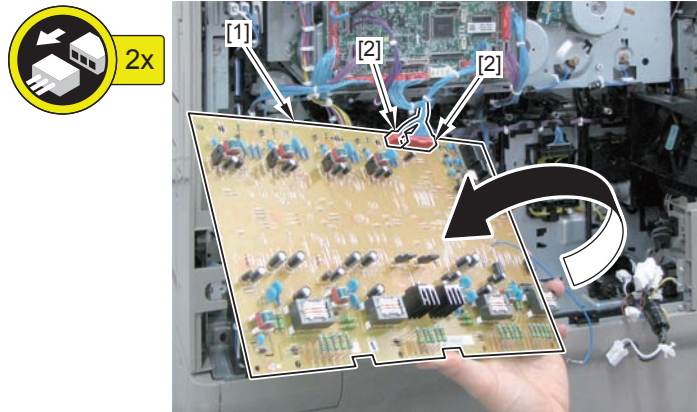
- 8 Claws [2]
- 6 Bosses [3]



F-4-49

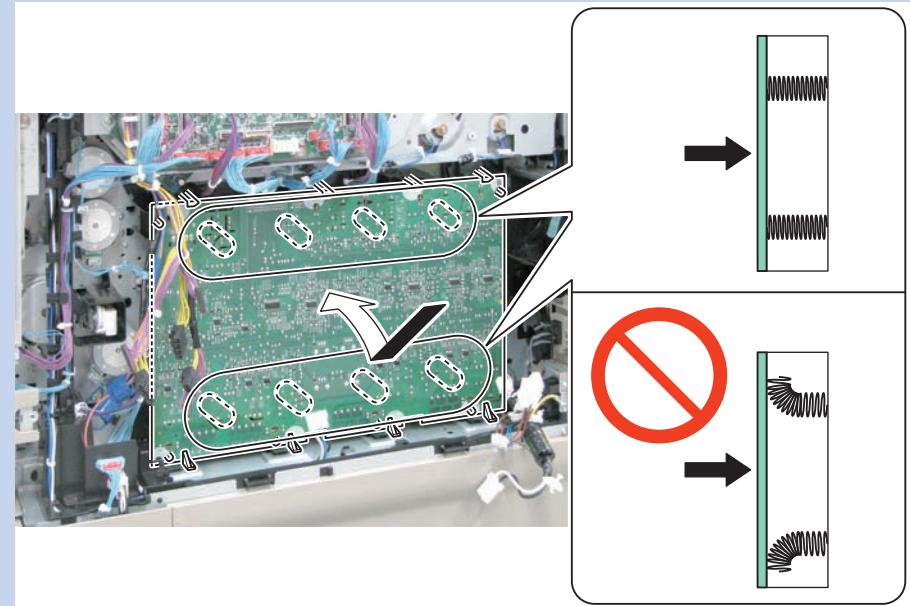
3) Disconnect the 2 connectors [2], and remove the Secondary Transfer High Voltage PCB [1].

- 2 Connectors [2]



F-4-50

NOTE:
Be sure that the Contact Spring is in the correct position.



F-4-51

Removing the Control Panel



F-4-52

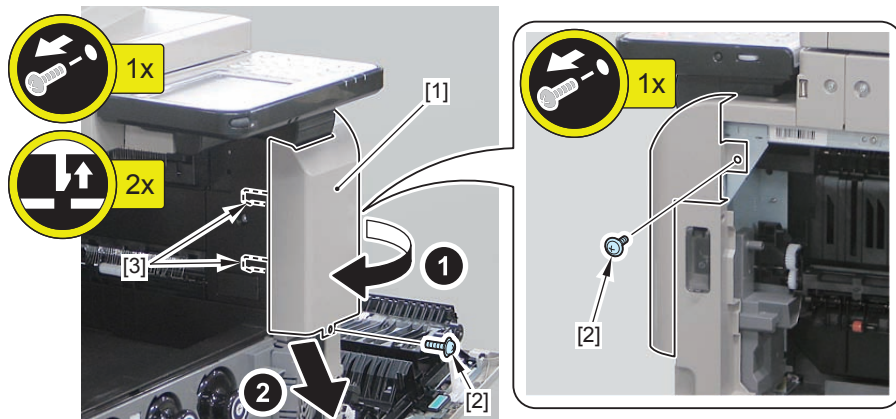
Preparation

- 1) Open the Front Door.
- 2) Fully open the Right Door.

Procedure

- 1) Remove the Control Panel Lower Cover [1].

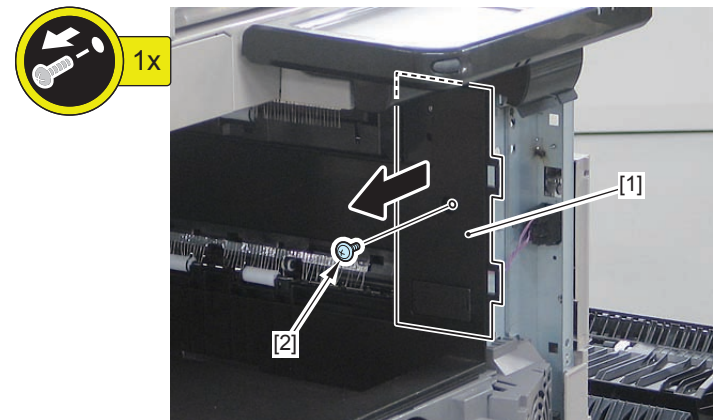
- 2 Screws [2]
- 2 Claws [3]



F-4-53

- 2) Remove the Delivery Outlet Side Cover [1].

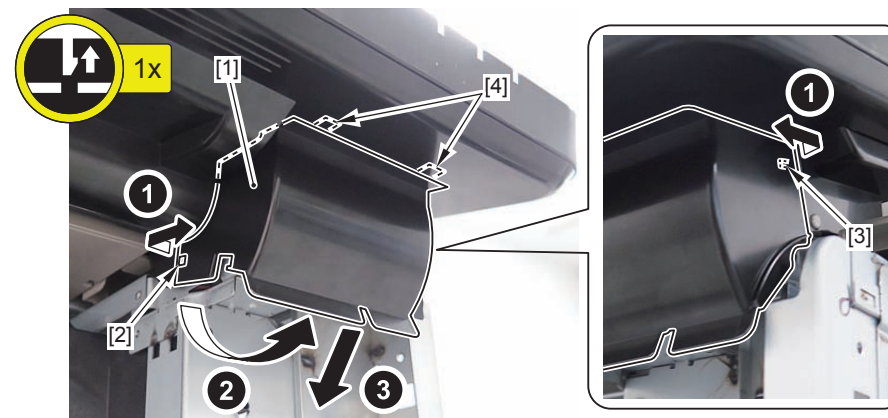
- 1 Screw [2]



F-4-54

- 3) Remove the Control Panel Hinge Cover (Right) [1].

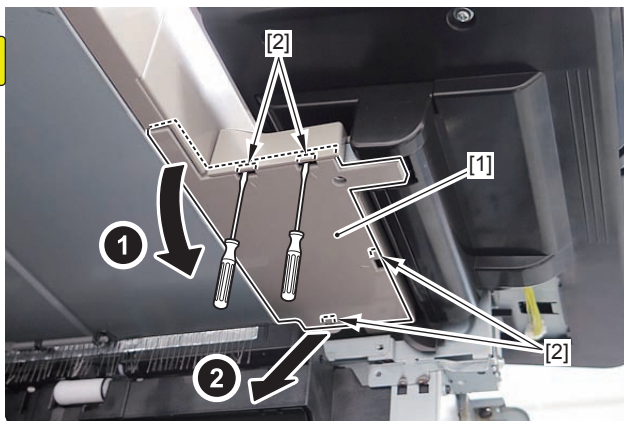
- 1 Claw [2]
- 1 Boss [3]
- 2 Protrusions [4]



F-4-55

4) Remove the Control Panel Lower Cover (Small) [1].

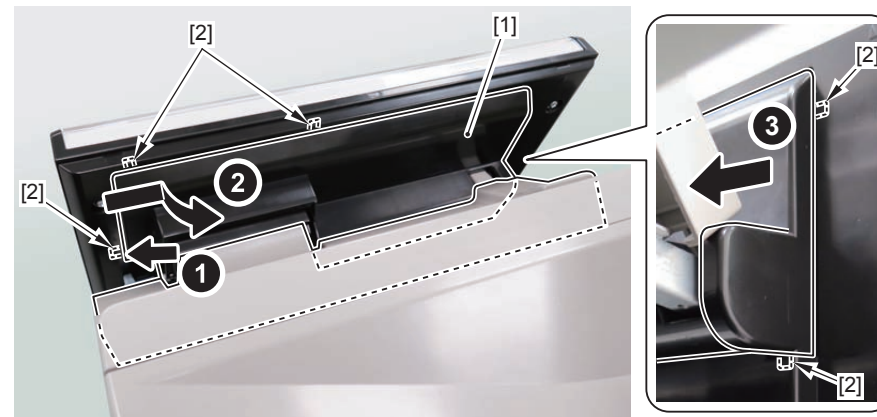
- 4 Claws [2]



F-4-56

6) Remove the Control Panel Hinge Inner Cover [1].

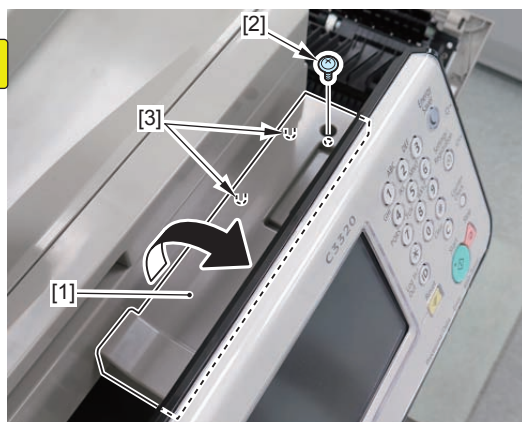
- 5 Protrusions [2]



F-4-58

5) Remove the Control Panel Cover (Rear) [1].

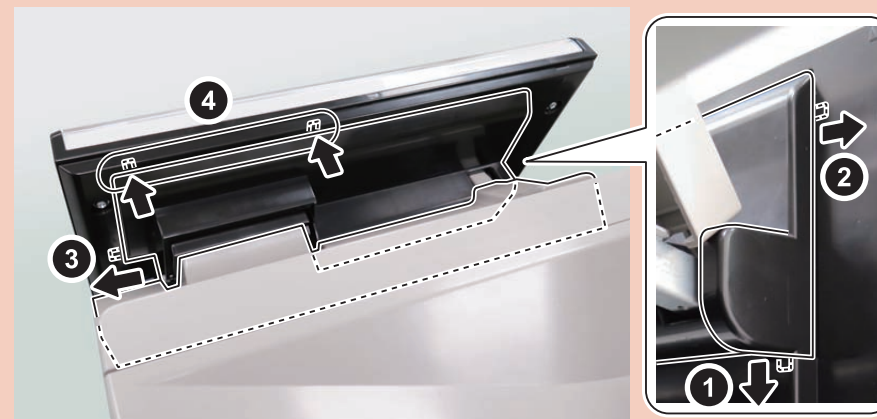
- 1 Screw [2]
- 2 Bosses [3]



F-4-57

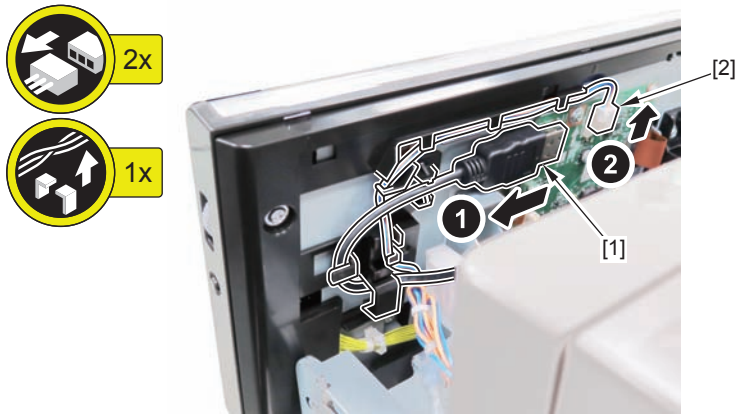
Points to Note at Installation:

When installing the Control Panel Hinge Inner Cover, be sure to follow the order shown below.



F-4-59

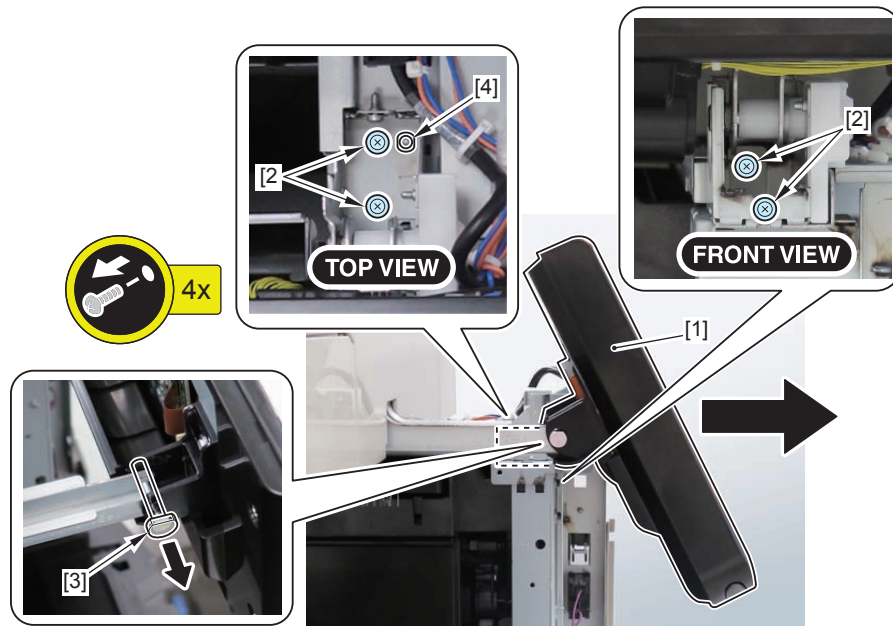
7) Disconnect the Control Panel Cable [1] and the Power Supply Cable [2].



F-4-60

8) Remove the Control Panel [1].

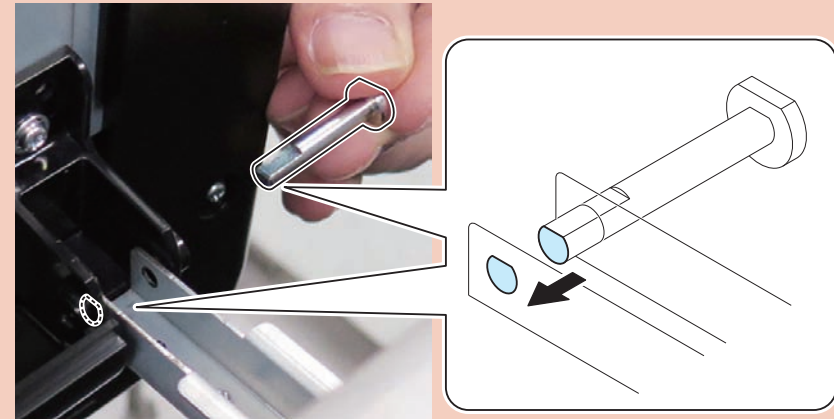
- 4 Screws [2]
- 1 Hinge Shaft [3]
- 1 Boss [4]



F-4-61

Points to Note at Installation:

When installing the Hinge Shaft, be sure to align the shape of the shaft hole with that of the shaft's leading edge.



F-4-62

Removing the Control Panel CPU PCB



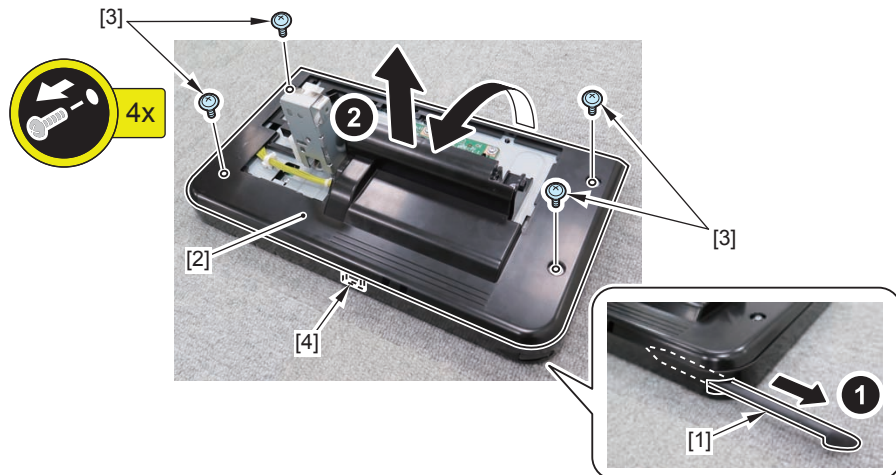
F-4-63

Preparation

- 1) Open the Front Door.
- 2) Fully open the Right Door.
- 3) Remove the Control Panel.

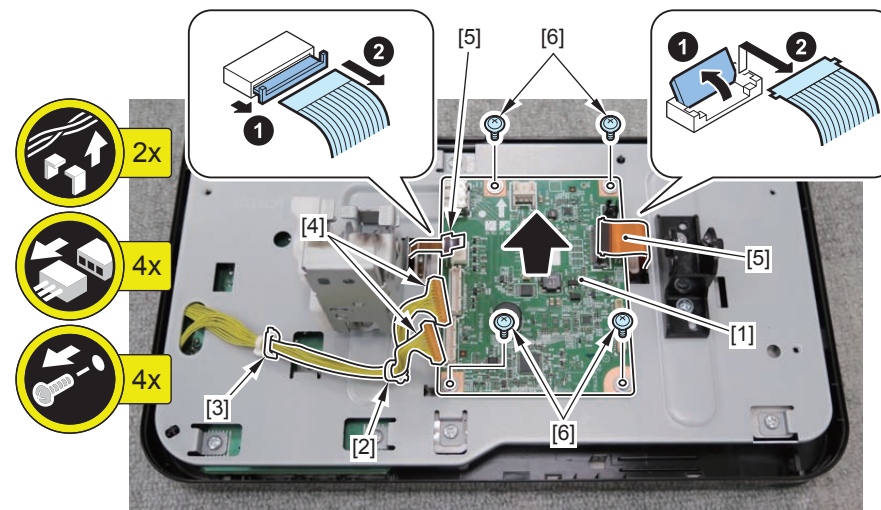
Procedure

- 1) Pull out the Control Panel Pen [1], and remove the Control Panel Lower Cover [2].
 - 4 Screws [3]
 - 1 Claw [4]



F-4-64

- 2) Remove the Control Panel CPU PCB [1].
 - 1 Reuse Band [2]
 - 1 Wire Saddle [3]
 - 2 Connectors [4]
 - 2 Flat Cables [5]
 - 4 Screws [6]



F-4-65

Removing the Touch Panel/LCD Unit and the Control Panel Key Switch PCB



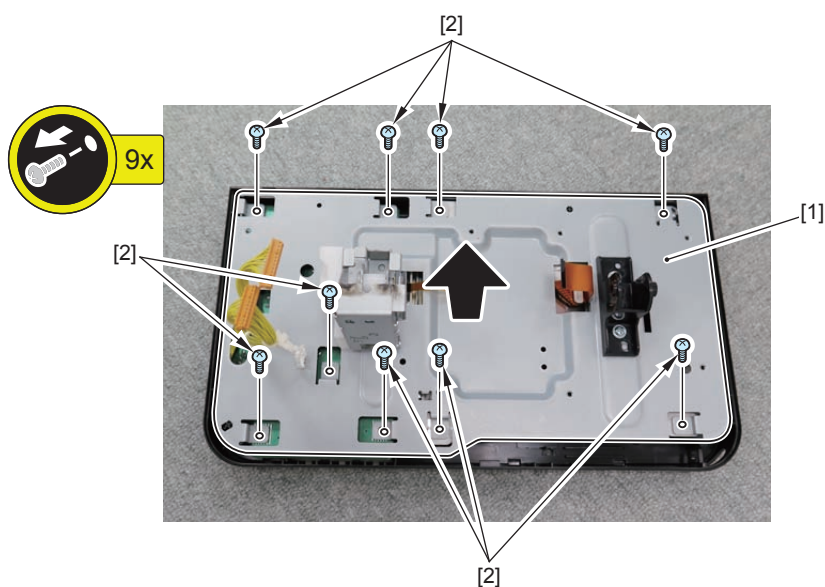
F-4-66

Preparation

- 1) Open the Front Door.
- 2) Fully open the Right Door.
- 3) Remove the Control Panel.
- 4) Remove the Control Panel CPU PCB.

Procedure

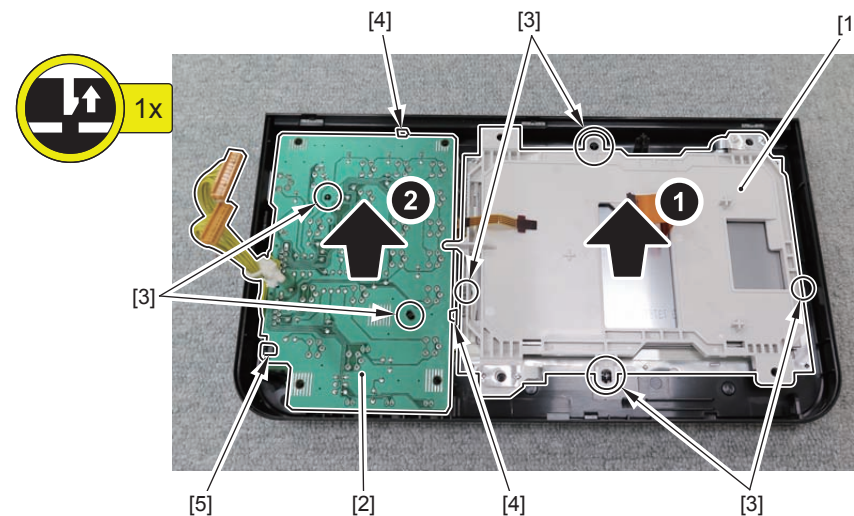
- 1) Remove the Control Panel Stay [1].
 - 9 Screws [2]



F-4-67

- 2) Remove the Touch Panel/LCD Unit [1], and the Control Panel Key Switch PCB [2].

- 6 Bosses [3]
- 2 Claws [4]
- 1 Hook [5]



F-4-68

Original Exposure System

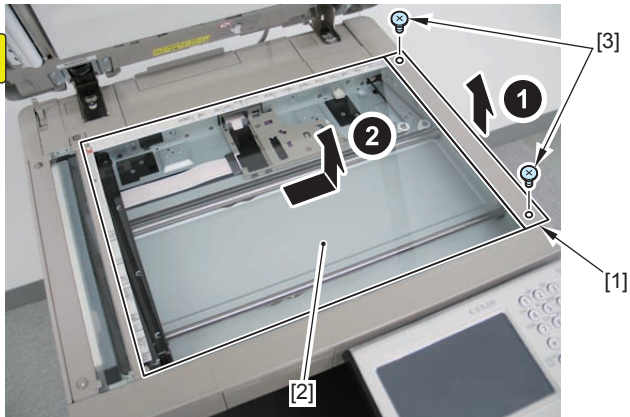
Removing the Reader Scanner Unit



F-4-69

Procedure

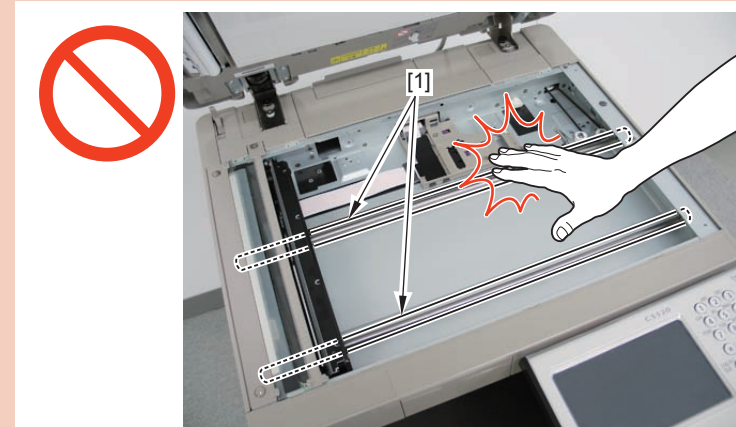
- 1) Open the ADF Unit.
- 2) Remove the Glass Retainer (Right) [1] and then remove the Copy Board Glass [2].
 - 2 Screws [3]



F-4-70

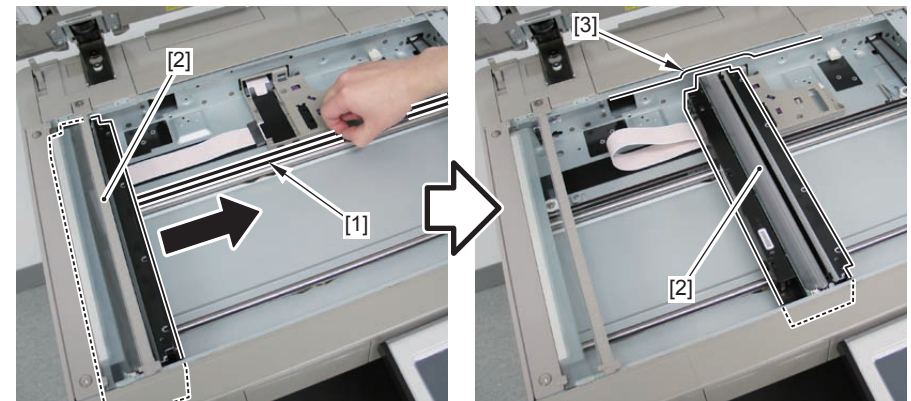
CAUTION:

Grease is applied on the 2 Rail Shafts [1] of the Reader Scanner Unit. If you have touched the grease, be careful not to put it to other parts.



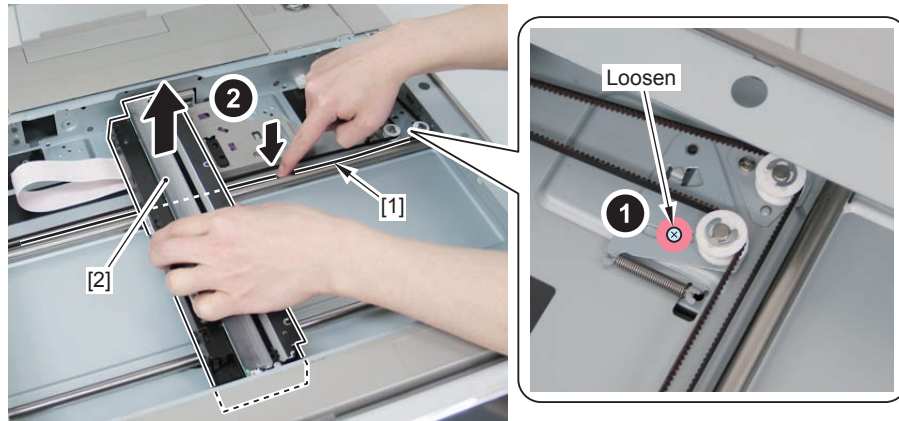
F-4-71

- 3) Move the belt [1], and move the Reader Scanner Unit [2] to the cut-off of the Reader Unit.



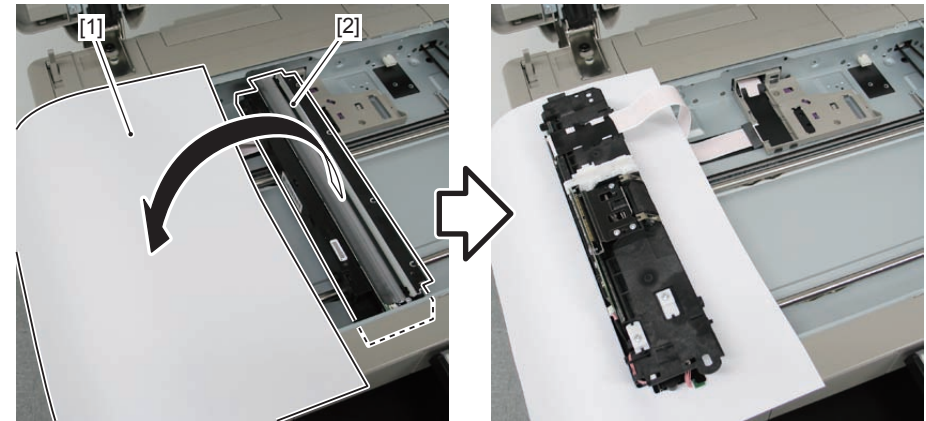
F-4-72

4) Loosen the screw to release the tension applied on the belt. After that, remove the belt [1] from the Reader Scanner Unit [2].



F-4-73

5) Place paper [1] on the Stream Reading Glass, and place the Reader Scanner Unit [2] on it with its up side down.

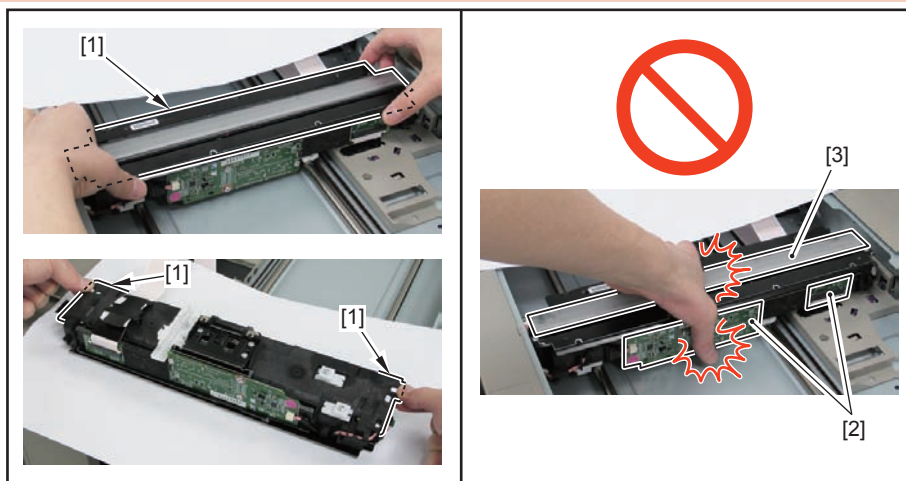


F-4-75

CAUTION:

Holding the Reader Scanner Unit

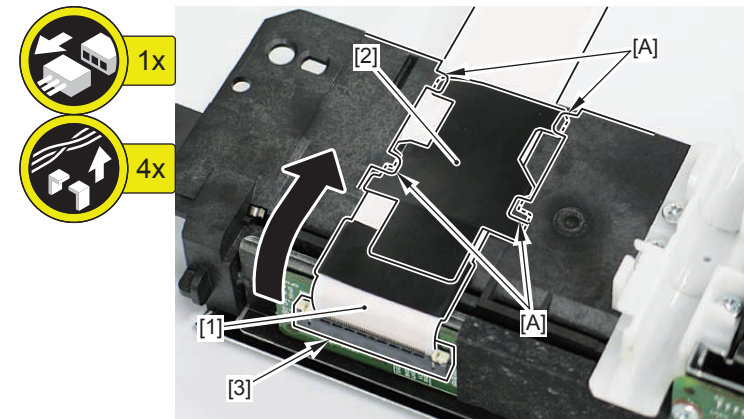
- Be sure to hold both edges [1].
- Do not touch the PCB [2] and the mirror [3].



F-4-74

6) Disconnect the Flat Cable [1] (with Protection Sheet [2]) from the Reader Scanner Unit.

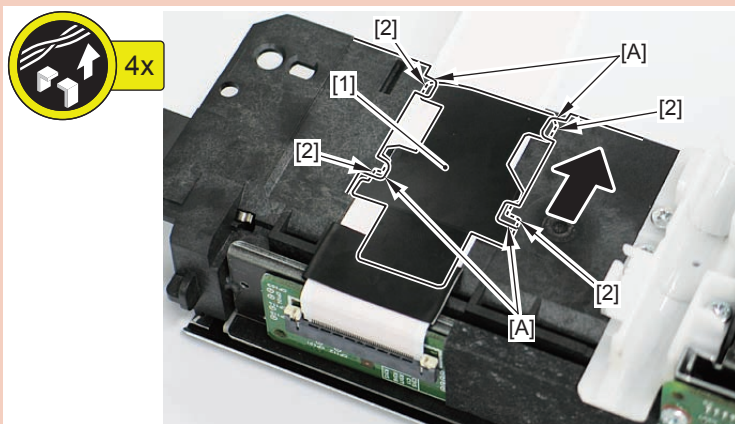
- 1 Connector (with a hook) [3]
- Guide [A]



F-4-76

CAUTION:

When installing the Reader Scanner Unit, be sure to insert the 4 protrusions [2] of the Flat Cable Protection Sheet [1] into the guide [A].



F-4-77

NOTE:**Installation Procedure**

When installing the belt to the Reader Scanner Unit, it can be installed easily by removing the belt from pulley.



F-4-78

After Replacing the Scanner Unit

The following procedure can also be performed in [Service Mode > Situation Mode > Parts Replacement > Adjustment during Scanner unit replacement].

1) Input the white level data (barcode value in the copyboard glass right upper) of the standard white plate.

Lv.	COPIER > ADJUST > CCD >	
1	100-RG	100-GB

2) Adjust the shading position.

Lv.	COPIER > FUNCTION > INSTALL >
1	RDSHDPOS

3) Adjust the stream reading position.

Lv.	COPIER > FUNCTION > INSTALL >
1	STRD-POS

4) Perform white level adjustment.:

4-1) Set A3 or LDR paper in the copyboard glass.

CAUTION:

If white level is adjusted in the small width paper, there is possibility that it will not adjust.

4-2) Execute white level adjustment at copyboard reading.

Lv.	COPIER > FUNCTION > CCD >
1	DF-WLVL1

4-3) Remove the paper from copyboard glass, set it in the DADF document pickup tray.

4-4) Execute white level adjustment at DADF reading.

Lv.	COPIER > FUNCTION > CCD >
1	DF-WLVL2

5) Perform the MTF filter coefficient computation.

Lv.	COPIER > FUNCTION > CCD >
1	MTF-CLC

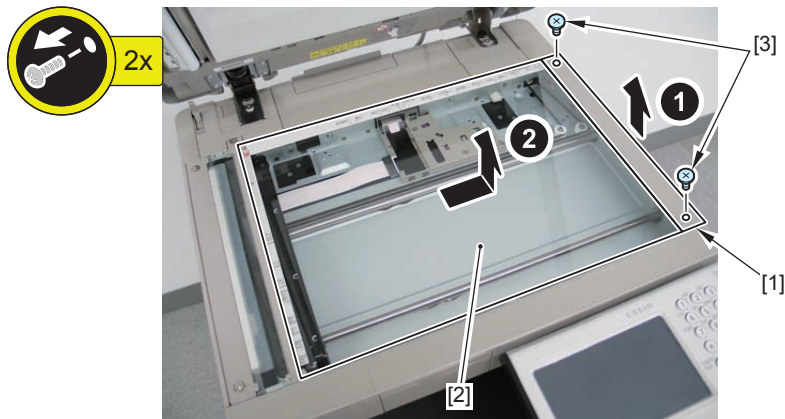
6) Write down the values in the service label (on the back of the Reader Front Cover).

Lv.	COPIER > ADJUST > CCD >				
1	DFTAR-R	DFTAR-G	DFTAR-B	100-RG	100-GB

Cleaning the Reader Scanner Unit Scanner Mirror

Procedure

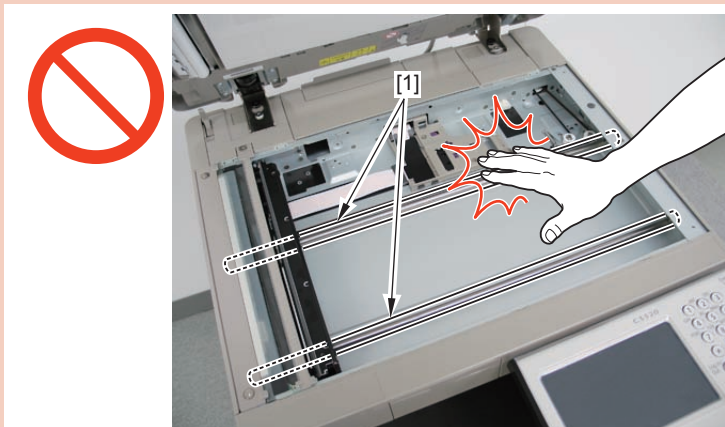
- 1) Open the ADF Unit .
- 2) Remove the Glass Retainer (Right) [1] and then remove the Copy Board Glass [2].
 - 2 Screws [3]



F-4-79

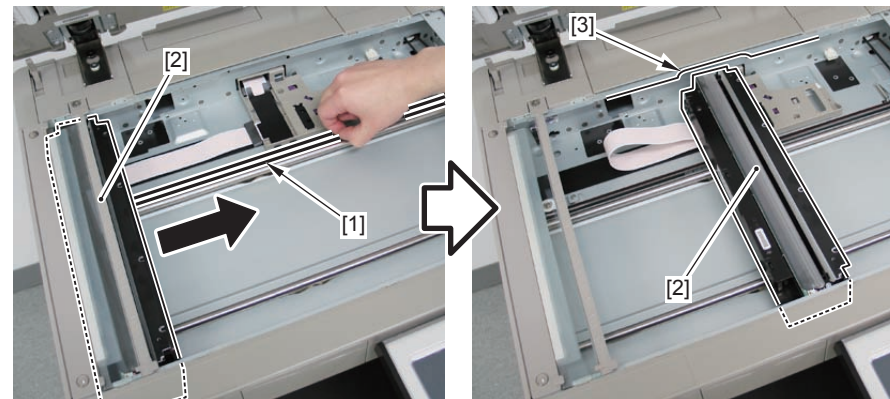
CAUTION:

Grease is applied on the 2 Rail Shafts [1] of the Reader Scanner Unit. If you have touched the grease, be careful not to put it to other parts.



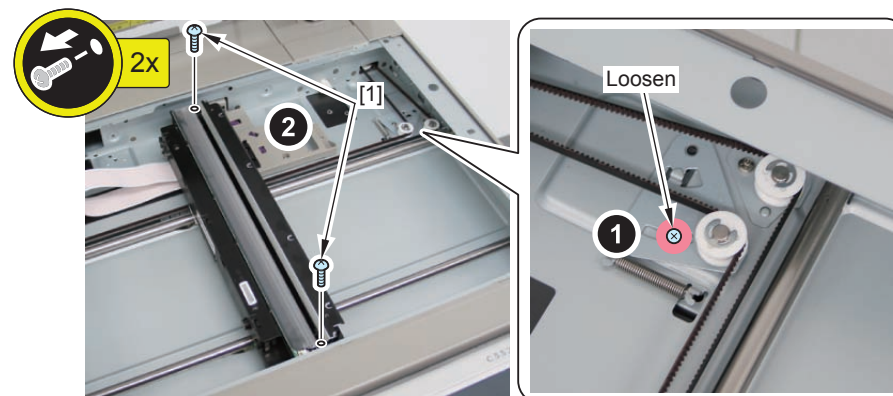
F-4-80

- 3) Move the belt [1], and move the Reader Scanner Unit [2] to the cut-off of the Reader Unit.



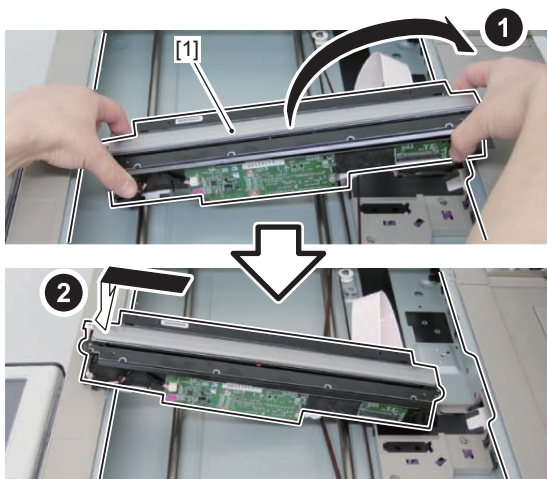
F-4-81

- 4) Loosen the screw to release the tension applied on the belt.
- 5) Remove the 2 screws [1] securing the LED Unit.



F-4-82

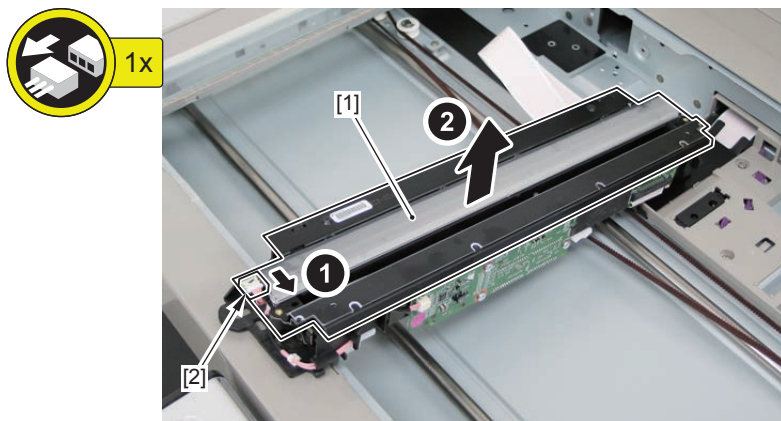
6) Place the Reader Scanner Unit [1] as shown in the figure below.



F-4-83

7) Remove the LED Unit [1].

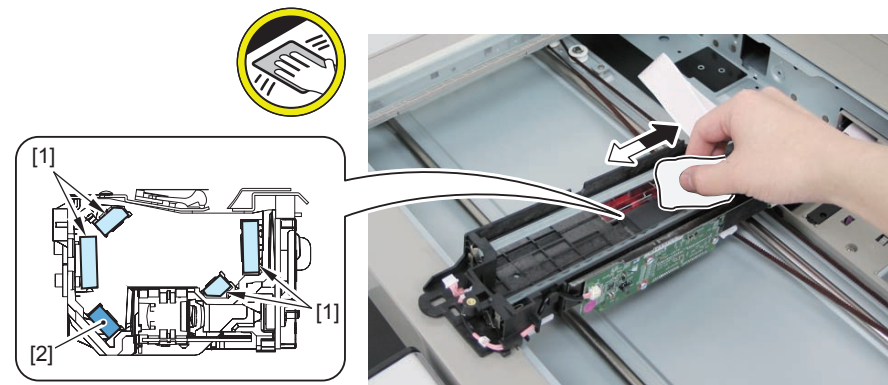
- 1 Connector [2]



F-4-84

8) Return the Scanner Unit to its original position.

9) Clean the mirror [1] with lint-free paper. The following 4 mirrors can be cleaned.



F-4-85

NOTE:

The rearmost mirror [2] cannot be cleaned. However, it is a dustproof mirror, so there is no need to clean it.

Controller System

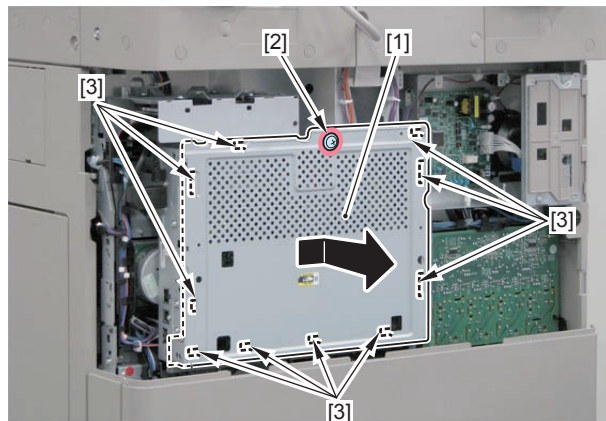
Removing the Controller Cover

Preparation

- 1) Remove the Cover (Rear Upper).
- 2) Remove the Right Cover (Rear Upper).

Procedure

- 1) Remove the Controller Cover [1].
 - Loosen the screw [2].
 - 10 Claws [3]



F-4-86

Removing the HDD

Preparation

- 1) Back up the necessary data based on the table shown below.
- 2) Printing the set/registered data
 - (Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT
 - (Lv.1) COPIER > FUNCTION > MISC-P > P-PRINT
 In case the backup fails, print it out or export it to a USB.
- 3) Remove the Cover (Rear Upper).
- 4) Remove the Right Cover (Rear Upper).
- 5) Remove the Controller Cover. (Refer to page 4-46)

<Backup List>

Backup target data	Backup Method			
	User (excluding DCM)	Service	DCM	Device Information Delivery
Address List	Yes*1	-	Yes*9	Yes*10
Forwarding Settings	Yes*1	-	Yes*9	Yes*10
Settings / Registration				
Preferences (Except for Paper Type Management Settings)	-	-	Yes*9	Yes*10
Adjustment/Maintenance(*)	-	-	Yes*9	Yes*10
Function Settings (Except for Printer Custom Settings, Forwarding Settings)	-	-	Yes*9	Yes*10
Set Destination (Except for Address List)	-	-	Yes*9	Yes*10
Management Settings (Except for Address List)	-	-	Yes*9	Yes*10
User authentication information used for local device authentication of UA (User Authentication) (Management Settings > User Management > Authentication Management > User Management, etc.)	Yes*2	-	Yes*9	-
Printer Settings	Yes*1	-	-	Yes*10
Set Paper Information	Yes*1	-	Yes*9	Yes*10
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	Yes*1	Yes*8	Yes*9	Yes*10
Default Settings	-	Yes*8	Yes*9	-
Shortcut settings for "Options"	-	Yes*8	Yes*9	-
Previous Settings	-	Yes*8	-	-
Setting items for Quick Menu				
Button Size information	Yes*3	Yes*8	Yes*9	-
Wallpaper Setting	Yes*3	Yes*8	Yes*9	-
Button information in Quick Menu	Yes*3	Yes*8	Yes*9	-

Backup target data	Backup Method			
	User	Service	DCM	Device Information Delivery
	(excluding DCM)			
Restrict Quick Menu	Yes*3	Yes*8	Yes*9	-
Setting items for Main Menu				
Button settings in Main Menu	-	-	Yes*9	-
Button settings on the top of the screen	-	-	Yes*9	-
Wallpaper Setting for Main Menu	-	-	Yes*9	-
Other settings for Main Menu	-	-	Yes*9	-
Box settings				
Mail Box Settings (Box Name, PIN, Time Until File Auto Delete, Print Files Upon Storing from Printer Driver)	Yes*4	-	Yes*9	Yes*10
Image data in Mail Box, Fax Inbox, and Memory RX Inbox	Yes*4	-	-	-
Network Place Settings	-	-	Yes*9	-
Web browser settings				
Web Access setting information	-	-	Yes*9	Yes*10
MEAP settings				
MEAP application	-	Yes*8	-	-
License files for MEAP applications	Yes*5	-	-	-
Data saved using MEAP applications	Yes*5	Yes*8	-	-
SMS (Service Management Service) password	-	Yes*8	-	-
Universal data settings				
Unsent documents (documents waiting to be sent with the Delayed Send mode)	-	-	-	-
Job logs	-	-	-	-
Audit Log	Yes*6	-	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen)	-	-	Yes*9	-
Auto Adjust Gradation setting values	-	-	-	-
PS font	-	-	-	-
Key information to be used for encryption when TPM is OFF	-	-	-	-
Key and settings information to be used for encryption when TPM is ON	Yes*7	-	-	-
Service Mode				
Service Mode setting values (MN-CON)	-	-	Yes*9	-

T-4-18

- *1: Remote UI > Settings/Registration > Management Settings > Data Management > Import or Export
- *2: Remote UI > Settings/Registration > Management Settings > User Management > Authentication Management > User Management
- *3: Remote UI > Quick Menu > Export
- *4: Remote UI > Settings/Registration > Management Settings > Data Management > Back Up or Restore

*5: Remote UI > Service Management Service

*6: Remote UI > Settings/Registration > Management Settings > Device Management > Save Audit Log
Audit log that was exported cannot be put back to the device from which the log was exported.

*7: Settings/Registration > Management Settings > Data Management > TPM Settings

*8: Download mode > [5]: Backup/Restore > [3] : MEAP Backup > Meapback.bin

Backup is possible using SST or USB memory

The data saved using a MEAP application can be backed up only when the MEAP application has a backup function.

*9: Backup Method using DCM

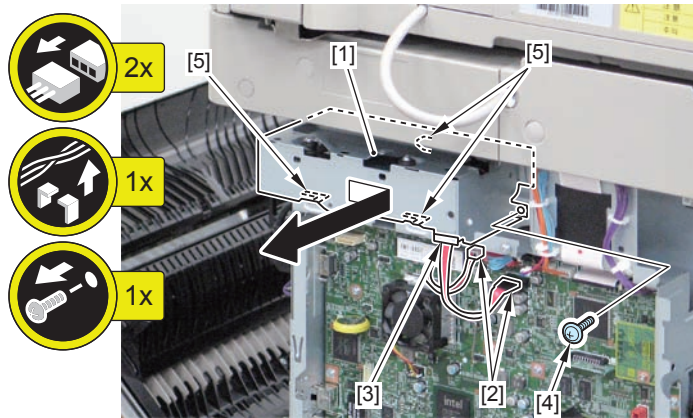
When You set it in COPIER> OPTION> USER> SMD-EXPT> ON, a backup/restore is possible in Service Mode Settings from the Remote UI. There is a backup button on the TOP page of the service mode.

1. Remote UI > Settings/Registration > Management Settings > Data Management > Import/Export All
2. Remote UI > Settings/Registration > Management Settings > Data Management > Import/Export
3. Service mode top screen > BACKUP
Service mode setting values only can be backed up and restored.
4. Web Service

*10: Web Service

Procedure

- 1) Remove the HDD [1].
 - 2 Connectors [2]
 - 1 Wire Saddle [3]
 - 1 Screw [4]
 - 3 Hooks [5]



F-4-87

Actions after Replacement

- 1) HDD format.
 - Start the machine in safe mode, and format all partitions using SST or a USB memory.
- 2) Turning OFF and ON the main power switch.
- 3) Restoring the backup data.
- 4) Resetting/registering the data.
 - While referring to the list which was printed before replacement, reset/register the data.
- 5) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again.

NOTE:

When configuring the number of cassettes for the 1-cassette model for China as 1-cassette
(Lv.2) COPIER > OPTION > FNC-SW > CST-MDL = 1

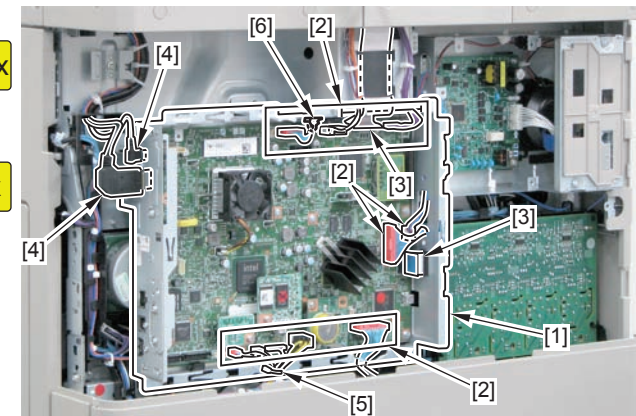
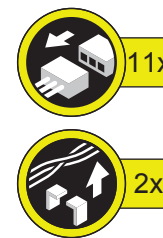
Removing the Main Controller PCB

Preparation

- 1) Remove the Cover (Rear Upper).
- 2) Remove the Right Cover (Rear Upper).
- 3) Remove the Controller Cover. (Refer to page 4-46)
- 4) Remove the HDD. (Refer to page 4-46)

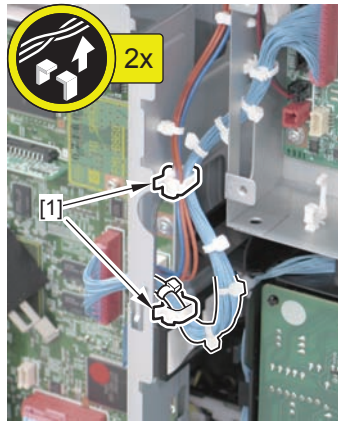
Procedure

- 1) Free the harness from the Main Controller PCB [1].
 - 9 Connectors [2] (11 when a fax is installed)
 - 2 Flexible Cables [3]
 - 2 UI Cables [4]
 - 2 Wire Saddles [5]
 - 1 Clamp [6]



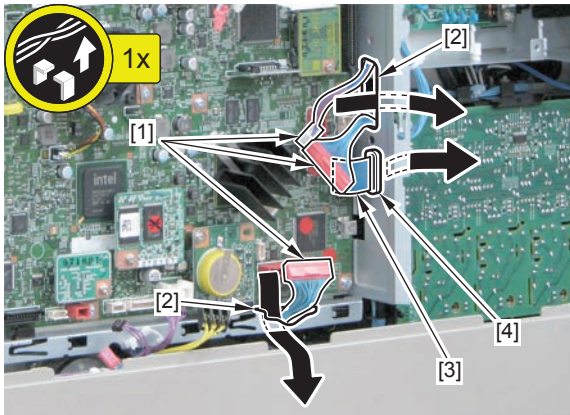
F-4-88

2) Remove the 2 Wire Saddles [1] (When a fax is installed).



F-4-89

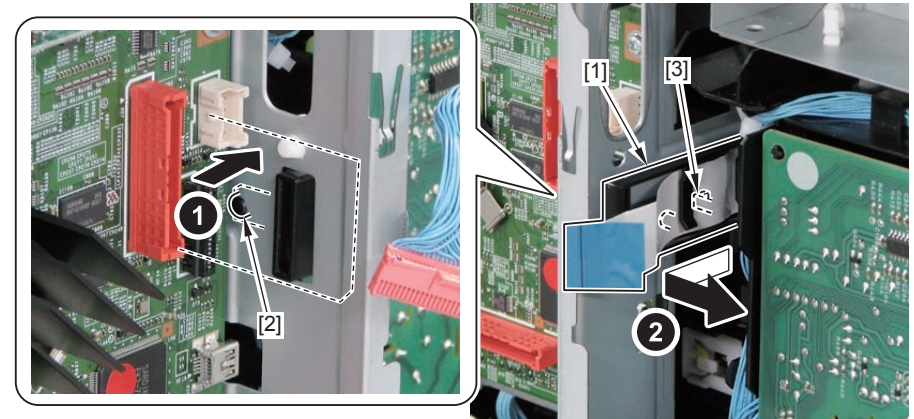
3) Free the harness [1] (3 when a fax is installed) from the hole [2], and free the Flexible Cable [3] from the guide [4].



F-4-90

4) Remove the Flexible Cable guide [1].

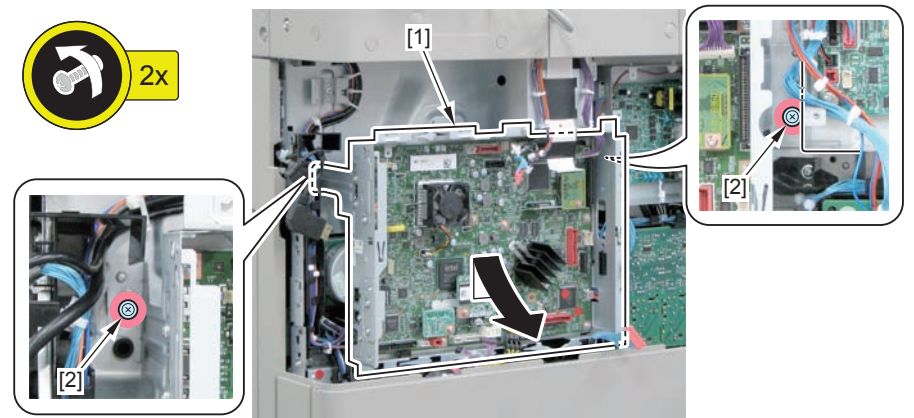
- 1 Bosses [2]
- 1 Hooks [3]



F-4-91

5) Remove the Main Controller PCB [1].

- 1 Screws [2]
- 2 Screws [3] to loosen



F-4-92

6) Replace parts from an old PCB to a new PCB.

- Memory PCB
- FLASH PCB
- TPM PCB

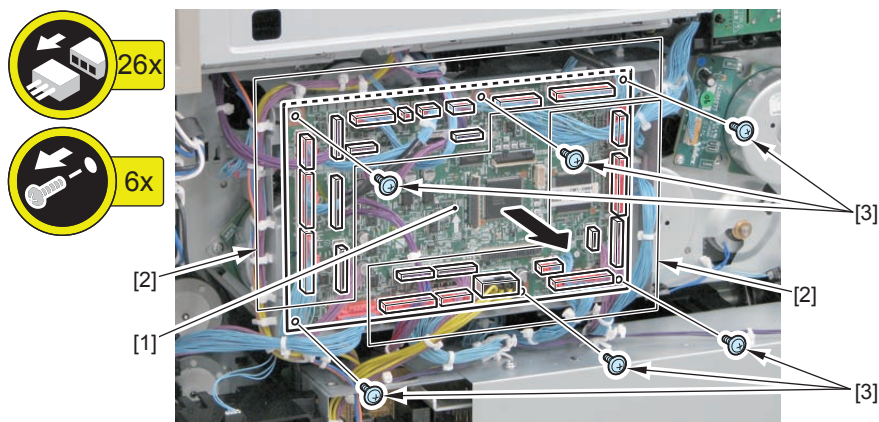
Removing the DC Controller PCB

Preparation

- 1) Perform backup as necessary and turn OFF the power.
Backup the Service Mode data.
(Lv.2) COPIER > FUNCTION > SYSTEM > DSRAMBUP
After "ACTIVE" is displayed for approx. 2 minutes, "OK!" is displayed.
*: If necessary, output the service mode setting values by P-PRINT before execution.
(Lv.1) COPIER > FUNCTION > MISC-P > P-PRINT
- 2) Remove the Connector Cover [1].
- 3) Remove the Cover (Rear Lower).

Procedure

- 1) Remove the DC Controller PCB [1].
 - 26 Connectors [2]
 - 6 Screws [3]



F-4-93

Actions after Replacement

- 1) Restore of the Service Mode data.
(Lv.2) COPIER > FUNCTION > SYSTEM > DSRAMRES
"ACTIVE" is displayed at execution and then "OK!" is displayed about 2 minutes later.
Restoration is complete.
- 2) If uploading of backup data fails before replacement due to the damage to the DC Controller PCB, enter the values of service mode items recorded on the service label or P-PRINT.
- 3) Turn OFF and then ON the main power switch.

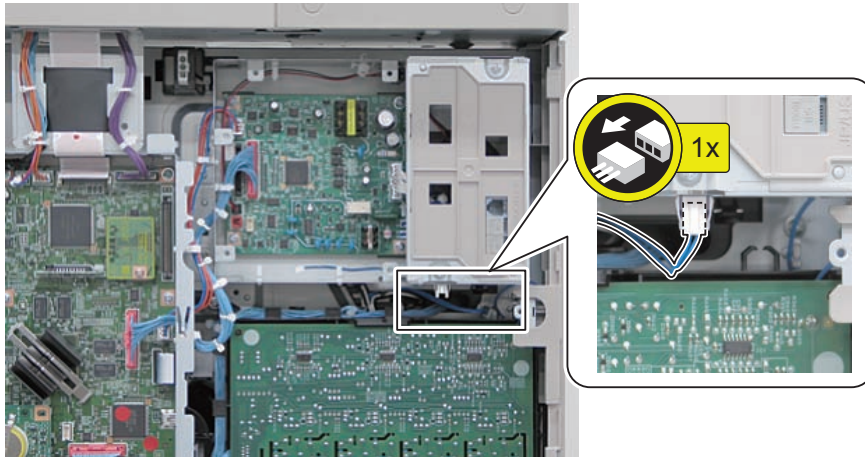
Removing the Fax Unit

Preparation

- 1) Remove the Cover (Rear Upper).
- 2) Remove the Controller Cover. (Refer to page 4-46)

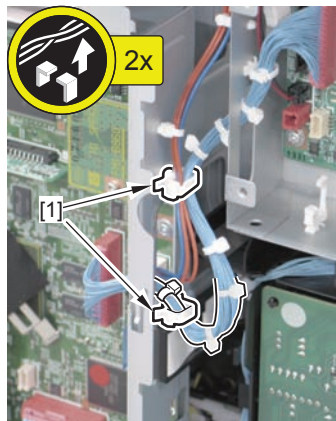
Procedure

- 1) Disconnect the connector (when the 2-line Fax is installed).



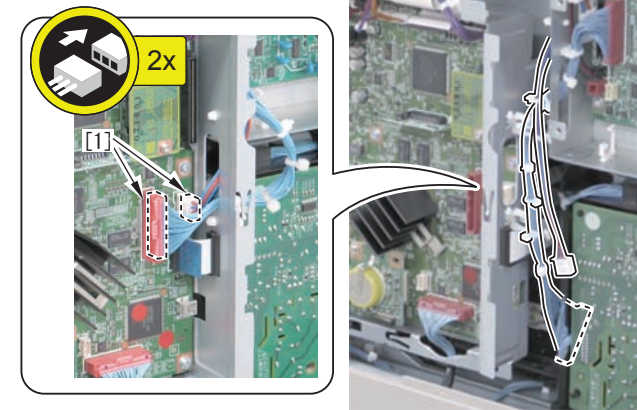
F-4-94

- 2) Remove the 2 Wire Saddles [1].



F-4-95

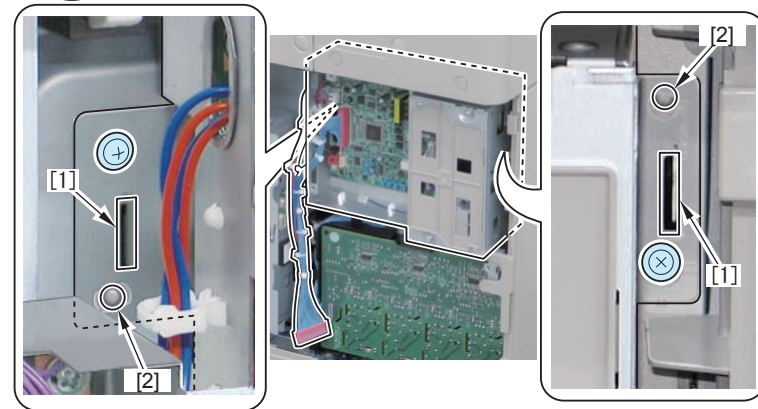
- 3) Disconnect the 2 connectors [1].



F-4-96

- 4) Remove the Fax Unit.

- 2 Hooks [1]
- 2 Bosses [2]
- 2 Screws



F-4-97

Laser Exposure System

Removing the Laser Scanner Unit

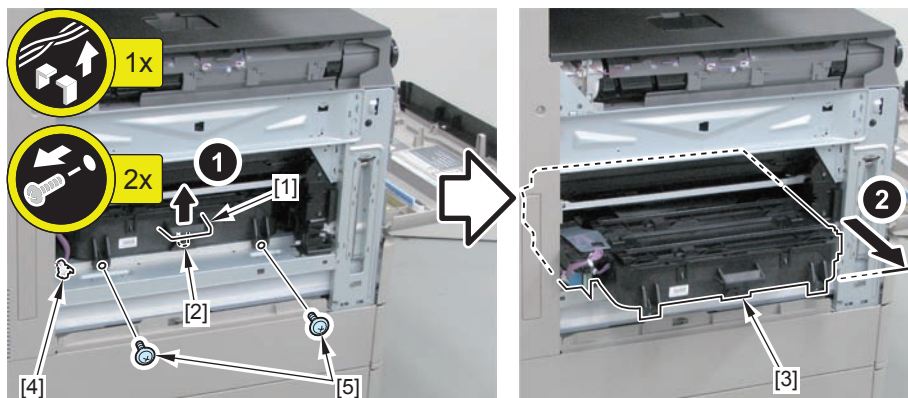
Preparation

- 1) Pull out the Cassette 1.
- 2) Open the Waste Toner Cover.
- 3) Remove the Left Cover (Upper)

Procedure

- 1) Grasp and lift up the handle [1] to release the protrusion [2], and pull out the Laser Scanner Unit [3] to the position in the following figure.

- 1 Clamp [4]
- 2 Screws [5]

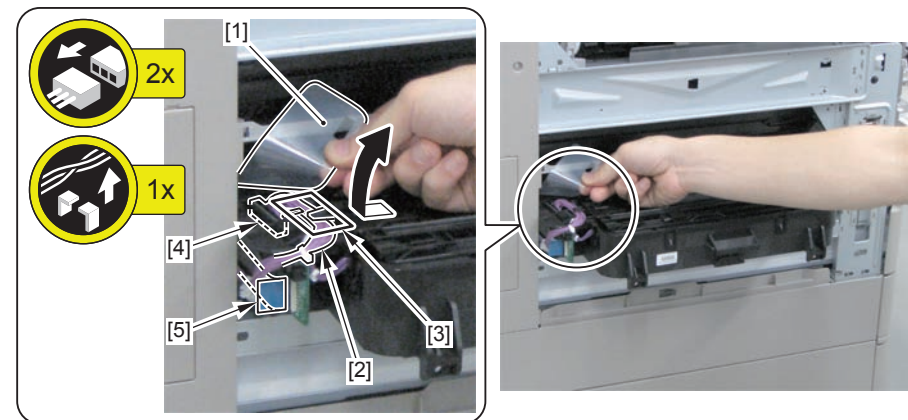


F-4-98

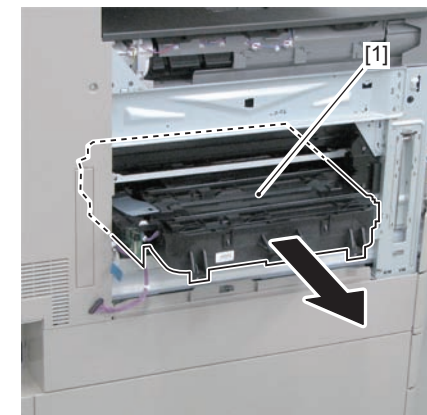
- 2) Turn over the Protection Sheet [1], and free the harness [2] from the Harness Guide [3].

- 1 Connector [4]

- 3) Disconnect the Flexible Cable [5].



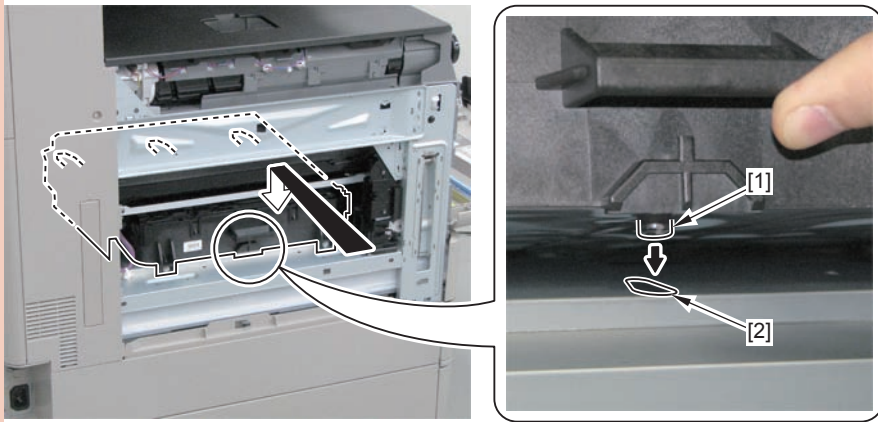
- 4) Remove the Laser Scanner Unit [1].



F-4-100

Points to Note at Installation:

When installing, be sure to fit the protrusion [1] of the Laser Scanner Unit with a hole [2] in the plate.



F-4-101

CAUTION:

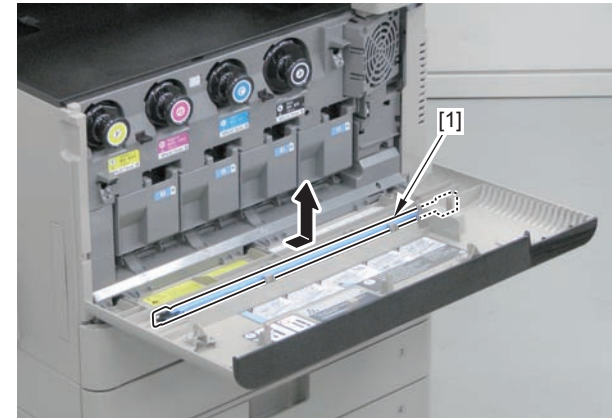
Do not disassemble the Laser Scanner Unit because it requires adjustment.

■ Actions after Replacement

- 1) Execute [Auto Correct Color Mismatch].
- 2) If the degree of color displacement differs between the center and the edge, execute "copy ratio correction" and "distortion correction" as needed.

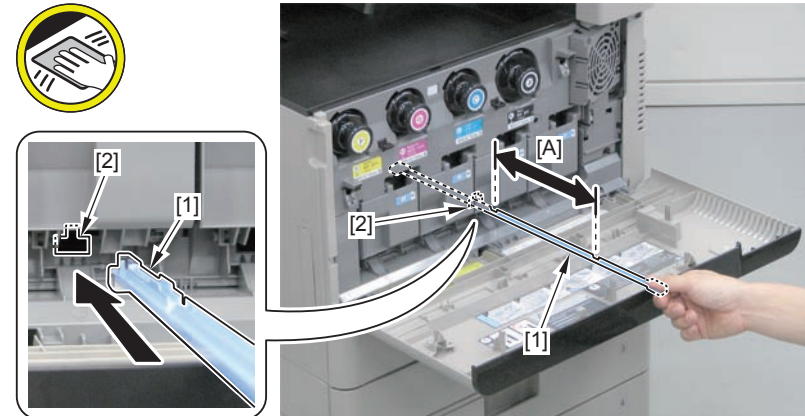
Cleaning the Dustproof Glass

- 1) Open the Front Door.
- 2) Remove the Dustproof Glass Cleaning Tool [1].



F-4-102

- 3) Insert the Dustproof Glass Cleaning Tool [1] into the hole [2], and clean the glass by moving it back and forth 2 to 3 times in the [A] part.



F-4-103

Points to Note at Installation:

Do not insert the Dustproof Glass Cleaning Tool upside down.

Image Formation System

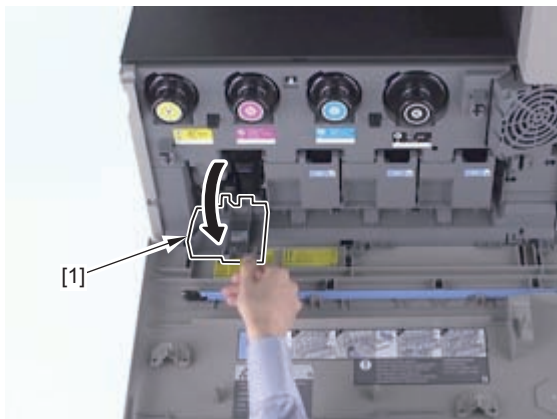
Removing the Drum Unit

CAUTION:

If you perform work while in Deep sleep mode or when the power was turned OFF while in Deep sleep mode, the Primary Transfer Roller will not be disengaged.

When removing the Drum Unit (Bk), be sure to do so after returning the machine to a standby state.

- 1) Open the Front Door.
- 2) Open the Drum Unit Retaining Cover [1].

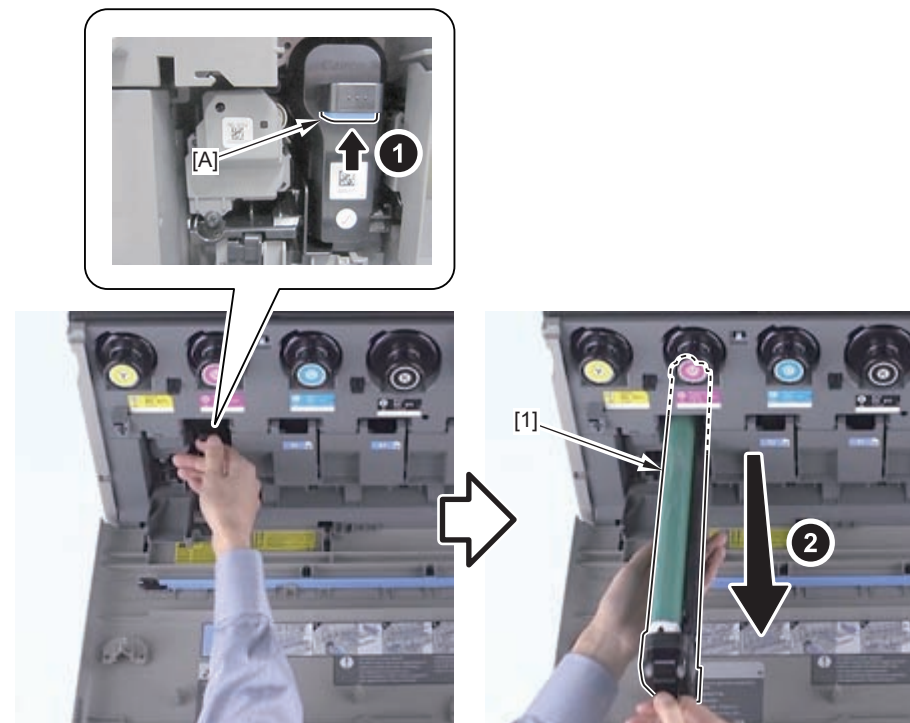


F-4-104

- 3) Pinch the light-blue [A] part, and pull out the Drum Unit [1].

CAUTION:

Since there is a risk of damaging the Photosensitive Drum, do not touch the surface.
Be sure to block light to the removed Drum Unit using paper, otherwise it will be exposed to light.



F-4-105

Removing the Developing Unit

Preparation

CAUTION:

If you perform work while in Deep sleep mode or when the power was turned OFF while in Deep sleep mode, the Primary Transfer Roller will not be disengaged.

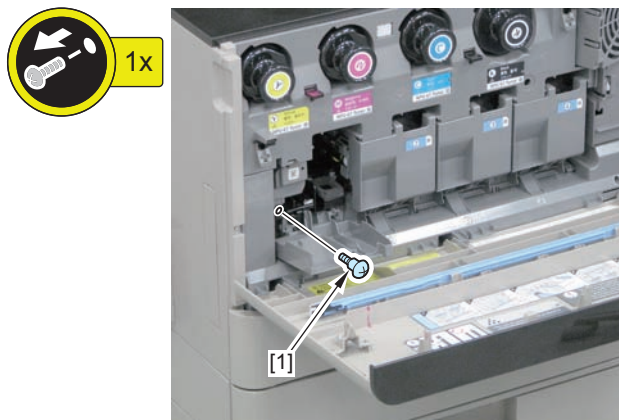
When removing the Drum Unit (Bk), be sure to do so after returning the machine to a standby state.

1) Remove the Drum Unit. (Refer to page 4-54)

Procedure

1) Remove the screw [1].

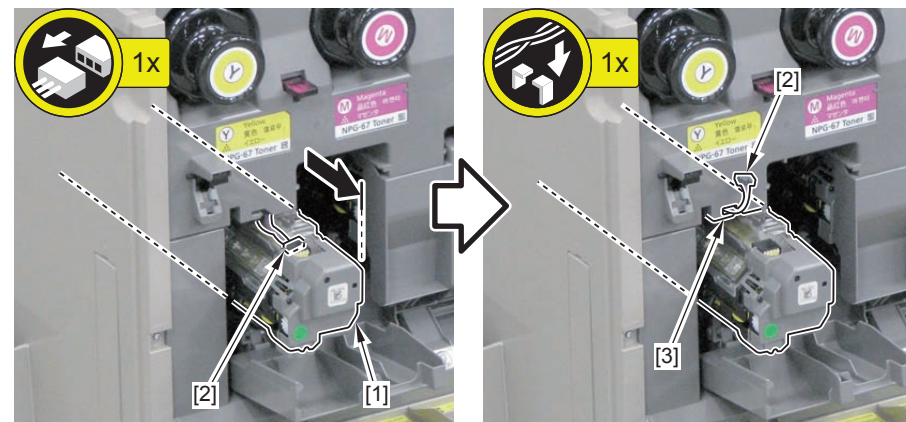
- 1 Screw [1]



F-4-106

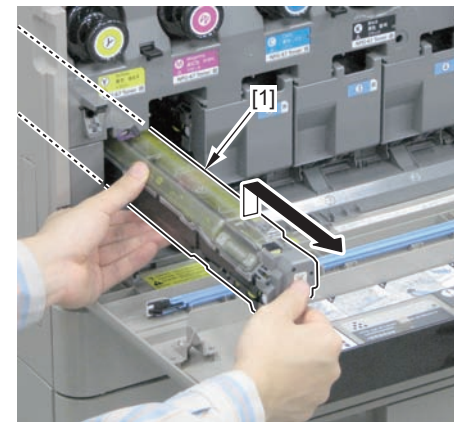
2) Pull out the Developing Unit [1] to the position in the figure below, disconnect the connector [2], and hook it on the groove in the cover [3].

- 1 Connector [2]



F-4-107

3) Remove the Developing Unit [1] while lifting it up.



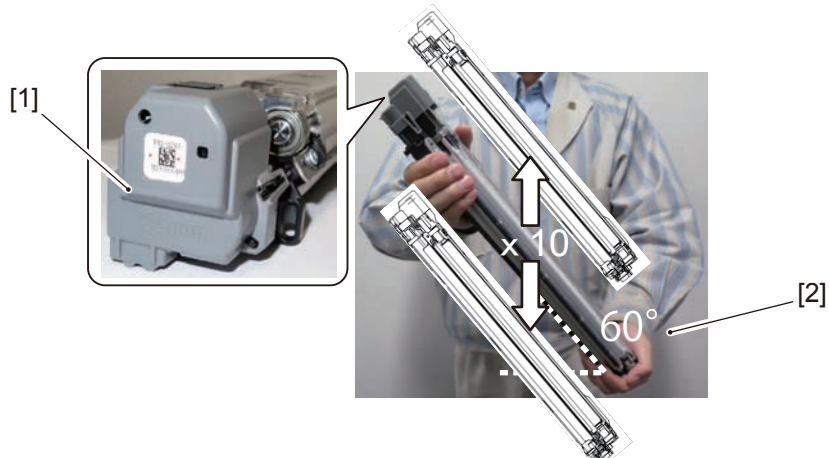
F-4-108

Installing the Developing Unit

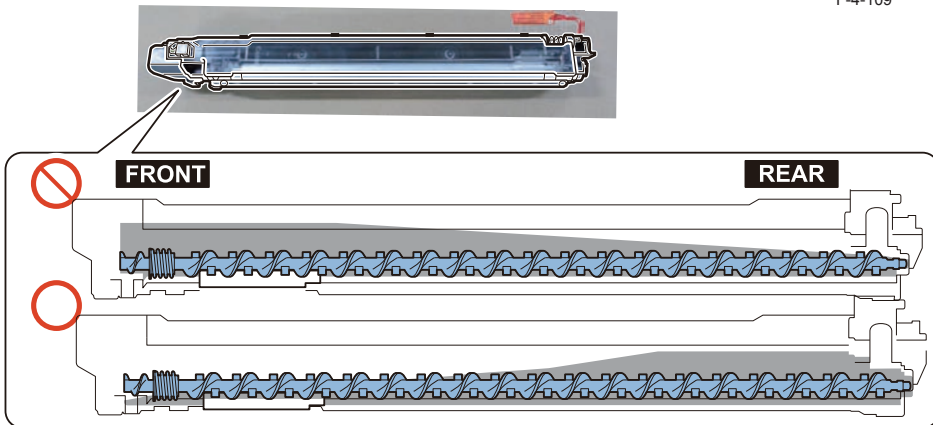
1) Unpack the new Developing Unit.

* Do not yet remove the seal from the supply mouth.

2) Before installing the Developing Unit, orient the Front Cover [1] upwards, and shake the unit strongly up and down approx. 10 times with its angle unchanged [2].



F-4-109

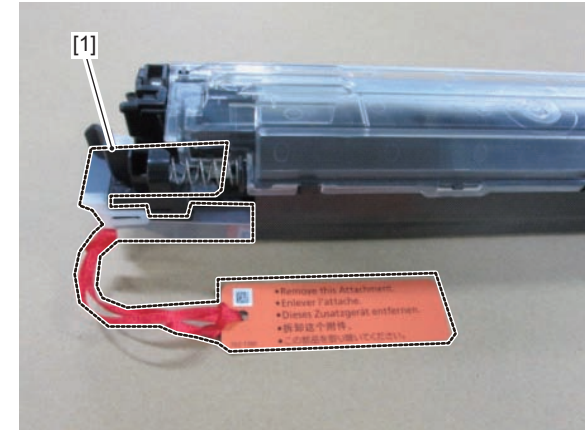


F-4-110

CAUTION:

If the Developing Unit is installed with toner uneven in the container, the screw may be broken and E020/E021 may occur.

3) Remove the seal [1] from the supply mouth.



F-4-111

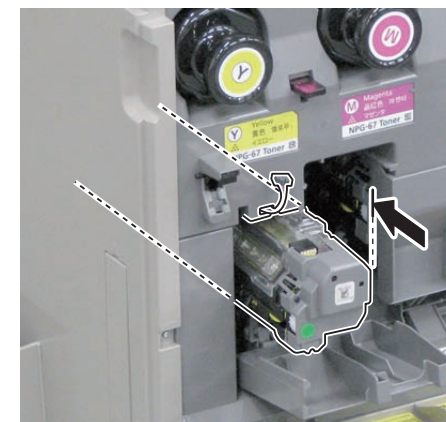
4) Check that the connector is hooked on the groove in the cover.

If it is not hooked, the connector may get stuck when inserting the Developing Unit.

5) Insert the Developing Unit up to the position in the figure below.

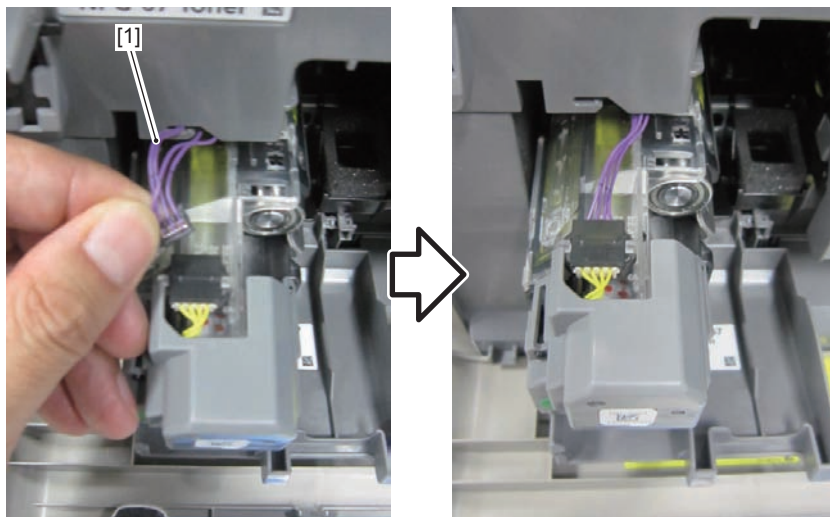
CAUTION:

Take care to prevent the connector of the Developing Unit from getting caught.



F-4-112

6) Disconnect the connector [1] from the groove in the cover, and connect it to the Developing Unit.



F-4-113

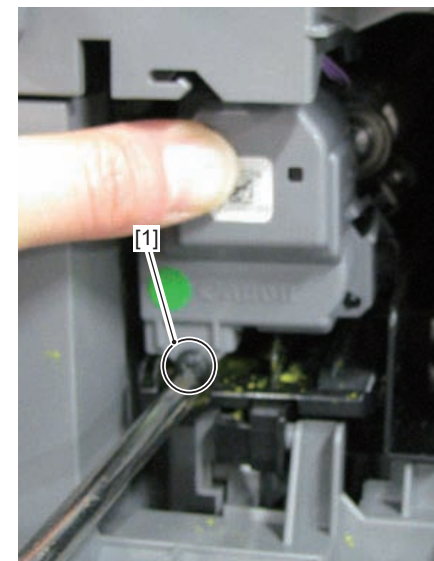
7) Slowly insert the Developing Unit up to the position where it is to be secured with a screw.

CAUTION:

If you insert it abruptly, toner may scatter on the rear side inside the machine when the shutter opens.

8) Secure the Developing Unit with the screw while holding it down.

- 1 Screw [1]



F-4-114

9) Install the Drum Unit.

■ Actions after Replacement

The following procedure can also be performed in [Service Mode > Situation Mode > Parts Replacement > Adjustment during Developing Unit replacement].

- 1) Execute COPIER> FUNCTION> INSTALL> INISET-Y/M/C/K.
* When this is performed, each of the initialization operations is performed and the parts counters are cleared.
- 2) Check COPIER>ADJUST>DENS>D-Y/M/C/K-LVL and write down on the service label of the Front Door.
- 3) Check COPIER>ADJUST>DENS>CONT-Y/M/C/K and write down on the service label of the Front Door.
- 4) Execute Auto Adjust Gradation> Full Adjust.

Removing the Waste Toner Container

- 1) Open the Cassette 1.
- 2) Open the Waste Toner Cover.



- 3) Remove the Waste Toner Container.



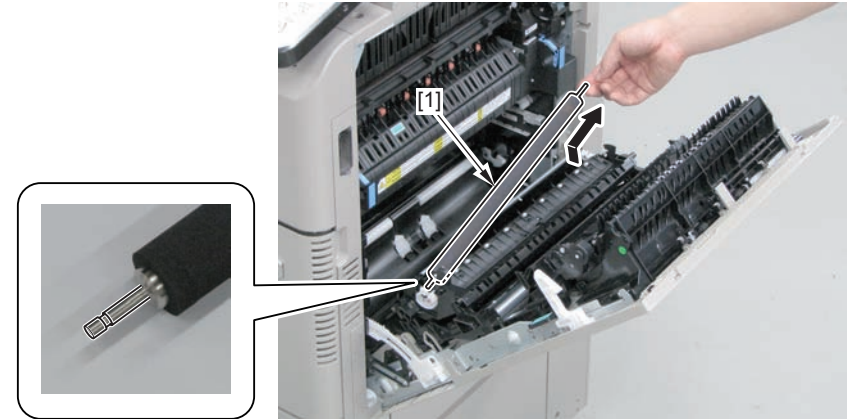
Points to Note at Replacement:

Replacing the Waste Toner Container after the preparation warning has been displayed clears the parts counter automatically.

Parts Counter : COPIER > COUNETR > DRBL-1 > WST-TNR

Removing the Secondary Transfer Outer Roller

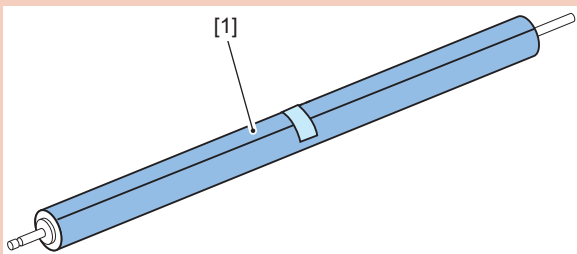
- 1) Open the Right Door.
- 2) Remove the Secondary Transfer Outer Roller [1].



F-4-115

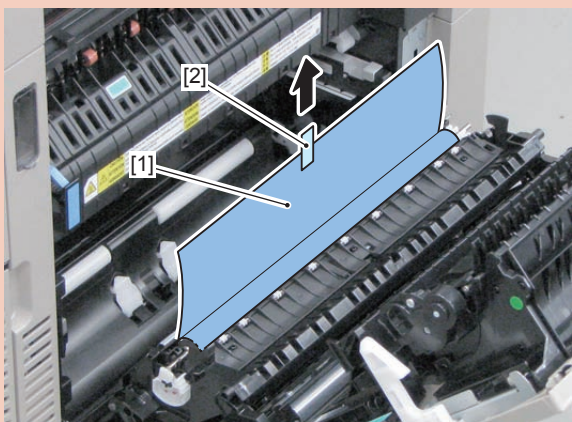
Points to Note at Installation:

Remove the Protection Sheet [1] from the new Secondary Transfer Outer Roller after installation.



F-4-116

Pull the tape [2] on the Protection Sheet [1] in the direction of the arrow to remove the sheet.



F-4-117

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > 2TR-ROLL
- It is also cleared at the same time when R-DOOR is cleared.

Removing the ITB Unit

Preparation

CAUTION:

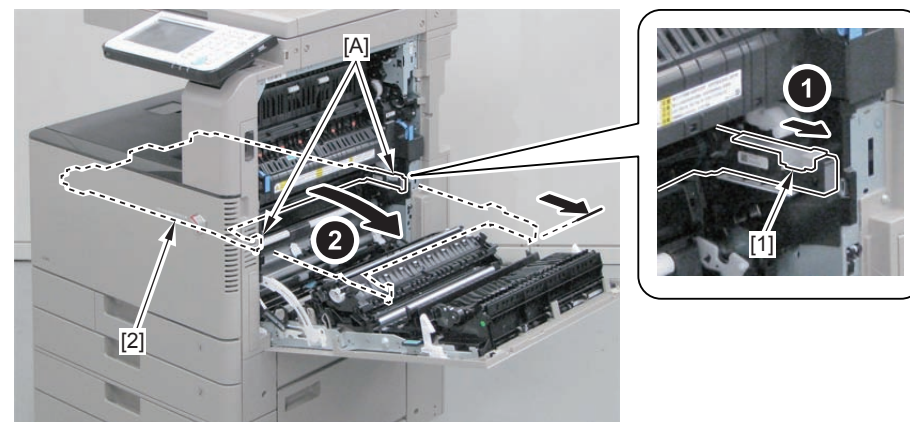
If you perform work while in sleep mode or when the power was turned OFF while in sleep mode, the Primary Transfer Roller will not be disengaged, and so you will not be able to pull out the ITB Unit.

You should perform the work after returning the machine to the standby state.

1) Fully open the Right Door.(Refer to page 4-27)

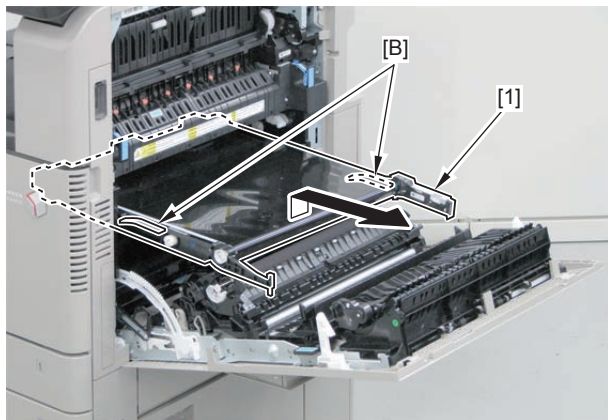
Procedure

1) Pull the lever [1] to unlock it, grasp the handle [A] on the left and right, and pull the ITB Unit [2] to the position in the figure below while shifting it to the left side.



F-4-118

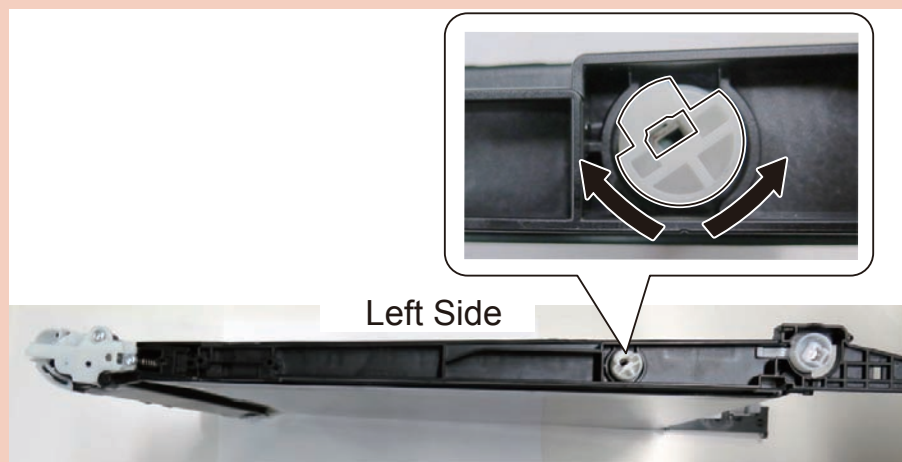
2) Switch your grip to the handle [B] on the left and right, and pull out the ITB Unit [1].



F-4-119

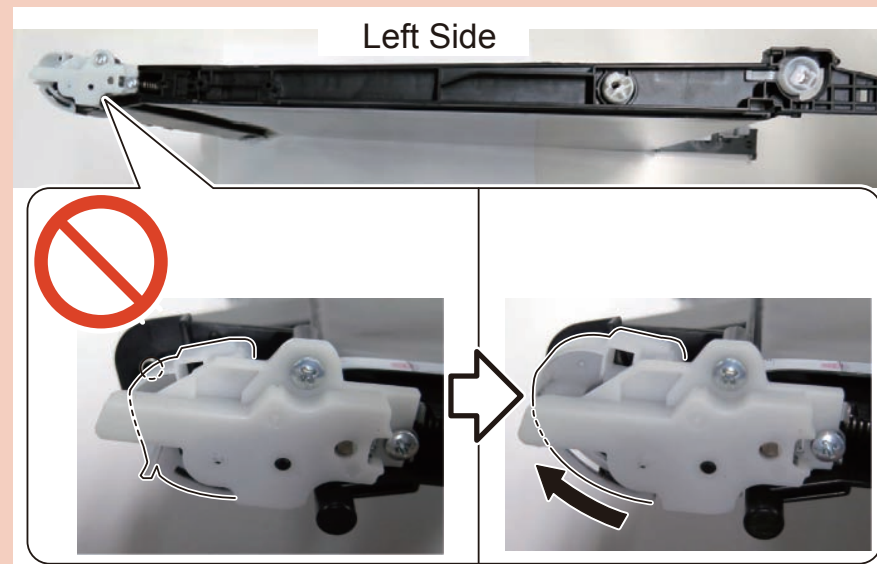
Points to Note at Installation:

1) Install the unit while the Primary Transfer Roller is completely disengaged. Check that the Disengagement Cam is located at the position shown in the figure on the right.

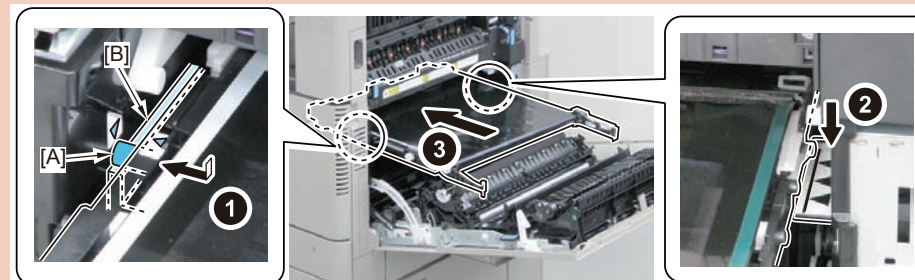


Points to Note at Installation:

2) Check that the shutter of the Waste Toner Ejection Mouth is closed.



3) Align the triangle mark in the guide on the left with that in the ITB Unit, place the shaft [A] of the ITB Unit [1] on the rail [B] of the guide, and install the unit while shifting it to the left.



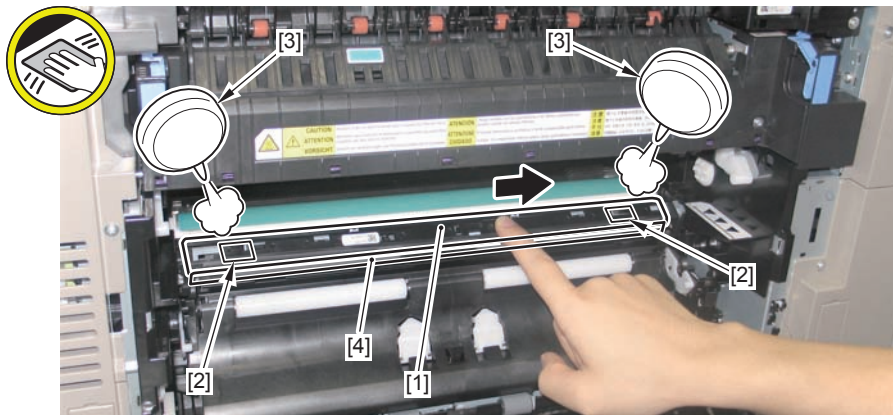
NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > TR-UNIT
- When TR-UNIT is cleared, T-CLN-BD/ TR-BLT/ TR-ROLK/ TR-ROLC are also cleared at the same time.
- After installation, execute [Auto Adjust Gradation> Full Adjust], [Auto Correct Color Mismatch].

After Removing the ITB Unit

Cleaning the Registration Patch Sensor Unit

- 1) Open the shutter [1], and clean the Patch Sensor [2] using the blower [3].
After cleaning, check that there is no soiling caused by toner on the surface of the sensor.
If the soiling cannot be removed, perform step 2.
- 2) While pressing the shutter [1], clean the Patch Sensor [2] in the single direction with wet and tightly-wrung cotton swab.
- 3) Clean the leading edge [4] of the Pre-transfer Cover Sheet with lint-free paper.



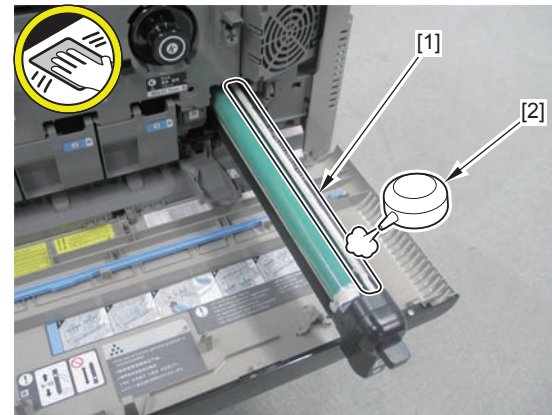
F-4-120

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.

Cleaning the Light Guide

- 1) Clean the upper surface [1] of the Light Guide of each color Drum Unit using the blower [2].



F-4-121

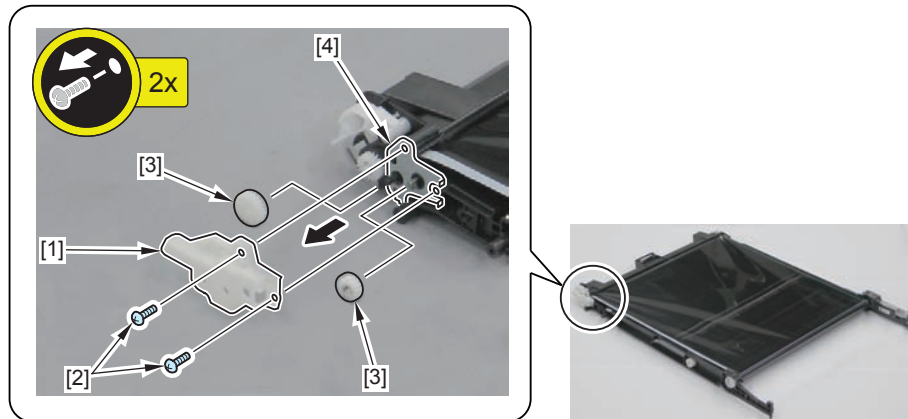
Removing the ITB Cleaning Blade

Preparation

- 1) Open the Right Door.
- 2) Fully open the Right Door. (Refer to page 4-27)
- 3) Remove the ITB Unit. (Refer to page 4-59)

Procedure

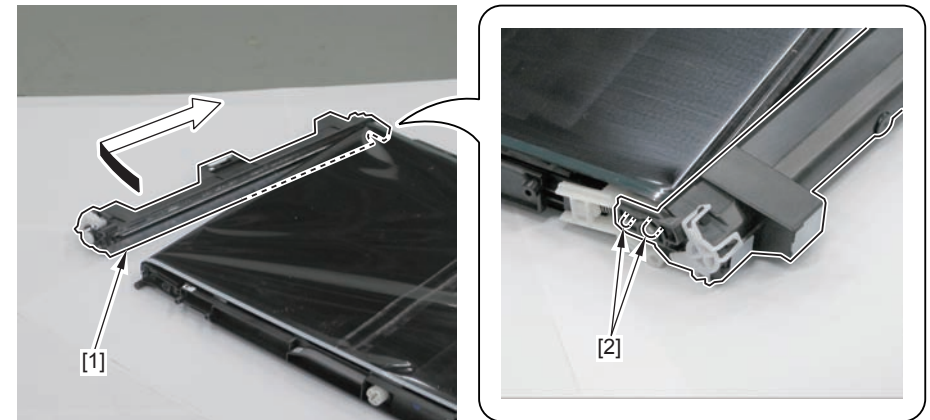
- 1) Remove the ITB Cleaning Blade Retainer [1].
 - 2 Screws [2]
 - 2 Gears [3]
 - 1 Clasp [4] (Used when removing the ITB)



F-4-122

- 2) Remove the Cleaning Blade [1].

- 2 Bosses [2]



F-4-123

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > T-CLN-BD
- It is also cleared at the same time when TR-UNIT is cleared.
- After installation, execute [Auto Adjust Gradation > Full Adjust], [Auto Correct Color Mismatch].

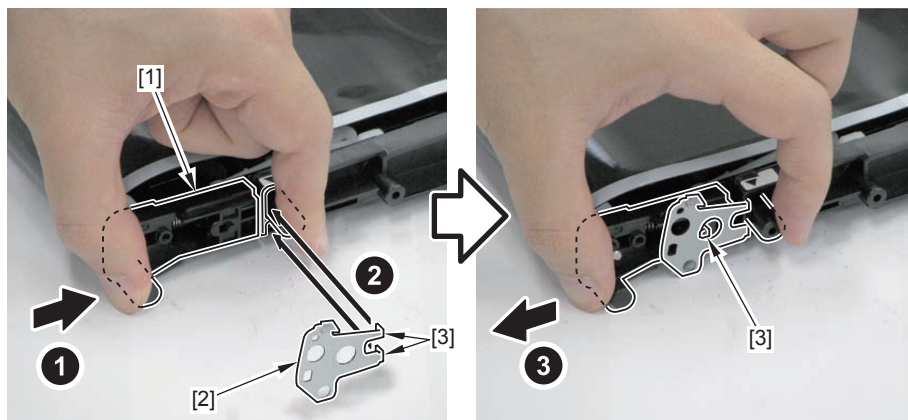
Removing the ITB

Preparation

- 1) Open the Right Door.
- 2) Fully open the Right Door. (Refer to page 4-27)
- 3) Pull out the ITB Unit. (Refer to page 4-59)
- 4) Remove the ITB Cleaning Blade. (Refer to page 4-62)

Procedure

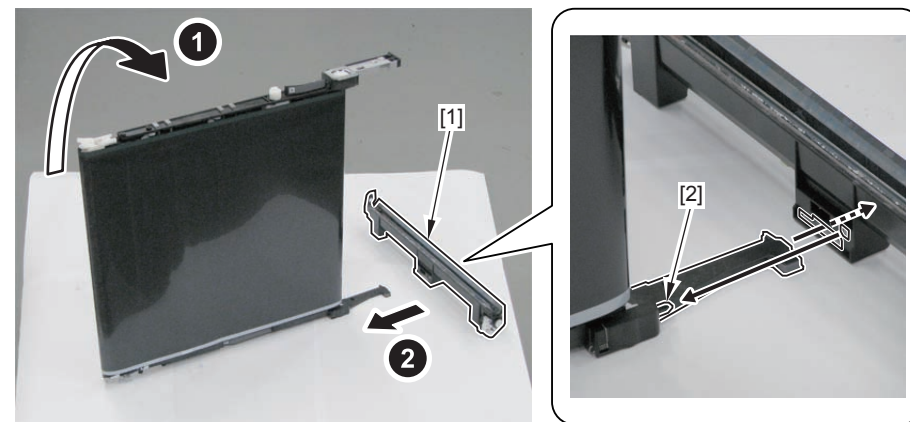
- 1) Push the Tension Guide [1] to loosen the tension of the ITB, and secure the guide using the clasp [2].
- 3 Hooks [3]



F-4-124

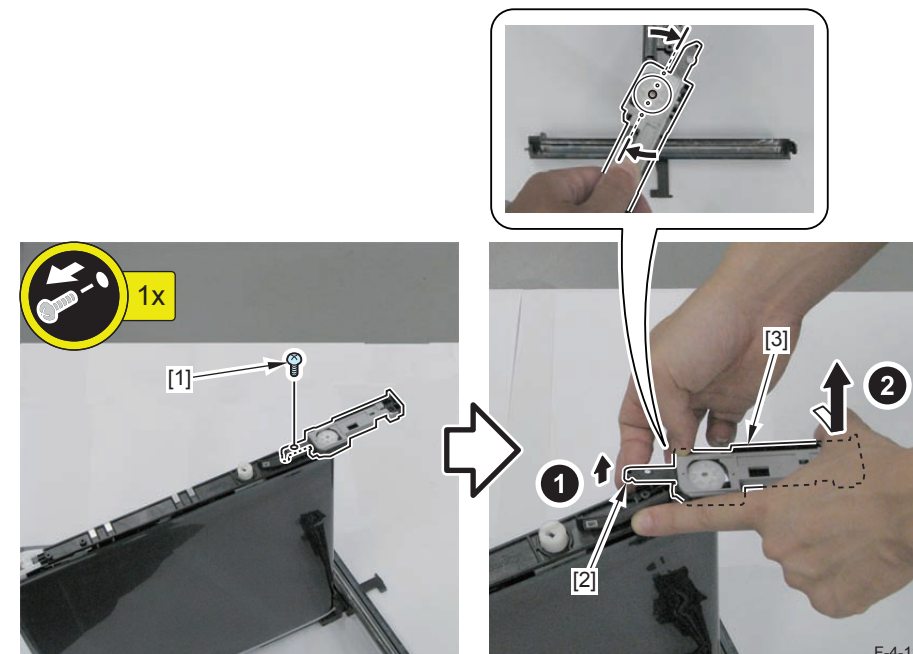
- 2) Stand the ITB Unit, and secure it by using the ITB Cleaning Blade [1] as a base.

- 1 Boss [2]



- 3) Remove the screw [1], and remove the Left Handle [3] by rotating it while lifting up the boss [2].

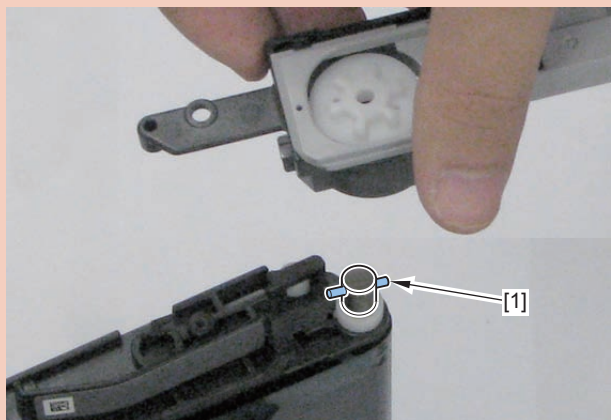
- 1 Screw [1]
- 1 Boss [2]



F-4-125

CAUTION:

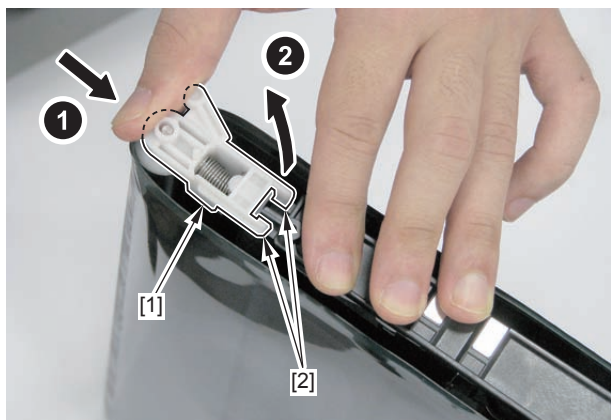
Be careful not to lose the Parallel Pin [1].



F-4-127

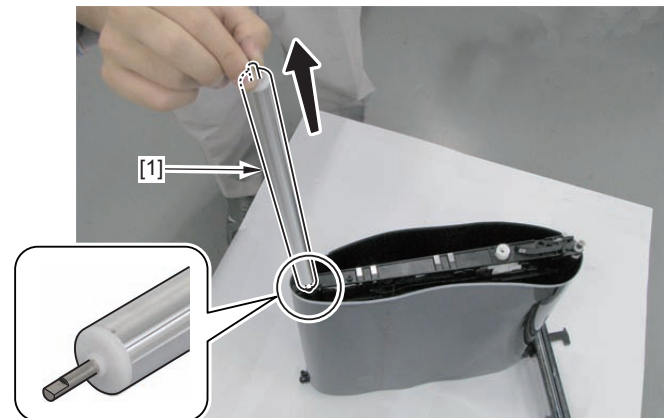
4) Remove the Tension Roller Retainer [1].

- 2 Hooks [2]



F-4-128

5) Remove the ITB Tension Roller [1].



F-4-129

6) Remove the ITB [1].



F-4-130

Points to Note at Installation:

Be sure that the rib of the ITB is not placed on the Tension Roller.

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > TR-BLT
- It is also cleared at the same time when TR-UNIT is cleared.
- After installation, execute [Auto Adjust Gradation> Full Adjust], [Auto Correct Color Mismatch].

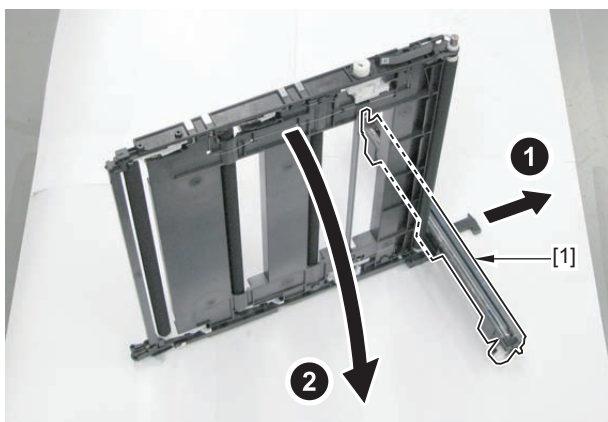
Removing the Primary Transfer Roller (Y/M/C/BK)

Preparation

- 1) Remove the ITB Unit. (Refer to page 4-59)
- 2) Remove the ITB Cleaning Blade. (Refer to page 4-62)
- 3) Remove the ITB. (Refer to page 4-63)

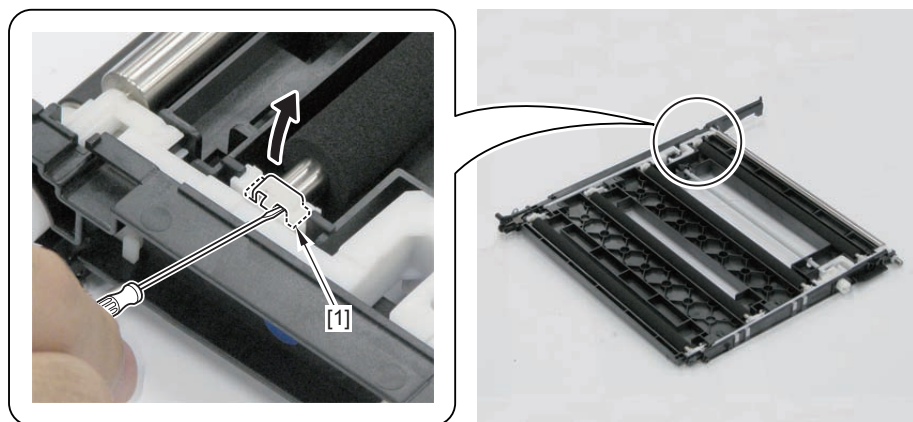
Procedure

- 1) Remove the ITB Cleaning Blade [1], and lay down the ITB Unit such that the Primary Transfer Roller is visible.



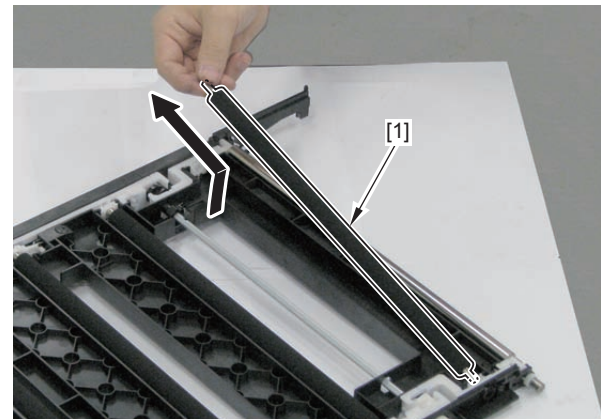
F-4-131

- 2) Remove the Primary Transfer Roller Retainer Member [1].



F-4-132

- 3) Remove the Primary Transfer Roller [1].



F-4-133

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > TR-ROLK
- Parts Counter : COPIER > COUNTER > DRBL-1 > TR-ROLK
- It is also cleared at the same time when TR-UNIT is cleared.
- After installation, execute [Auto Adjust Gradation> Full Adjust], [Auto Correct Color Mismatch].

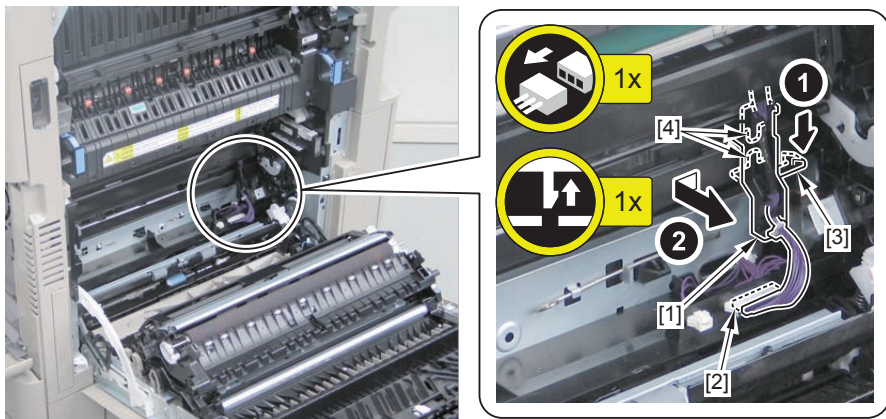
Removing the Patch Sensor Unit

Preparation

- 1) Remove the Registration Guide Unit. (Refer to page 4-93)
- 2) Remove the ITB Unit. (Refer to page 4-59)

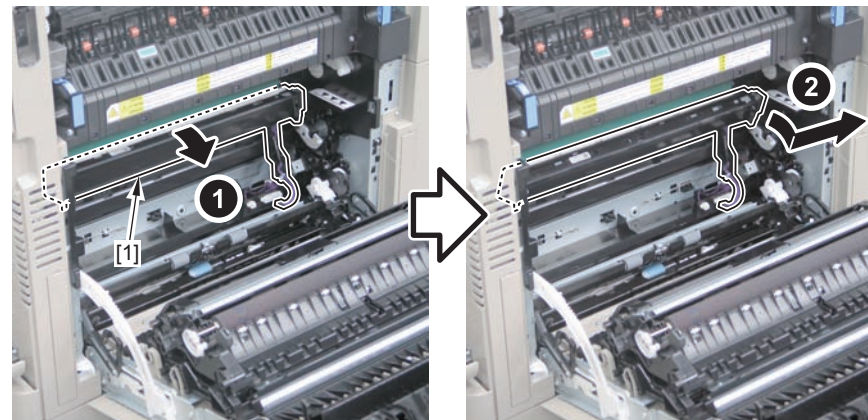
Procedure

- 1) Remove the Harness Guide [1].
 - 1 Connector [2]
 - 1 Claw [3]
 - 2 Hooks [4]



F-4-134

- 2) Remove the Patch Sensor Unit [1].



F-4-135

Adjustment after Replacement

The following procedure can also be performed in [Service Mode > Situation Mode > Parts Replacement > Adjustment During Patch Sensor Unit Replacement].

- 1) Enter the value shown on the label included in the package.
 COPIER > ADJUST > DENS > PALPHA-F
 COPIER > ADJUST > DENS > PALPHA-R
- 2) Execute auto gradation adjustment.
- 3) After executing auto gradation adjustment, see the alarm log to check that 10-0006/10-0007 has not occurred.
 When an alarm occurs, perform a remedy according to the instruction of the alarm.

Removing the Waste Toner Drive Unit

Preparation

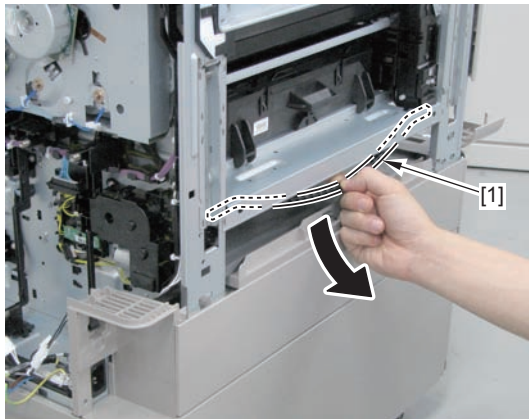
- 1) Remove the Motor Fan. (Refer to page 4-32)
- 2) Remove the Low Voltage Power Supply Unit. (Refer to page 4-33)
- 3) Remove the Secondary Transfer High Voltage PCB. (Refer to page 4-34)
- 4) Remove the Waste Toner Container. (Refer to page 4-58)
- 5) Remove the Left Cover (Upper).
- 6) Remove the Left Cover Assembly (Rear)
- 7) Remove the Power Supply Cooling Fan. (Refer to page 4-30)

Procedure

- 1) Remove the Waste Toner Drive Shaft [1] by bending it.

NOTE:

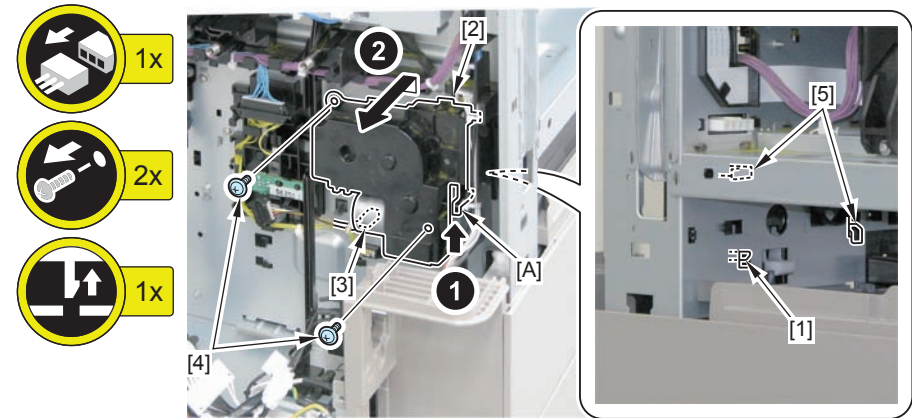
The Waste Toner Drive Shaft is removed to prevent toner from leaking from the Waste Toner Feed Unit on the front side.



F-4-136

- 2) Lift up the [A] part of the lever to release the claw [1], and remove the Waste Toner Drive Assembly [2].

- 1 Claw [1]
- 1 Connector [3]
- 2 Screws [4]
- 2 Hooks [5]



F-4-137

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > WT-DR-U

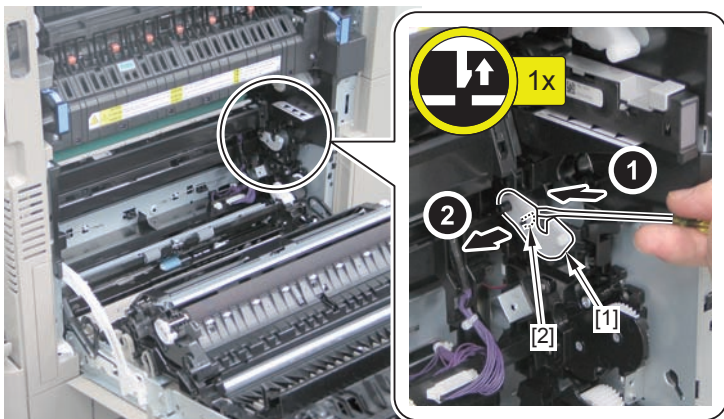
Removing the Registration Drive Unit / Duplex Merging Motor / Registration Motor

Preparation

- 1) Remove the Right Door. (Refer to page 4-80)
- 2) Remove the Registration Guide Unit. (Refer to page 4-93)
- 3) Remove the Cassette 1 Pickup Unit. (Refer to page 4-85)
- 4) Remove the Motor Fan. (Refer to page 4-32)

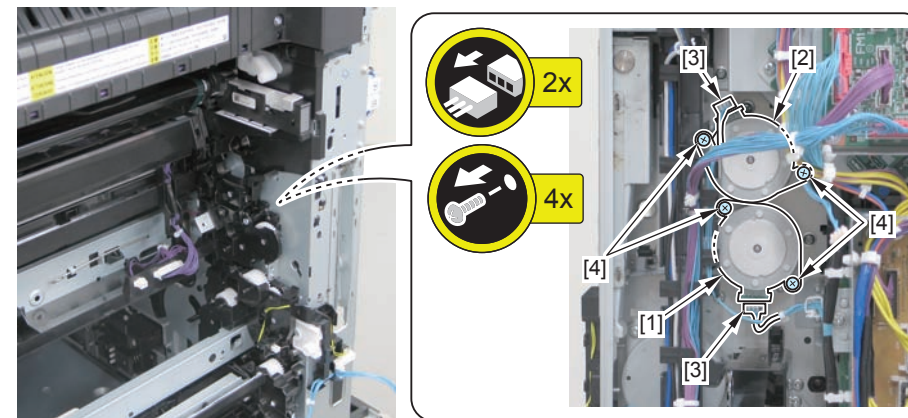
Procedure

- 1) Remove the white member [1] using a flat-blade screwdriver.
 - 1 Claw [2]



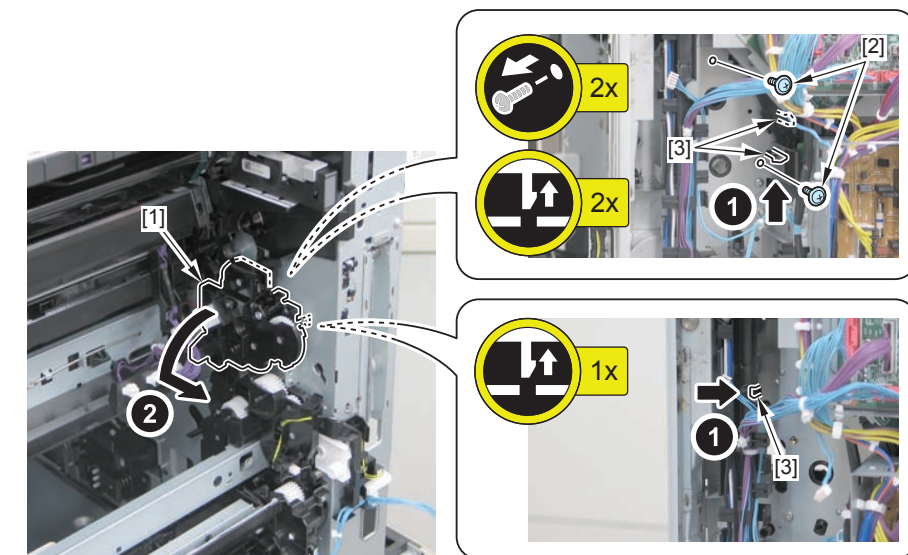
F-4-138

- 2) Remove the Duplex Merging Motor [1] and the Registration Motor [2].
 - 2 Connectors [3]
 - 4 Screws [4]



- 3) Remove the Registration Drive Unit [1].
 - 2 Screws [2]
 - 3 Claws [3]

F-4-139



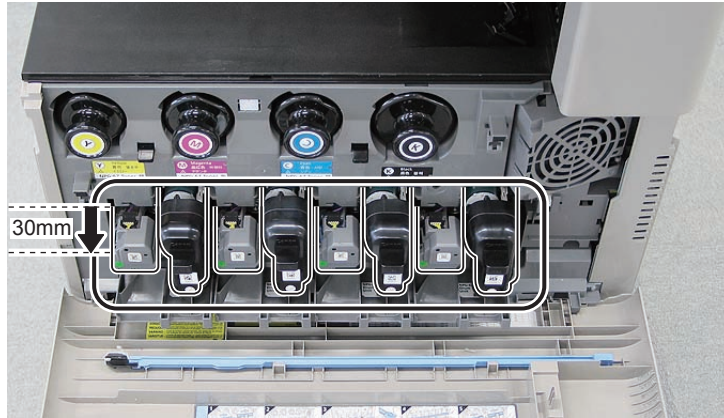
NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > REG-DR-U

Removing the Main Drive Unit

Preparation

- 1) Open the Front Cover.
- 2) Pull out the Drum Unit by approx. 3 cm.
- 3) Pull out the Developing Unit by approx. 3 cm.

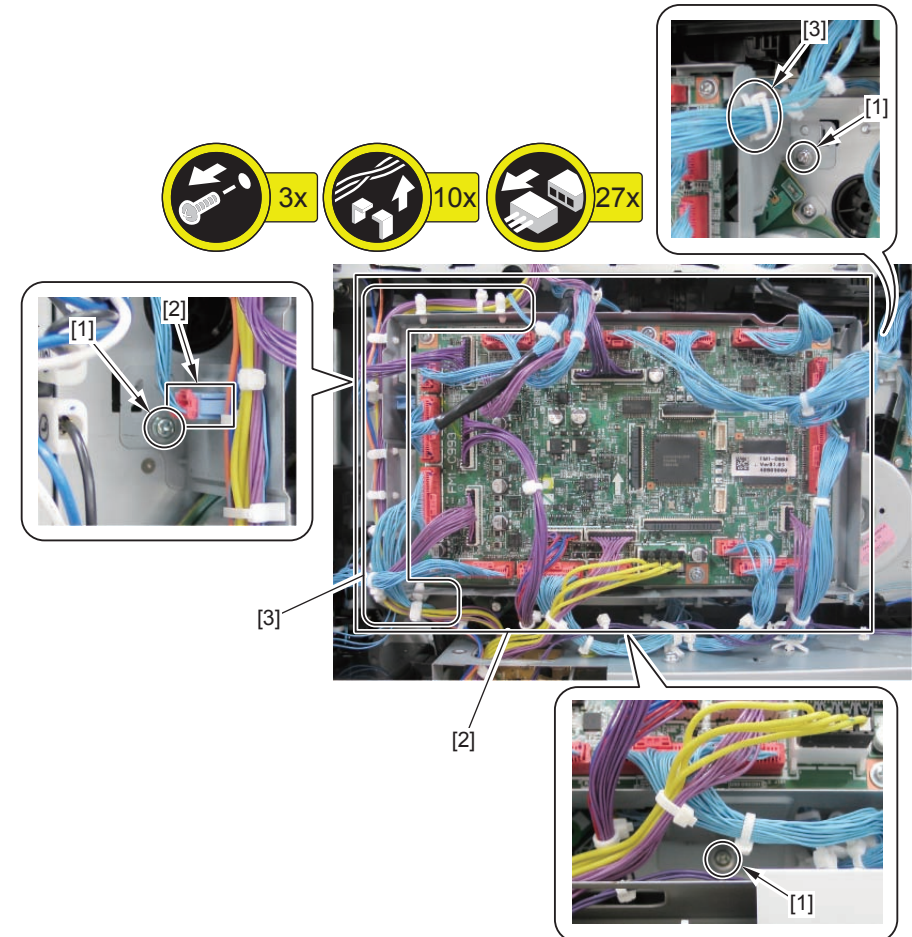


F-4-140

- 4) Remove the Rear Upper Cover.
- 5) Remove the Rear Lower Cover.

Procedure

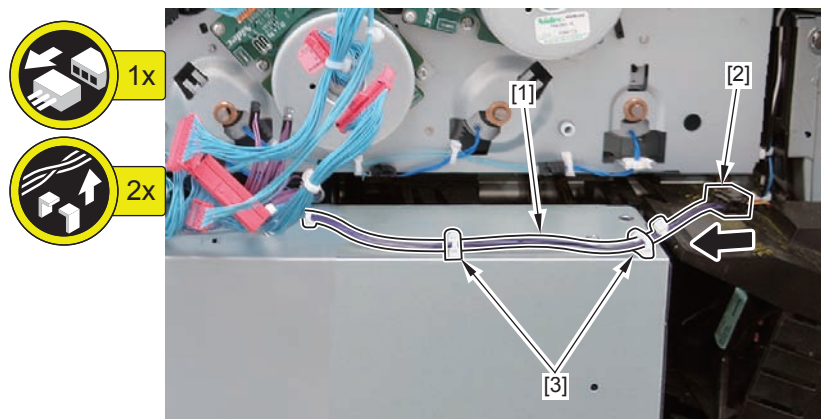
- 1) Remove the DC Controller PCB together with the Support Plate.
 - 3 Screws [1]
 - 27 Connectors [2]
 - 10 Wire Saddles [3]



F-4-141

2) Free the harness [1] of the Low-voltage Power Supply Assembly and disconnect the connector [2] of the Power Supply Cooling Fan.

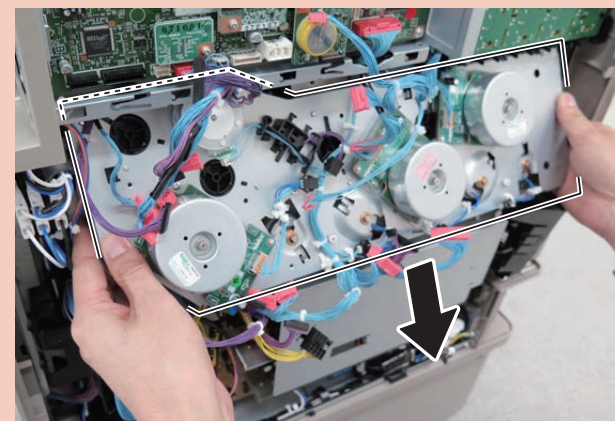
- 2 Wire Saddles [3]



F-4-142

CAUTION:

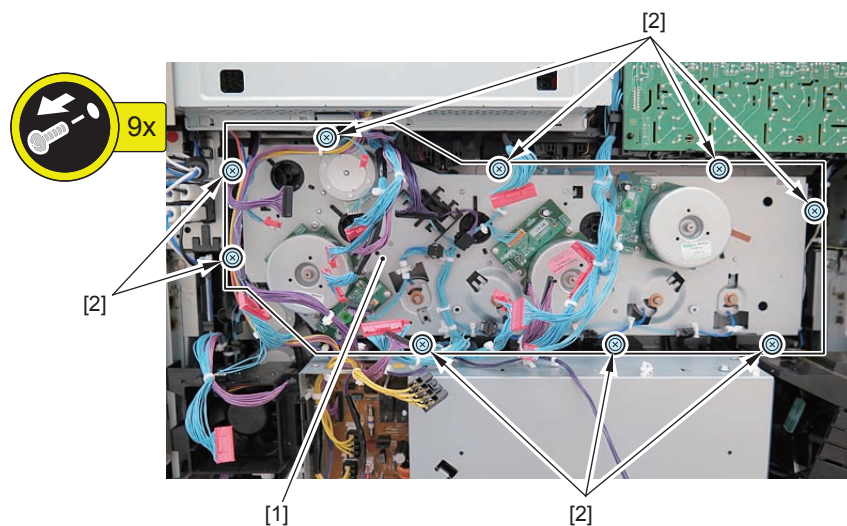
When removing the unit, be sure to release the lower edge of the unit first as shown in the figure.



F-4-144

3) Remove the Main Drive Unit.

- 9 Screws [1]



F-4-143

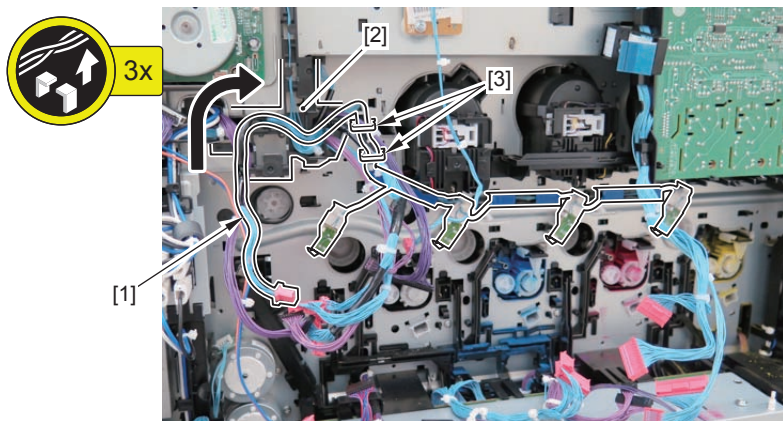
Removing the Drum Cleaning Pre-exposure LED Unit

Preparation

- 1) Removing the Main Controller PCB. (Refer to page 4-48)
- 2) Removing the Main Drive Unit. (Refer to page 4-69)

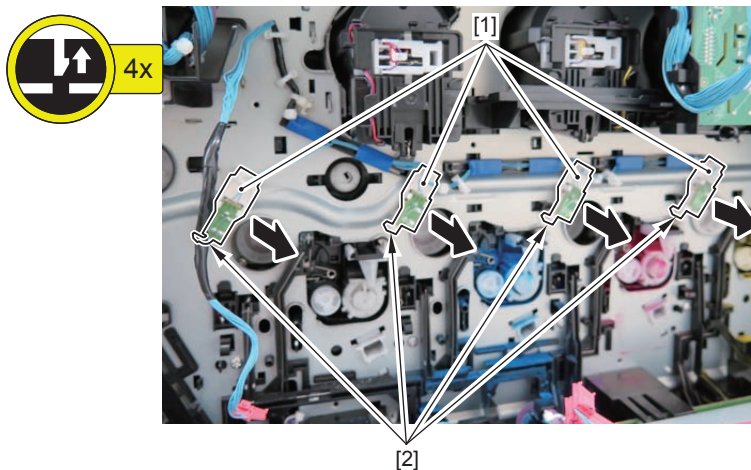
Procedure

- 1) Free the harness [1] from the Harness Guide [2].
- 2) Wire Saddles [3]



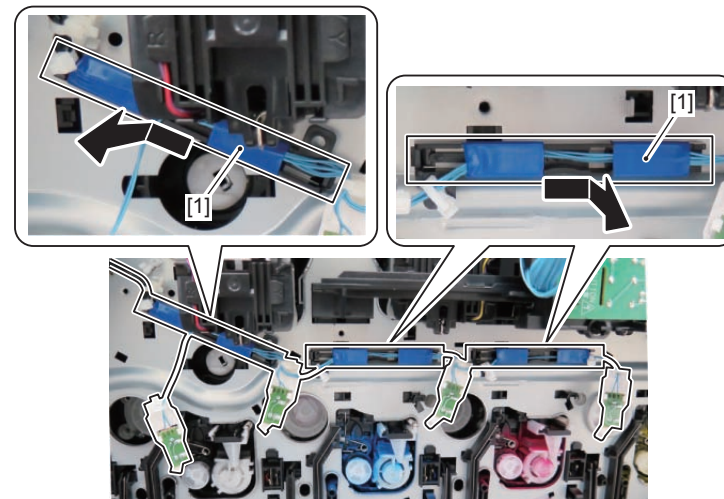
F-4-145

- 2) Remove the 4 Pre-exposure LEDs [1].
- 1) Claw [2]



F-4-146

- 3) Remove the guide [1] of the Pre-exposure LED.



F-4-147

Adjustment after Replacement

The following procedure can also be performed in [Service Mode > Situation Mode > Parts Replacement > Adjustment at replacement of the Pre-exposure LED].

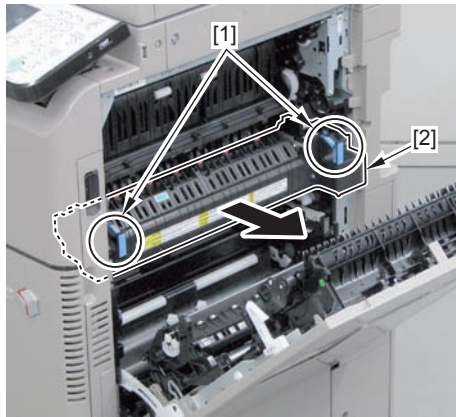
- 1) Light up the Cleaning Pre-exposure LED and check that the LED lights up.
COPIER>FUNCTION>MISC-P>PRE-EXP
- 2) Enter the value shown on the label included in the package.
COPIER>ADJUST>EXP-LED>INTEXP-Y/M/C/K
- 3) Put the label included in the package on the corresponding item on the service label on the Front Door.

Fixing System

Removing the Fixing Unit

1) Open the Right Door.

2) Grasp the light-blue handle [1], and remove the Fixing Unit [2].



F-4-148

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > FX-UNIT
- The parts counter of the Fixing Unit is automatically cleared when a new Fixing Unit is detected.
- * When a fixing error (E001/E002/E003) occurs, be sure to turn ON the power after closing the Right Door.
- When FX-UNIT is cleared, FX-LW-RL/ FX-UP-FR/ FX-LW-BS are also cleared at the same time.

Removing the Fixing Film Unit

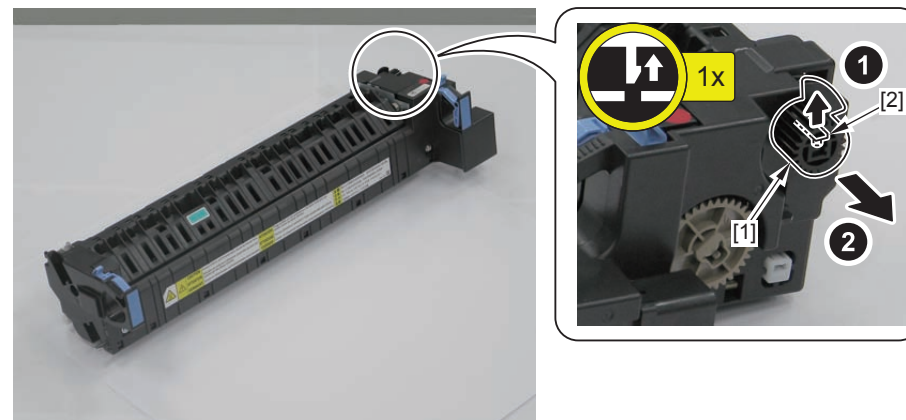
Preparation

1) Remove the Fixing Unit. (Refer to page 4-72)

Procedure

1) Remove the Fixing Disengagement Gear [1].

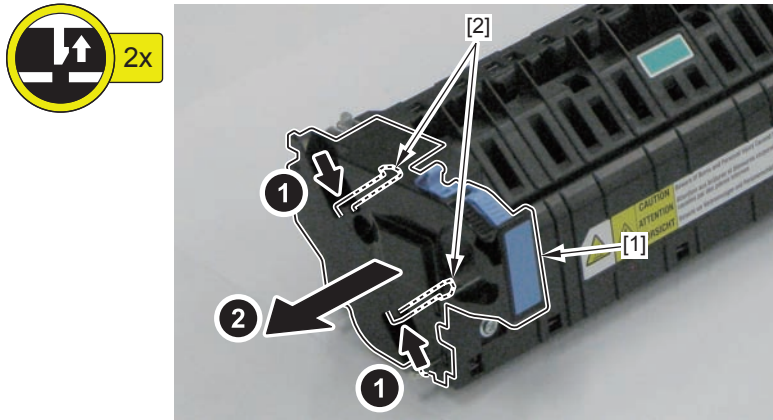
- 1 Claw [2]



F-4-149

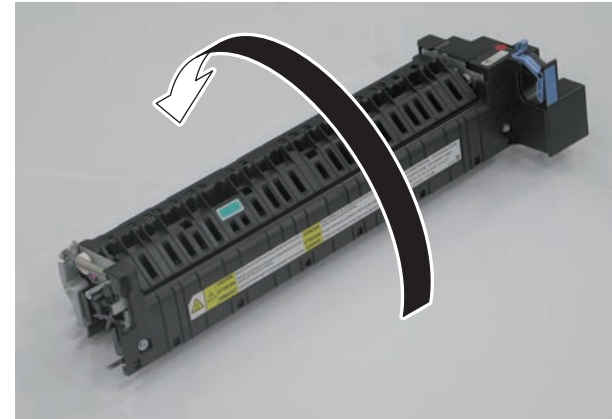
2) Remove the Fixing Left Cover [1].

- 2 Claws [2]



F-4-150

3) Rotate the Fixing Unit 180 degrees.



F-4-152

4) Remove the Fixing Right Cover [1].

- 2 Claws [2]

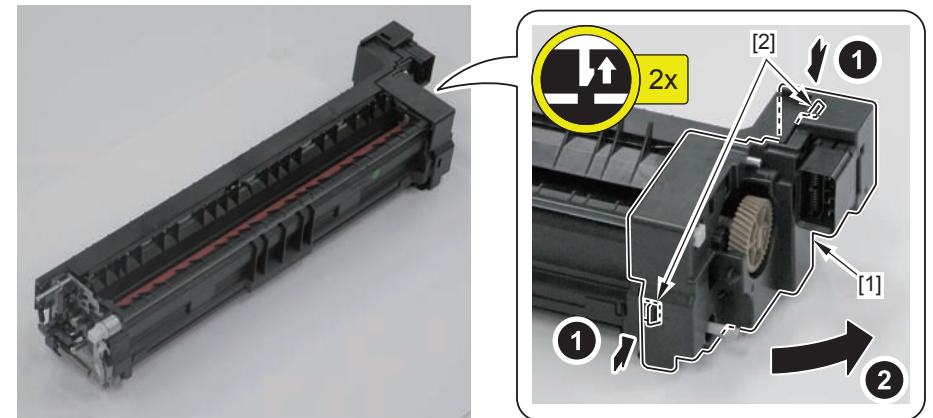
CAUTION:

Since there are connectors connected inside, do not remove them abruptly.

NOTE:
If the claw of the Fixing Left Cover is damaged, [1] can be secured by tightening the screws.



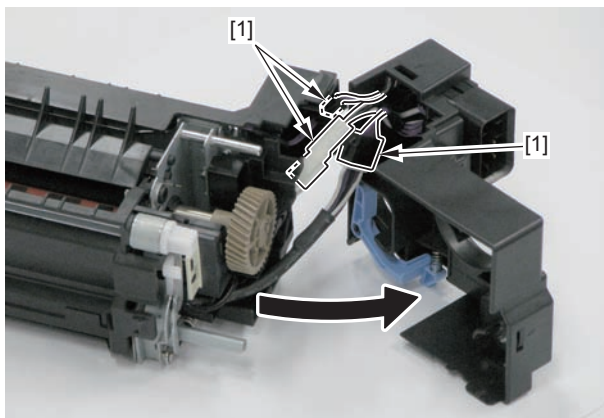
F-4-151



F-4-153

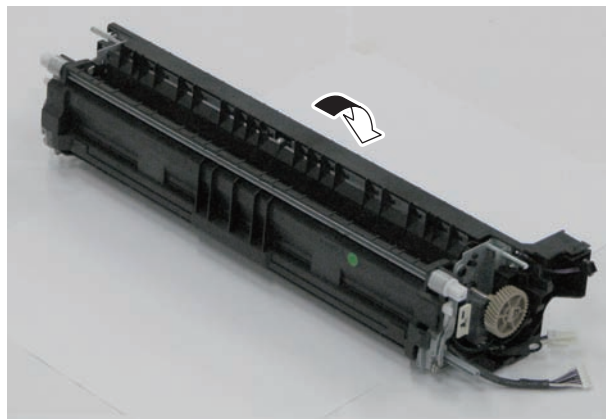
5) Disconnect the 3 connectors [1].

- 3 Connectors [1]



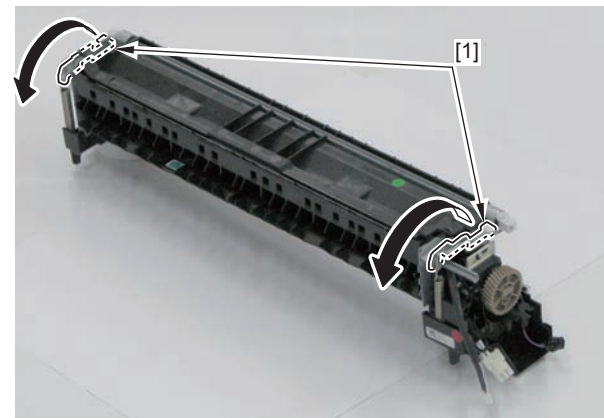
F-4-154

6) Rotate the Fixing Unit 90 degrees.



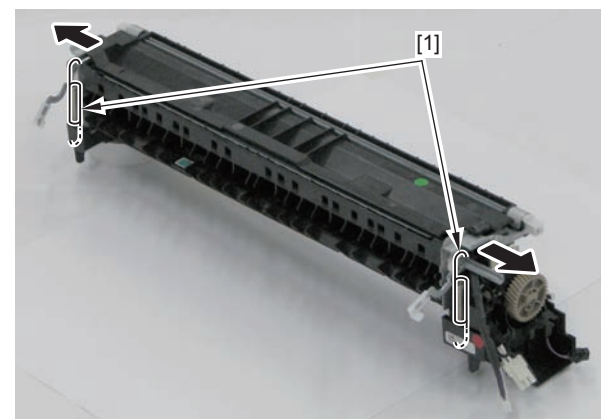
F-4-155

7) Open the left and right Fixing Pressure Levers [1].



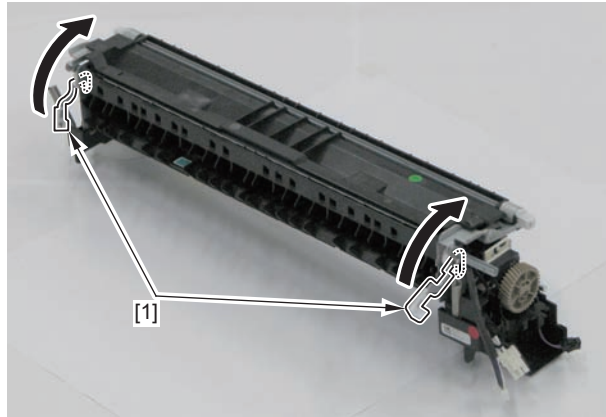
F-4-156

8) Remove the 2 springs [1] from the left and right Fixing Pressure Levers.



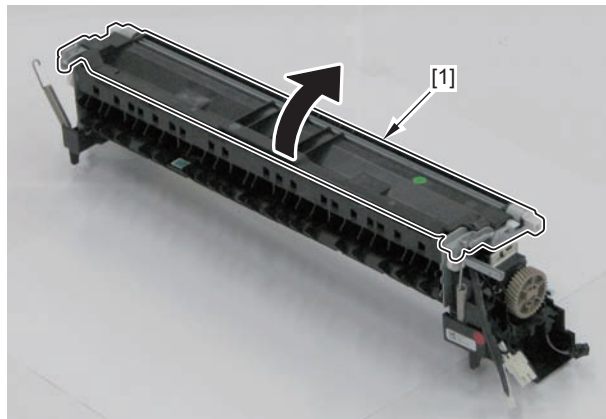
F-4-157

9) Return the Fixing Pressure Lever [1].



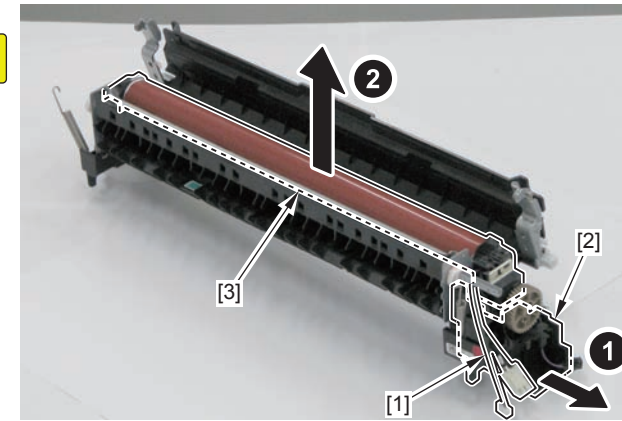
F-4-158

10) Open the Fixing Lower Cover [1].



F-4-159

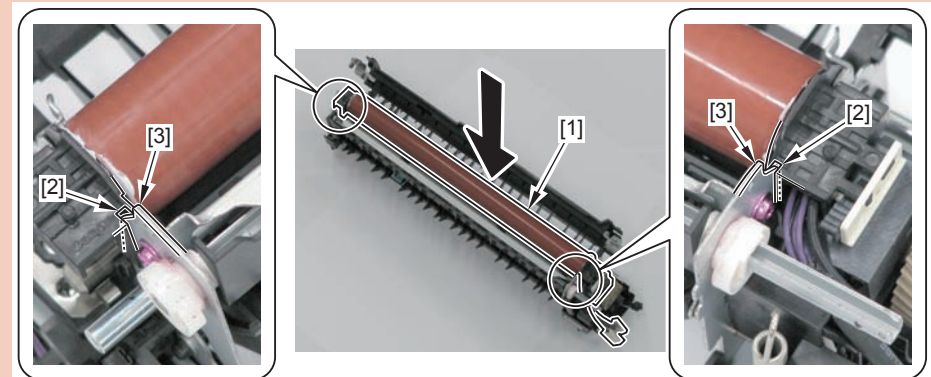
11) Free the harness [1] from the Harness Guide [2], and remove the Fixing Film Unit [3].



F-4-160

Points to Note at Installation:

When installing the Fixing Film Unit [1], be sure to align the grooves on the right and left with the rail [3].



F-4-161

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > FX-UP-FR
- It is also cleared at the same time when FX-UNIT is cleared.

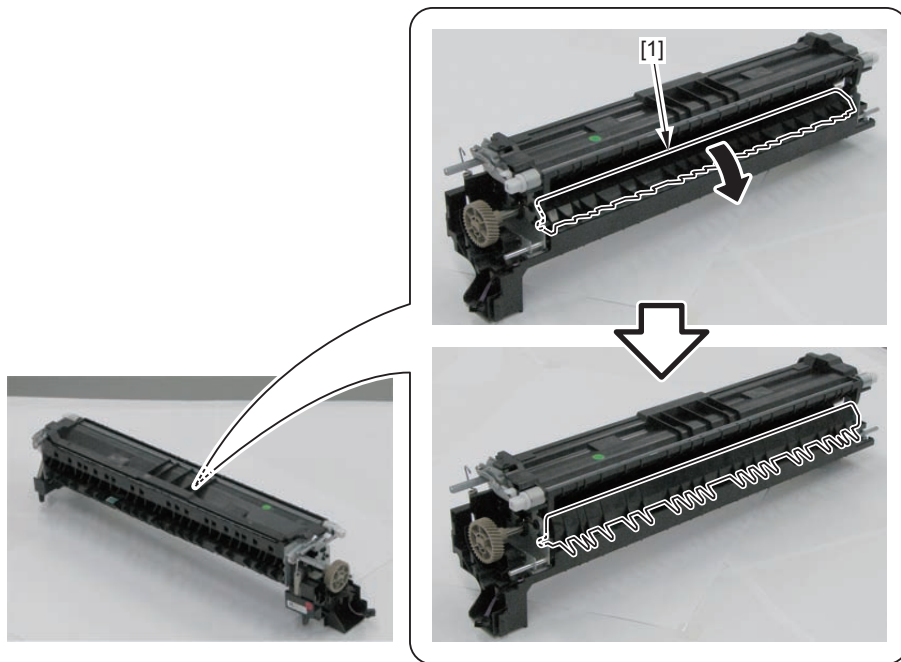
Removing the Fixing Pressure Roller / Fixing Pressure Roller Shaft Support

Preparation

- 1) Remove the Fixing Unit. (Refer to page 4-72)
- 2) Remove the Fixing Film Unit. (Refer to page 4-72)

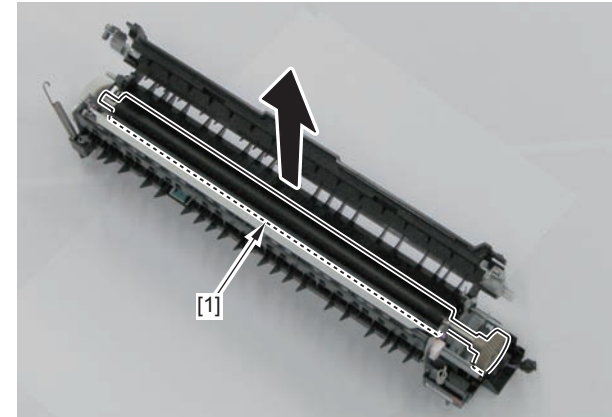
Procedure

- 1) Open the guide [1].



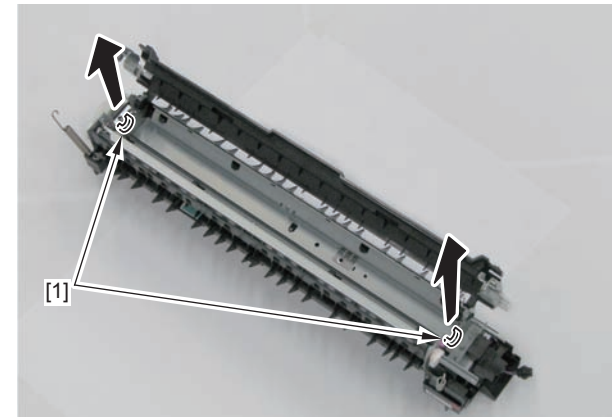
F-4-162

- 2) Remove the Fixing Pressure Roller [1].



F-4-163

- 3) Remove the Fixing Pressure Roller Shaft Support [1].



F-4-164

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > FX-LW-RL
- Parts Counter : COPIER > COUNTER > DRBL-1 > FX-LW-BS
- It is also cleared at the same time when FX-UNIT is cleared.

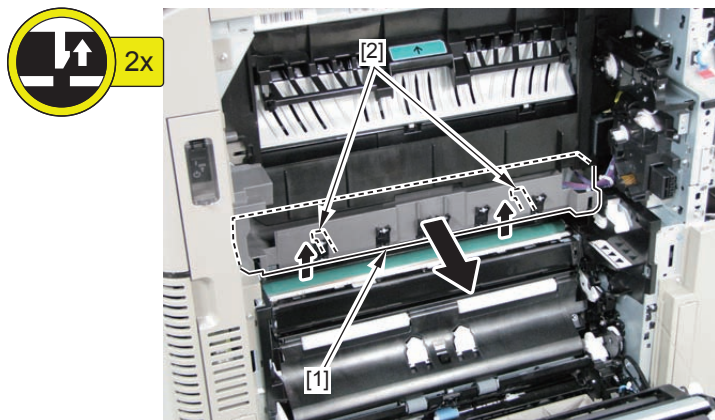
Removing the Fixing Drive Unit

Preparation

- 1) Fully open the Right Door.(Refer to page 4-27)
- 2) Remove the Fixing Unit.(Refer to page 4-72)
- 3) Remove the ITB Unit.(Refer to page 4-59)
- 4) Remove the Right Upper Rear Cover.
- 5) Remove the Second Delivery Unit.(Refer to page 4-84)
- 6) Remove the First Delivery Unit.(Refer to page 4-83)

Procedure

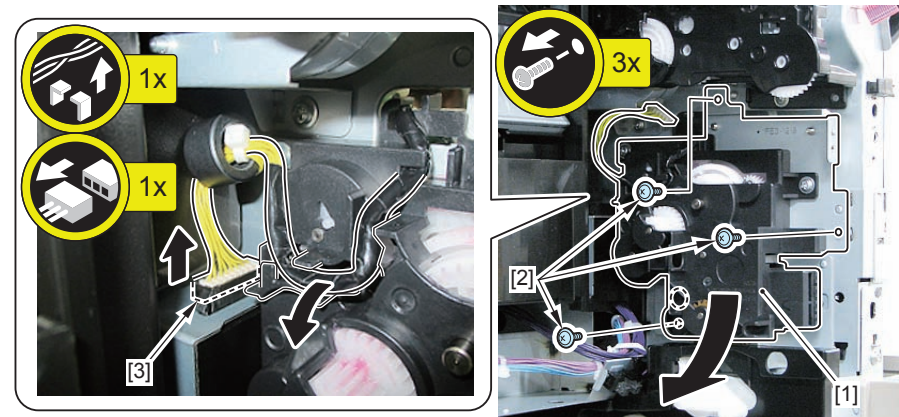
- 1) Remove the Air Flow Duct [1].
 - 2 Claws [2]



F-4-165

- 2) Remove the Fixing Drive Assembly [1].

- 3 Screws [2]
- 1 Connector [4]



F-4-166

Pickup/Feed System

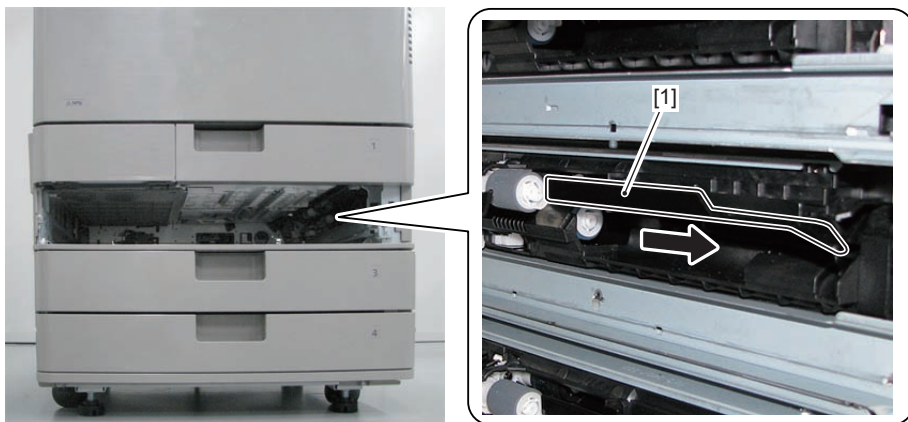
Removing the Pickup/Feed/Separation Roller (Cassette 1/2,Cassette 3/4(Optional))

Preparation

- 1) Open the Right Door (Lower) or the Cassette Right Door Assembly .
Cassette 1/2: Right Door (Lower)
Cassette 3/4: Cassette Right Door Assembly
- 2) Pull out the cassette (each paper source).

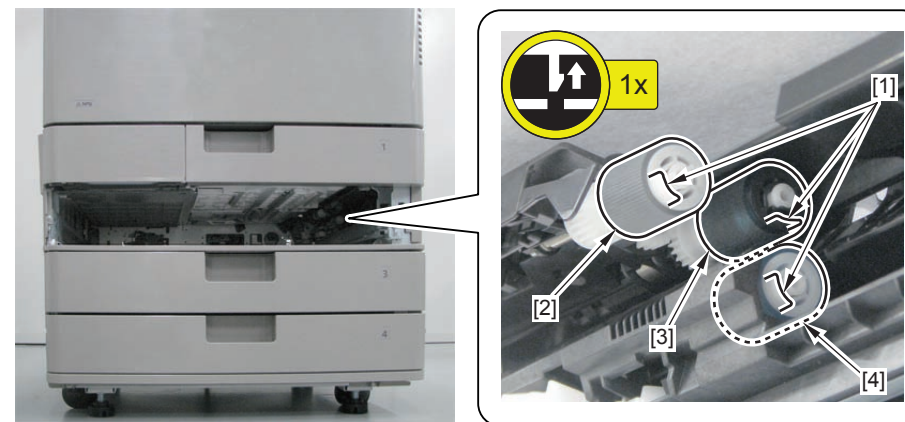
Procedure

- 1) Move the Pickup Guide Holder [1].



F-4-167

- 2) Pull out the Pickup Roller [2]/Feed Roller [3]/Separation Roller [4] while holding down the claw [1].
- 3 Claws [1]



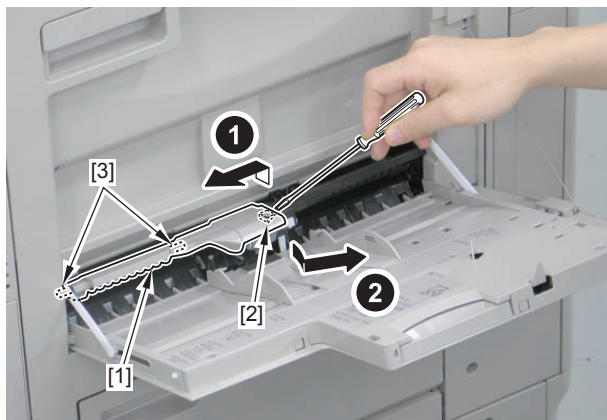
F-4-168

NOTE:

Parts Counter : COPIER > COUNTER > DRBL-1 > Cx-PU-RL / Cx-FD-RL / Cx-SP-RL
Parts Counter : COPIER > COUNTER > DRBL-2 > Cx-PU-RL / Cx-FD-RL / Cx-SP-RL

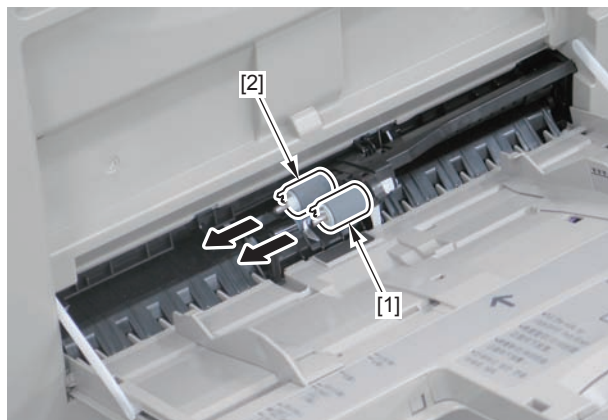
Removing the Multi-purpose Tray / Feed / Separation Roller

- 1) Open the Multi-purpose Tray Pickup Tray.
- 2) Remove the Multi-purpose Tray Pickup Roller Cover [1].
 - 1 Claw [2]
 - 2 Bosses [3]



F-4-169

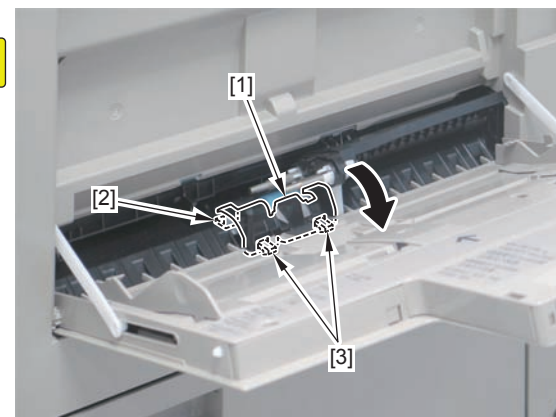
- 3) Remove the Multi-purpose Tray Pickup Roller [1] and the Feed Roller [2].



F-4-170

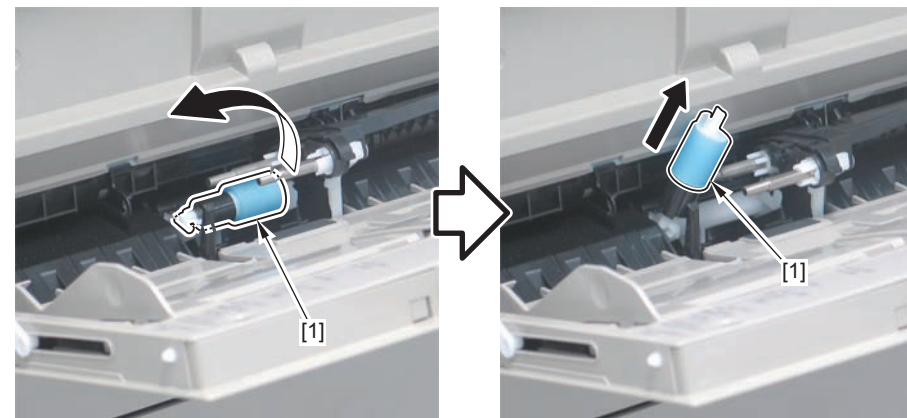
- 4) Remove the Multi-purpose Tray Separation Roller Guide [1].

- 1 Hook [2]
- 2 Claws [3] (on the host machine side)



F-4-171

- 5) Raise the Multi-purpose Tray Separation Roller [1] with the shaft as the center, and pull it out from the shaft.



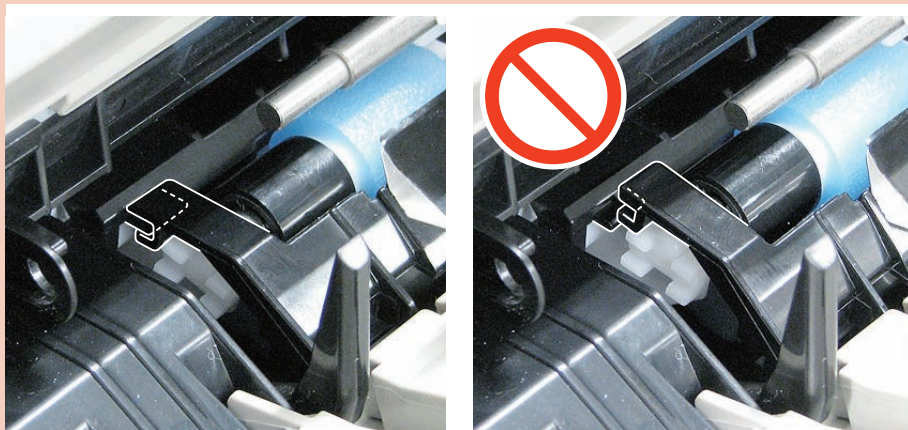
F-4-172

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > M-PU-RL / M-SP-RL / M-FD-RL
- M-PU-RL/ M-SP-RL/ M-FD-RL is also cleared at the same time when R-DOOR is cleared.

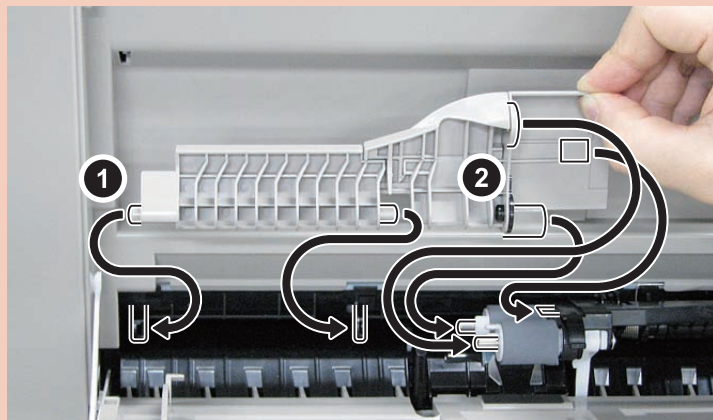
Points to Note at Installation:

- 1) Because a jam may occur when the Multi-purpose Tray Separation Roller is not inserted properly, be sure to insert it all the way to the correct position.



F-4-173

- 2) When installing the Multi-purpose Tray Pickup Roller Cover, be sure to do so after aligning (1) with the boss hole and (2) with the holes.

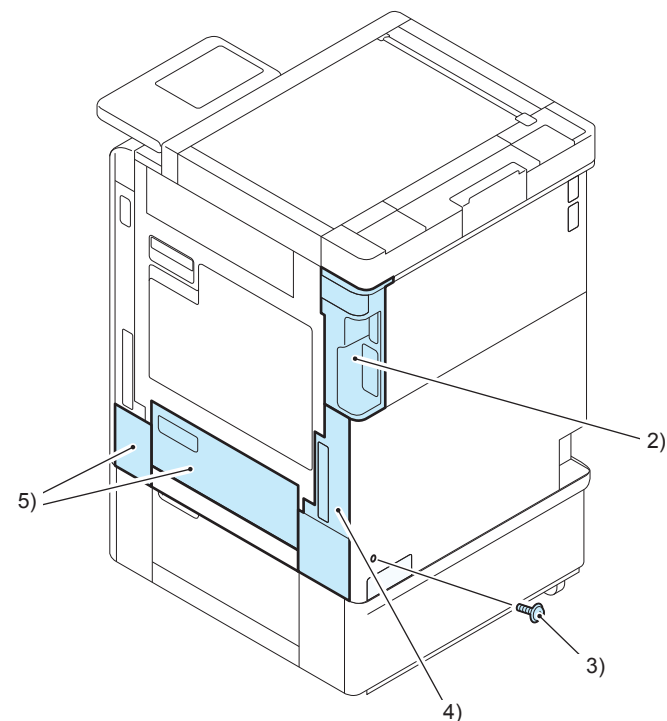


F-4-174

Removing the Right Door Unit

Preparation

- 1) Pull out the Cassette 1/2.
- 2) Open the Right Door/Right Door (Lower)/Cassette Right Door Assembly.
- 3) Remove the Right Cover (Rear Upper).
- 4) Remove the screw on the left side of the Cover (Rear Lower).
- 5) Remove the Right Cover Assembly (Rear Lower).
- 6) Remove the Right Cover (Front Lower) and Right Door (Lower).
- 7) Open the Multi-purpose Tray Pickup Tray.

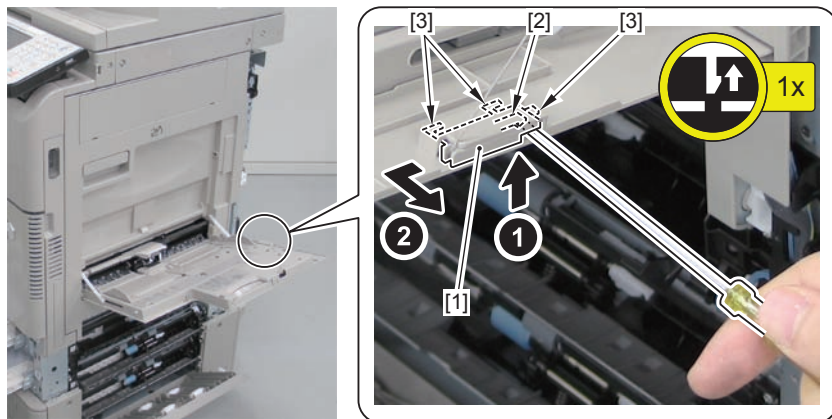


F-4-175

Procedure

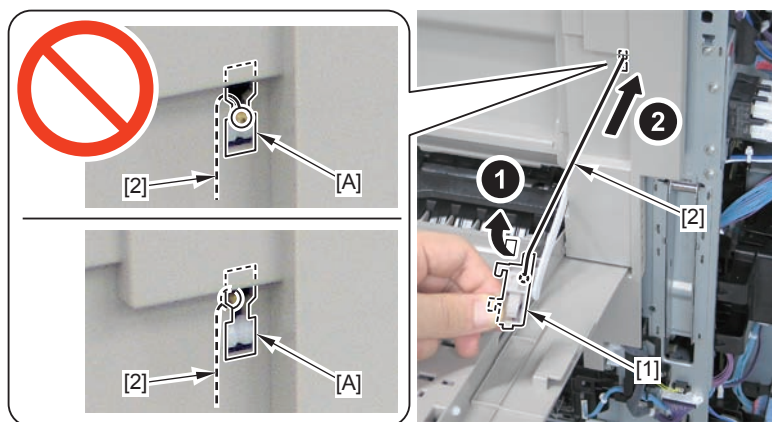
1) Remove the Wire Fixation Member [1].

- 1 Claw [2]
- 3 Hooks [3]



F-4-176

2) Free the wire [2] from the Wire Fixation Member [1], and pass it through the hole [A] in the Right Door.

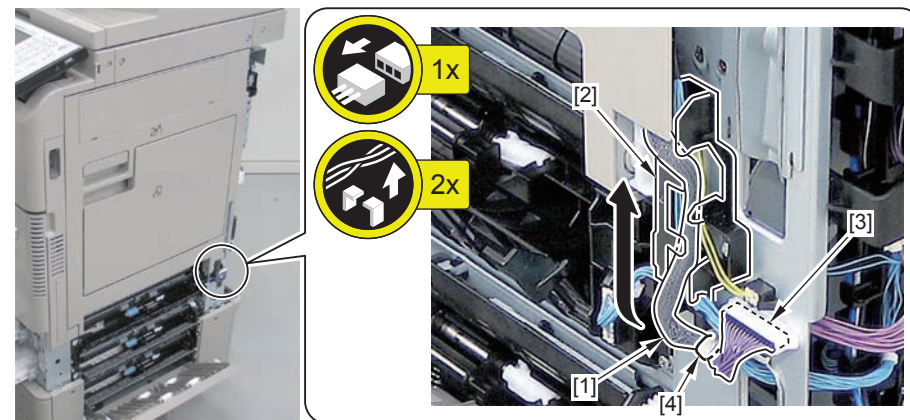


F-4-177

3) Close the Multi-purpose Tray Pickup Tray.

4) Free the harness [1] from the Harness Guide [2].

- 1 Connector [3]
- 1 Clamp [4]



F-4-178

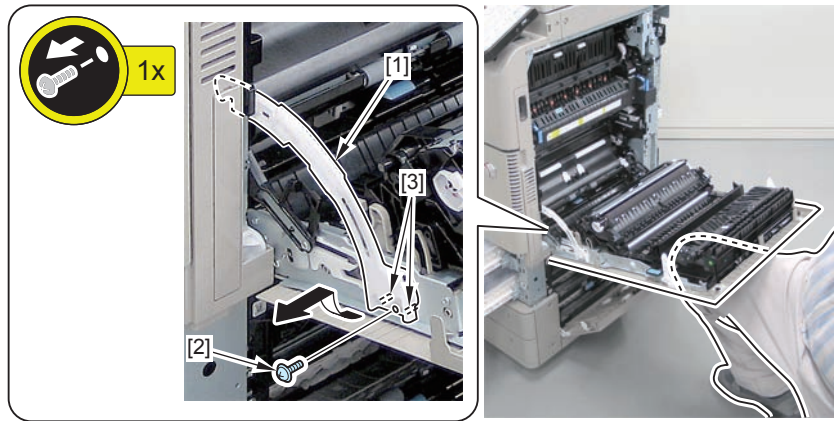
5) Fully open the Right Door .

6) Remove the Link Gear [1].

- 1 Screw [2]
- 2 Bosses [3]

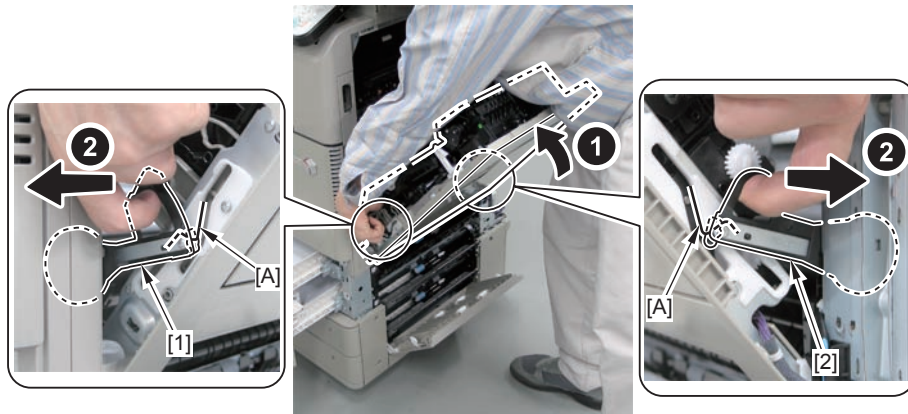
CAUTION:

Be sure to perform work while supporting the Right Door with your thigh and taking care to prevent it from falling.



F-4-179

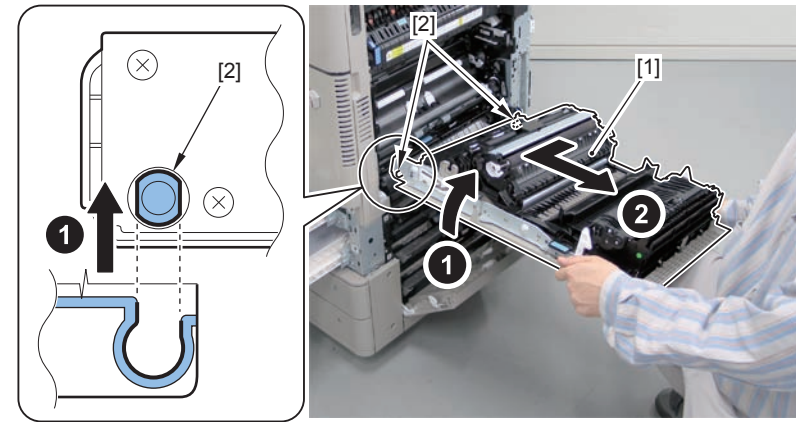
7) Pull the Right Door Link (Left) [1] and Right Door Link (Right) [2] towards the outside to remove them while bending the [A] part at the position in the following figure.



F-4-180

8) Remove the Right Door [1].

- 2 Bosses [2]



F-4-181

NOTE:

- Parts Counter : COPIER > COUNTER > DRBL-1 > R-DOOR
- REG-RL/ M-PU-RL/ M-SP-RL/ M-FD-RL is also cleared at the same time when R-DOOR is cleared.

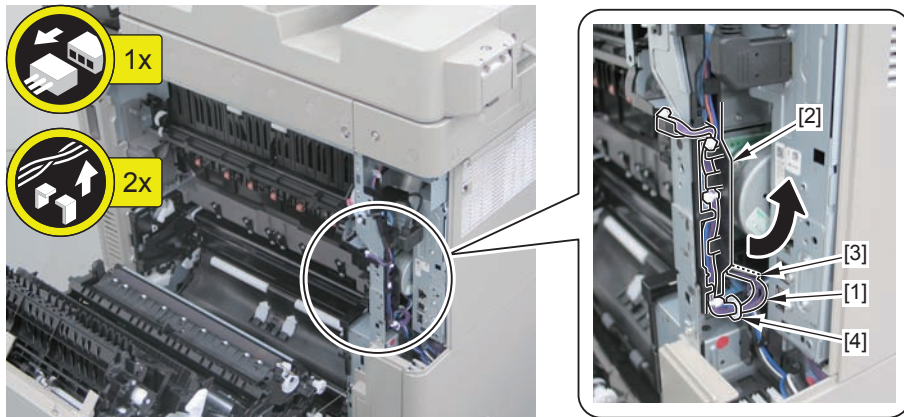
Removing the First Delivery Unit

Preparation

- 1) Open the Right Door
- 2) Remove the Right Cover (Rear Upper).
- 3) Remove the Fixing Unit. (Refer to page 4-72)
- 4) Remove the Second Delivery Unit. (Refer to page 4-84)

Procedure

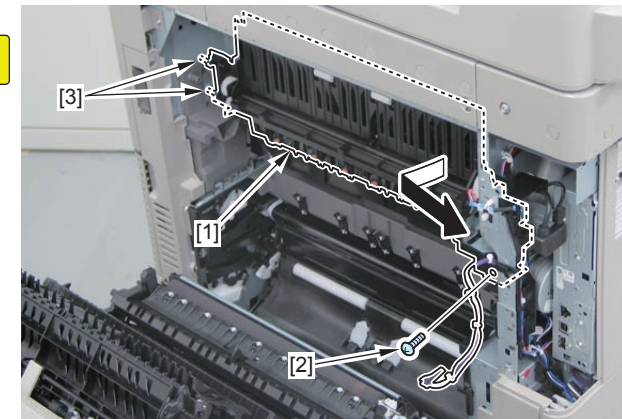
- 1) Free the harness [1] from the Harness Guide [2].
 - 1 Connector [3]
 - 1 Wire Saddle [4]



F-4-182

- 2) Remove the First Delivery Unit [1].

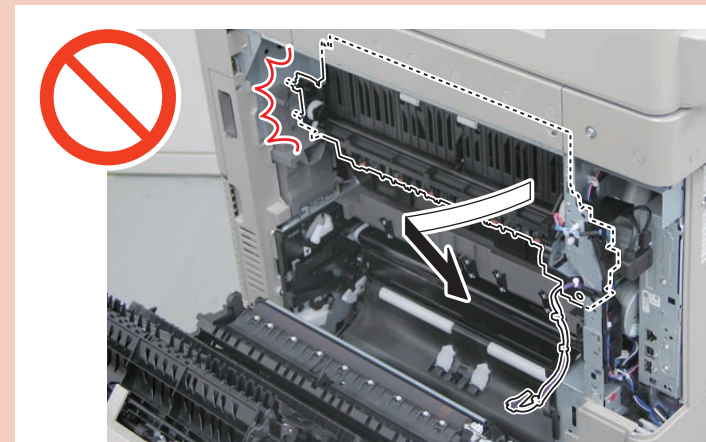
- 1 Screw [2]
- 2 Bosses [3]



F-4-183

Points to Note at Removing:

If you pull the right side of the First Delivery Unit out too far, the 2 bosses may be damaged.



F-4-184

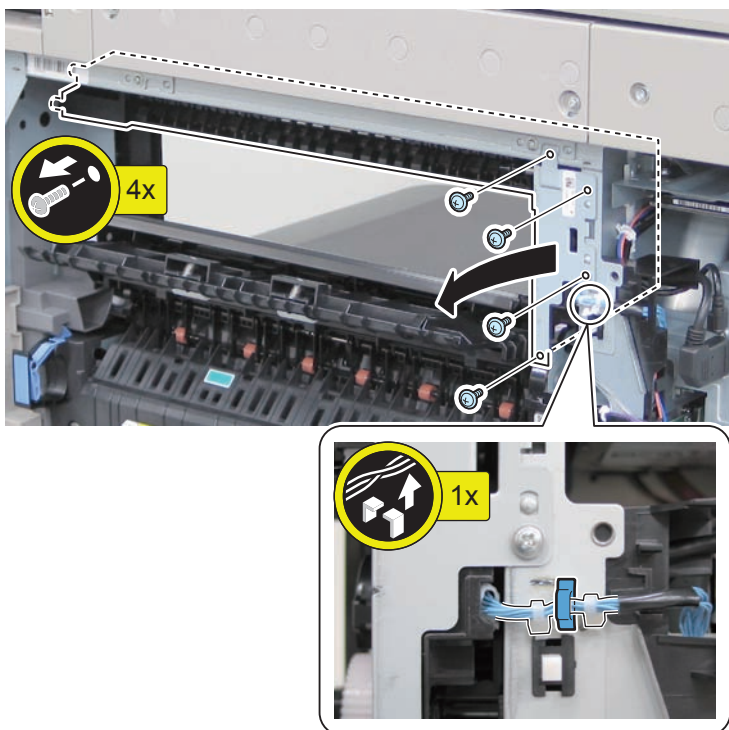
Removing the Second Delivery Unit

Preparation

- 1) Open the Right Door.
- 2) Remove the Right Cover (Rear Upper).

Procedure

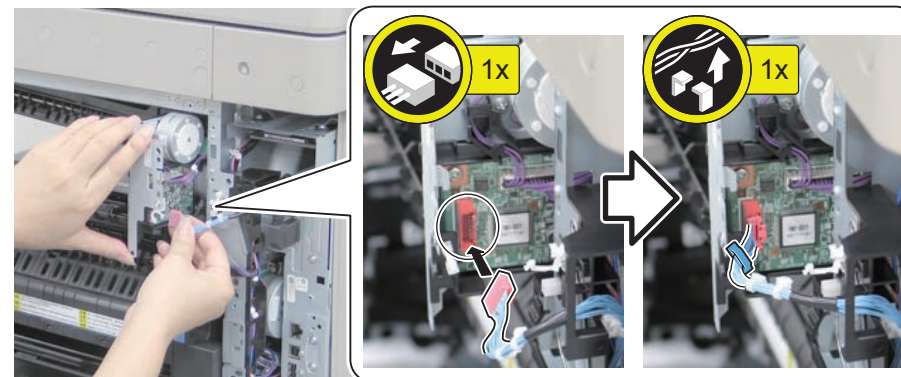
- 1) Pull out the Second Delivery Unit slightly.
- 4 Screws
 - 1 Wire Saddle



F-4-185

- 2) Pull out the Second Delivery Unit slightly and disconnect the connector.

- 1 Connector [1]

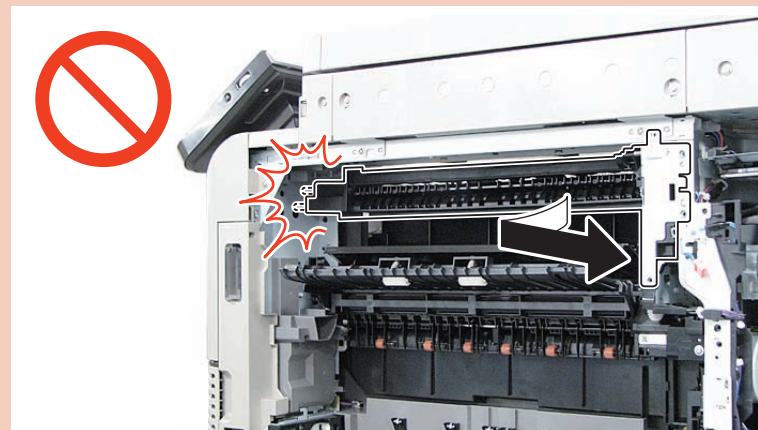


F-4-186

- 3) Remove the Second Delivery Unit.

Points to Note at Removing:

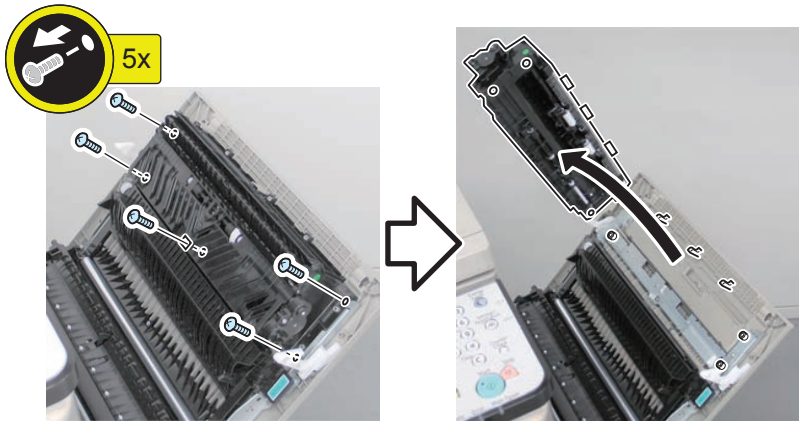
If you pull the right side of the Second Delivery Unit out too far, the 2 bosses may be damaged.



F-4-187

Removing the Third Delivery Unit

- 1) Open the Right Door.
- 2) Fully open the Right Door.(Refer to page 4-27)
- 3) Remove the Third Delivery Unit.
 - 3 Bosses
 - 3 Protrusions
 - 5 Screws



F-4-188

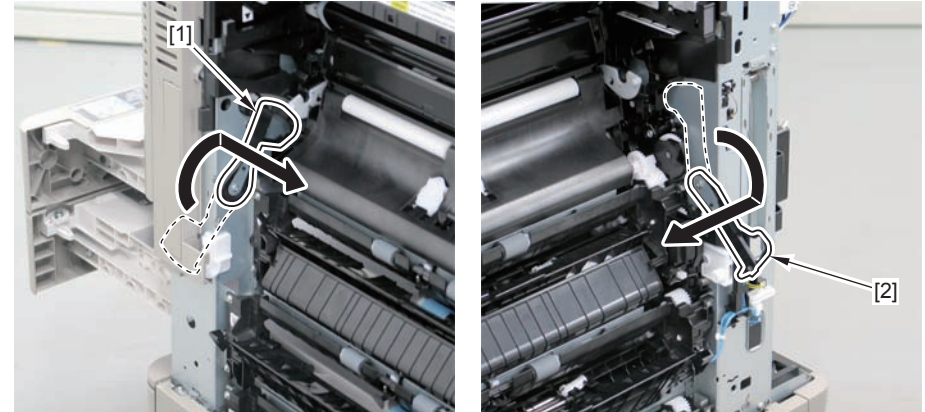
Removing the Cassette 1 Pickup Unit

Preparation

- 1) Remove the Right Door Unit.(Refer to page 4-80)

Procedure

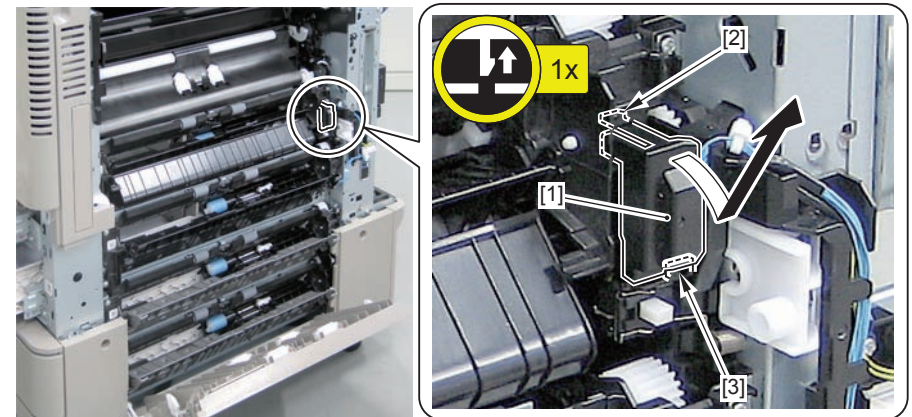
- 1) Remove the Right Door Link (Left) [1] and Right Door Link (Right) [2].



F-4-189

- 2) Remove the Connector Cover [1].

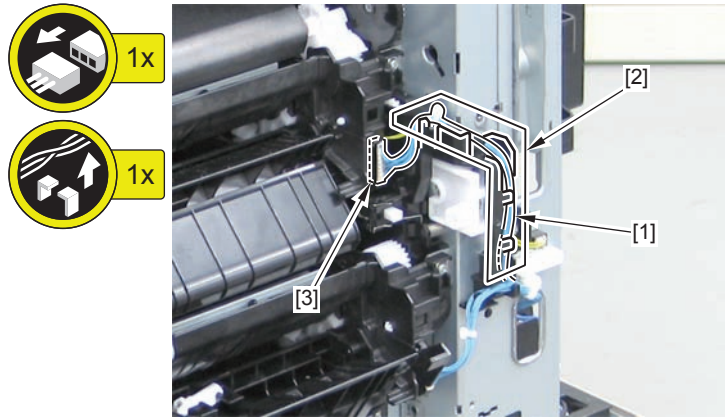
- 1 Claw [2]
- 1 Hook [3]



F-4-190

3) Free the harness [1] from the Harness Guide [2].

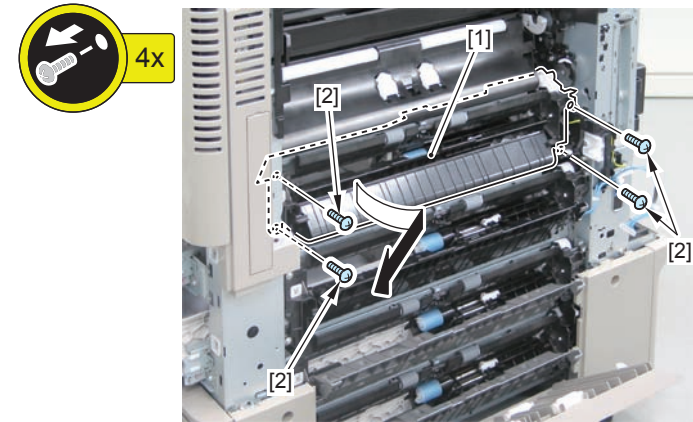
- 1 Connector [3]



F-4-191

4) Remove the Cassette 1 Pickup Unit [1].

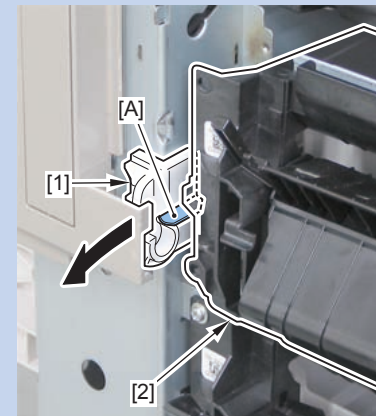
- 4 Screws [2]



F-4-192

Note at Removal/Installation:

Remove the Cassette 1 Pickup Unit [2] while pulling it out along the [A] part of the Right Door Shaft Support Block [1] on the left side.

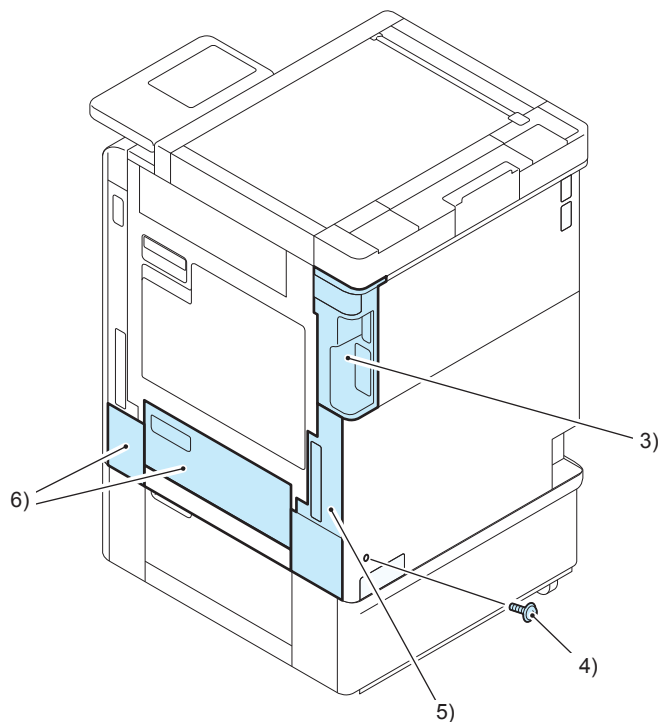


F-4-193

Removing the Cassette 2 Pickup Unit

Preparation

- 1) Pull out the Cassette 1/2.
- 2) Open the Right Door/Right Door (Lower)/Cassette Right Door Assembly.
- 3) Remove the Right Cover (Rear Upper).
- 4) Remove the screw on the left side of the Cover (Rear Lower).
- 5) Remove the Right Cover Assembly (Rear Lower).
- 6) Remove the Right Cover (Front Lower) and Right Door (Lower)

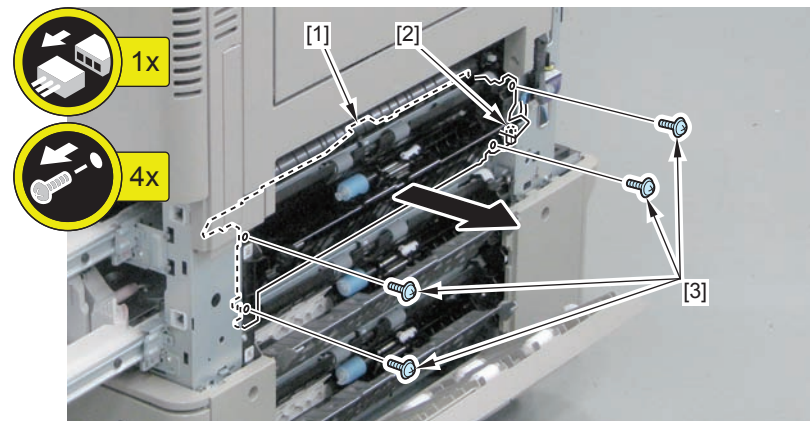


F-4-194

Procedure

- 1) Remove the Cassette 2 Pickup Unit [1].

- 1 Connector [2]
- 4 Screws [3]

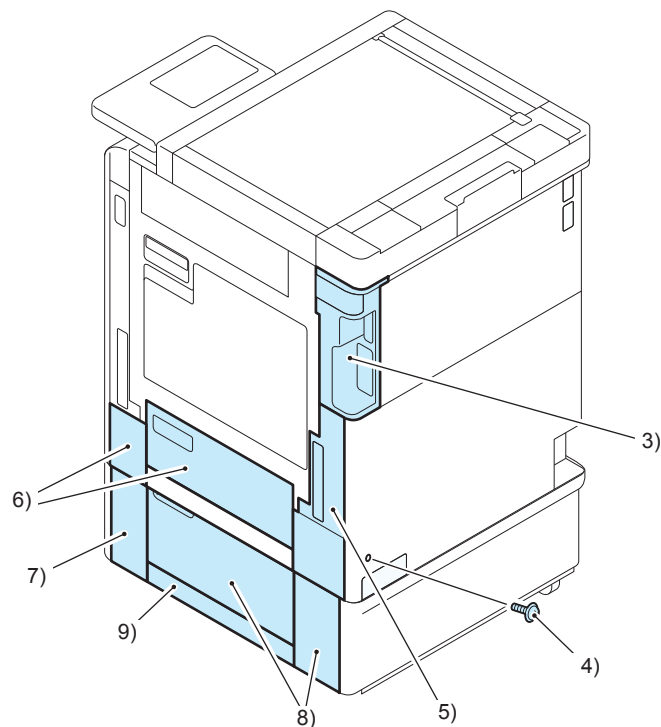


F-4-195

Removing the Cassette 3/4 Pickup Unit (Option)

Preparation

- 1) Pull out all of the cassettes.
- 2) Open the Right Door/Right Door (Lower)/Cassette Right Door Assembly.
- 3) Remove the Right Cover (Rear Upper).
- 4) Remove the screw of the Cover (Rear Lower).
- 5) Remove the Right Cover Assembly (Rear Lower).
- 6) Remove the Right Cover (Front Lower) and Right Door (Lower).
- 7) Remove the Cassette Cover (Right Front).
- 8) Remove the Cassette Cover (Right Rear) and remove the Cassette Right Door.
- 9) Remove the Cassette Right Cover (Lower).

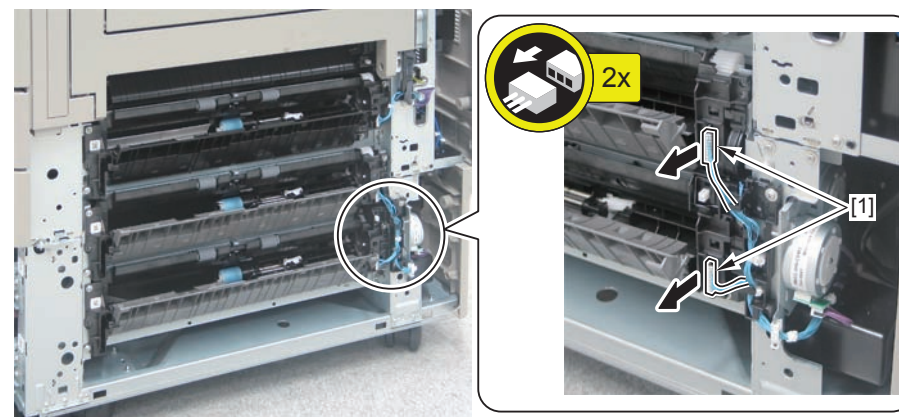


F-4-196

Procedure

- 1) Release the connector [1] of the Harness Guide.

- 2 Connectors [1]

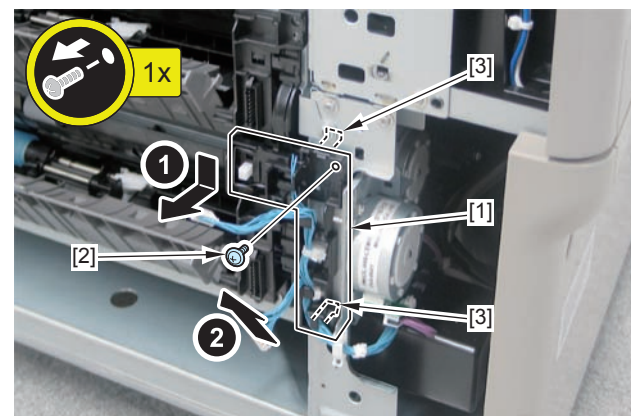


F-4-197

- 2) Remove the Cassette Right Door Open/Close Detection Switch [1].

- 1 Screw [2]

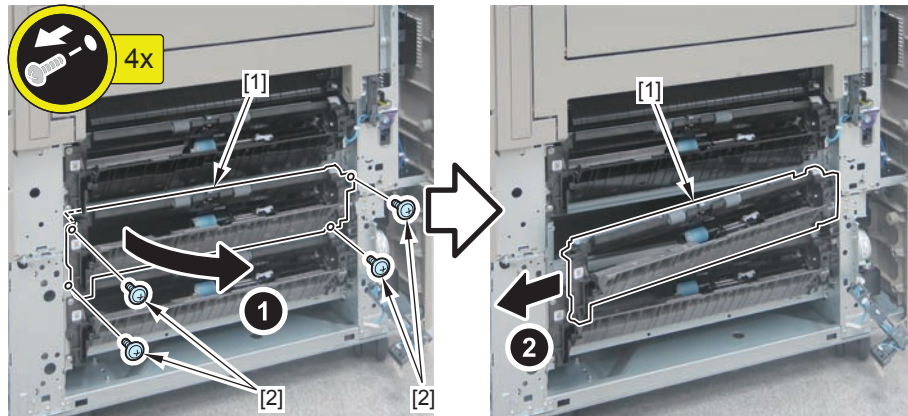
- 2 Hooks [3]



F-4-198

3) Remove the Pickup Unit [1].

- 4 Screws [2]



F-4-199

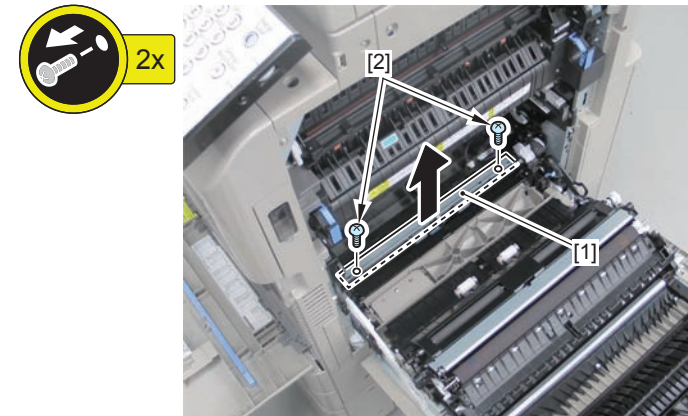
Removing the Cassette 1 Vertical Path Roller

Preparation

- 1) Fully open the Right Door. (Refer to page 4-27)
- 2) Remove the Registration Guide Unit. (Refer to page 4-93)

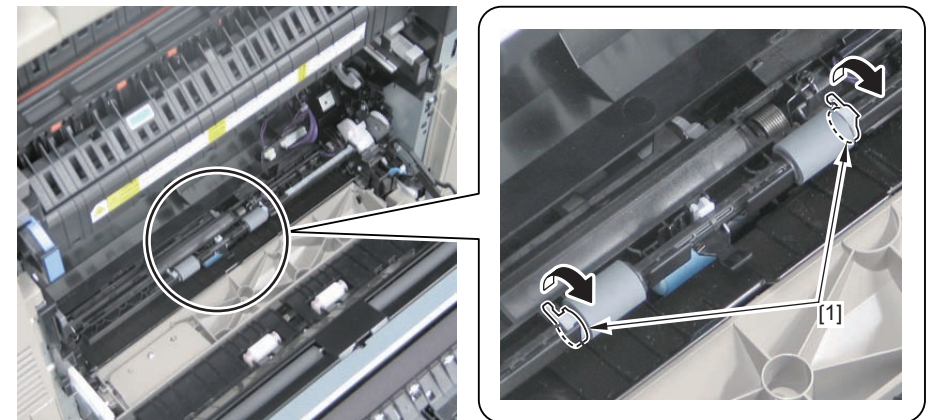
Procedure

- 1) Remove the Guide Plate [1].
 - 2 Screws [2] (Use a stubby screwdriver)



F-4-200

- 2) Orient the tabs of the 2 bushings [1] upward.

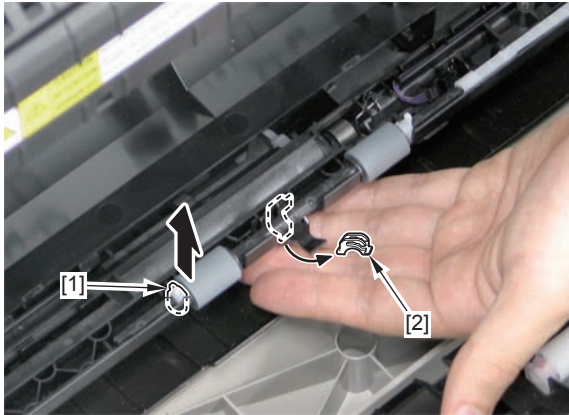


F-4-201

3) Lift up the left bushing [1], and remove the Shaft Spacer [2].

CAUTION:

Use caution as the Shaft Spacer drops easily at this time.

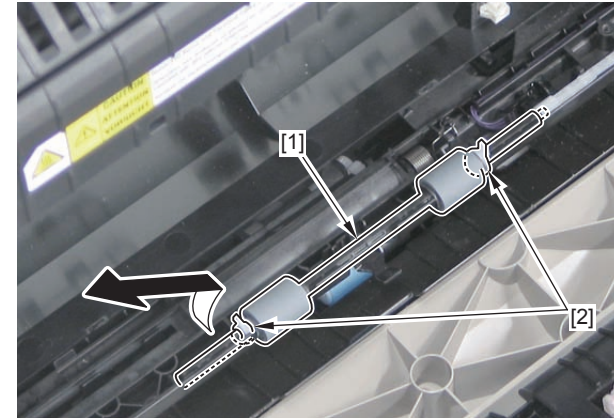


F-4-202

4) Remove the Vertical Path Roller [1].

CAUTION:

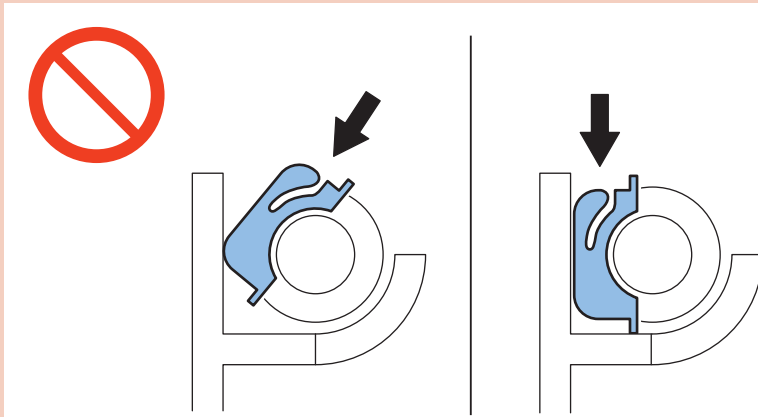
Take care not to drop the 2 bushings [2].



F-4-204

Points to Note at Installation:

Be sure to push the Shaft Spacer from above all the way down.



F-4-203

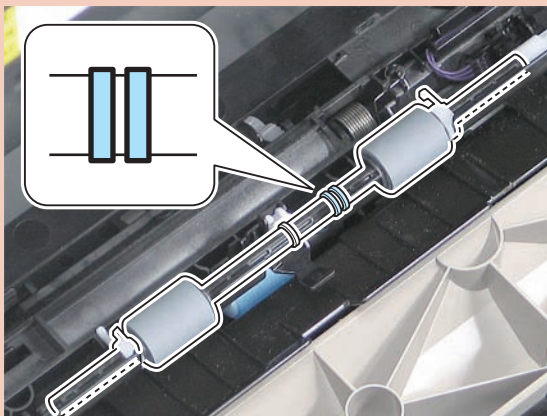
5) Remove the 2 bushings [1].



F-4-205

Points to Note at Installation:

Be sure to install the roller so that the side with the marking in the following figure is on the right.



F-4-206

NOTE:

- Be sure to replace the Cassette 1 Vertical Path Roller at the same time as the Registration Roller.
- * This is because the speed control varies as the roller wears.
- Parts Counter : COPIER > COUNTER > DRBL-1 > VP-FD-RL
- VP-FD-RL is also cleared at the same time when R-DOOR is cleared.

Removing the Registration Roller

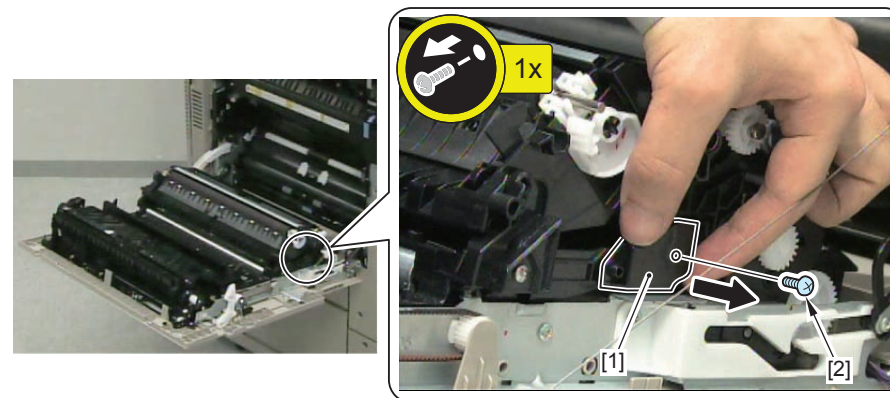
Preparation

1) Fully open the Right Door.(Refer to page 4-27)

Procedure

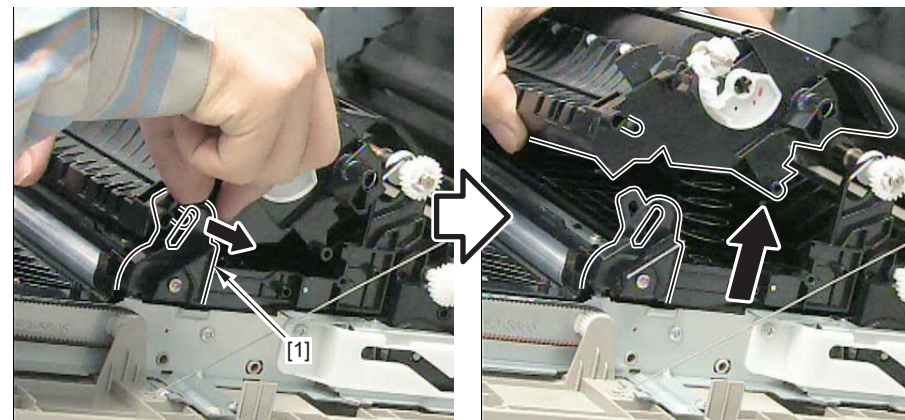
1) Remove the Secondary Transfer Guide Retainer [1].

- 1 Screw [2]



F-4-207

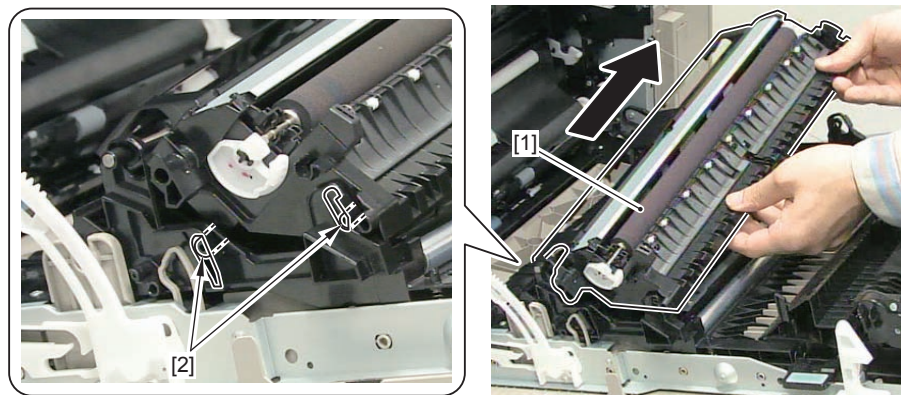
2) Release the protrusion by bending the hook [1] on the Secondary Transfer Guide.



F-4-208

3) Remove the Secondary Transfer Guide Unit.

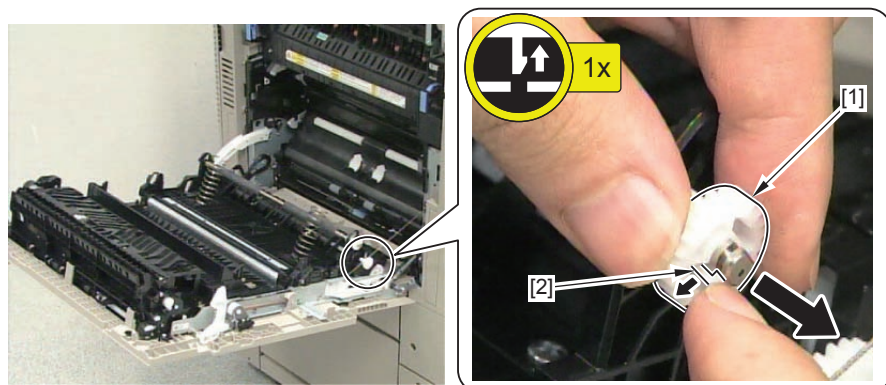
- 2 Protrusion [2]



F-4-209

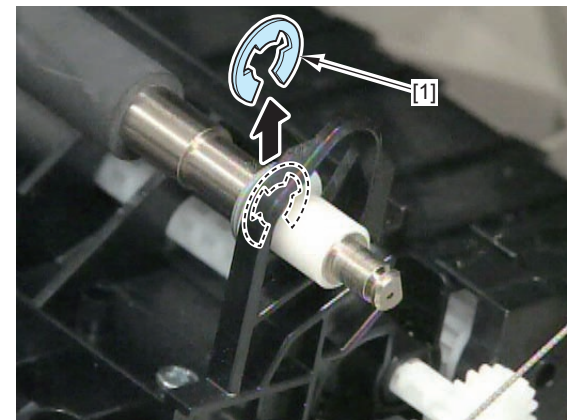
4) Remove the gear [1].

- 1 Claw [2]



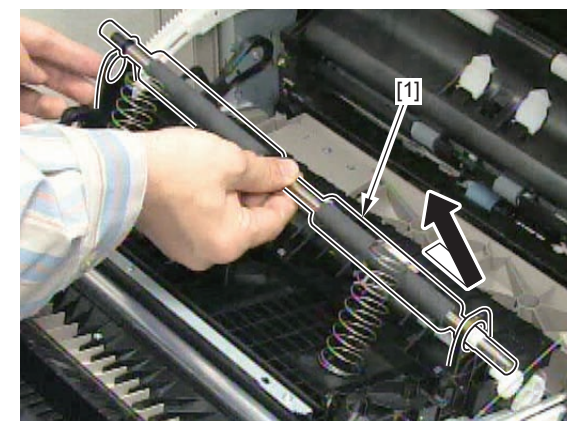
F-4-210

5) Remove the E-ring [1].



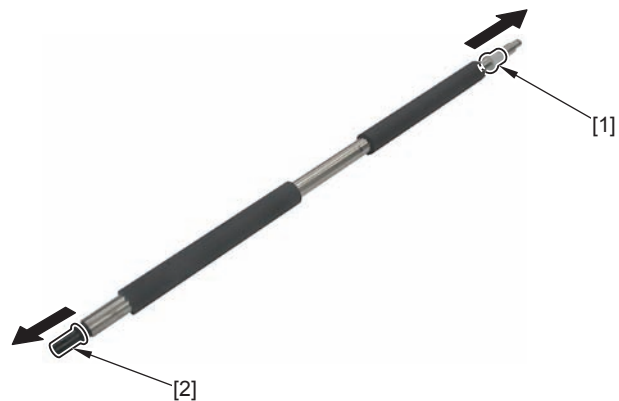
F-4-211

6) Remove the Registration Roller [1].



F-4-212

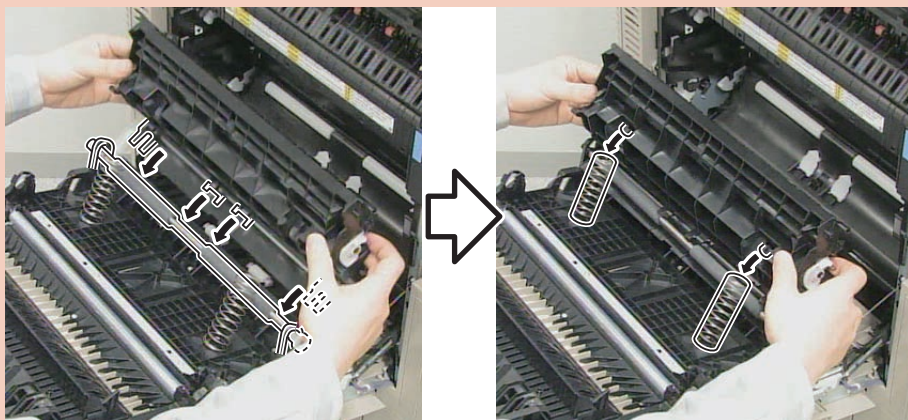
7) Remove the Spacer (Right) [1] and Spacer (Left) [2].



F-4-213

Points to Note at Installation:

Be sure to install the Registration Roller after aligning the Secondary Transfer Guide Unit with the position of the roller.



F-4-214

NOTE:

- Be sure to replace the Registration Roller at the same time as the Cassette 1 Vertical Path Roller.
- * This is because the Speed Control varies as the roller wears.
- Parts Counter : COPIER > COUNTER > DRBL-1 > REG-RL
- REG-RL is also cleared at the same time when R-DOOR is cleared.

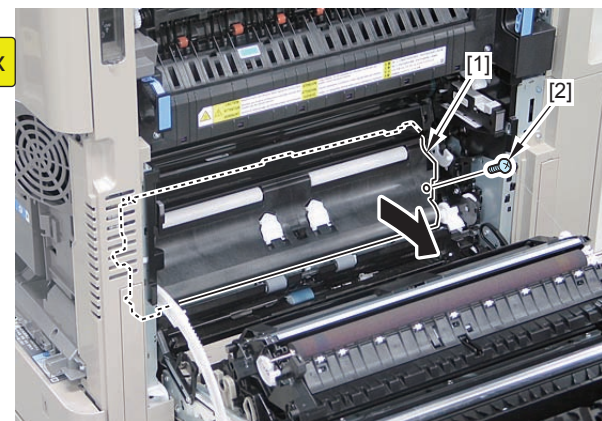
Removing the Registration Guide Unit

Preparation

- 1) Open the Right Door.
- 2) Fully open the Right Door.(Refer to page 4-27)
- 3) Remove the Front Door.(Refer to page 4-27)

Procedure

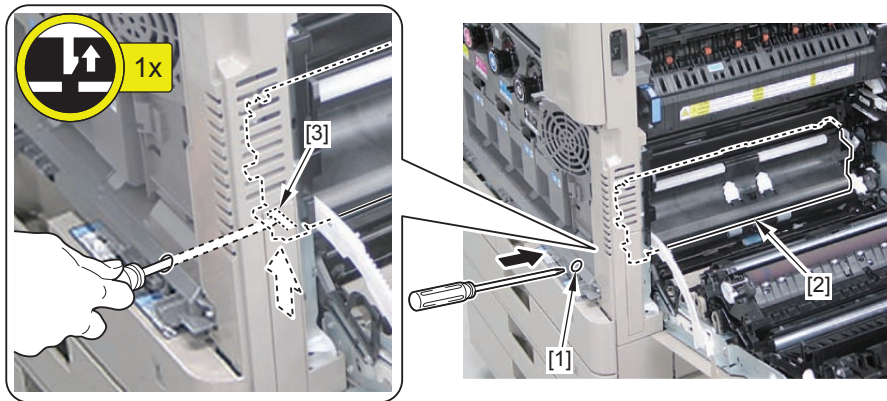
- 1) Remove the right side of the Registration Guide Unit [1].
 - 1 Screw [2]



F-4-215

2) Insert a Phillips screwdriver into the hole [1], and then release the claw [3] from the Registration Guide Unit [2].

- 1 Claw [3]

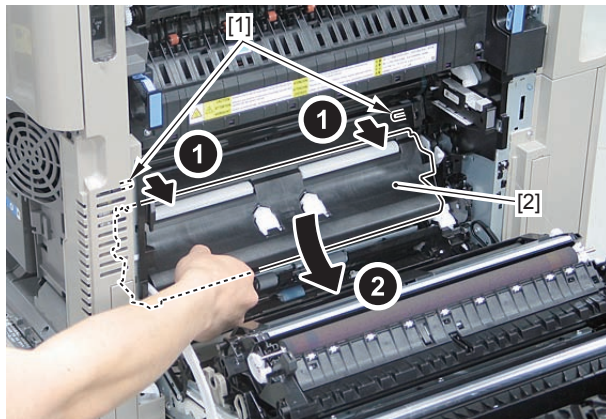


F-4-216

3) Release the 2 protrusions, and pull out the Registration Guide Unit [2].

CAUTION:

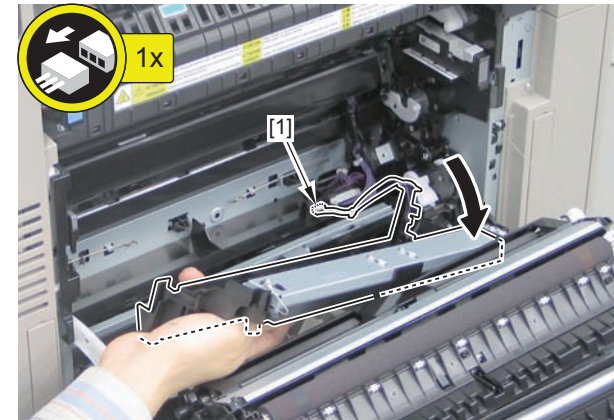
Be careful of the connector on the back.



F-4-217

4) Disconnect the connector [1].

- 1 Connector [1]



F-4-218

5

Adjustment

- Pickup Feed System
- Document Exposure System
- Actions after Replacement

Pickup Feed System

Image position adjustment

CAUTION:

Adjusting the 1st side also changes the margin on the 2nd side. If the difference between the 1st and the 2nd sides is +/- 0.5 mm or less, do not adjust the 2nd side.

<Reference: Standard value>

Leading edge: 4.0+1.5/-1.0 mm (front side, back side)

Left edge: 2.5+/-1.5 mm (front side) / 2.5+/-2.0 mm (back side)

1) After setting the service mode (level 1) as shown below, press the Start key and output a test print (2-sided print) from each of the paper sources.

- COPIER > TEST > PG > TYPE = 5
- COPIER > TEST > PG > COLOR-K = 1
- COPIER > TEST > PG > COLOR-Y/M/C = 0
- COPIER > TEST > PG > 2-SIDE = 1
- COPIER > TEST > PG > PG-PICK = each of the paper sources

CAUTION:

At 2-sided printing, paper is output with the 1st side up and 2nd side down.

When checking the leading edge margin on the 1st side, check the up side of paper, and check the margin on the rear side with respect to the feed direction.

CAUTION:

If the margin is not within the standard values, perform the adjustment of each cassette in the following order:

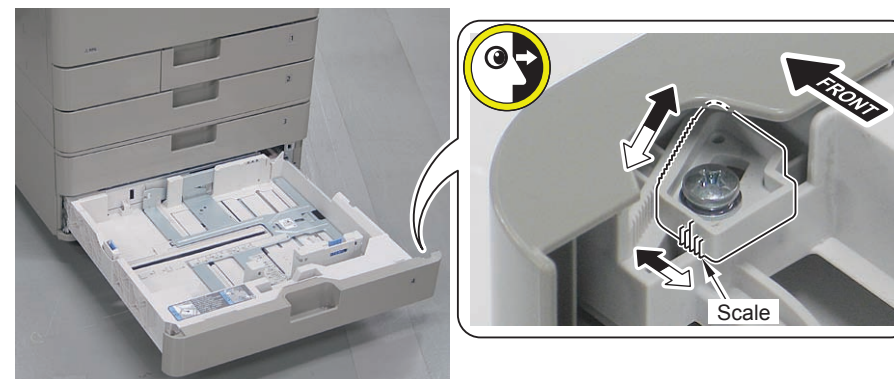
Order	Cassette 1	Cassette 2	Cassette 3/4
1	Software Adjustment	Software Adjustment	Mechanical Adjustment
2	-	Mechanical Adjustment	Software Adjustment

*: Hardware adjustment is not performed for Cassette 1.

T-5-1

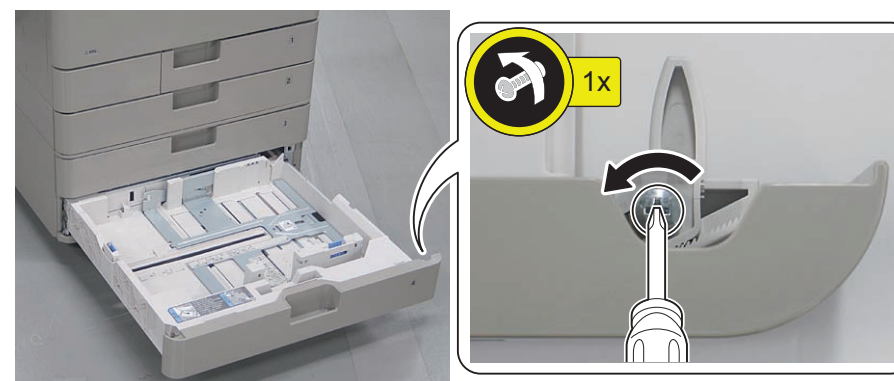
Mechanical Adjustment

- 1) Pull out the Cassettes.
- 2) Check the value of the scale on the Adjustment Plate.



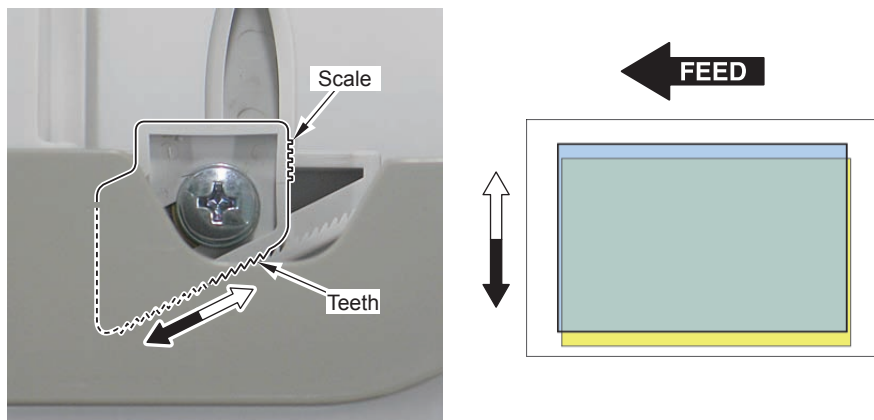
F-5-1

- 3) Loosen the Fixation screw.



F-5-2

- 4) Move the Adjustment Plate left or right according to the scale value checked in step 2.
(As the Adjustment Plate is moved toward the left on the machine by 1 tooth, the left edge margin is increased by 0.5mm.)

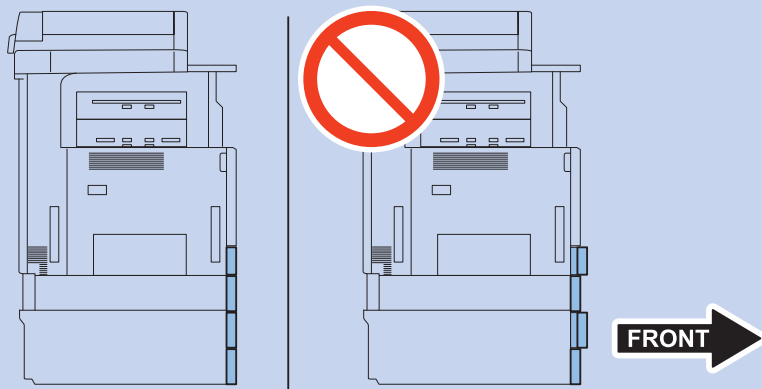


F-5-3

- 5) Tighten the Fixation Screw.

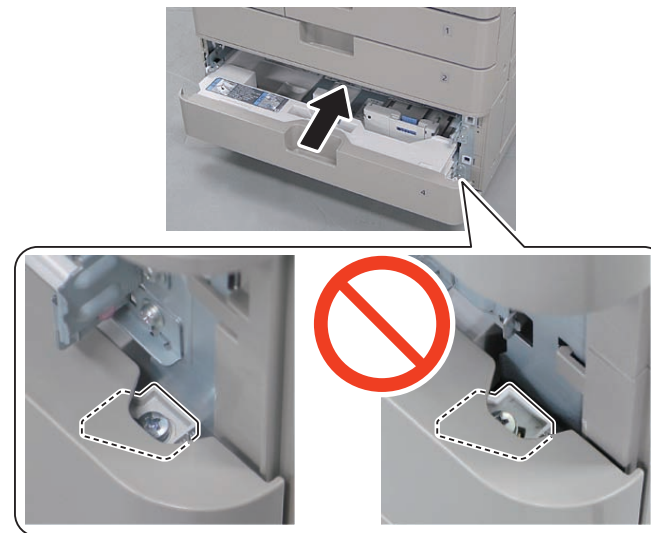
NOTE:

If you are concerned with the difference in level of the cassettes after mechanical adjustment, adjust it by loosening the 2 screws on the side.



F-5-4

- 6) Pull out the next upper cassette, and check that the Adjustment Plate is correctly pushed against the frame.



F-5-5

CAUTION:

If the Adjustment Plate is not correctly pushed against the frame, image cannot be correctly adjusted.

When checking Cassette 3, the Between-cassette Cover needs to be removed.

- 7) Output and check that the margin is within the standard values.

■ Software Adjustment

● Adjustment method

Use the following service mode to make an adjustment. (Refer to the figure displayed by pressing the [j] button.)

1) Leading edge

REGIST: 1/1 speed, front side

REG-DUP1: 1/1 speed, back side

REG-THCK: 1/2 speed, front side

REG-DUP2: 1/2 speed, back side

As the value is changed by 1, the leading edge margin is changed by 0.1 mm.

2) Left edge

ADJ-C1/C2/C3/C4/MF: Front side, ADJ-C1RE/C2RE/C3RE/C4RE/MFRE: Back side

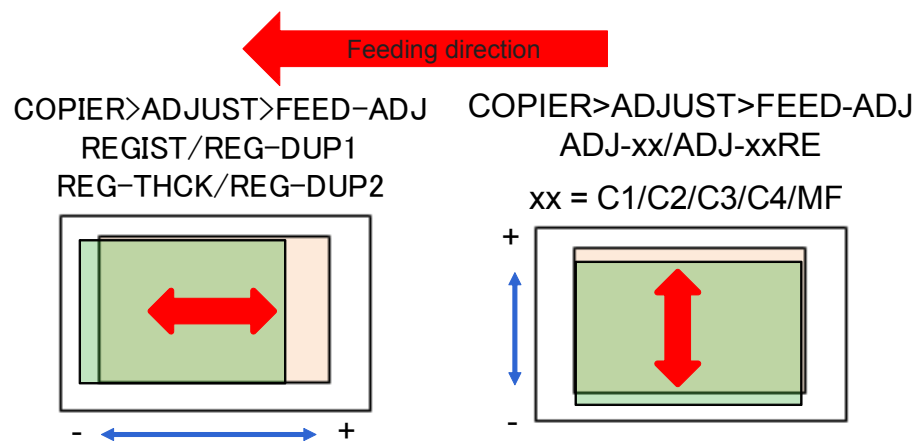
As the value is changed by 1, the left edge margin is changed by 0.1 mm.

3) If the service mode has been changed, write the new adjustment value on the service label.

<Reference: Standard value>

Leading edge : 4.0+1.5/-1.0 mm (front side, back side)

Left edge : 2.5+/-1.5 mm (front side) / 2.5+/-2.0 mm (back side)



F-5-6

Document Exposure System

Service mode backup

The machine is adjusted one by one at the factory shipment and the adjustment values are written on the service label.

When the adjustment is carried out at a field and the service mode values are changed, be sure to write the changed values on the service label.

If there is no corresponding items on the service label, write the value to a blank field.

The service label is affixed to the back of the Reader Front Cover.

In addition, backup and restoration in service mode is also possible.

- Backup

Level2 > COPIER > FUNCTION > SYSTEM > RSRAMBUP

Lv.	COPIER > FUNCTION > SYSTEM >
2	RSRAMBUP

- Restoration

Lv.	COPIER > FUNCTION > SYSTEM >
2	RSRAMRES

NOTE:

When changing the service mode setting values, it is recommended to back them up in the above service mode. Performing backup makes the work easier when replacing the Scanner Unit, etc.

When clearing the Reader-related RAM data.

Points to note before replacing the Reader Controller PCB:

- Be sure to output the P-PRINT.
Level1 > COPIER > FUNCTION > MISC-P > P-PRINT
- Back up the service mode setting values related to Main Controller PCB. (Excluding the case where service mode cannot be executed due to the Main Controller PCB not operating normally)
Level2 > COPIER > FUNCTION > SYSTEM > RSRAMBUP

1) Perform RAM clear.

Level1 > COPIER > FUNCTION > CLEAR > R-CON

2) Turn OFF and then ON the main power.

When backup is performed normally

3) Restore the backup data.

Service mode Level1 > COPIER > FUNCTION > SYSTEM > RSRAMRES

NOTE:

Work is completed when backup was normally performed.

When backup is not performed normally

4) Enter the values written on the service label (on the back of the Reader Front Cover).

Lv.	COPIER > ADJUST > ADJ-XY >				
1	ADJ-X	ADJ-Y	STRD-POS	ADJ-X-MG	ADJ-Y-DF
Lv.	COPIER > ADJUST > CCD >				
1	W-PLT-X	W-PLT-Y	W-PLT-Z	DFTAR-R	DFTAR-G
	DFTAR-B	100-RG	100-GB	-	-
Lv.	COPIER > ADJUST > PASCAL >				
1	OFST-P-Y	OFST-P-M	OFST-P-C	OFST-P-K	-
Lv.	FEEDER > ADJUST >				
1	LA-SPEED	DOCST	-	-	-

5) Make an output of P-PRINT.

COPIER > FUNCTION > MISC-P > P-PRINT

T-5-2

Actions after Replacement

HDD

When replacing the HDD, be sure to perform the following works.

Item	Specification
Replacing method	"Removing the HDD"(page 4-46).
Before Replacing	1) Back up the necessary data based on the table shown below. 2) Printing the set/registered data (Lv.1) COPIER > FUNCTION > MISC-P > USER-PRT (Lv.1) COPIER > FUNCTION > MISC-P > P-PRINT In case the backup fails, print it out or export it to a USB.
After Replacing	1) HDD format Start the machine in safe mode, and format all partitions using SST or a USB memory. 2) Turning OFF and ON the main power switch 3) Restoring the backup data 4) Resetting/registering the data While referring to the list which was printed before replacement, reset/register the data. 5) When the user generates and adds the encryption key, certificate and/or CA certificate, request the user to generate them again. - When configuring the number of cassettes for the 1-cassette model for China as 1-cassette (Lv.2) COPIER > OPTION > FNC-SW > CST-MDL = 1
Points to Note when Using the HDD	When using the HDD 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.

T-5-3

Backup target data	Backup Method			
	User (excluding DCM)	Service	DCM	Device Information Delivery
Address List	Yes*1	-	Yes*9	Yes*10
Forwarding Settings	Yes*1	-	Yes*9	Yes*10
Settings / Registration				
Preferences (Except for Paper Type Management Settings)	-	-	Yes*9	Yes*10
Adjustment/Maintenance(*)	-	-	Yes*9	Yes*10
Function Settings (Except for Printer Custom Settings, Forwarding Settings)	-	-	Yes*9	Yes*10
Set Destination (Except for Address List)	-	-	Yes*9	Yes*10
Management Settings (Except for Address List)	-	-	Yes*9	Yes*10
User authentication information used for local device authentication of UA (User Authentication)	Yes*2	-	Yes*9	-

Backup target data	Backup Method			
	User (excluding DCM)	Service	DCM	Device Information Delivery
Printer Settings	Yes*1	-	-	Yes*10
Set Paper Information	Yes*1	-	Yes*9	Yes*10
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	Yes*1	Yes*8	Yes*9	Yes*10
Default Settings	-	Yes*8	Yes*9	-
Shortcut settings for "Options"	-	Yes*8	Yes*9	-
Previous Settings	-	Yes*8	-	-
Setting items for Quick Menu				
Button Size information	Yes*3	Yes*8	Yes*9	-
Wallpaper Setting	Yes*3	Yes*8	Yes*9	-
Button information in Quick Menu	Yes*3	Yes*8	Yes*9	-
Restrict Quick Menu	Yes*3	Yes*8	Yes*9	-
Setting items for Main Menu				
Button settings in Main Menu	-	-	Yes*9	-
Button settings on the top of the screen	-	-	Yes*9	-
Wallpaper Setting for Main Menu	-	-	Yes*9	-
Other settings for Main Menu	-	-	Yes*9	-
Box settings				
Mail Box Settings (Box Name, PIN, Time Until File Auto Delete, Print Files Upon Storing from Printer Driver)	Yes*4	-	Yes*9	Yes*10
Image data in Mail Box, Fax Inbox, and Memory RX Inbox	Yes*4	-	-	-
Network Place Settings	-	-	Yes*9	-
Web browser settings				
Web Access setting information	-	-	Yes*9	Yes*10
MEAP settings				
MEAP application	-	Yes*8	-	-
License files for MEAP applications	Yes*5	-	-	-
Data saved using MEAP applications	Yes*5	Yes*8	-	-
SMS (Service Management Service) password	-	Yes*8	-	-
Universal data settings				
Unsent documents (documents waiting to be sent with the Delayed Send mode)	-	-	-	-
Job logs	-	-	-	-
Audit Log	Yes*6	-	-	-
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Set-tings in System Settings (from the Additional Functions screen)	-	-	Yes*9	-
Auto Adjust Gradation setting values	-	-	-	-
PS font	-	-	-	-
Key information to be used for encryption when TPM is OFF	-	-	-	-

Backup target data	Backup Method			
	User	Service	DCM	Device Information Delivery
	(excluding DCM)			
Key and settings information to be used for encryption when TPM is ON	Yes*7	-	-	-
Service Mode				
Service Mode setting values (MN-CON)	-	-	Yes*9	-

T-5-4

- *1: Remote UI > Settings/Registration > Management Settings > Data Management > Import or Export
- *2: Remote UI > Settings/Registration > Management Settings > User Management > Authentication Management > User Management
- *3: Remote UI > Quick Menu > Export
- *4: Remote UI > Settings/Registration > Management Settings > Data Management > Back Up or Restore
- *5: Remote UI > Service Management Service
- *6: Remote UI > Settings/Registration > Management Settings > Device Management > Save Audit Log
Audit log that was exported cannot be put back to the device from which the log was exported.
- *7: Settings/Registration > Management Settings > Data Management > TPM Settings
- *8: Download mode > [5]: Backup/Restore > [3]: MEAP Backup > Meapback.bin
Backup is possible using SST or USB memory
The data saved using a MEAP application can be backed up only when the MEAP application has a backup function.
- *9: Backup Method using DCM
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.
1. Remote UI > Settings/Registration > Management Settings > Data Management > Import/Export All
 2. Remote UI > Settings/Registration > Management Settings > Data Management > Import/Export
 3. Service mode top screen > BACKUP
Service mode setting values only can be backed up and restored.
 4. Web Service
- *10: Web Service

Main controller PCB

Item	Specification
Replacing method	"Removing the Main Controller PCB"(page 4-48).
Operation at Replacement	Replace parts from an old PCB to a new PCB. <ul style="list-style-type: none"> • Memorey PCB • FLASH PCB • TPM PCB
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. <ul style="list-style-type: none"> • Main Controller PCB • Memorey PCB • FLASH PCB • TPM PCB

T-5-5

DC controller PCB

Item	Specification
Replacing method	"Removing the DC Controller PCB"(page 4-50).
Operation at Replacement	1) Backup the Service Mode data. (Lv.2) COPIER > FUNCTION > SYSTEM > DSRAMBUP After "ACTIVE" is displayed for approx. 2 minutes, "OK!" is displayed. *: If necessary,output the servise mode setting values by P-PRINT before execution. (Lv.1) COPIER > FUNCTION > MISC-P > P-PRINT 2) After the above execution is completed, turn OFF the main power supply.
Prohibited Operation	1) Restore of the Service Mode data. (Lv.2) COPIER> FUNCTION> SYSTEM> DSRAMRES "ACTIVE" is displayed at execution and then "OK!" is displayed about 2 minutes later. Restoration is complete. 2) If uploading of backup data fails before replacement due to the damage to the DC Controller PCB, enter the values of service mode items recorded on the service label or P-PRINT. 3) Turn OFF and then ON the main power switch

T-5-6

TPM PCB

Item	Specification
How to Replace the Parts	Refer to "Security Function (Encryption Key, Certificate and Protection of Password)"

T-5-7

FLASH PCB

Item	Specification
How to Replace the Parts	Contact to the sales company.
Points to Note	Do not remove it unless a failure is suspected.
Replace the Parts	A FLASH PCB which had been used in another machine cannot be reused.

T-5-9

Control Panel CPU PCB/Touch Panel

Item	Specification
After Replacing	Execute COPIER > FUNCTION > PANEL > TOUCHCHK.
* Adjustment in service mode mentioned below is necessary only when replacing a single part.	When the Touch Panel's coordinate is deviated, the above operation may not be possible. In that case, the Touch Panel can be adjusted only by the hard keys as shown below. Perform Touch Panel adjustment by "simultaneously pressing the service mode top screen > [Settings/Registration] button > "5" button three times"

T-5-9

Developing Unit

Item	Specification
explanation	CAUTION: Be sure to perform the work according to the color that was replaced. 1) Execute COPIER > FUNCTION > INSTALL > INISET-Y/M/C/K. 2) Check COPIER > ADJUST > DENS > D-Y/M/C/K-LVL, and write the value on the service label on the Front Door. 3) Check COPIER > ADJUST > DENS > CONT-Y/M/C/K, and write the value on the service label on the Front Door. 4) Execute auto gradation adjustment.

T-5-10

Pre-exposure LED Unit

Item	Specification
explanation	1) Light up the Cleaning Pre-exposure LED and check that the LED lights up. COPIER > FUNCTION > MISC-P > PRE-EXP 2) Enter the value shown on the label included in the package. COPIER > ADJUST > EXP-LED > INTEXP-Y/M/C/K 3) Put the label included in the package on the corresponding item on the service label on the Front Door.

T-5-11

Patch Sensor Unit

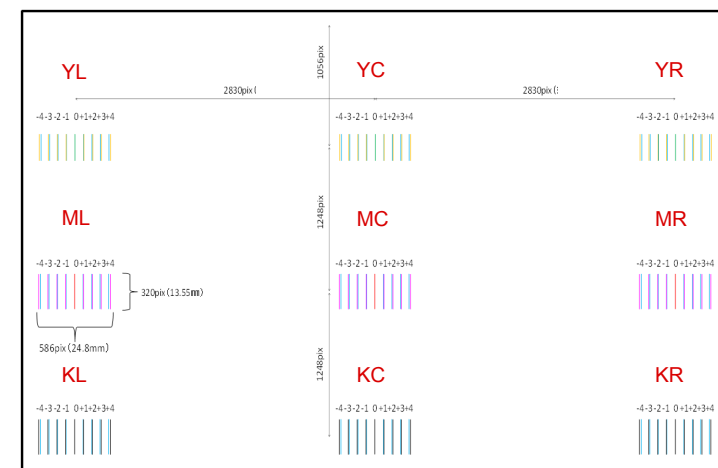
Item	Specification
explanation	1) Enter the service mode values written on the label included in the package. COPIER > ADJUST > DENS > PALPHA-F COPIER > ADJUST > DENS > PALPHA-R 2) Execute auto gradation adjustment. 3) After executing auto gradation adjustment, see the alarm log to check that 10-0006/10-0007 has not occurred. When an alarm occurs, perform a remedy according to the instruction of the alarm.

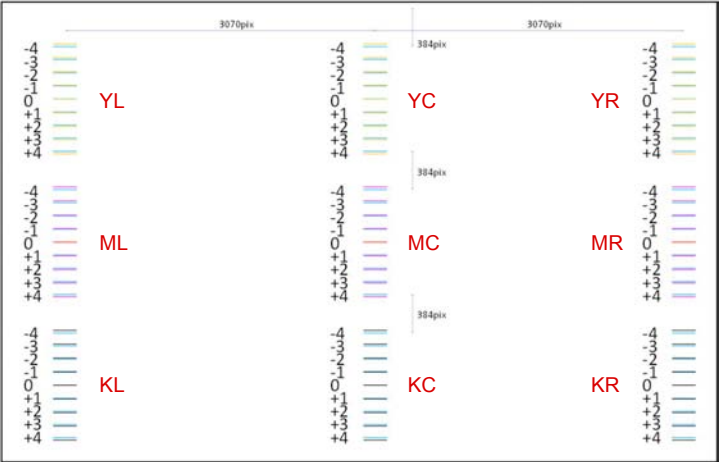
T-5-12

Laser Scanner Unit

Item	Specification
explanation	1) Execute [Auto Correct Color Mismatch]. 2) If the degree of color displacement differs between the center and the edge, execute "copy ratio correction" and "distortion correction" as needed. Execute "copy ratio correction" and then "distortion correction". <Copy ratio correction> 1) Clear the offset value of copy ratio correction. COPIER > FUNCTION > CLEAR > LS-INT-H 2) Output PG for adjustment. COPIER > TEST > PG > TYPE: 61 COPIER > TEST > PG > PG-PICK: Select the paper source where A4 or LTR size paper or larger is loaded 3) Check the chart and enter the value. 9 settings of LS-H-xx (Refer to the figure displayed by pressing the [i] button.)

LS-H-xx



Item	Specification
explanation	<p><Distortion correction></p> <p>1) Clear the offset value of distortion correction. COPIER > FUNCTION > CLEAR > LS-INT-V</p> <p>2) Output PG for adjustment. COPIER > TEST > PG > TYPE: 62 COPIER > TEST > PG > PG-PICK: Select the paper source where A4 or LTR size paper or larger is loaded</p> <p>3) Check the chart and enter the value. 9 settings of LS-V-xx (Refer to the figure displayed by pressing the [i] button.)</p> <p style="text-align: center;">LS-V-xx</p> 

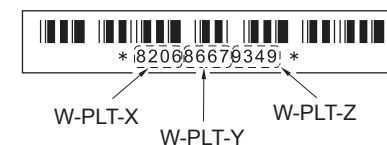
T-5-13

After Replacing the Copyboard Glass

- 1) Input the white level data (barcode value in the copyboard glass right upper) of the standard white plate.

Lv.	COPIER > ADJUST > CCD >		
1	W-PLT-X	W-PLT-Y	W-PLT-Z

T-5-14



F-5-7

- 2) Perform white level adjustment.:

2-1) Set A3 or LDR paper in the copyboard glass.

CAUTION:

- If white level is adjusted in the small width paper, there is possibility that it will not adjust.
- If low whiteness paper is used, the adjustment may result in failure.

2-2) Execute white level adjustment at copyboard reading.

Lv.	COPIER > FUNCTION > CCD >	
1	DF-WLVL1	

T-5-15

2-3) Remove the paper from copyboard glass, set it in the DADF document pickup tray.

2-4) Execute white level adjustment at DADF reading.

Lv.	COPIER > FUNCTION > CCD >	
1	DF-WLVL2	

T-5-16

- 3) Write down the values in the service label (on the back of the Reader Front Cover).

Lv.	COPIER > ADJUST > CCD >		
1	DFTAR-R	DFTAR-G	DFTAR-B

T-5-17

After Replacing the Scanner Unit

1) Input the white level data (barcode value in the copyboard glass right upper) of the standard white plate.

Lv.	COPIER > ADJUST > CCD >	
1	100-RG	100-GB

T-5-18

2) Adjust the shading position.

Lv.	COPIER > FUNCTION > INSTALL >	
1	RDSHDPOS	

T-5-19

3) Adjust the stream reading position.

Lv.	COPIER > FUNCTION > INSTALL >	
1	STRD-POS	

T-5-20

4) Perform white level adjustment.:

4-1) Set A3 or LDR paper in the copyboard glass.

CAUTION:

- If white level is adjusted in the small width paper, there is possibility that it will not adjust.
- If low whiteness paper is used, the adjustment may result in failure.

4-2) Execute white level adjustment at copyboard reading.

Lv.	COPIER > FUNCTION > CCD >	
1	DF-WLVL1	

T-5-21

4-3) Remove the paper from copyboard glass, set it in the DADF document pickup tray.

4-4) Execute white level adjustment at DADF reading.

Lv.	COPIER > FUNCTION > CCD >	
1	DF-WLVL2	

T-5-22

5) Perform the MTF filter coefficient computation.

Lv.	COPIER > FUNCTION > CCD >	
1	MTF-CLC	

T-5-23

6) Write down the values in the service label (on the back of the Reader Front Cover).

Lv.	COPIER > ADJUST > CCD >				
1	DFTAR-R	DFTAR-G	DFTAR-B	100-RG	100-GB

T-5-24

6

Troubleshooting

- Initial Check
- Test Print
- Controller Self Diagnosis
- Debug Log
- Version Upgrade
- Backup/Restore

Initial Check

Initial check items list

Item	No.	Detail	Check
Site Environment	1	The voltage of the power supply is as rated ($\pm 10\%$).	
	2	The site is not a high temperature / humidity environment (near a water faucet, water boiler, humidifier), 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 have the following test print TYPE and you can judge the image failure that is checked as “Yes” in the following image check items with each test print.

If the image failure occurred on normal output does not reappear on the test print, it may be caused by the PDL input or reader side.

PG TYPE	TYPE Pattern	Items										Originator
		Gradation	Fogging	Transfer Fault	Black line (Color line)	White line	Uneven Density	Uneven Density at the Front / Rea	Right Angle	Straight Lines	Color displacement	
0	Normal copy / print											----
1to3	---(For R&D)											----
4	16 gradations	Yes	Yes			Yes		Yes				Main controller PCB
5	Full half-tone			Yes	Yes	Yes	Yes	Yes				Main controller PCB
6	Grid								Yes	Yes	Yes	Main controller PCB
7	---(For R&D)											----
8	Half-tone / Patch		Yes	Yes	Yes	Yes	Yes					
9	---(For R&D)											----
10	MCYBk horizontal stripes (sub scanning direction)				Yes	Yes		Yes				Main controller PCB
11	---(For R&D)											----
12	MCYBk 64-gradation	Yes	Yes			Yes						Main controller PCB
13	---(For R&D)											----
14	Full color 16-gradation	Yes	Yes									Main controller PCB

T-6-2

Steps to select the test print TYPE

- 1) Set the number of print, paper size etc.
- 2) Select: COPIER > TEST > PG.
- 3) Select: COPIER > TEST > PG > TYPE.
- 4) Enter the desired TYPE number and press OK key.
- 5) Select the corresponding color (setting 1 means output) in COLOR-Y/M/C/K.
- 6) Set the density in DENS-Y/M/C/K (this is enabled for TYPE=5 only).
- 7) Press start key.

How to use the test print

16 gradations (TYPE=4)



F-6-1

This test print is for mainly checking the gradation, fogging, white line and uneven density at front & rear.

Check item	Check method	Assumed cause
Gradation	Check that 16 density gradation is properly reproduced.	Failure of Drum Unit Failure of Laser Scanner Unit
Fogging	Check that fogging occurs on white image area only.	Failure of Drum Unit Failure of Laser Scanner Unit
White line	Check that white line does not appear on entire image.	Failure of Drum Unit
Uneven density at front & rear	Check that uneven density does not appear at front & rear.	Failure of Drum Unit

T-6-3

■ Full half tone (TYPE=5)



F-6-2

This test print is for mainly checking the black line, white line and uneven density.

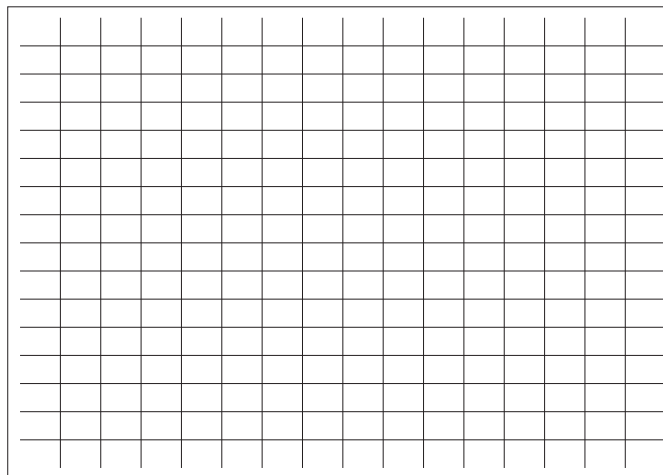
NOTE:

- Select: service mode > COPIER > TEST > PG and specify developing color "COLOR-Y/M/C/K" to output the print by developing color.
- To change the density of test print, select: service mode > TEST > PG > DENS-Y/M/C/K and set the density.

Check item	Check method	Assumed cause
Transfer failure	Check that the transfer failure does not appear on entire image.	Failure of ITB (scratch, dirt)
		Failure of Primary Transfer Roller (scratch, dirt)
		Failure of Secondary Transfer Roller (scratch, dirt)
Black line (color line)	Check that black line does not appear on entire image.	Scratch on Photosensitive Drum
		Dirt on Primary Charging Roller
White line	Check that white line does not appear on entire image.	Failure of ITB Unit
		Failure of Secondary Transfer Outer Roller
		Dirt on laser light path
Uneven pitch	Check that uneven pitch does not appear on entire image.	Failure of Drum Unit
Uneven density	Check that uneven density does not appear on entire image.	Dirt on Dustproof Glass
		Deterioration of ITB

T-6-4

■ Grid (TYPE=6)



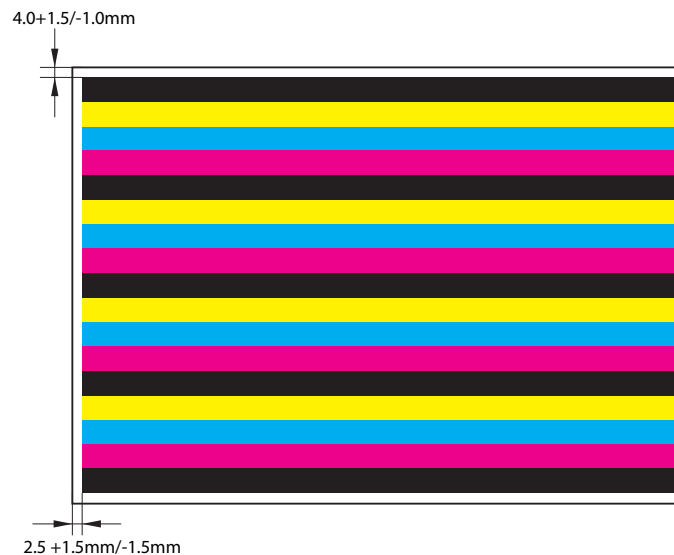
F-6-3

This test print is for mainly checking the color displacement, right angle accuracy and straight line accuracy.

Check items	Check method	Assumed cause
Uneven density	Check that uneven density does not appear on solid area of each color	Failure of Laser Scanner Unit
		Failure of developer in Drum Unit
		Failure of Primary Transfer Roller
Black line (color line)	Check that black line (color line) does not appear on solid area of each color	Scratch on Photosensitive Drum
		Dirt on Primary Charging Roller
White line	Check that white line does not appear on solid area of each color	Failure of ITB Unit
		Failure of Secondary Transfer Outer Roller
		Dirt on Laser Light Path

T-6-5

■ MCYBk horizontal stripe (TYPE=10)



F-6-4

This test print is for mainly checking the dark area density of each color, each color balance and white line on development.

Check items	Check method	Assumed cause
Uneven density	Check that uneven density does not appear on solid area of each color	Failure of Laser Scanner Unit
		Failure of developer in Drum Unit
		Failure of Primary Transfer Roller
Black line (color line)	Check that black line (color line) does not appear on solid area of each color	Scratch on Photosensitive Drum
		Dirt on Primary Charging Roller
White line	Check that white line does not appear on solid area of each color	Failure of ITB Unit
		Failure of Secondary Transfer Outer Roller
		Dirt on Laser Light Path

T-6-6

64-gradations (TYPE=12)



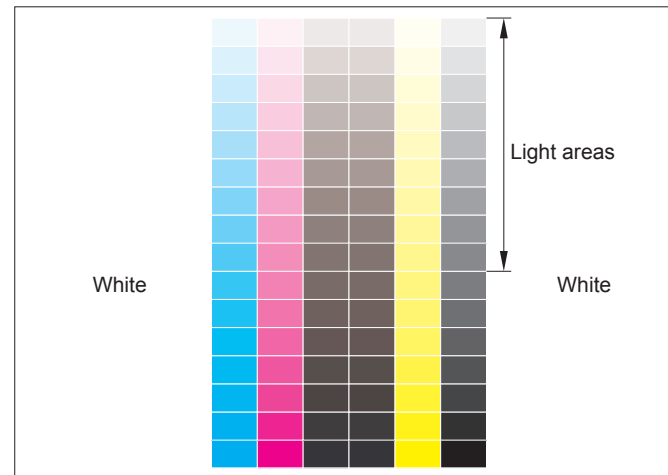
F-6-5

This test print is for mainly checking the gradations of YMCBk single color at one time.

Check item	Check method	Assumed cause
Gradation	Check that 64 gradations density is properly reproduced.	Failure of Drum Unit
		Failure of Laser Scanner Unit
Fogging	Check that fogging appears on white image area only.	Failure of Drum Unit
		Failure of Laser Scanner Unit
White line	Check that there is no white line on entire image.	Failure of Drum Unit

T-6-7

■ Full color 16-gradations (TYPE=14)



F-6-6

This test print is for mainly checking the gray balance, gradations of YMCbK single color and fogging.

Check item	Check method	Assumed cause
Gradation	Check that 64 gradations density is properly reproduced in each color.	Failure of Drum Unit
		Failure of Laser Scanner Unit
Fogging	Check that fogging appears on white image area only.	Failure of Drum Unit
		Failure of Laser Scanner Unit
Gray balance	Check that density is even in each color on gray scale area.	Failure of Drum Unit

T-6-8

Troubleshooting Items

List of Troubleshooting Items

Category	Description	Reference
Malfunction	Not able to remove the ITB Unit due to the Primary Transfer Roller disengagement failure	Refer to page 6-10

T-6-9

Malfunction

Not able to remove the ITB Unit due to the Primary Transfer Roller disengagement failure

[Location]

ITB Unit

[Cause/Condition]

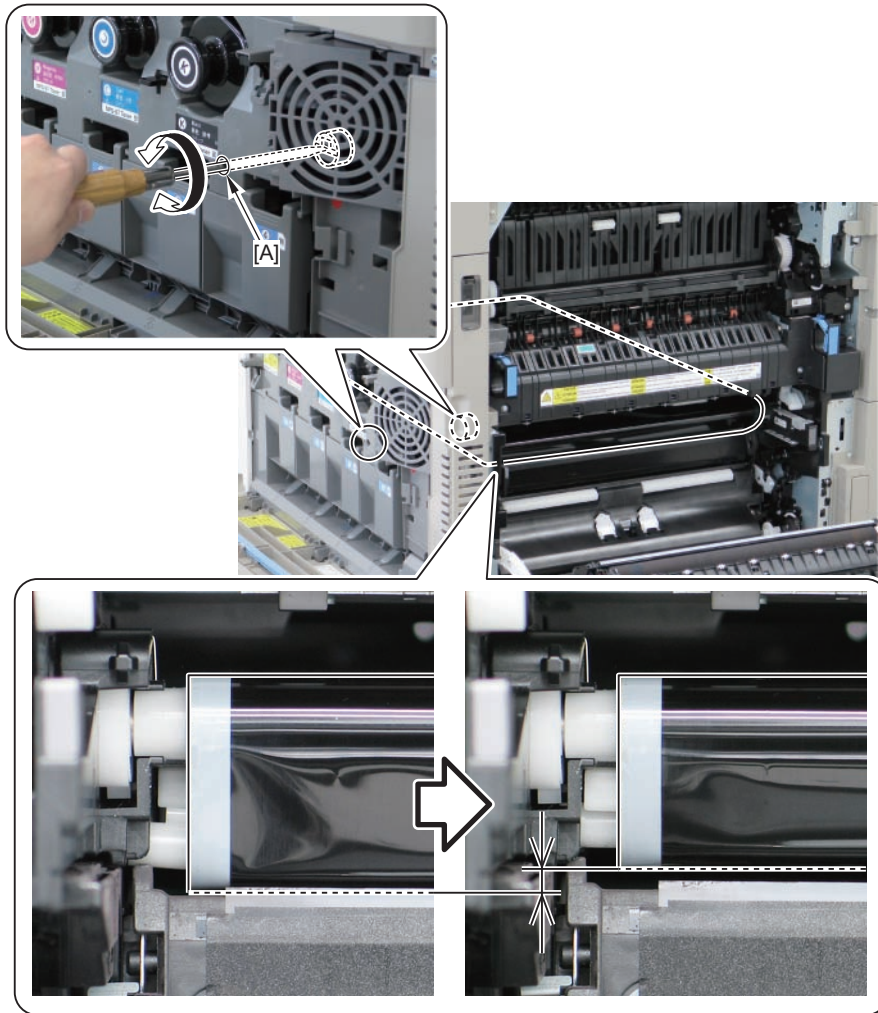
If unexpected situations coincide with unexpected conditions, disengagement failure of the Primary Transfer Roller may occur. As a result, the ITB Unit may not be able to be removed from the host machine.

[Field Remedy]

Follow the procedure shown below to remove the ITB Unit from the host machine.

- 1) Open the Front Cover.
- 2) Open the Right Cover Unit.
- 3) Insert a flat-blade screwdriver into the hole [A].

4) Turn the flat-blade screwdriver until the pressure of the ITB is released.



F-6-7

5) Remove the Drum Unit.

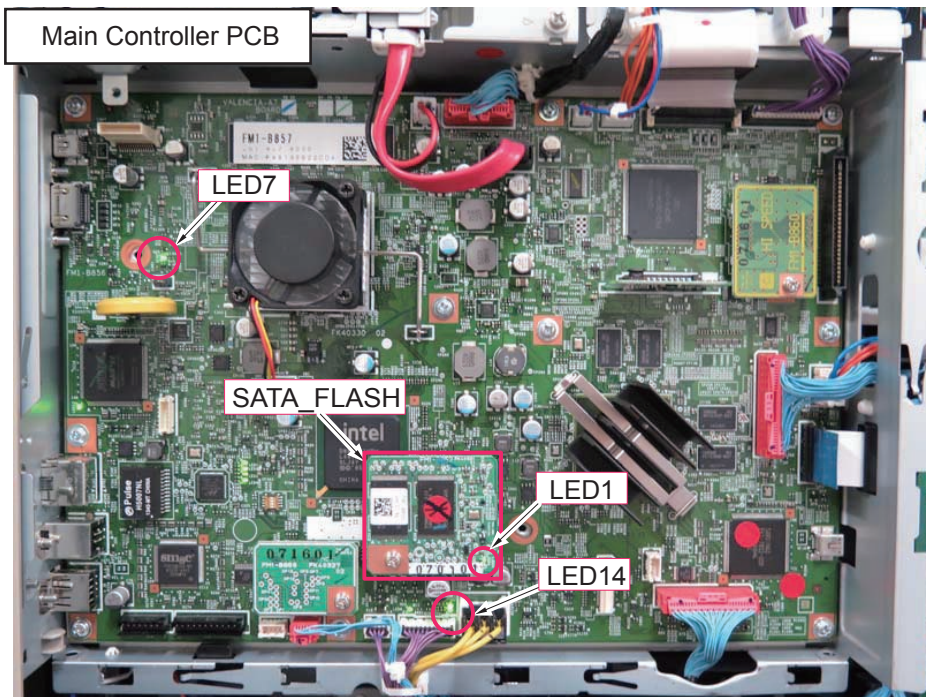
6) Remove the ITB Unit.

Operation Check of the Main Controller LEDs

Overview

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



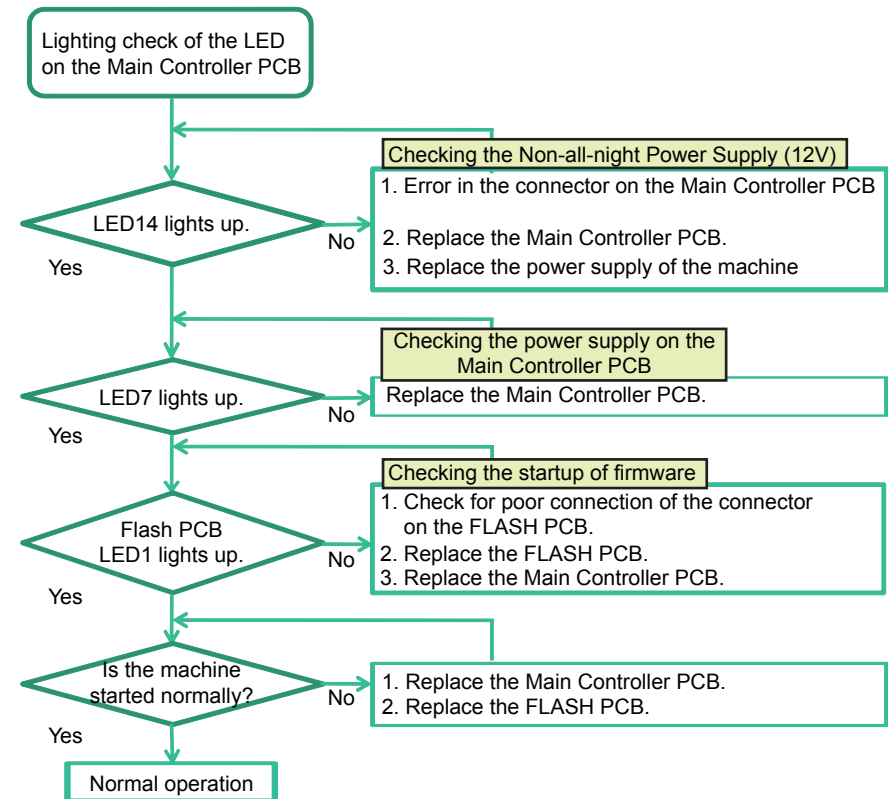
F-6-8

Preconditions

Check whether the connectors are securely connected. LEDs are not lit when the contact 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).

Check the lighting of the LED on the Main Controller



F-6-9

Startup System Failure Diagnosis

The viewpoint of this Startup System Failure Diagnosis

The goal of the startup system failure diagnosis is to be able to solve troubles associated with a Control Panel display failure by performing the following steps.

It is assumed that the users have already learned the following items:

- How to use a tester
- Roles of the Low-voltage Power Supply (3.3V, 12V)(Power supply)
- How to back up data (HDD and Flash PCB)

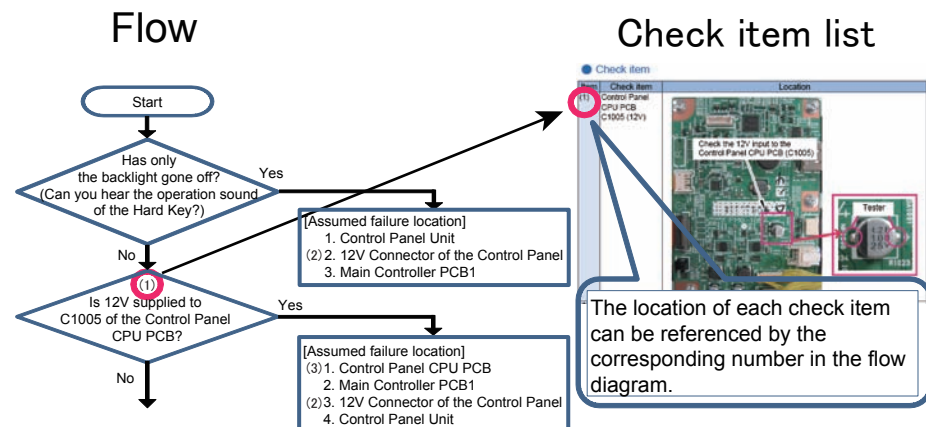
⚠ CAUTION:

AC power supply is always supplied to the Low-voltage Power Supply PCB. Pay attention not to cause short circuit when accessing the PCB.

Useful Operations

The items of detailed procedure explanation start with a description of the flow diagram.

The items and procedures checked in the flow diagram are described separately in a check item table. The flow diagram contains numbers (e.g. (1)) corresponding to the check items so that the readers can grasp the relevant parts of the check item table.



F-6-10

Startup Failure Analysis Policy

Startup Failure Analysis Policy describes troubleshooting related to "Execution Flow for Control Panel Startup Failure" for the Low-voltage Power Supply (3.3V, 12V) and Low-voltage Power Supply PCB.

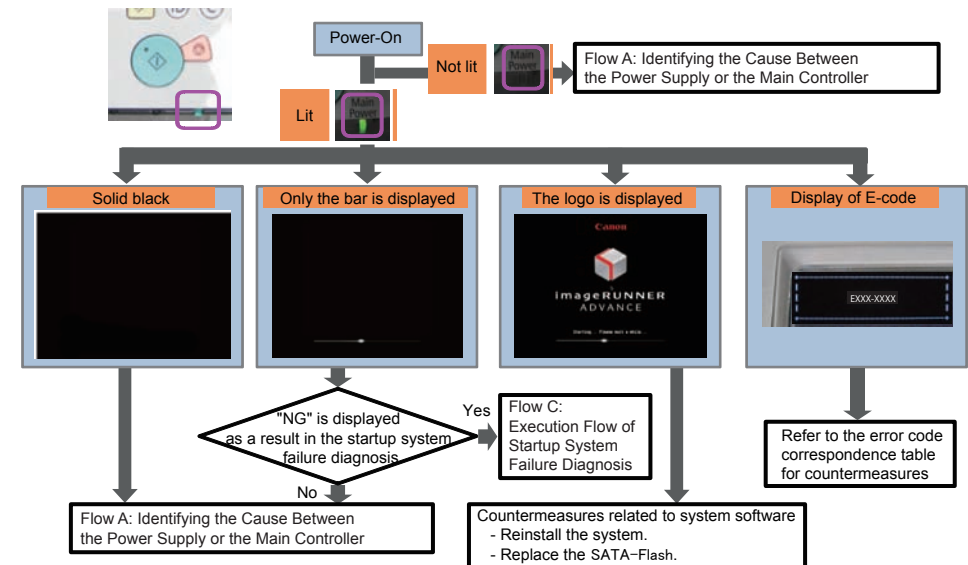
If the host machine does not start successfully even when its Power Switch is turned ON, identify the location of the failure by referencing the following diagram.

Select the appropriate failure location identification procedure based on the display status of the Control Panel.

Preconditions

If the following two parts are not operating with the main power turned ON, it is likely that a failure has occurred.

- Control Panel Main Power LED (Low-voltage Power Supply 3.3V system)
- Rotation noise of the motor at warm-up rotation and activation of the Control Panel Backlight (12V system)



F-6-11

Flow A: Identifying the Cause Between the Power Supply or the Main Controller

Status Check

If the Control Panel is black when the power of the host machine is turned ON, identify the location of the failure according to the flow.

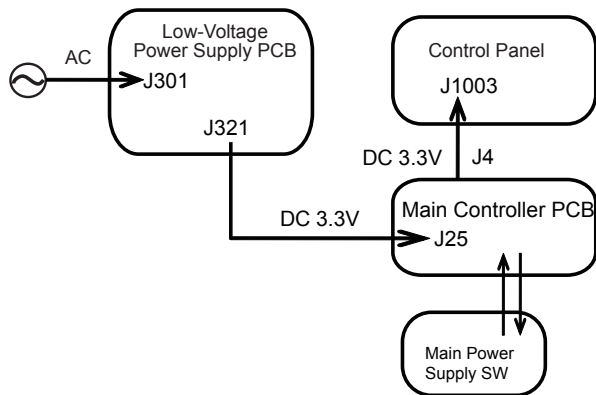
Flow for narrowing down troubles

If the Control Panel LED is ON, the All-night Power Supply (3.3V) is being supplied.

If the Control Panel LED is not ON, it can be suspected that a failure has occurred in the signal path of the Main Power Supply Switch or to the Low-voltage Power Supply PCB itself.

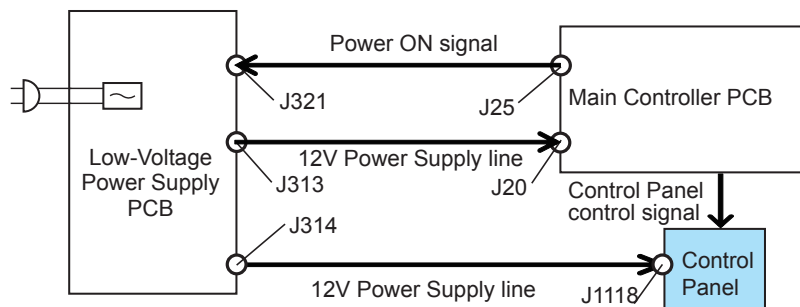
If the Control Panel LED is ON, it is likely that an error has occurred to 12V power supply.

3.3 V power supply route



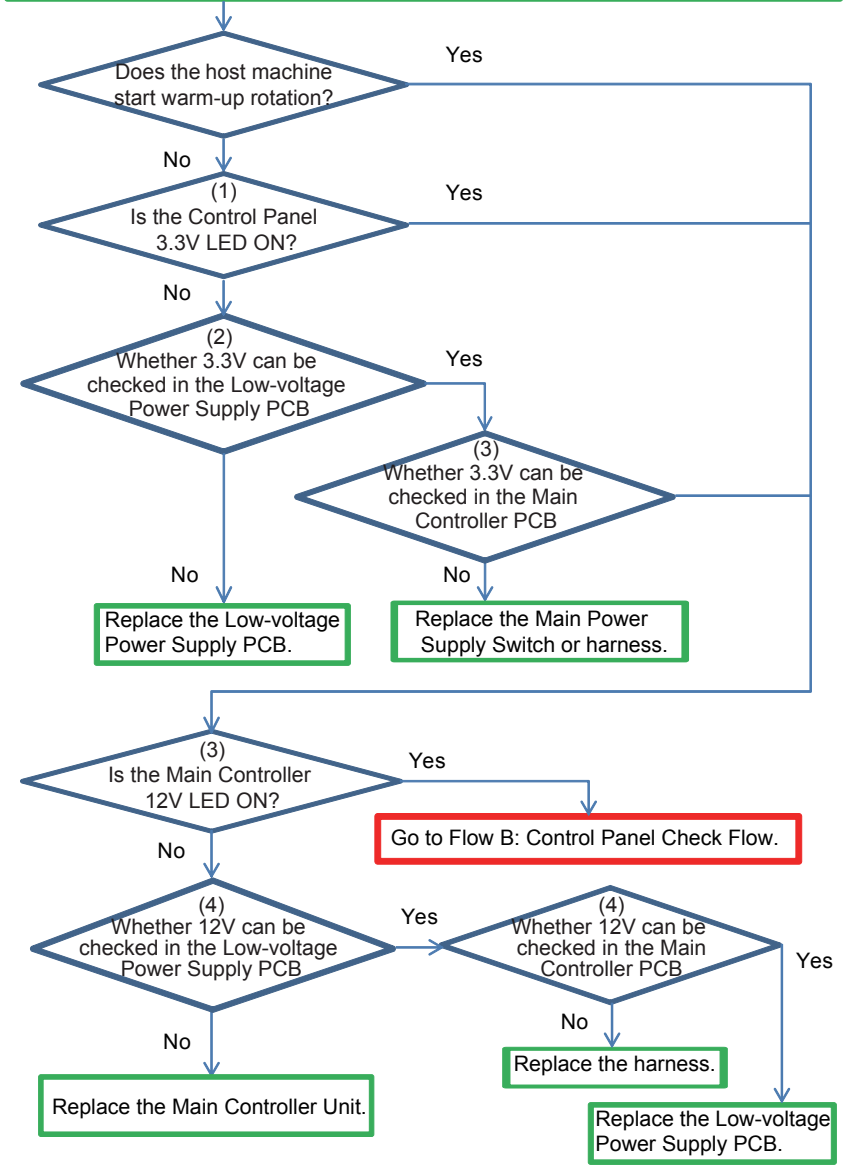
F-6-12

12 V power supply route



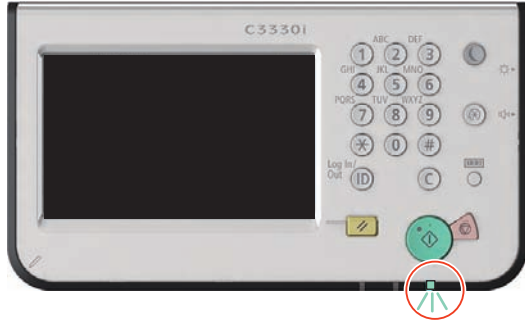
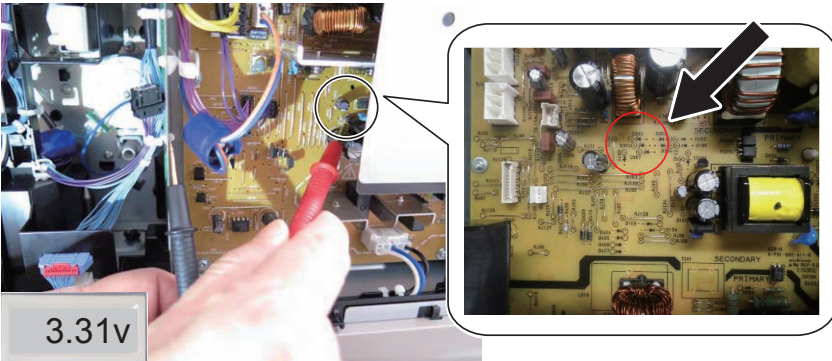
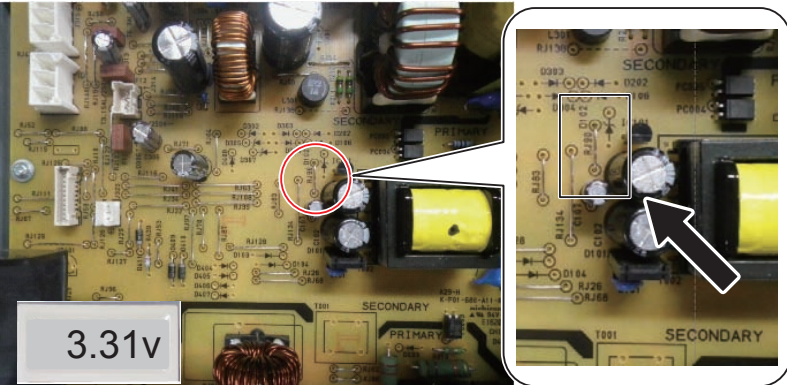
F-6-13

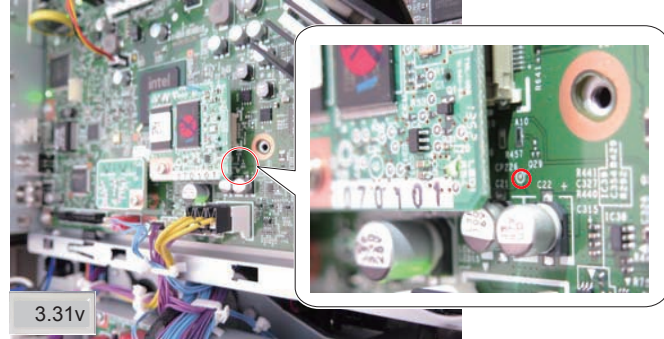
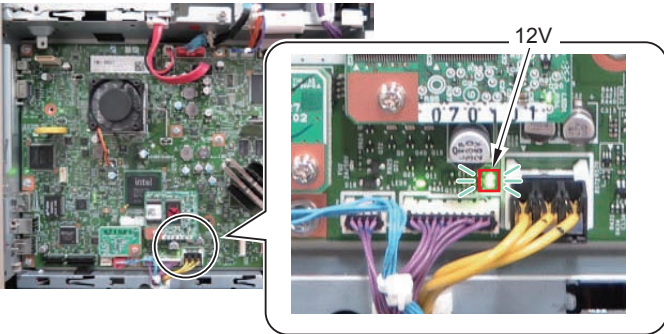
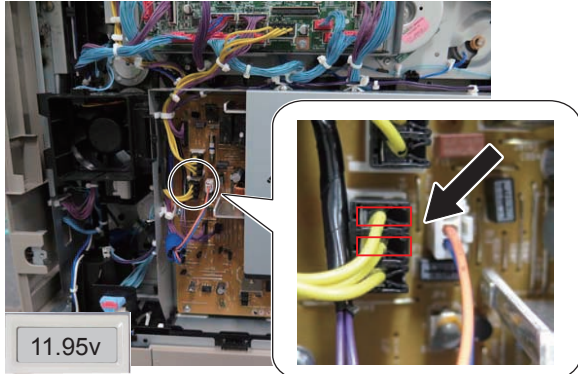
1. Turn OFF the Main Power Supply Switch.
2. Disconnect and then connect the power plug of the host machine from/to the outlet.
3. Turn ON the Main Power Supply Switch.

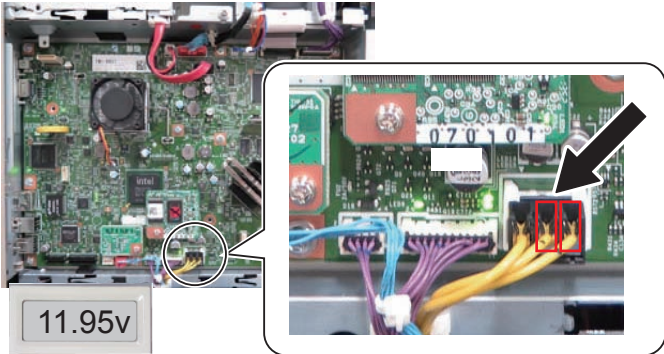


F-6-14

● Check item

Item	Check item	Location
(1)	Control Panel LED	
(2)	Low-voltage Power Supply PCB 3.3V There are 2 types of PCB. Identify the installed PCB with reference to the photo below, and check 3.3V.	<p>TYPE1 : FB601</p>  <p>3.31v</p> <p>TYPE1 : RJ90</p>  <p>3.31v</p>

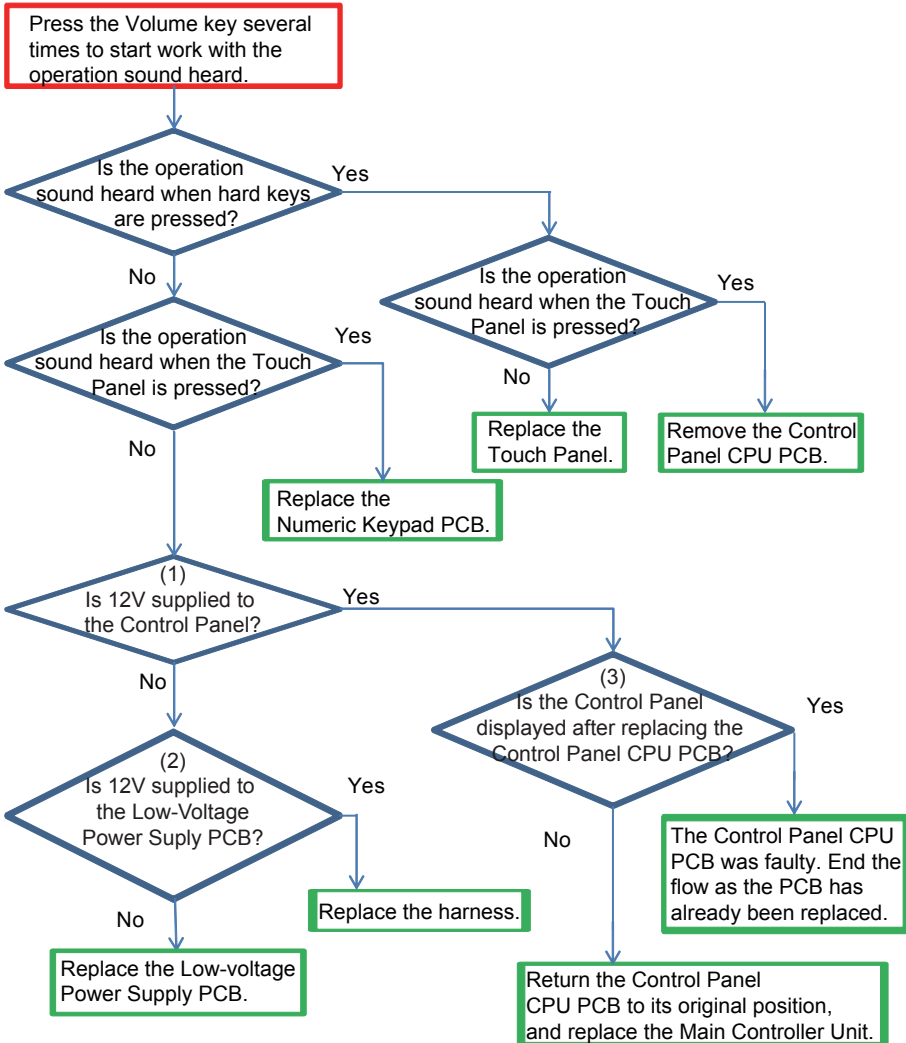
Item	Check item	Location
(3)	Main Controller PCB 3.3V CP226	 <p>3.31v</p>
(4)	Main Controller PCB 12V LED is ON	 <p>12V</p>
(5)	Is 12 V detected at the connector J313 of the Low Voltage Power Supply PCB?	 <p>11.95v</p>

Item	Check item	Location
(6)	Is 12 V detected at the connector J20 of the Main Controller PCB?	

T-6-10

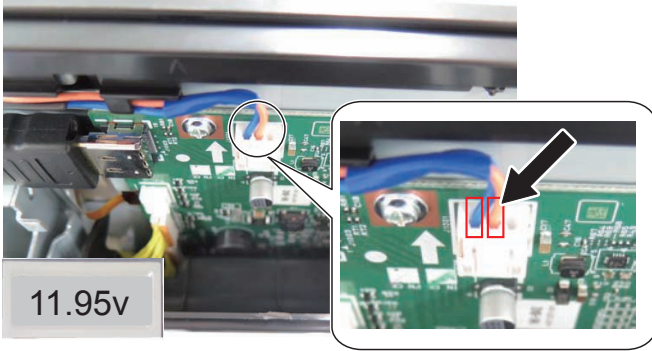
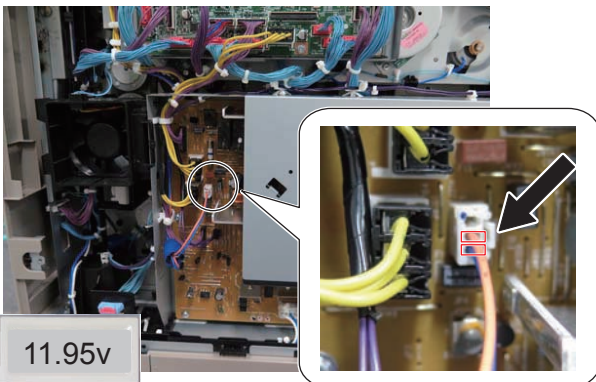
Flow B: Control Panel Check Flow

Control Panel Check Flow



F-6-15

Check item

Item	Check item	Location
(1)	Control Panel CPU PCB J1118: 12V	
(2)	Low-voltage Power Supply PCB J314: 12V	
(3)	Control Panel CPU PCB	End the flow if the display is recovered after replacing the Control Panel CPU PCB. If it is not recovered, the cause is a failure on the Main Controller side. Return the Control Panel CPU PCB to its original position, and replace the Main Controller Unit.

T-6-11

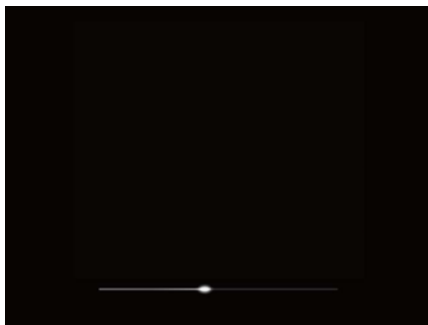
Flow C: Execution Flow of Startup System Failure Diagnosis

Status Check

If startup does not complete properly with only the Control Panel bar displayed, identify the location of the failure according to the flow.

Description

The workflow of the Controller system failure diagnosis to be executed when only the Control Panel bar is displayed.

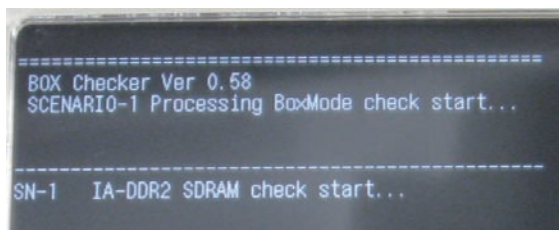


F-6-16

Check item

Startup Method

1. Turn ON the Main Power Supply Switch while pressing the numeric keys '2' and '4' simultaneously.
2. Keep pressing the numeric keys until the following screen appears on the Control Panel. (approx. 20 seconds)



F-6-17

Remedy after the check

1. Perform the following checks if the failure diagnosis does not start. If it starts, proceed to the next step.
 - Install the system software (Download by 2+8 startup)
 - Replace the SATA Flash.
 - Replace the Main Controller Unit.
2. When the detected location is displayed on the screen where "NG" is displayed, identify the location of the failure by referencing the controller system failure diagnosis, and perform the remedy. If the diagnosis does not proceed to a status where "NG" is displayed, proceed to the next step.
3. If the failure diagnosis does not finish, perform the following work:
 - Install the system software (Download by 2+8 startup)
 - Replace the SATA Flash.
 - Replace the Main Controller Unit.

Controller Self Diagnosis

Controller Self Diagnosis

Introduction

Operation of the 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.

- An error is suspected to have occurred in the Main Controller PCB and other related PCBs (child PCBs such as Flash PCB, Memory PCB or TPM mounted in the Main Controller PCB).

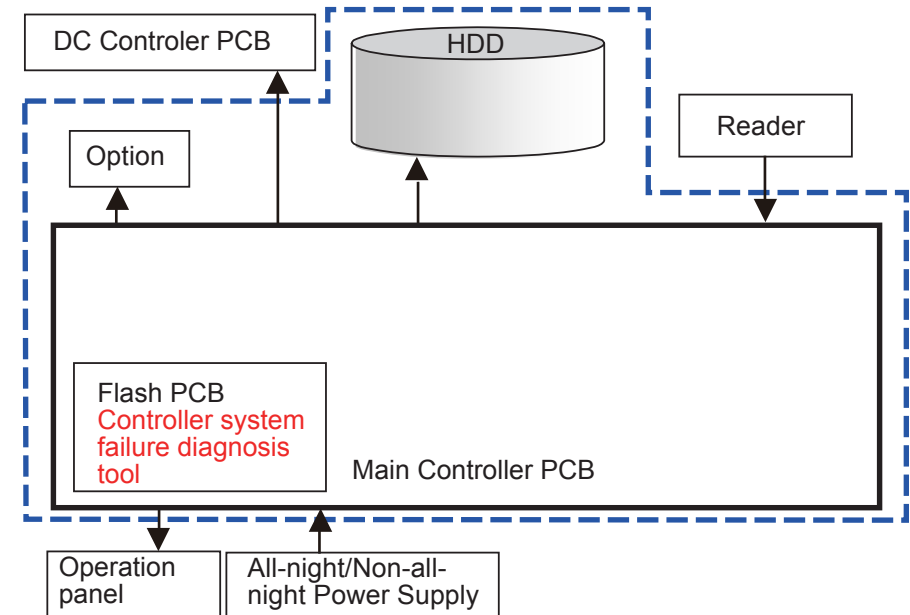
PCBs and units diagnosed by each tool are as follow:

Tool	PCBs/Units
Controller System Error Diagnosis Tool	<ul style="list-style-type: none"> Main Controller PCB TPM PCB FLASH PCB Memory PCB HDD

T-6-12

Overview

Error diagnosis tools are installed in this machine, and stored in the locations shown below.



F-6-18

Controller System Error Diagnosis Tool covers the components shown in the blue frame (dotted line).

Controller System Error Diagnosis Tool

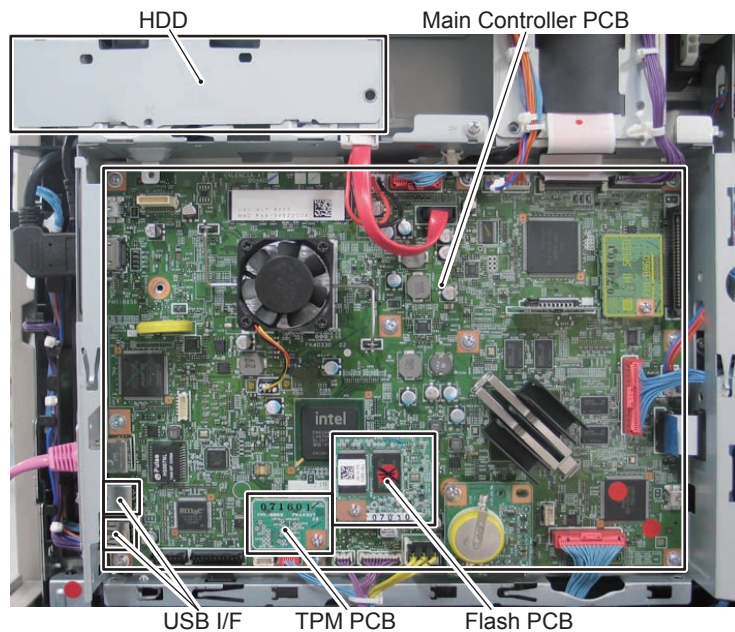
This tool automatically checks the Main Controller PCB, child PCBs mounted on the Main Controller PCB, and display the result on the Control Panel.

This tool is installed in Flash PCB.

Therefore, this tool cannot be used when an error occurred in Flash PCB.

Layout Drawing

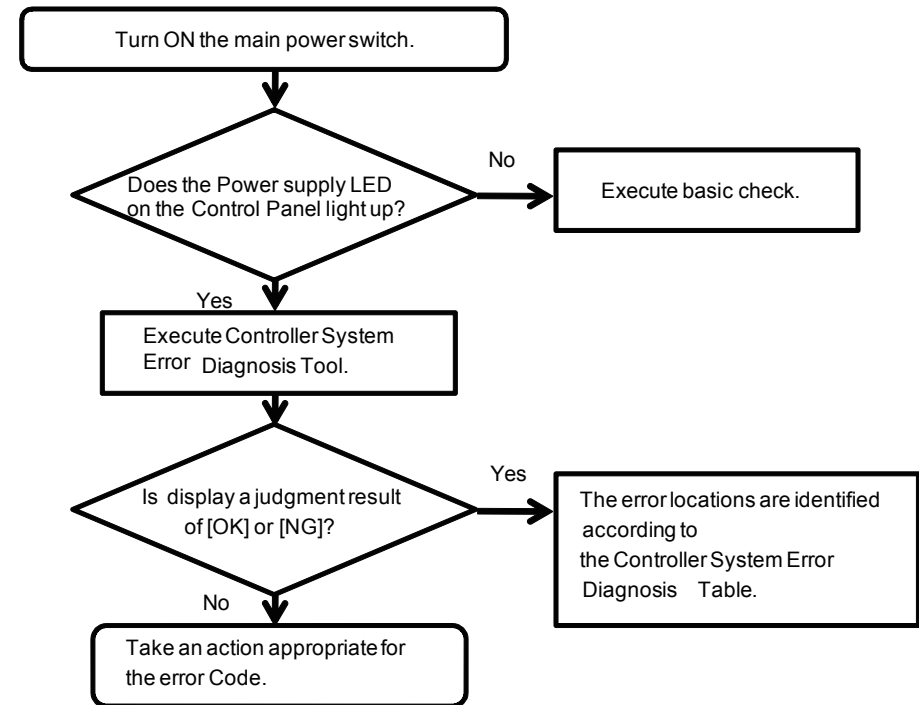
Layout Drawing of PCBs Subject to Diagnosis



F-6-19

Basic Flowchart

Check all of the items shown below.



F-6-20

Basic Check Items

- Check if the Power Supply Plug is disconnected.
- Check if the Connection Cable between the Main Controller PCB and Control Panel is disconnected.
- Check if the Connection An All-night Power Supply. Check if the Connection Cable from Main Controller PCB is disconnected. Change AC Driver PCB if not recovered.

Prerequisite

This machine's Firmware is installed in Flash PCB.

Controller System Error Diagnosis Tool (BCT) is also installed at the same time when System software is installed.

NOTE:

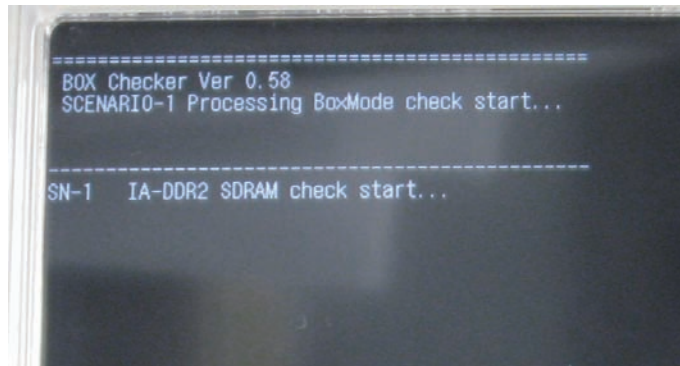
BCT stands for Box Checker Test.

When BCT is installed on the main body, version of the installed module can be checked using service mode (COPIER > DISPLAY > VERSION > BCT).

Controller System Error Diagnosis

Boot Method

- 1) Turn ON the Main Power Supply Switch while pressing the numeric keys '2' and '4' simultaneously.
- 2) Keep pressing the numeric keys (for approx. 20 seconds) until the following screen appears on the Control Panel.



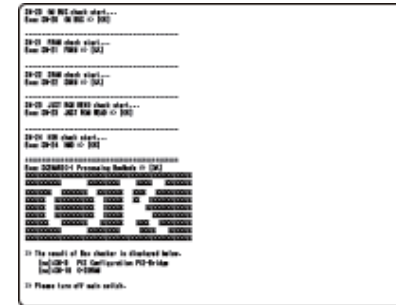
F-6-21

Diagnosis Time

Diagnosis is completed in approx. 3 minutes.

The result is displayed on the Control Panel.

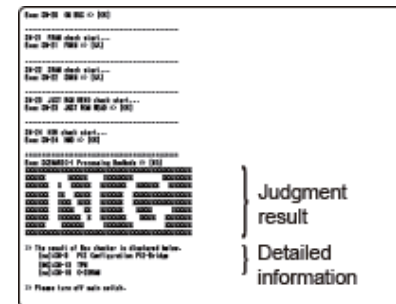
<When the diagnosis result is normal>



F-6-22

<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.



F-6-23

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.

```
>> The result of Box checker is displayed below.
[no]:SN-9   PCI Configuration PCI-Bridge
[NG]:SN-13  TPM
[no]:SN-19  0-SDRAM
>> Please turn off main switch.
```

F-6-24

[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.

NOTE:

Once the tool is activated, this machine reboots after approx. 2 minutes.
After completion of the diagnosis, be sure to turn OFF and then ON the main power.
By turning the power OFF, the operation of this tool completes.

Controller System Error Diagnosis Table

The error locations are identified according to the following table.

No	Test Name	Description	Assumed error location	Remedy	Error Code
SN-1	MN-DDR2 SDRAM	Check an error between the Main Controller PCB and SDRAM on the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB .	-
SN-2	SM BUS MN DDR2 On Board	Check an SM bus error in I2C on the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB .	-
SN-3	SM BUS MN Clock Gen	Check an SM bus error in SDRAM (inside) on the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB .	-
SN-5	PCI Configuration	Check a PCI Configuration error in the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB .	-
SN-8	CPLD	Check failure of CPLD chip on the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB .	-
SN-9	LANC FLASH	Check failure of LANC SPI on the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB .	-
SN-10	RTC CHECK	Check failure of RTC on the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB .	-
SN-11	TPM	Check failure of the TPM PCB on the Main Controller PCB * TPM PCB is not installed in products for China. So, the diagnosis results NG.	• Main Controller PCB • TPM PCB	1. Check the installation of the TPM PCB. 2. Replace the TPM PCB. 3. Replace the Main Controller PCB.	E746
SN-12	SOC-DDR2 SDRAM	Check an error DDR2 SDRAM on the Main Controller PCB	• Main Controller PCB	1. Replace the Main Controller PCB.	-
SN-13	FRAM	Check failure between the Main Controller PCB and the Memory PCB	• Main Controller PCB • Memory PCB	1. Check the installation of the Memory PCB. 2. Replace the Memory PCB. 3. Replace the Main Controller PCB.	E355

NOTE:

Correspondence at the HDD Data Encryption Kit use.

The SMART contents are diagnosis results of the master HDD.

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.

■ Restrictions

● Controller System Error Diagnosis

Regarding the diagnosis for the test names (SN-1, 2, 5, 12), 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, the following judgment results are displayed.

- Standard PCB: [NG]
- Optional PCB: [OK]

However, [no] is displayed in detailed error information for optional PCBs.

Debug Log

Overview

Function Overview

The debug log is a log that analyzes the program behavior of the machine to enable developers to identify problems.

This machine is embedded with this function to collect the history for the behavior of each software module in the debug log and output it as an integrated log for analyzing problems. Since the frequency of outputting the debug log and the content of the log can be changed, the settings need to be changed according to the trouble that occurs and the situation.

However, the on-site service technician does not need to make such decisions because instructions are sent from the Support Dept. of your sales company.

Conditions for Obtaining Logs

Cases where Logs Cannot Be Obtained

In the following cases, the procedure for obtaining logs is not required because logs cannot be obtained.

- When the background of the Control Panel is solid black and an error code is displayed in text
- When the device is frozen on the startup screen
- When the device repeats the startup process and does not become available

Prerequisites for Obtaining Logs

- If a problem has occurred, suspend operations where possible. If operations are continued or jobs are executed even after a problem has occurred, the log of the problem may not be able to be obtained because it is overwritten.
- While the problem is occurring or quickly after the problem occurs, save the debug log to a backup area before turning OFF and then ON the power. (Refer to "Saving to a USB device With Counter Key + Numeric Key" on page 6-79.)
- This operation enables you to save the log to the hard disk immediately after the problem occurs.
- Ask the user to make a note of the date and time when the problem occurred and the procedure.
- If the user notifies the log has been saved, collect the log.
- The DEBUG PCB ASS'Y Board may need to be installed to obtain the log, depending on the problem (refer to "Flow of Determining the Procedure for Obtaining Logs").

NOTE:

The DEBUG SRAM PCB ASS'Y Board is required when the following problems occur.

- Problems relating to restart
 - Problems that cause the Control Panel to become inoperable
 - Problems relating to recovery from deep sleep
- When an unexpected error, E code error, or problem relating to restart occurs, the log can be automatically saved to the hard disk. To automatically save the log to the hard disk, confirm that the following service mode is set to "101".
 - (Level2) COPIER > Function > CBG-LOG > LOG-TRIG > 101

Collecting Logs Saved to the Hard Disk

With this machine, the total of 11 debug logs are retained in the debug log save area; 10 archive logs that have been automatically saved and 1 archive log that has been manually saved.

If more than the above number of logs is generated, the oldest archive log is deleted.

When logs are retrieved by a USB device or SST, they are archived as a single file.

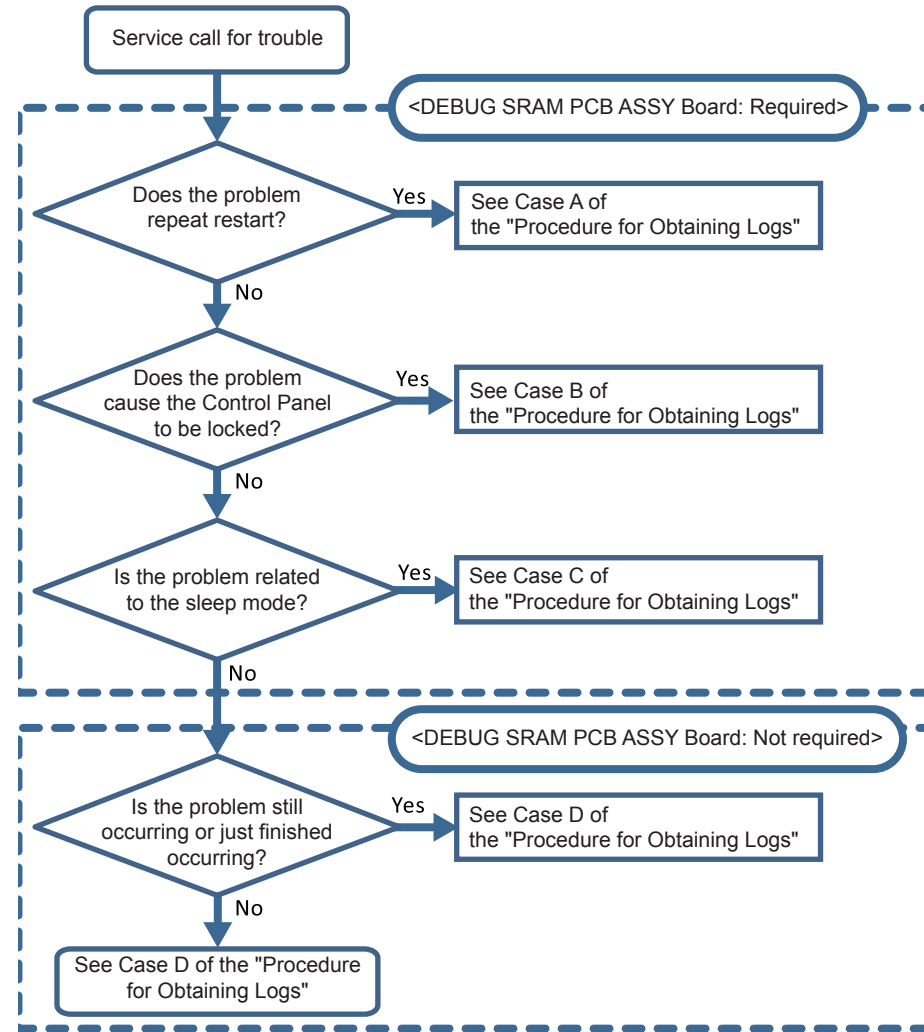
When logs are retrieved from the machine, the saved log files are erased.

When a problem occurs, it is necessary to collect the log for the problem before it is overwritten.

Obtaining Logs

Flow of Determining the Procedure for Obtaining Logs

Check the following flow to determine the procedure for obtaining logs according to the type of problem.



F-6-26

Procedure for Obtaining Logs

Obtain logs according to the Flow for Determining the Procedure for Obtaining Logs.

Case	Details of Problem	DEBUG SRAM PCB ASS'Y Board	Procedure for Obtaining Logs
Case A	Problem that repeats restart	Necessary	1) Install the DEBUG SRAM PCB ASS'Y Board. 2) Save the log in the HDD immediately after restart. 3) Collect the log from the HDD with SST, etc.
Case B	Problem causing the Control Panel to be locked	Necessary	1) Install the DEBUG SRAM PCB ASS'Y Board. 2) Turn OFF and then ON the power immediately after the Control Panel is locked. 3) Save the log in the HDD after startup. 4) Collect the log from the HDD with SST, etc.
Case C	Problem related to the sleep mode	Necessary	1) Install the DEBUG SRAM PCB ASS'Y Board. 2) After the problem occurs, turn OFF and then ON the power if necessary, and save the log in the HDD. 3) Collect the log from the HDD with SST, etc.
Case D	Problem when executing a job (Example: Printing is not performed, etc.)	Not needed.	1) Save the log in the HDD while the problem is occurring. 2) Collect the log from the HDD with SST, etc.
	When an E code error has occurred	Not needed.	Collect the log from the HDD with SST, etc. However, if the background of the Control Panel is solid black and an error code is displayed in text, logs cannot be obtained.
Case E	Problems other than above	Not needed.	Collect the log from the HDD with SST, etc. Check with the user on the date and time when the problem occurred and the procedure.

T-6-15

NOTE:

When an unexpected error, E code error, or problem of restart occurs, the log can be automatically saved to the hard disk. To automatically save logs to the hard disk, confirm that the following service mode is set to the default value. For models without the service mode item, no check is needed because it is already set to the default value.

- (Level2) COPIER > Function > DBG-LOG > LOG-TRIG > 101

Tools Required

One of the following tools is required to obtain the debug logs of the machine.

Exporting to a USB Device

- USB device

When exporting debug logs to a USB device, use a USB device in which the system software for the device is registered using SST.

Since the size and number of log files to collect varies according to the device status and the logs that have been saved, the size of the collected files may be several hundred MB. Therefore, it is recommended that you use a USB device with 1 GB or more space. The USB device must be formatted with the FAT file system.

Exporting to a PC

- PC with SST installed
- Network connection cable

When exporting debug logs to a PC, a PC with SST installed and a network connection cable are required.

Common

- DEBUG SRAM PCB ASS'Y Board

Only when determined to be required by the above "Flow of Determining the Procedure for Retrieving Logs".

NOTE:

With this machine, a standard function included with the device can be used to save the debug logs (Sublog) to the hard disk without using the DEBUG SRAM PCB ASS'Y Board.

However, the DEBUG SRAM PCB ASS'Y Board is specified as a tool to use because a Sublog Board with a battery is required when it is necessary to restart the machine to reproduce the problem that is occurring.

Method for Obtaining Logs

To obtain debug logs from the machine, perform an operation on the machine (or a remote operation from a PC) to save the logs to a USB device, FTP server, or PC (with SST ver. 4.75 or later).

Operation	Destination	Remarks
Operation in download mode	USB device	Logs are only saved to the USB device.
Operation from SST	PC	Logs are saved to both the machine hard disk and USB device.
Operation with Counter key + numeric key	USB device	Logs are saved to both the machine hard disk and USB device. If a USB device has not been connected in advance, logs are only saved to the machine hard disk.
Operation in service mode	USB device	Logs are only saved to the USB device.

T-6-16

Saving to a USB Device Using Download Mode

Start the machine in download mode and transfer the debug logs to a USB device.

With this collection method, debug logs are not saved to the hard disk.

For details on the procedure, refer to "Saving to a USB Device Using Download Mode".

Saving to a PC Using SST

Start the machine in download mode and transfer the debug logs to a computer connected to the network using SST.

For details on the procedure, refer to "Saving to a PC Using SST".

Saving to a USB Device with Counter Key + Numeric Key

Hold down the Counter key for approx. 10 seconds, and then press numeric keys 1, 2, and 3 in that order to save the current logs to the machine's storage area, and save the logs in the machine's storage area to the USB device.

If a USB device has not been connected to the machine in advance, logs are only saved to the storage area of the machine.

For details on the procedure, refer to "Saving to a USB Device with Counter Key + Numeric Key".

Saving to a USB Device Using Service Mode

Execute the following service mode to save the debug logs to a USB device.

For details on the procedure, refer to "Saving to a USB Device Using Service Mode".

- 4) When [Download File Menu (USB)] is displayed, press [1] key on the Control Panel to select [1]: SUBLOG Download.

```

[[[[[[[ Download File Menu (USB) ]]]]]]]
-----
[1]: SUBLOG Download
[4]: ServicePrint Download
[5]: Netcap Download
[C]: Return to Main Menu

[Reset]: Start shutdown sequence

/[1] has been selected. Execute?/
- (OK):0 / (CANCEL):Any other keys -

```

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- 5) When a message confirming whether you want to execute the operation is displayed, press [0] key on the Control Panel to execute the operation.
- 6) Exit download mode, remove the USB device, and collect the logs.

Remarks:
Multiple debug logs are archived into one file to be sent into the USB memory device.

File Name

"Date/time", "Machine serial number" and "MN-CONT" are automatically added to archive file name.

A file name example: 20100425_13-32-ENS00059-V01.44_SAFE.bin

In the above example,

- "20100425_13-32" shows the date and time of log collection (the date and time set in the machine),
- "ENS00059" the serial number,
- "V01.44" the firmware version of the Main Controller (MNCONT)

NOTE:

The log file is deleted from the machine once it is collected into the USB memory device.

You can check the description of the logs to be included in .bin file with "LOGLIST.TXT" that is saved simultaneously with the .bin file into the USB memory device.

Saving to a PC Using SST

The following shows a method to collect a log by connecting a PC with SST (Ver. 4.75 or later) running to the machine.

Preconditions:

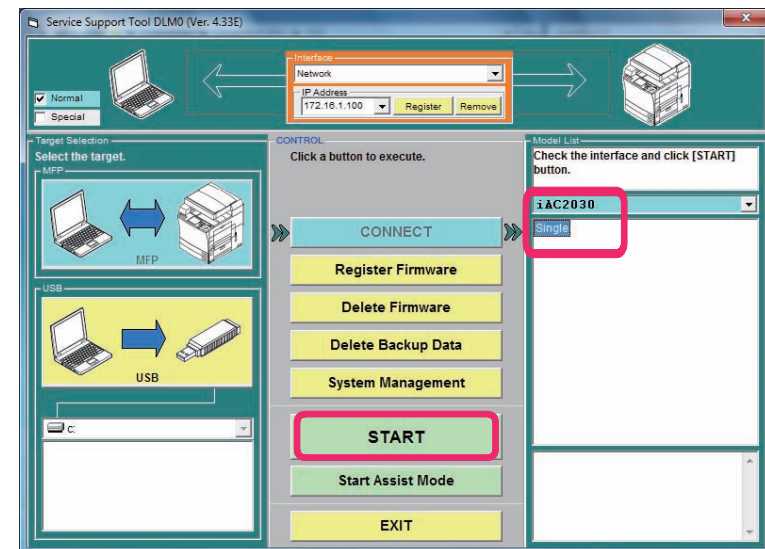
The log is stored in the machine by holding down the counter + 1.2.3 or the automatic log collection function.

A PC with SST running is connected to the machine and this device is at download mode by starting it with the 2 and 8 keys.

NOTE:

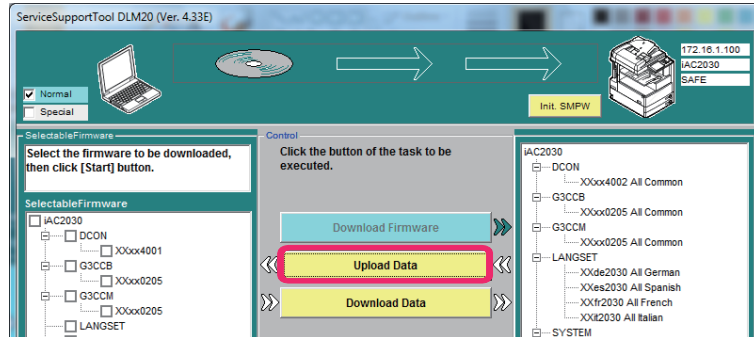
Executing a log collection by SST deletes logs in this device.

1. Start SST (Ver. 4.75 or later) and select this device's model name from Model List. Press [Start] button.



F-6-30

2. Press [Upload Data] button.



F-6-31

3. Select the data to be uploaded, then click [Start] button.

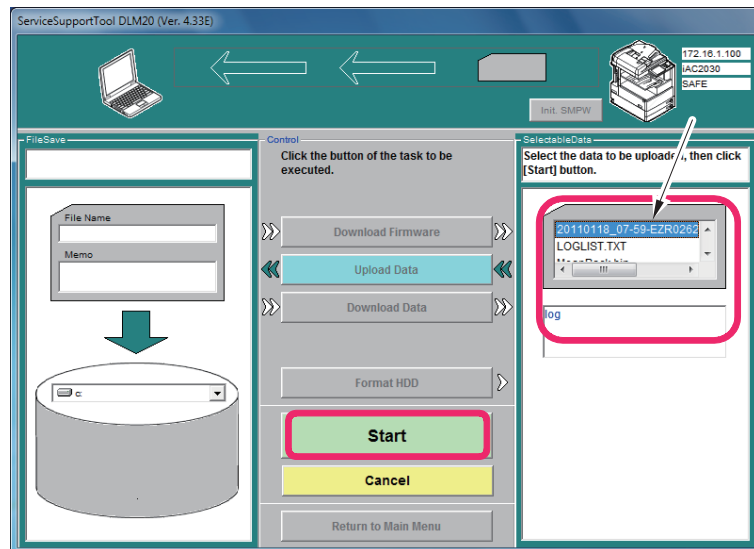
When there is no log in the machine, it results in blank option items for "data to upload".

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:

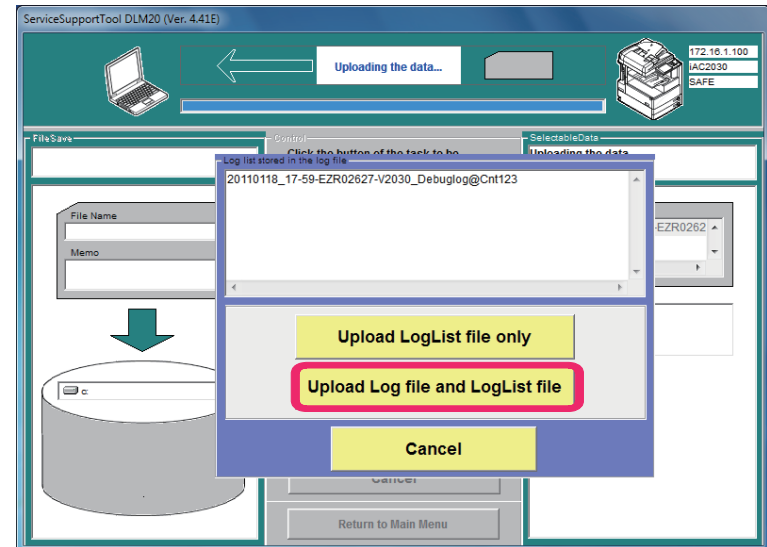
The log is not stored when You cancel it before pushing the Start button.
It is deleted from this device.



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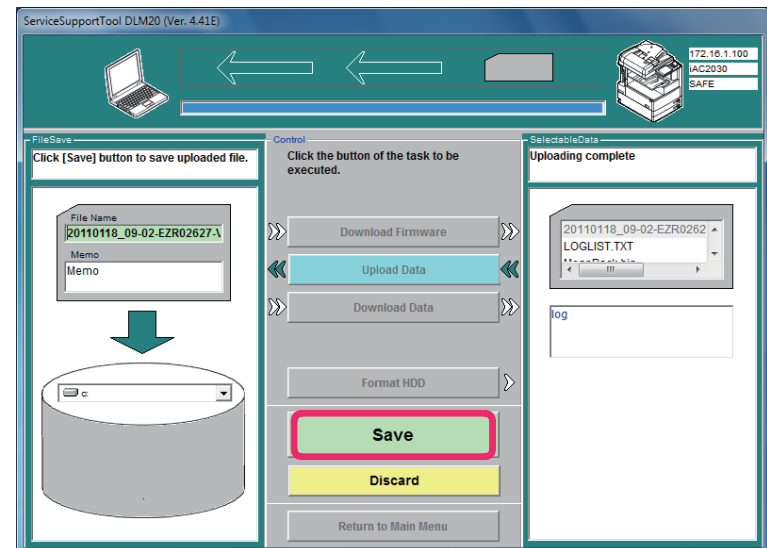
4. Select "Upload Log file and LogList file".

The list of logs stored in the log file of the machine (description of LogList files) is displayed.



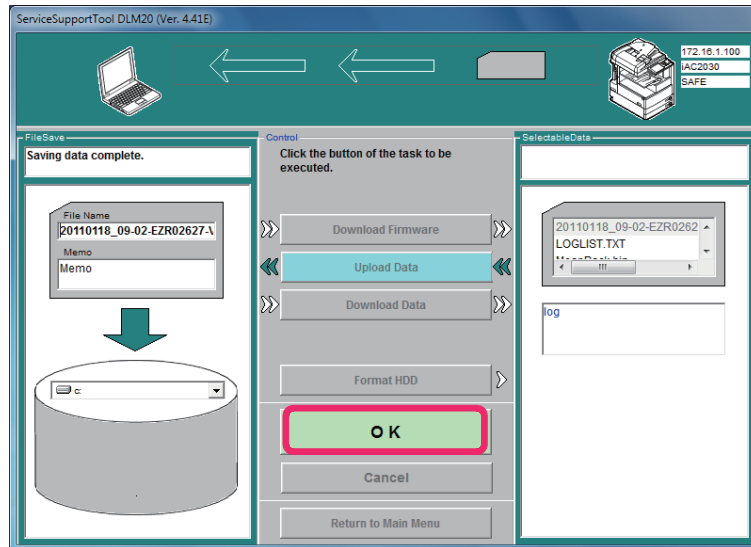
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5. Press the "Save" button.



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6. Check that the data storage is completed and click the "OK" button.

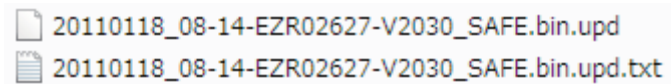


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7. Check that the log is stored in the specified location in the PC.

In the initial setting:

Windows(C:) > ServData > iAC3300 > ZZZ99999 (Serial number)



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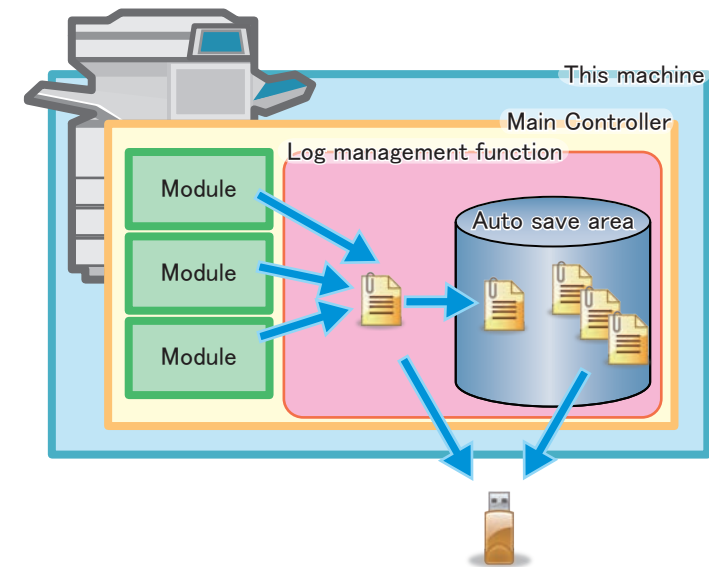
Saving to a USB Device with Counter Key + Numeric Key

Overview

Log archives can be saved to the machine hard disk and to a USB device at the same time, using a method that users can perform.

- When this operation is performed, the log archive for each module is saved to the auto save area.
- If a USB device has been connected to the machine in advance, the log archives saved in the auto save area are saved to the USB device.

Since this operation can obtain the log archives current as of the operation, logs useful for analysis can be obtained by performing this operation while reproducing the problem.

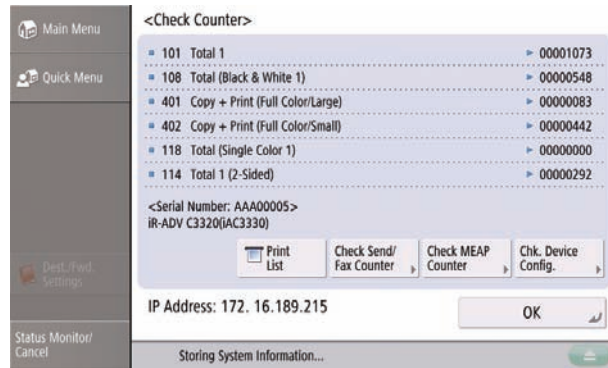


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Operation Procedure

- 1) Connect a USB device to the machine to have it recognized.
- 2) Hold down the Counter key (for 10 seconds or more).
- 3) Press the numeric keys 1, 2, and 3, in that order.

When the processing starts, the message "Storing System Information..." is displayed on the bottom of the Touch Panel on the machine's Control Panel.



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- 4) When the processing is complete, the main menu is displayed again. If a USB device was connected, perform the operation required before removing the USB device, and then remove the device.

NOTE:

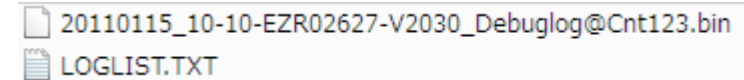
If the USB device has not been recognized by the machine in advance, the logs are transferred to the log save area on the machine hard disk, and are written to the USB device by performing the above operation the next time the USB device is connected. However, the extensions of the file names differ between when directly writing to the USB device and when writing to the USB device after saving in the machine hard disk. Log files collected to a USB device are deleted from the machine.

File Name

The log file exported to a USB device using Counter key is named by the rule of "date/time+serial number+MNCNT version+Debuglog@Cnt123(retrieval method).bin".

Example:

20100510_12-35-ENS00059-V01.54_debuglog@Cnt123.bin



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NOTE:

The date and time added to the file name are the date and time when the log is transferred. When the machine is not correctly running, the time may not become the local time. In this case, it becomes the Greenwich mean time.

Status Display on the Control Panel

During a log collection processing, "Storing system information..." is displayed on the status line. The message disappears once the log collection processing is complete. (When the log has been collected with a USB memory device connected, a message "a memory media is connected" is displayed.)

When holding down the counter + 1.2.3 while an error code is shown, the message "Storing system information..." is not displayed for convenience of UI display.

Saving to a USB Device Using Service Mode

■ Function

This is a function to send a set of debug logs in the machine to a USB memory device connected to the device.

For using LOG2USB, take note of the following difference compared to the operation by holding down the counter + 1.2.3.

NOTE:

Executing LOG2USB while no USB memory device is connected to the machine causes an "NG" display. The data is not transferred.

Make the machine recognize a USB memory device before executing LOG2USB.

■ Operation Procedure

- 1) Connect USB memory device to the device.
- 2) Execute the following service mode.
 - COPIER > Function > LOG-USB

NOTE:

Do not perform the following operations during the processing.

- Turning OFF and then ON the power of the machine.
- Disconnecting a USB memory device.
- Any operation on the touch panel of the machine.

- 3) "OK!" is displayed when the operation is complete. Press [Reset] key to return to the main menu.

"NG!" is displayed when the processing fails.

- 4) Go to the screen for removing memory media, and remove the USB device.

NOTE:

- When there is any debug log file that has been automatically saved in the sublog storage space, send it to the USB memory device as well.
- Multiple debug logs are archived into one file to be sent into the USB memory device.
- The archived name is automatically given as follows: "date and time", "serial number", "MN-CONT"

■ File Name

A file name example: 20100425_13-32-ENS00059-V01.44_Debuglog@USB.bin

In the above example, "20100425_13-32" shows the date and time of log collection (the date and time set in the machine), "ENS00059" the serial number, "V01.44" the firmware version of the Main Controller (MNCONT), and

"Debuglog@USB" shows that the log was "collected with "DBG-LOG>LOG2USB".

NOTE:

The log file is deleted from this device once it is collected into the USB memory device. You can check the description of the logs to be included in .bin file with "LOGLIST.TXT" that is saved simultaneously with the .bin file into the USB memory device.

Service Mode Relating to Debug Logs

Overview

This machine has menus related to debug logs.

- (Level2) COPIER > Function > DBG-LOG

Changing Debug Log Settings (LOG-TRIG)

Overview

LOG-TRIG changes the settings related to the obtaining of debug logs, and starts a log collection operation with the new settings.

Available settings include the log level of the debug logs to obtain and the conditions for auto saving.

Changing the Range of Debug Logs to Obtain

This machine includes the following two operation modes for changing the range of debug logs to obtain.

- Mode for recording all logs, which may include user information (setting 1)
- Mode for recording only logs that do not include user information (setting 2)

The default setting is 2 (record only logs that do not include user information), but logs can be obtained with mode 1 to enable more precise analysis if user agreement is obtained. The user information that may be included in the logs obtained with mode 1 is indicated below.

- Machine setting information
 - Status information
 - Image data
 - User setting information (Address Book, etc.)
 - Names of printed files
 - Part of printed data
 - Network environment information
- etc.

The procedure for changing the range of logs to obtain with LOG-TRIG is indicated below.

- 1) Press [LOG-TRIG] and enter the operation mode to set (1 or 2).
- 2) Confirm that the value you set is reflected in the display column.

Changing the Conditions for Auto Saving

This machine saves debug logs generated by each module to the auto save area every time an event occurs.

The event conditions for saving debug logs to the auto save area and their settings are indicated below.

List of Conditions and Settings (asterisks indicate default settings)

Setting value	Event Condition for Saving Debug Logs
Conditions set for automatic saving of logs	101 * When an unexpected error occurs, an error code occurs, or the machine is restarted
	111 Only when an unexpected error occurs
	121 Only when an error code occurs
	131 Only when the machine is restarted
	201 When an unexpected error occurs, an error code occurs, the machine is restarted, or an alarm occurs
	211 When an unexpected error occurs or an alarm occurs
	221 When an error code occurs or an alarm occurs
	231 When the machine is restarted or an alarm occurs
	291 Only when an alarm occurs
	301 When an unexpected error occurs, an error code occurs, the machine is restarted, or a jam occurs
	311 When an unexpected error occurs or a jam occurs
	321 When an error code occurs or a jam occurs
	331 When the machine is restarted or a jam occurs
	391 Only when a jam occurs

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The procedure for changing the log auto save conditions with LOG-TRIG is indicated below.

- 1) Press [LOG-TRIG], enter the value for the conditions you want to set, and press [OK]. If you do not want to change the operation mode, proceed to the next step.
- 2) "ACTIVE!" flashes in the display column, and the log settings in the machine are changed.
- 3) "OK!" is displayed when the processing is successfully completed. "NG!" is displayed when the processing fails.

It is not necessary to restart the device.

- A value between 0 and 99999 can be set, but make sure to set the value instructed by the Support Dept. of your sales company. Operations are not guaranteed when value other than the above is set.
- The displayed setting is not changed simply by changing the setting or pressing [DEFAULT]. It is necessary to exit the DBG-LOG screen once by pressing the [Reset] key, etc. and then display it again, after performing these operations.

● Example of Auto Saving

To experience a log collection operation, the following shows an executing example:
This is a log collection example when a jam occurs in the Delivery Assembly during a copy operation.

- 1) Connect a USB memory device to an available machine.
- 2) Set "301" in the following service mode.
 - (LEVEL 2) COPIER > FUNCTION > DBG-LOG > LOG-TRIG
- 3) Make a sheet of copy. Open the Delivery Feed Assembly before the paper is delivered from the Delivery Assembly to make paper jam.
- 4) When a jam occurs, "Storing system information..." is displayed at the lower side of the Control Panel.
- 5) Hold down the counter + 1.2.3 to transfer the log in the HDD of the machine to the USB memory device.
- 6) Check that the display disappears and cancel connection of the USB memory device to remove the USB memory device.
- 7) Connect the USB memory device to the PC and check that a log file is created.

● Types and Descriptions of Logs to be Collected from Device

Debug log information, serial number and status information sent by the firmware of the device are collected while image data, user settings (such as Address Book), etc. are not collected. Depending on the log, user information (print file name, a part of image data, etc.) can be included indirectly.

Select necessary settings.

1. Mode 1:
2. Mode 2: Collection of only logs that do not contain user information

When you gain an approval from the customer, collect log in mode 1. (Switch modes 1 and 2 by changing the settings from "LOG-TRIG".)

Mode 2 is the default setting; therefore, Mode 2 applies to all log collection settings unless the mode is changed by LOG-TRIG (LOG-TRIG > 1).

When changing the mode to Mode 1 by LOG-TRIG, Mode 1 applies to all log collection settings.

The following shows how to change the mode from Mode 2 (default at the time of shipping) to Mode 1:

- 1) Enter "1" by LOG-TRIG and click OK.
- 2) Then enter "101" and click OK.

When making another number setting after executing step 2) above, the setting made in step 1) is disabled; therefore, clear the default settings and then execute steps 1) and 2) again.

■ Limitations

When the operation on debug log goes wrong, repeated log collection/setting change can cause faulty behavior such as generating extra temporary file and log file. In such a case, execute "DEFAULT" and reset the settings on debug log, and then try again.

■ Confirming the Existence of Debug Logs (HIT-STS)

This service mode confirms whether debug logs exist in the auto save area. "OK!" is displayed if logs exist in the auto save area.

NOTE:

The status also shows "OK" by holding down the counter key + 1.2.3.

■ Initializing the Debug Log Settings (DEFAULT)

Set all debug log-related settings back to the default settings (the state at the time of shipment).

- You must perform this measure when you complete troubleshooting and return the device to the customer. (Operations required)
- Perform this measure when you reset or make another settings relating to debug log during a log collection investigation.

For log files that were automatically stored in the debug log storage space secured in the machine's controller (/var/xpt/dbglog), they kept to be stored unless the number of log files exceeds the limit. To delete the stored log (to use HIT-STS), use "LOG-DEL" described later.

■ Deleting Debug Logs (LOG-DEL)

This is a function to delete log files that have been automatically stored. The settings on log operation such as the log storage trigger are not cleared.

Normally, there is no need to use this function (the firmware automatically restricts the upper limit for the number of stored logs); however, it is necessary to delete logs by LOG-DEL when using HIT-STS to see whether the log is collected or not after changing the log storage trigger setting.

(Because the HIT-STS status always shows OK as long as there is a log that has been stored.)

Collecting the Log of Key Operations

Overview

- The key operation log function collects key operation log of the user to identify the cause of an error such as a wrong FAX transmission, to see whether the error is caused by a failure in the machine or a wrong operation of the user.
- The key operation log is not recorded with the status at the time of shipment.
- A setting is ready in "Setting/ Registration" menu to enable the saving function of key operation log.
- Only when the above setting is enabled, the machine determines that the user permission has been obtained and starts recording user operation log.
- User operation log is saved/collected to be included in sublog when the sublog is saved.
- Among the user operation log that was saved, the following confidential information is masked.
 - Password entered from the software keyboard
 - Password, PIN code, etc. entered from the numeric keypad
 - Character strings displayed with turned letters on the UI screen

NOTE:

- When the log is output, information such as passwords and PINs is output as masked characters. This can help prevent sensitive information from being leaked externally.
- Collect this log when it is determined that analysis of the firmware debug log is required.

Operation Procedure

Preparation

- USB memory device
 - Prepare a USB device that meets the following conditions.
 - Formatted with the FAT file system
 - Not locked with a password
 - Has the firmware of the corresponding model registered

Prerequisites

It is necessary to obtain user permission to record the log of key operations to analyze problems in advance.

Operation

- 1) Enable the [Store Key Operation Log] setting.
 - After obtaining user permission, select [Settings/Registration] > [Management Settings] > [Device Management] > [Store Key Operation Log].
- 2) Select [ON] and press [OK] to start saving the log of key operations.
 - ON: The log of key operations starts to be recorded.
 - OFF: The log of key operations during the period is not recorded.
- 3) Connect a USB device to the machine.
- 4) Reproduce the problem, and quickly collect the debug log.
 - Hold down the Counter key (for 10 seconds) and press numeric keys 1, 2, and 3, in that order.

NOTE:

If this operation is executed with a USB device connected to the machine in advance, debug logs and the log of key operations are saved to the USB device. If a USB device is not connected, the logs are collected later.

- 5) Collect the log of key operations with a manual trigger.
 - The log can be collected using either SST or a USB device. The procedure for collecting the log using LOG2USB is used here as an example.
 - a) Allow the host machine to recognize USB memory device storage device.
 - b) Execute the following service mode.
 - (Level2) COPIER > FUNCTION > DBG-LOG > LOG2USB
 - c) "OK!" is displayed when the processing is successfully completed. "NG!" is displayed when the processing fails.
 - d) Remove the USB memory device for log collection.

Network Packet Capture

Overview

This function enables the network packet data sent and received by the device to be collected (captured) to the hard disk without using a special device. It enables network related trouble to be efficiently resolved. Use SST or a USB device to collect the network packets saved to the hard disk.

CAUTION:
The network packet capture function may fail to collect a part of packet in a high-loaded network environment.

Overall flow

The overall flow of operations is indicated below. For details on each procedure, see the related section.

- 1) Enable network packet capture function
- 2) Perform initial settings
- 3) Start network packet capture
- 4) Stop network packet capture
- 5) Save the obtained data
- 6) Disable network packet capture

List of Related Service Mode

The service mode related to this function is indicated below.

No	Service Mode	Description	Setting value
1	CAPOFFON	Setting for enabling/disabling this function	0: Disable 1: Enable
2	STT-STP	Setting for starting/stopping network capture	0: Stop 1: Start
3.	CAPSTATE	The operation status of the capture function (displayed only)	-
4	PONSTART	Whether to automatically start capturing when the machine is turned on	0: Do not automatically start 1: Automatically start
5	OVERWRIT	Whether to overwrite old data when there is no space in the hard disk	0: Do not overwrite 1: Overwrite
6	PAYLOAD	Whether to discard customer information when obtaining data	0: Do not discard 1: Discard
7	FILE-CLR	Delete packet data in the hard disk	-
8	SIMPFILT	Whether to use the filter function	0: Do not use 1: Use

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Enabling This Function

Overview

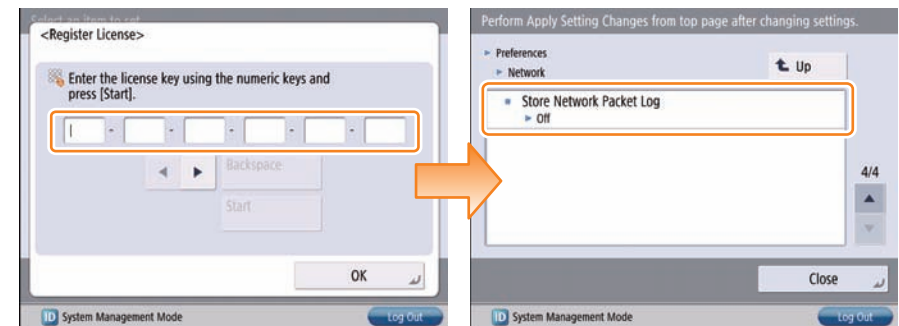
Since network packet data includes customer information, this function is not available by default. To use this function, it needs to be activated as a license option as well as service mode needs to be enabled.

When enabling this function, make sure to first explain it to the customer and obtain their approval.

Procedure for Enabling This Function

The procedure for enabling this function is indicated below.

- 1) Enter a license in the following menu to enable network capture.
[Settings/ Registration] > [Management Settings] > [License/ Other] > [Register License]
- 2) Enable the setting (ON) in the following menu.
[Settings/ Registration] > [Preferences] > [Network] > [Store Network Packet Log]



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- 3) Set "1" in the following service mode.
 - (Level2) COPIER > Test > NET-CAP > CAPOFFON

The function is now enabled.

Initial Settings

Overview

When the network capture function has been enabled/started, specify the initial settings before performing network capture.

Setting the Overwrite Function

To enable this function, set "1" in the following service mode.

- (Level2) COPIER > Test > NET-CAP > OVERWRIT

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".

Setting the Encryption Function

To enable this function, set "2" in 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.

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 device for data extraction.

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.

Setting the Payload Discard Function

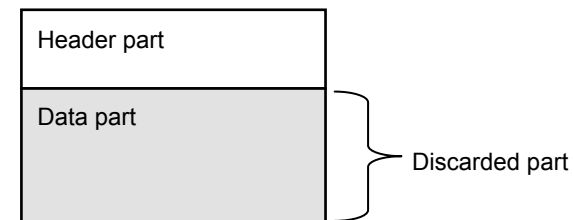
To enable this function, set "1" in the following service mode.

- (Level 2) Copier>Test>NET-CAP>PAYLOAD
 - 0: Payload is not discarded (factory setting value)
 - 1: Payload is discarded

The obtained packet data includes a header part and data part. The header part includes data such as the TCP header and IP header. The data part includes the actual data.

Enabling this function discards the actual payload data and extracts only the data from the header part, which has the following effects.

- Can be used when customer data is not allowed to be extracted
- Can be used in an environment where traffic is highly overloaded



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● Setting the Filter Function

To enable this function, set "1" in the following service mode.

- (Level 2) Copier > Test > NET-CAP > SIMPFILT
 - 0: Filtering is not performed. All the data is collected (factory default setting).
 - 1: Filtering is performed.

If this function is enabled, only packet data that includes the machine's MAC address in the packet header is captured.

● Setting the Collection Function at Startup

To enable this function, set "1" in the following 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.

Setting this service mode automatically starts collecting packet data if the condition of network packet 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.

● Deleting Files

Execute the following service mode to delete the obtained packet data.

- (level 2) Copier > Test > NET-CAP > FILE-CLR

Delete all the network packet capture data stored on the hard disk.

■ Start / Stop the Network Packet Capture Function

● Operation

To start or stop capturing network packets, set "0" or "1" in the following service mode.

- (Level2) COPIER > Test > NET-CAP > STT-STP
 - 0: The capture function is not available.(factory setting value)
 - 1: The capture function is available.

CAUTION:

Be sure to stop the network packet capture function after collecting network packet capture data.

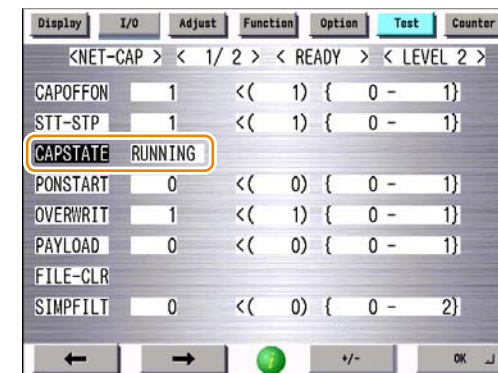
● Checking the Status of Capturing

Execute the following service mode to check the status of capturing.

- (Level2) COPIER > Test > NET-CAP > CAPSTATE

The following types of status are displayed.

- RUNNING: Packets are being captured.
- STOP: Packet capturing is stopped.
- HDDFULL: The maximum amount of 1 GB of packets has been captured.



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NOTE:

Packets are not collected if the machine enters deep sleep mode while capturing. However, capturing is resumed when the machine recovers from sleep mode.

Disabling This Function

Overview

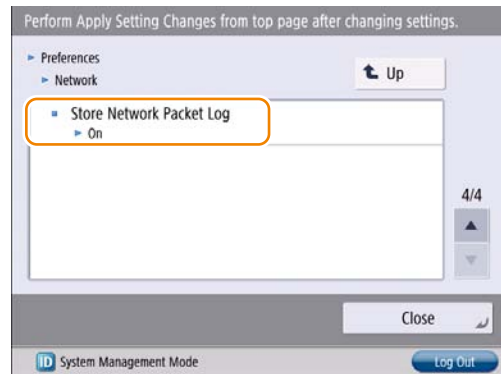
Disable this function when the required network packets have been obtained.

Procedure for Disabling This Function

The procedure for disabling this function is indicated below.

1) Disable the following items.

- [Settings/ Registration] > [Preference] > [Network] > [Store Network Packet Log]



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The function is now disabled.

When this setting is disabled, all the service mode settings are initialized.

CAUTION:

Be sure to disable the network packet 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.

Network Packet Capture Data Collection by SST

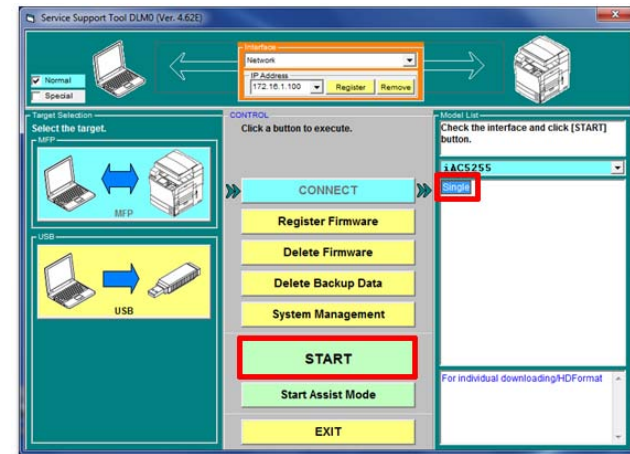
Overview

- Collect the network packet capture data that has been stored in the machine using SST.
- When using SST for collecting data, the setting of encryption function is disabled and files in clear text format/encrypted format can be always collected.
 - (level 2) Copier > Test > NET-CAP > ENCDATA

Collecting Network Capture Data

1) Start the machine by download mode, and connect SST.

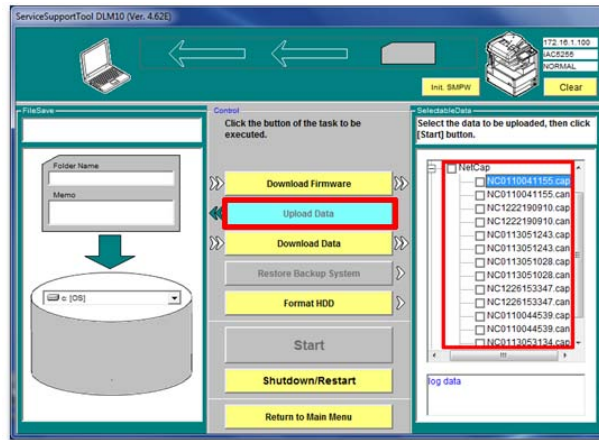
2) Select a model to connect, and click the [Single] and the [Start] buttons.



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3) Click the [Upload Data] button.

4) 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.

● Confirm the network packet capture data

1) Open the following folder and check the capture data.

In the case of the default installation destination for SST:

- C drive > ServData > target model (e.g.: iAC3300) > Device's serial number
- 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 packet capture files (ufset.txt).

Name	Date modified	Type	Size
NetCap	1/16/2012 6:49 PM	File folder	
20120116184931.ufset.txt	1/16/2012 6:49 PM	Text Document	

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Name	Date modified	Type	Size
NC0110041155.can	1/16/2012 6:48 PM	CAN File	24,184 KE
NC0110041155.cap	1/16/2012 6:48 PM	CAP File	24,184 KE
NC0110044539.can	1/16/2012 6:48 PM	CAN File	15,430 KE
NC0110044539.cap	1/16/2012 6:48 PM	CAP File	15,430 KE

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2) Use free software to analyze the collected network packet capture data in clear text format (xxx.cap) if it can be analyzed.

NOTE:

When the analysis work fails, send the file in encrypted format (xxx.can) to sales company's Support Dept.

USB Network Packet File Collection

Overview

Collect the network packet capture data that has been stored in the machine using a USB memory device.

Make sure to store the system software of the machine to connect to in the USB device to connect with.

Collect the network packet capture data

1) Connect the USB memory device to the USB port.

2) Enter download mode.

When the machine recognizes the USB memory device, download Menu (USB) appears on the Control Panel.

3) Select [8]: Download File.

```

[[[[[[[[[[ Root Menu (USB) ]]]]]]]]]
-----
[1]: Select Version
[4]: Clear/Format
[5]: Backup/Restore
[8]: Download File
[Reset]: Start shutdown sequence

/[8] has been selected. Execute?/
- (OK) :0 / (CANCEL) :Any other keys -
  
```

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4) Select [5]: Netcap Download, and select [0]: OK.

```

[[[[[[[[[[ Download File Menu (USB) ]]]]]]]]]
-----
[1]: SUBLOG Download
[4]: ServicePrint Download
[5]: Netcap Download
[C]: Return to Main Menu
[Reset]: Start shutdown sequence

/[5] has been selected. Execute?/
- (OK) :0 / (CANCEL) :Any other keys -
  
```

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Store all the network packet capture data stored in the machine on the USB memory device.

5) When “---Please hit any key---” appears, press any key.

6) Press the [C] key to return to the download Menu (HDD).

7) Press the [Reset] key to shut down the machine.

Collect the network packet capture data

1) Check that the network packet capture files are stored on the USB memory device.

Two types of files are collected; a file in clear text format (xxx.cap) and a file in encrypted format (xxx.can).

Name	Date modified	Type
NC0110041155.can	1/22/2015 11:34 AM	CAN File
NC0110041155.cap	1/22/2015 11:34 AM	CAP File
NC0110044539.can	1/22/2015 11:34 AM	CAN File
NC0110044539.cap	1/22/2015 11:34 AM	CAP File
NC0110051028.can	1/22/2015 11:34 AM	CAN File
NC0110051028.cap	1/22/2015 11:34 AM	CAP File
NC0110051243.can	1/22/2015 11:34 AM	CAN File
NC0110051243.cap	1/22/2015 11:34 AM	CAP File
NC0110053134.can	1/22/2015 11:34 AM	CAN File
NC0110053134.cap	1/22/2015 11:34 AM	CAP File
NC1222190910.can	1/22/2015 11:34 AM	CAN File
NC1222190910.cap	1/22/2015 11:34 AM	CAP File
NC1226153347.can	1/22/2015 11:34 AM	CAN File
NC1226153347.cap	1/22/2015 11:34 AM	CAP File

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2) 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 the Support Dept. of your sales company.
- Captured data collected as plain text is discarded.

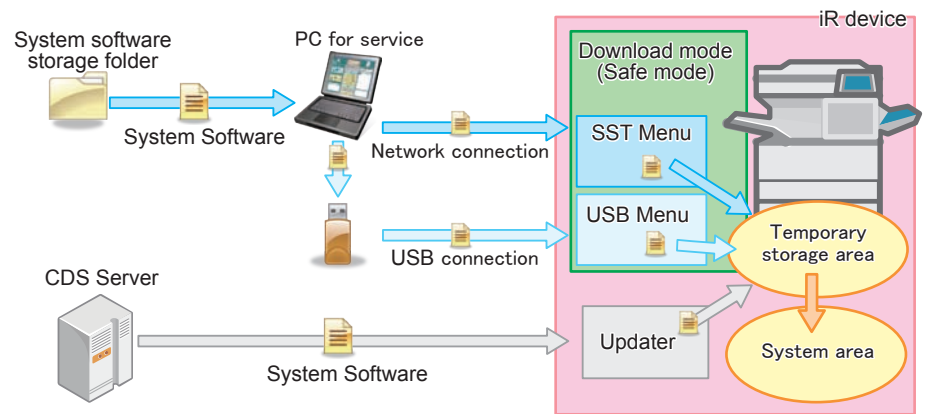
Version Upgrade

Overview

Overview of Version Upgrade

The following two methods exist for backing up the system of the device.

- Obtaining the system software and manually upgrading using Service Support Tool (hereinafter referred to as "SST") or a USB device
- Using the Updater function to access Contents Delivery System (hereinafter referred to as "CDS") and upgrading.



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System Software Configuration

The table below shows the system software configuration 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	CDS	
Host Machine						
SafeCont	iAC 3330	SYSTEM	✓	✓	✓	
StdCont : Language Module		LANGUAGE	✓	✓	✓	
Printer Controller		DCON	✓	✓	✓	
FAX Board Boot Program		G3CCB	✓	✓	✓	Super G3 FAX Board-AR1
FAX Board Main Program		G3CCM	✓	✓	✓	Super G3 FAX Board-AR1
Staple Finisher-U1						
Finisher Controller	FIN_U1	FIN_CON	✓	✓	✓	Staple Finisher-U1

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The finisher of this machine support version upgrade via the host machine in any of the abovementioned methods, i.e., via SST, USB memory storage device or CDS.

Limitation

Do not turn OFF the power while downloading/writing the system software.

Doing so may cause a failure of machine startup.

If the machine becomes unable to start, start it up in download mode (safe mode) (by turning ON the power while pressing numeric keys 2 and 8), and download the software again.

NOTE:

With the previous models, the error code of E753-0001 occurs when downloading the system software for the option that is not installed. With this machine, however, no error occurs even if downloading the system software for the option that is not installed.

■ Upgrading Procedure

● Obtaining the System Software (when Using SST or a USB Device)

Access the CDS server and download the system software of the machine.

When downloading the software, download the software for SST.

Save the downloaded software to the PC in which SST is installed.

● Starting the Machine in Download Mode (when Using SST or a USB Device)

Perform one of the following procedures to enter download mode.

- Entering download mode from service mode (recommended)
 - COPIER > Function > SYSTEM > DOWNLOAD
- Starting the machine while pressing numeric keys 2 and 8 (safe mode)

● Upgrading the System Software

Upgrading is performed in two steps: downloading the system software and then writing it.

Download the system software with SST, a USB device, or via the Internet.

The system software downloaded to the machine is stored in the temporary storage space.

When the machine is restarted, the downloaded system software is written to the system area and applied.

When the system software is successfully applied, the machine is automatically restarted using the downloaded system software.

- Upgrading with SST
 - For details on the procedure, refer to "Version Upgrade via SST".
- Upgrading with a USB Device
 - For details on the procedure, refer to "Version Upgrade using USB Memory Storage Device".
- Upgrading with CDS
 - For details on the procedure, refer to "Updater".

● Checking the Version

Execute the following service mode to confirm whether the processing was completed correctly.

- COPIER > DISPLAY > VERSION

■ Automatic Update

In addition to the system software for the Main Controller, the machine retains the system software for DCON and all options in its Main Controller.

Therefore, when options are installed, etc., their versions and the versions retained in the Main Controller are compared and automatically updated to a combination of versions that is guaranteed to operate.

Target PCB	COPIER > DISPLAY > VERSION
DC Controller PCB	DC-CON
Finisher Controller PCB	SORTER
Saddle PCB	SDL-STCH (when the Saddle Finisher-U1 is connected)

T-6-20

1) The following service mode needs to be set.

- COPIER > Option > FNC-SW > VER-CHNG
 - 2: Perform both an upgrade and a downgrade
 - 1: Perform an upgrade only
 - 0: Disable the automatic update function

CAUTION:

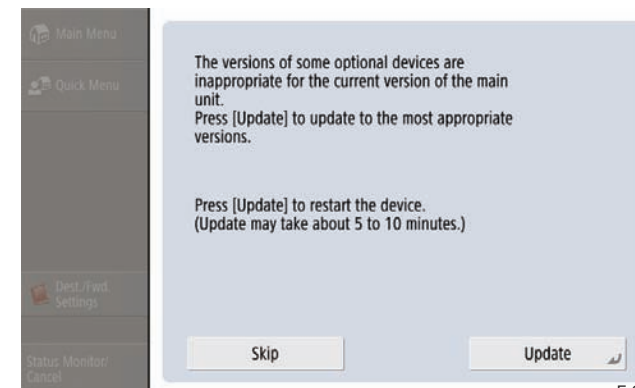
If "1" is set when a mismatch occurs in multiple modules, the update processing is not performed if any of the modules is downgraded (a notification screen is also not displayed).

Due to a combination of versions that is not guaranteed to operate, the operation of the machine is not guaranteed in this state.

2) Version mismatch is detected during normal startup.

[Update]: The machine is automatically restarted and the update processing is performed.

[Skip]: The notification screen is closed and the update processing is not performed.

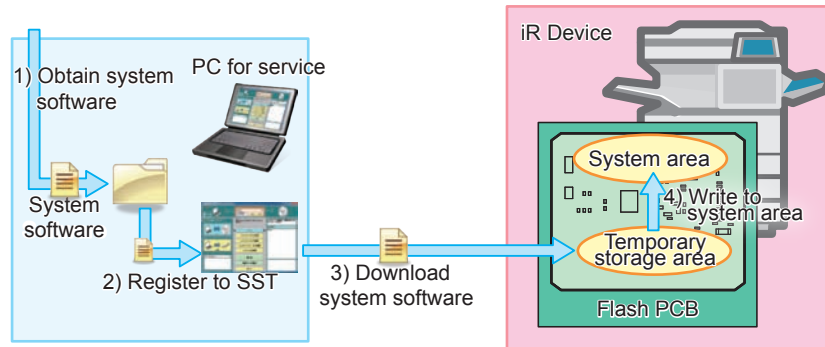


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Version Upgrade via SST

Overview

Overview of Upgrading Using SST



F-6-53

- 1) Obtain the system software and save it to the PC in which SST is installed.
- 2) Start SST, and register the saved system software to SST.
- 3) Connect the PC to the machine that has been started in download mode, and download the system software.
- 4) When the machine is automatically restarted, the system software is written to the system area.
- 5) The machine is automatically restarted after the writing processing is completed.

SST Operation Mode

Upgrading with SST operates with the following two modes.

Operation Mode	Features and Purpose
Assist mode	<ul style="list-style-type: none"> Automatically identifies the connecting model Automatically searches the new version of the system software for the connecting model Automatically downloads the system software in the combination of the versions, which the operation has been checked.
Single mode	<ul style="list-style-type: none"> Does not identify the connected model Use the single mode only in the following cases: <ul style="list-style-type: none"> When downloading a part of system software such as the DCON or an option. When uploading/ downloading the backup data.

Basically, use the assist mode to download the system software of this machine.

T-6-21

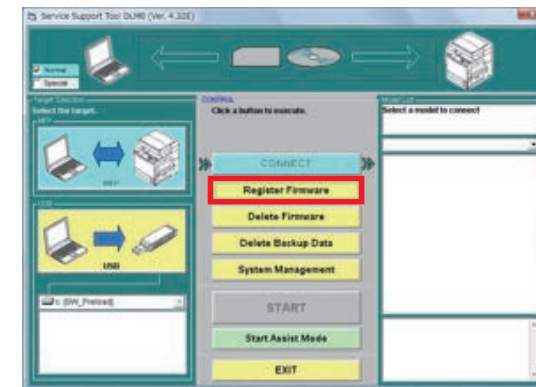
Registering to SST

Register the system software stored in the system file storage folder to SST.

NOTE:

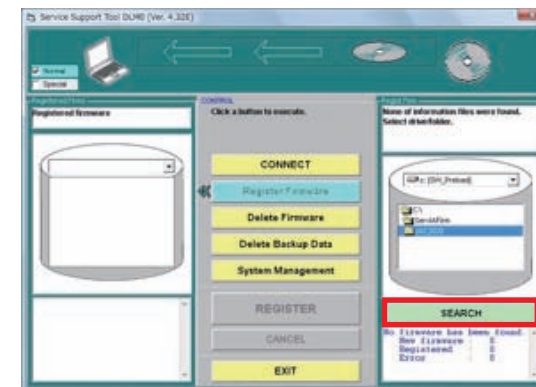
When the system software has been compressed, decompress the compression file and then register the file to SST.

- 1) Connect this machine and the PC with SST installed.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > Function > SYSTEM > DOWNLOAD
- 3) Start SST, and click the [Register System Software] button.



F-6-54

- 4) Select the folder containing the system software and click the "Search" button.



F-6-55

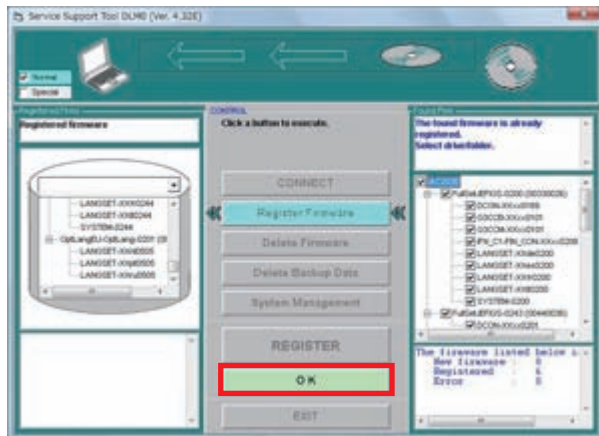
NOTE:
“XXXX” in the figure describes the version of system software.

- 5) A list of system software in the folder is displayed.
Deselect the checkbox of unnecessary folder(s) and/or system software and click the “Register” button.



F-6-56

- 6) Click the [OK] button after the message telling completion of system software registration is displayed.



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Connection

The following IP address is automatically assigned for this machine at startup 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 as follows:

- IP address: 172.16.1.160
- Subnet mask: 255.255.255.0
- Default gateway: arbitrary

CAUTION:

Ensure that the PC is disconnected from the network when you change the PC network settings. Alternatively use the cross cable to connect to this machine.

- 1) Connect this machine and the PC with SST installed.

CAUTION:

Disconnect USB memory storage devices if connected.

This machine disables the communication to SST if any USB memory storage device is recognized. SST and the USB memory storage device cannot be used concurrently.

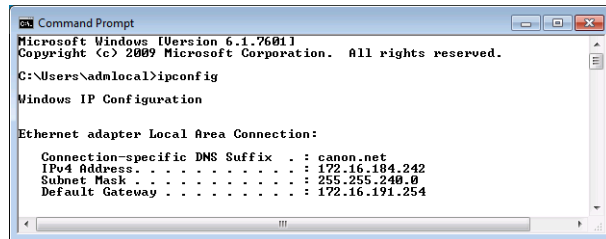
- 2) Turn ON the main power switch of this machine.
- 3) Execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD

4) Check the IP address of the PC.

Go to Start menu to select the following: Program > Accessory > Command Prompt.

Type IPCONFIG and press the [Enter] key 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.



```

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\admlcal>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : canon.net
    IPv4 Address. . . . . : 172.16.184.242
    Subnet Mask . . . . . : 255.255.240.0
    Default Gateway . . . . . : 172.16.191.254
  
```

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CAUTION:

The network settings cannot be shown with IPCONFIG if the PC is disconnected from the network. To check the settings, ensure that this machine is turned ON, and connect the PC and this machine with the cross cable.

Upgrading the System Software

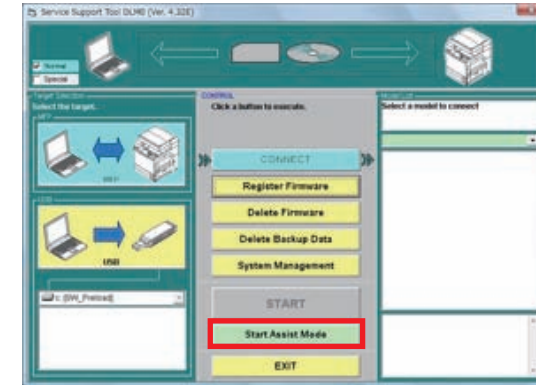
Assist mode

1) Connect this machine and the PC with SST installed.

2) Turn ON the machine power and execute the following service mode to enter download mode.

- COPIER > FUNCTION > SYSTEM > DOWNLOAD)

3) Start SST, and click the [Start Assist Mode] button.



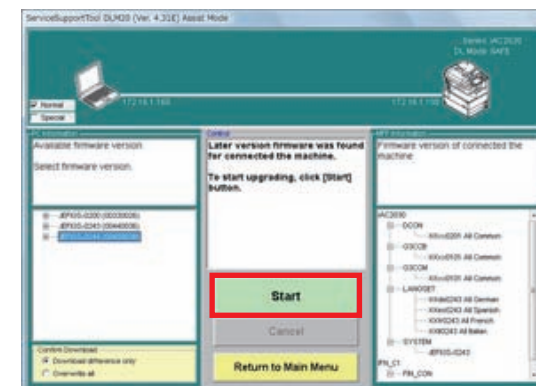
F-6-59

If newer combination of the system software is stored in SST, the new combination is automatically selected.

NOTE:

If only the existing system software combination is stored, none of them are selected. Any versions of the existing system software can be downloaded by manual selection.

4) Click the [Start] button.



F-6-60

Writing process is started when download is completed.
 The machine is restarted twice during the writing process.
 Upon completion of the writing process, the main menu is displayed.

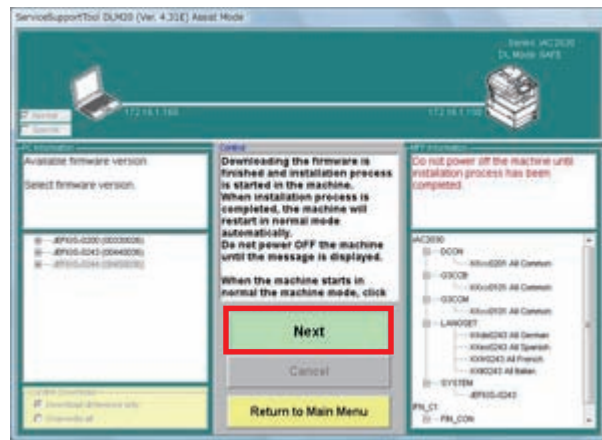
NOTE:
 Download is confirmed in any of the following 2 modes:

- Downloading of the difference only: "Skip the existing versions and confirm whether to download the downgraded versions"
- Overwrite all versions

Regardless of version upgrade or downgrade, all versions of the system software are downloaded without the confirmation message.

"Skip the existing versions and confirm whether to download the downgraded versions" can be selected when the checkbox for SYSTEM is selected. There is no choice but to select "Overwrite all versions" when the checkbox for SYSTEM is not selected.

5) Click the [Next] button.



F-6-61

6) Click the [OK] button.

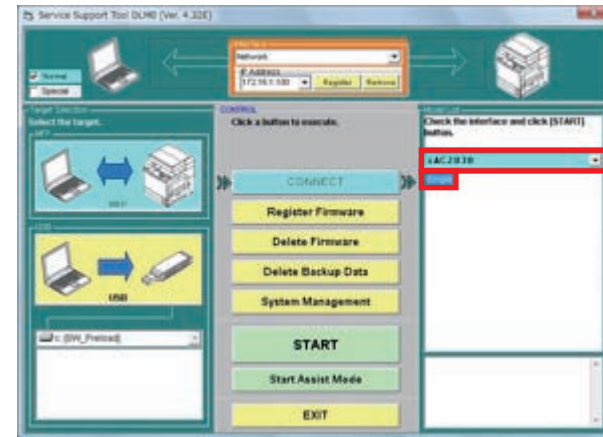
7) Enter service mode to check the version of the system software.

NOTE:
 When an error occurs during version upgrade, the machine is normally started with the previous version of the system software (the version before the upgrade). After version upgrade, be sure to check if the version of the system software is changed to the version you downloaded.

● Single mode

The following is the sample steps to download the DCON (the other components of the system software can be downloaded similarly)

- 1) Connect this machine and the PC with SST installed.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) Start SST. Select the model to be connected and "Single", check the network settings. Click the "Start" button.



F-6-62

NOTE:

The following device information is shown at the right top of SST screen.

- IP address
- Model name
- Download mode



F-6-63

4) Select the DCON version to be downloaded and click the “Start” button.

Multiple files of system software can be selected in this step. Selecting SYSTEM automatically selects the language software that supports the selected system.



F-6-64

NOTE:

Download is confirmed in any of the following 2 modes:

- Downloading of the difference only: “Skip the existing versions and confirm whether to download the downgraded versions”
- Overwrite all versions
Regardless of version upgrade or downgrade, all versions of the system software are downloaded without the confirmation message.

“Skip the existing versions and confirm whether to download the downgraded versions” can be selected when the checkbox for SYSTEM is selected. There is no choice but to select “Overwrite all versions” when the checkbox for SYSTEM is not selected.

NOTE: Checking execution status for download
Once download is started, the process up to the writing process is automatically executed. You cannot interrupt or add the process in the middle of the operation. The following confirmation message is displayed when downloading is executed.



F-6-65

5) When download is completed, click the [OK] button.

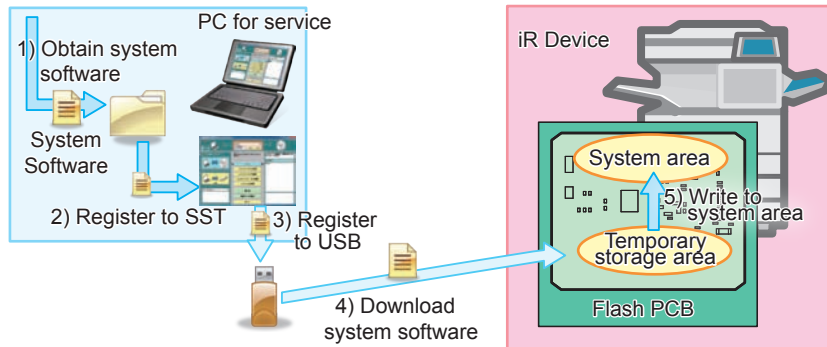
This machine is automatically restarted.

6) Enter service mode to check the version.

Version Upgrade using USB Memory Storage Device

Relation between SST and USB memory storage device

When using the USB memory storage device for version upgrade, the system software should be copied to the USB memory storage device.



F-6-66

- 1) Obtain the system software and save it to the PC in which SST is installed.
- 2) Start SST, and register the saved system software to SST.
- 3) Register (save) the registered system software to the USB device.
- 4) Connect the USB device to the machine that has been started in download mode, and download the system software.
- 5) When the machine is automatically restarted, the system software is written to the system area.
- 6) This machine is automatically restarted after the writing process is completed.

Upgrading with a USB device operates with the following three modes.

- Update (Auto)
Compares the versions of the system software in the machine and the USB device, and downloads only system software that is a new version.
- Update (w Confirmation)
Compares the versions of the system software in the machine and the USB device, and downloads system software if it is a new version. You can select whether to download the software if it is an old version.
- Update (Overwrite all)
Downloads all the system software in the USB device, regardless of the system software version in the machine.

It is recommended that you use "Update (Auto)" when upgrading the system software of the machine.

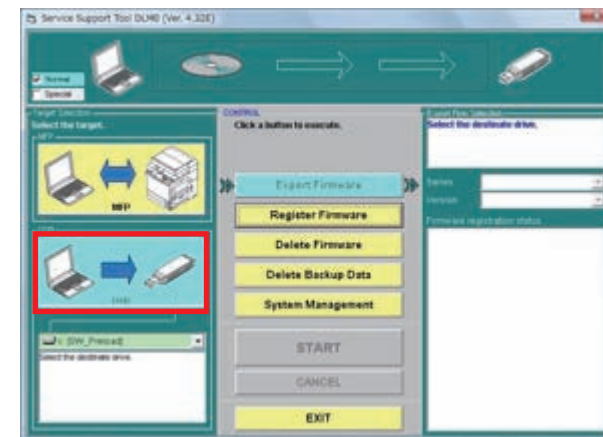
Register the system software

Register the system software registered in SST to the USB memory storage device. For information on registering to SST, refer to "Registering to SST".

NOTE:

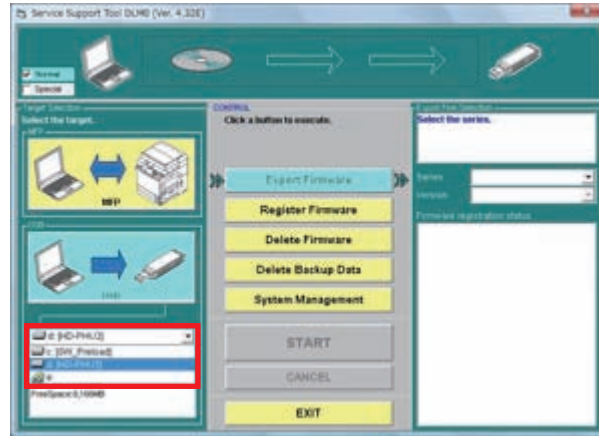
- Multiple versions of software can be saved simultaneously in the USB memory storage device with this machine (up to 9 versions)
- The following USB devices can be used.
Interface: USB1.1 or later (USB2.0 is recommended)
Memory capacity: 1GB or more is recommended (the total file size of the system software is approx. 350MB)
Format: FAT (FAT16), FAT32 (NTFS and HFS are not supported). The memory is formatted in a partition (multiple partitions are not supported)
Unusable USB memory storage device: the memory that is protected by a password or the encryption technology.

- 1) Connect the USB memory storage device to the PC.
- 2) Start SST. Click the USB icon shown in [Select the target] screen.



F-6-67

3) Select the drive (removable disk) where the USB memory storage device is inserted.



F-6-68

4) Select the [Series].

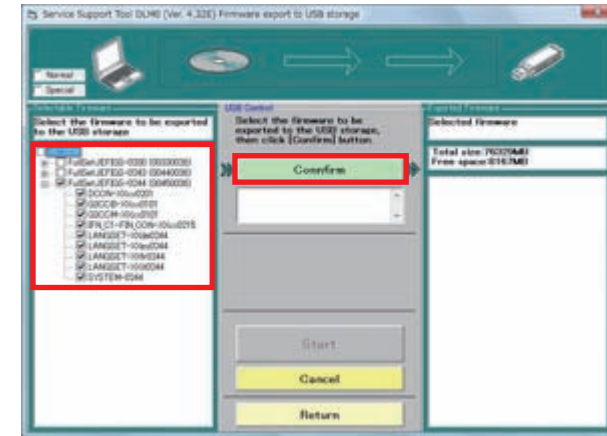


F-6-69

5) Select the version to register. After selecting the version, click [Confirm] button.

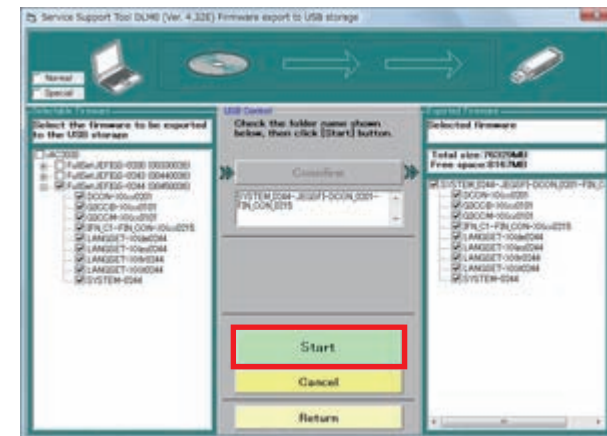
NOTE:

Only one version can be registered at once. In addition, a single system software can be registered.



F-6-70

6) When the firmware to be written is displayed, click [Start].

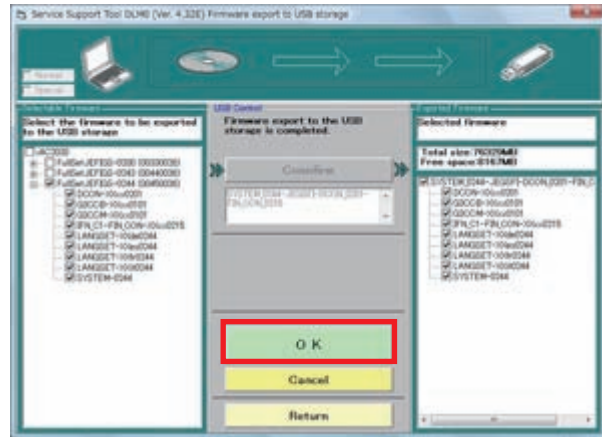


F-6-71

NOTE:

In the case of using USB1.1, it takes approx. up to 10 minutes for writing. In the case of using USB2.0, it takes approx. up to 3minutes so it is recommended to use USB memory supporting USB2.0.

- 7) When the system software is successfully registered to the USB memory storage device, click the [OK] button.



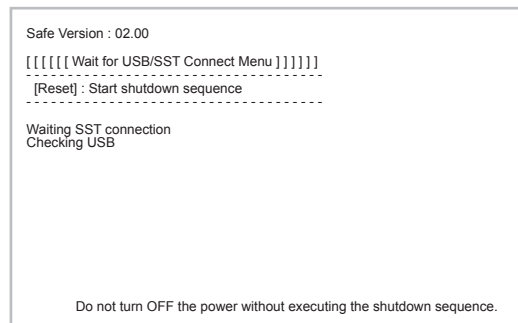
F-6-72

Connection

CAUTION:

This machine does not communicate with SST once it recognizes a USB memory storage device. Therefore, SST and a USB memory device cannot be used at the same time.

- 1) Remove the network cable if any network cable is connected to this machine.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) The following screen is displayed.



F-6-73

- 4) Connect the USB memory storage device to the USB port.

NOTE:

The USB port at the back of the device can be used as well.

- 5) When the machine recognizes the USB memory storage device, the following menu is displayed on the control panel.

```
[[[[[[[[[ Root Menu (USB) ]]]]]]]]]
```

```
[1] : Select Version
```

```
[4] : Clear/Format
```

```
[5] : Backup/Restore
```

```
[8] : Download File
```

```
[Reset] : Start shutdown sequence
```

Do not turn OFF power without executing the shutdown sequence.

F-6-74

CAUTION:

Depending on the manufacturer or the model, this machine may fail to recognize the USB memory storage device.

This machine retries recognition of a USB memory storage device for up to 60 seconds after power-ON. The above menu is not displayed if the machine fails to recognize a USB memory storage device within the time period.

In such a case, use another USB memory storage device.

CAUTION: Note when the power is turned OFF

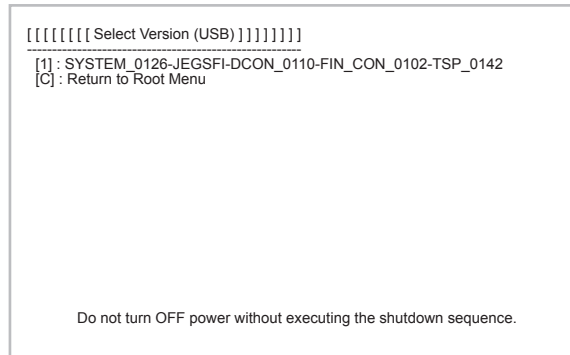
- To prevent unnecessary error, do not turn OFF the power during downloading or writing of the system software although the machine can be normally started using the previous version thanks to the recovery mechanism when an error occurs.
- Be sure to execute the following procedure to quit download mode.
 - 1) Pressing the [Reset] key and then the [0] key on the menu screen initiates the shutdown sequence.
 - 2) Once the message on the touch panel disappears, turn OFF the main power switch.

Upgrading System Software

[1]: Upgrade (Auto)

Compares the versions of the system software in the machine and the USB device, and downloads only system software that is a new version in the USB device.

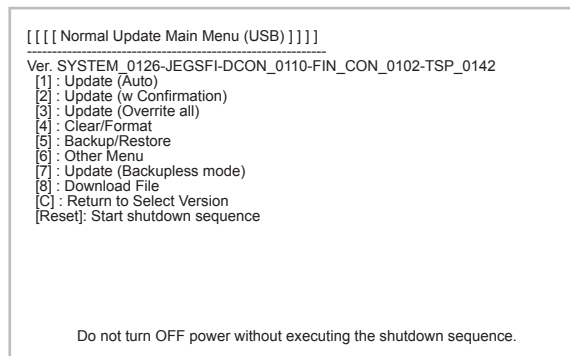
- 1) Remove the network cable if any network cable is connected to this machine.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) Connect the USB memory storage device to the USB port.
- 4) Press [1] and select the version of system software to be used on the screen for selecting version.



F-6-75

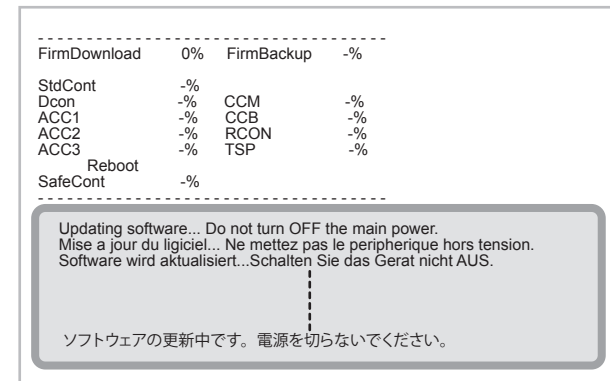
- 5) Select [1]: Update (Auto) to start download.

[1] to [0]: Execute download/ any key other than [0]: Return to the menu screen



F-6-76

During the download process, download status is displayed on the control panel.



F-6-77

Writing to the system software area on the FLASH PCB is started once download is completed. When writing to the Dcon (ACC1, CCM or CCB if there is an option) is completed, the machine is automatically restarted. After writing of SafeCont is completed, the machine is automatically restarted again.

- 6) When the main menu is displayed, press the removal key at the bottom right on the touch panel and select removal of memory media device, and then remove the USB memory storage device.
- 7) Enter service mode to check the version.

[2]: Upgrade (w Confirmation)

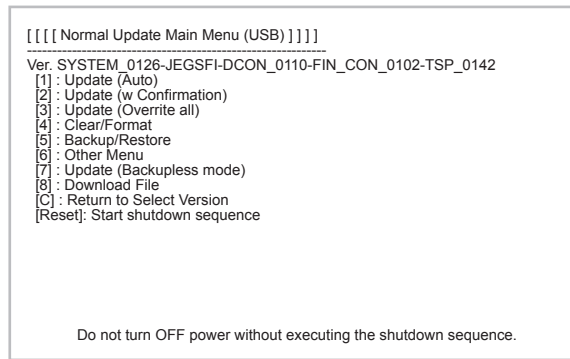
Compares the versions of the system software in the machine and the USB device, and downloads system software that is a new version in the USB device.

When the versions of system software in the USB memory storage device are older version, a confirmation message is displayed on the control panel so that the user can select whether to overwrite or not. This step is skipped when the target software is the same version.

- 1) Remove the network cable if any network cable is connected to this machine.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) Connect the USB memory storage device to the USB port.
- 4) Press [1] and select the version of system software to be used on the screen for selecting version.

5) Select [2]: Update (w Confirmation) to start downloading.

[2] - [0]: Execute download/ any key other than [0]: Return to the menu screen



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NOTE:

When the system software version in the USB memory storage device is older than the system software version in the device, a confirmation message as to whether to overwrite or not is displayed on a module basis. Press the key on the control panel.
[0]: Overwrite/ any key other than [0]: Not to overwrite

When download is completed, this machine is automatically restarted to start writing to the system software area in the FLASH PCB. When writing to the Dcon (ACC1, CCM or CCB if there is an option) is completed, the machine is automatically restarted. After writing of SafeCont is completed, the machine is automatically restarted again.

6) When the main menu is displayed, press the removal key at the bottom right on the touch panel and select removal of memory media device, and then remove the USB memory storage device.

7) Enter service mode to check the version.

● [3]: Upgrade (Overwrite all)

Regardless of the system software version in the machine, all the system software in the USB memory storage device is downloaded.

NOTE:

All firmware update may take up to 25 minutes. To reduce downtime, we recommend using [Update (Auto)] under normal condition.

1) Remove the network cable if any network cable is connected to this machine.

2) Turn ON the machine power and execute the following service mode to enter download mode.

- COPIER > FUNCTION > SYSTEM > DOWNLOAD

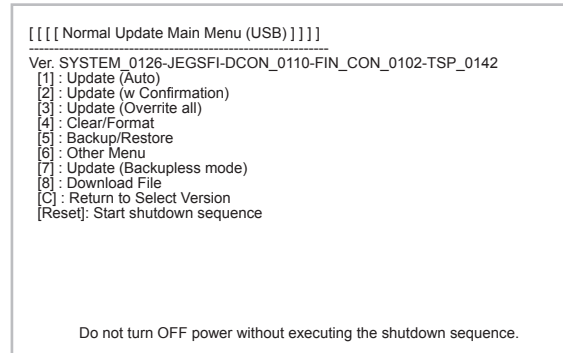
3) Connect the USB memory storage device to the USB port.

4) Press [1] and select the version of system software to be used on the screen for selecting version.

5) Select [3]: Update (Overwrite all) to start downloading.

[3] - [0]: Execute download/ any key other than [0]: Return to the menu screen

During the download process, download status is displayed on the control panel.



F-6-79

When download is completed, this machine is automatically restarted to start writing to the system software in the FLASH PCB. When writing to the Dcon (ACC1, CCM or CCB if there is an option) is completed, the machine is automatically restarted. After writing of SafeCont is completed, the machine is automatically restarted again.

6) When the main menu is displayed, press the removal key at the bottom right on the touch panel and select removal of memory media device, and then remove the USB memory storage device.

7) Enter service mode to check the version.

Version Upgrade via CDS

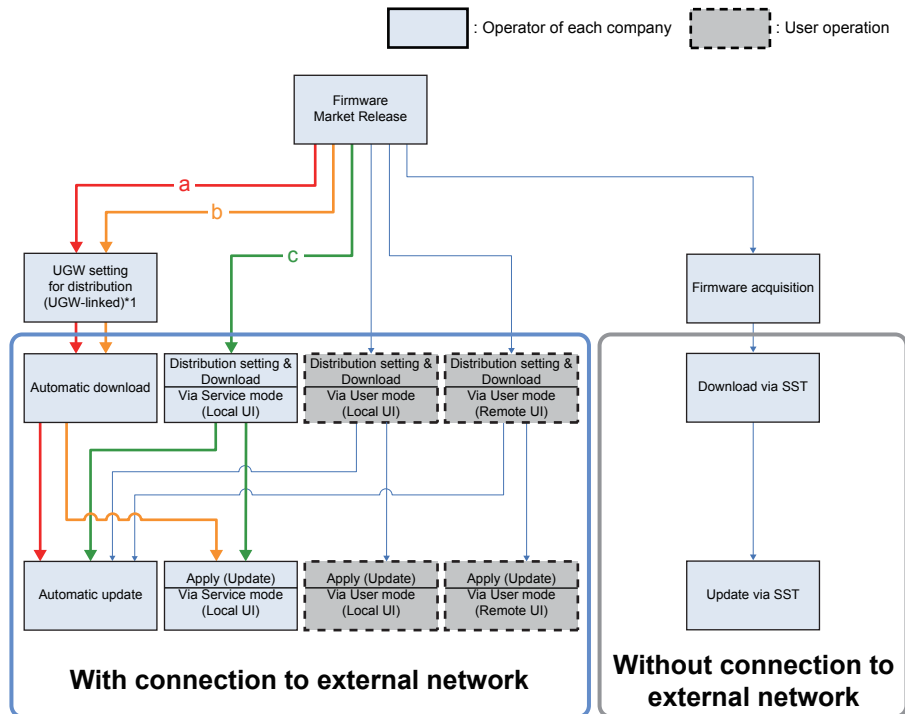
Overview

Among the 4 methods in which service technicians provide firmware install services, the following 3 methods are available using Updater functions.

UGW-linked Download and Update (Full-remote Update)

UGW-linked Download (Remote Distribution Update)

Manual Download and Update (On-site Update from Service Mode)



*1: Schedules for UGW-linked distribution are maintained on CDS.

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Preparation

The following preparations are required to upgrade with CDS.

Installation Method	Setting Sales Company's HQ	Network Settings	Enabling UGW Link	Enabling [Update Firmware] Button	Enabling [Manual Update] Button of Remote UI
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

T-6-22

For details on the procedure, refer to Chapter 2, "Preparation."

CAUTION:

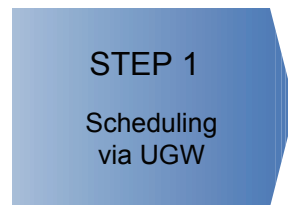
Firmware update will not be triggered when any of the following jobs remains in the queue.

- Print
- Scan
- Fax (except I-FAX; this function is enabled for I-FAX only during Print/Scan operation)

See the section of "Wait for EOJ (end of job) Function" under "Limitations and Cautions", "Updater" of Chapter 2 "Technology" of this manual for more detailed information.

■ UGW-linked Download and Update (Full-remote Update)

See the figure below for the operational flow of “UGW-linked Download and Update”.



F-6-81

● Scheduling via UGW

The firmware distribution schedule to the certain device should be set on UGW. See “UGW-linked Download and Update” of Operation Manual of Content Delivery System for Firmware Distribution for details.

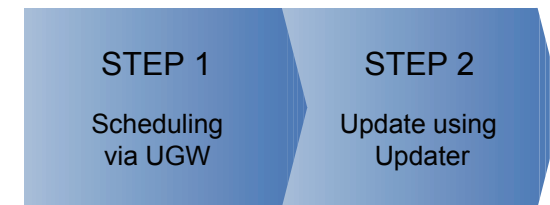
The device checks the schedule concerned every 12 hours on UGW. This allows the device to register the firmware distribution setting, enabling automatic firmware download and update.

NOTE:

To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

■ UGW-linked Download (Remote Distribution Update)

See the figure below for the operational flow of “UGW-linked download”.



F-6-82

● Scheduling via UGW

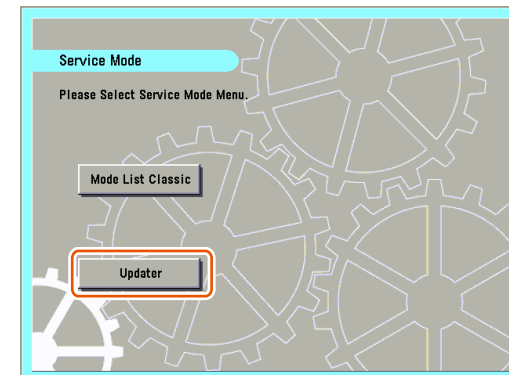
The firmware distribution schedule to the certain device should be set on UGW. See “UGW-linked Download” in Operation Manual of Content Delivery System (for Firmware Distribution) for details.

NOTE:

The firmware downloaded by scheduling via UGW can be checked/deleted from [Settings/ Registration] menu, but cannot be updated. If a user download the other firmware, the firmware downloaded with "UGW-linked Download" is overwritten.

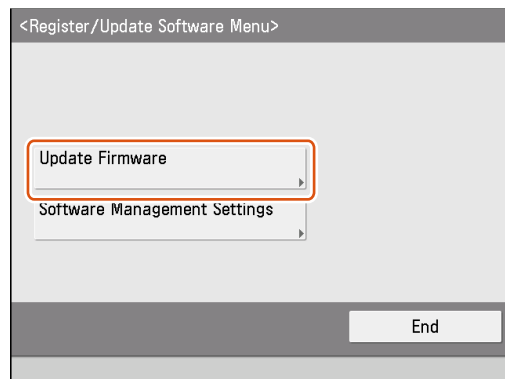
● Update using Updater

1) Press [Updater] in the service mode menu.



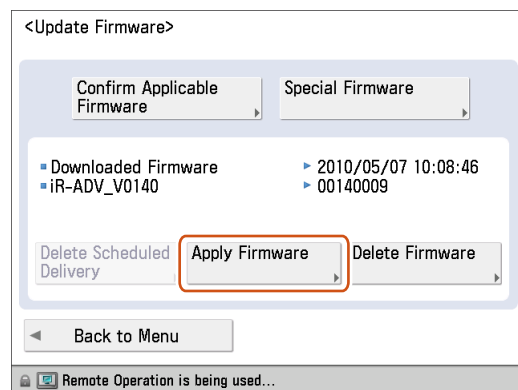
F-6-83

2) Press [Update Firmware] button.



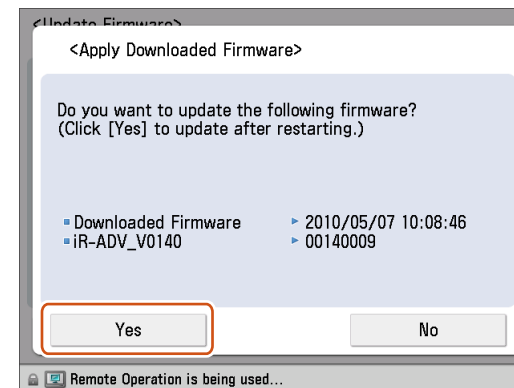
F-6-84

3) Press [Apply Firmware] button.



F-6-85

4) Confirm the downloaded firmware and press [Yes] button.



F-6-86

5) The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

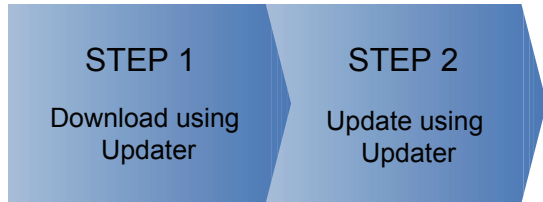
6) When the device is restarted, confirm the version of the firmware.

NOTE:

To contacts registered for E-mail notification on UGW, the E-mail is sent from UGW upon completing firmware update.

Manual Download and Update (On-site Update from Service Mode)

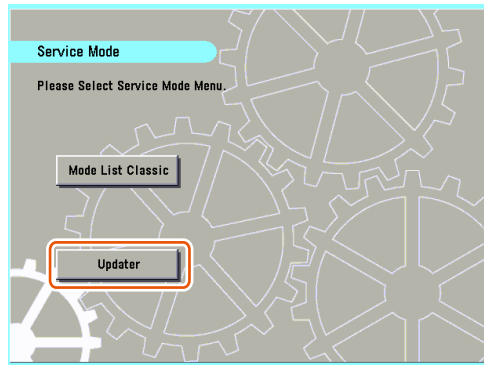
The figure below shows the operational flow of "Manual Download and Update".



F-6-87

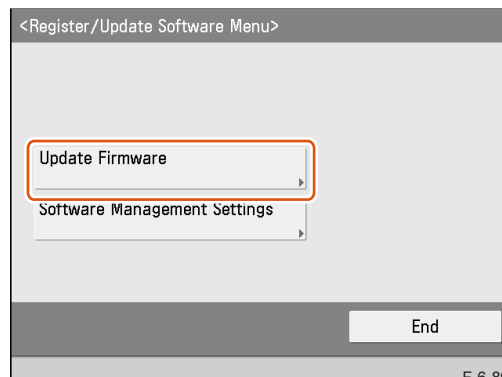
Download using Updater

1) Press [Updater] in the service mode menu.



F-6-88

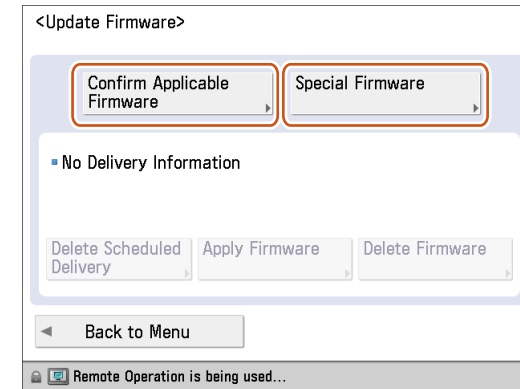
2) Press [Update Firmware] button.



F-6-89

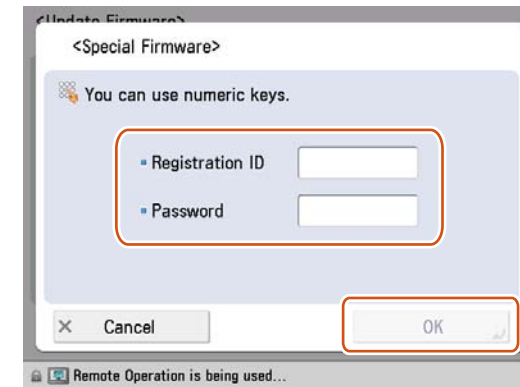
3) Confirm the firmware to be updated in either of the following 2 ways.

- 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-6-90

4) [Special Firmware] screen is shown as below. Enter the fields and press [OK] button.

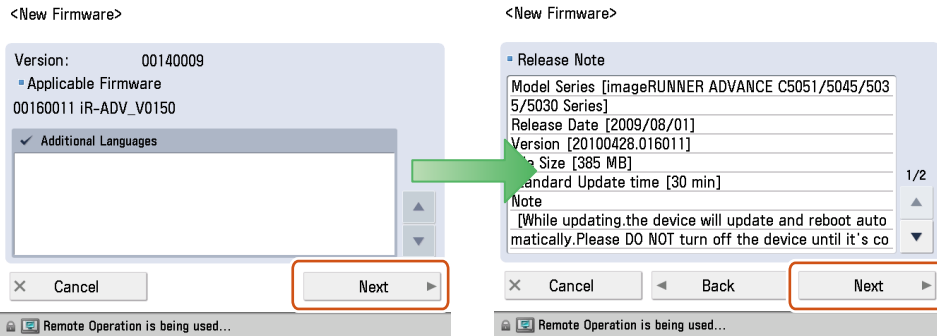


F-6-91

Item	Content
Retrieval ID	Enter numeric up to 8 characters.
Password	Enter numeric up to 8 characters.

T-6-23

5) [New Firmware] screen is shown as below. Check the contents and press [Next] button.



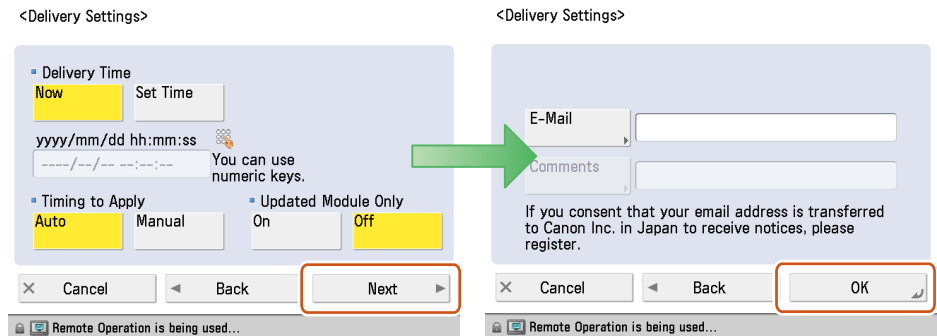
F-6-92

Item	Content
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.

T-6-24

NOTE:
To update to the individual response edition, the firmware corresponding to the ID and password that you input is displayed in [Applicable Firmware].

6) [Delivery Settings] screen is shown as below. Enter the fields and press [OK] button.

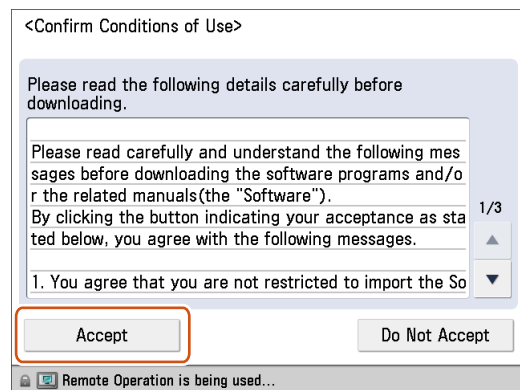


F-6-93

Item	Contents	Remarks
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 7 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.	For firmware versions with no remote update permission, [Auto] cannot be selected in [Timing to Apply]
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.	For firmware versions with no difference-only delivery disabled, only [OFF] can be selected in [Updated Module Only].
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.	<ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> Distribution Set Distribution Started Distribution Finished Update Started Update Finished Error Occurred
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.	-

T-6-25

7) Confirm Export Criteria screen is shown as below. Check the contents and press [Accept] button.

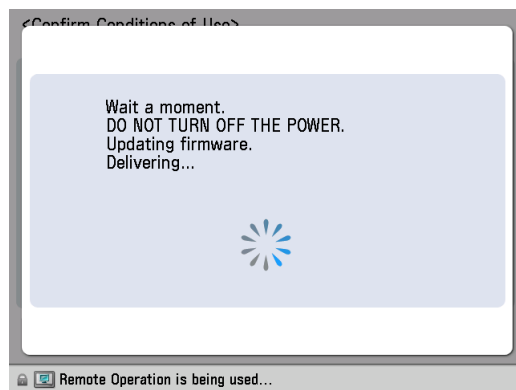


F-6-94

8) 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:

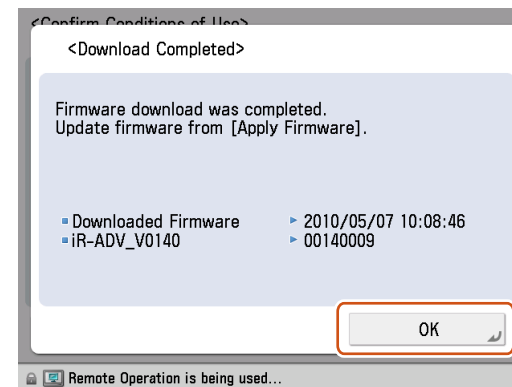
Firmware is downloaded and updated automatically to the device. The device is automatically restarted upon update completed. Now STEP 1 is successfully completed.



F-6-95

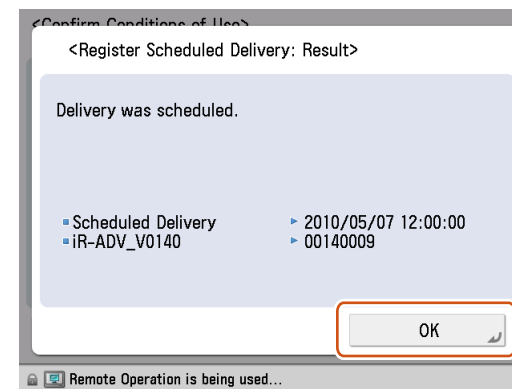
- When Distribution Time and Timing to Apply of Distribution Setting are set to [Now] and [Manual], respectively:

Confirm the firmware and press [OK] button. Now STEP 1 is successfully completed.



F-6-96

- 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.



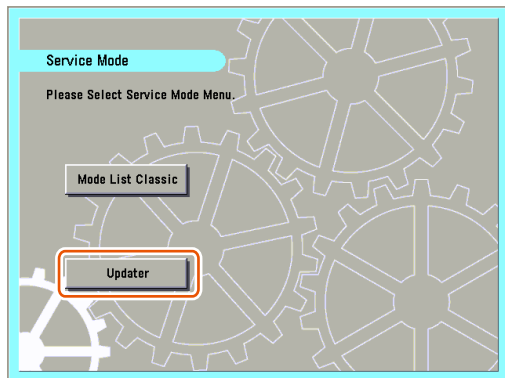
F-6-97

Update using Updater

The firmware downloaded to this device can be updated using Updater functions.

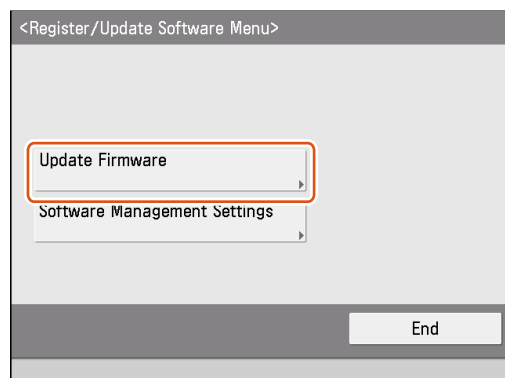
When Timing to Apply is set to [Auto] in Distribution Setting in STEP 1, the firmware is updated automatically. Only when Timing to Apply is set to [Manual], follow the steps below to update the firmware.

1) Press [Updater] in the service mode menu.



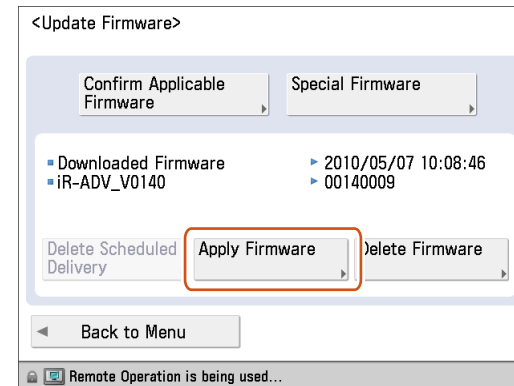
F-6-98

2) Press [Update Firmware] button.



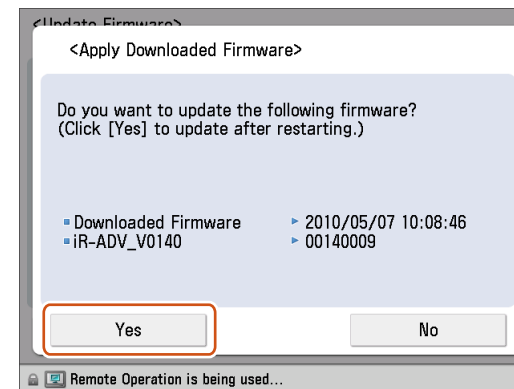
F-6-99

3) Press [Apply Firmware] button.



F-6-100

4) Confirm the downloaded firmware and press [Yes] button.



F-6-101

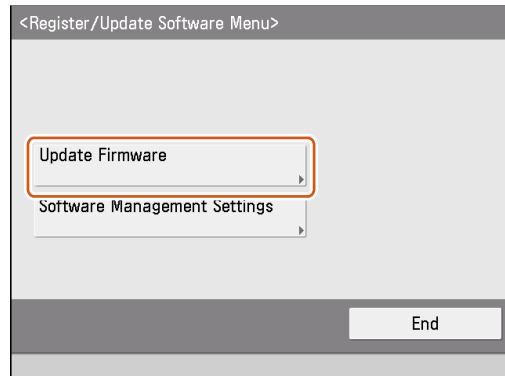
5) The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.

6) When the device is restarted, confirm the version of the firmware.

■ Updating Downloaded Firmware (Applying Firmware)

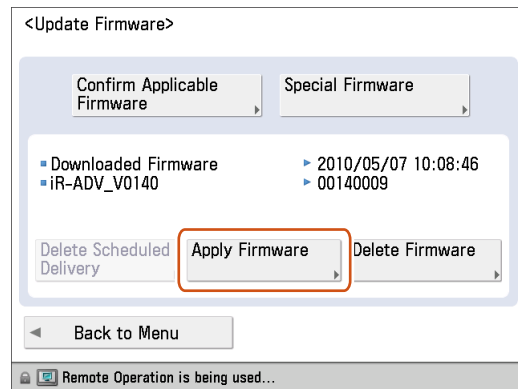
This section describes how to update the downloaded firmware.

- 1) Press [Updater] in the service mode menu.
- 2) Press [Update Firmware] button.



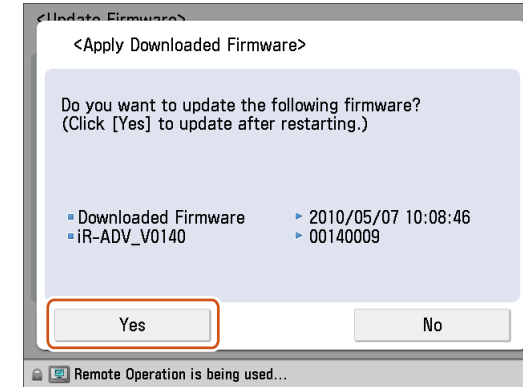
F-6-102

- 3) Press [Apply Firmware] button.



F-6-103

- 4) Confirm the downloaded firmware and press [Yes] button.

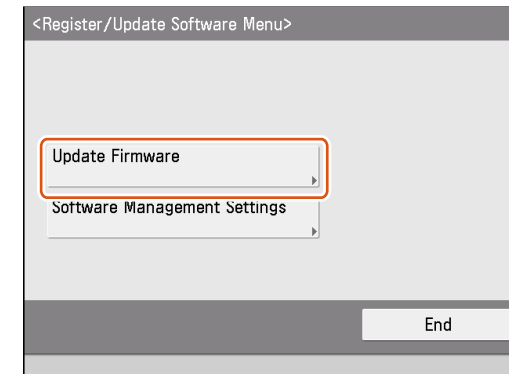


F-6-104

- 5) The firmware is applied to the device. The device is automatically restarted when the firmware is successfully applied.
- 6) When the device is restarted, confirm the version of the firmware.

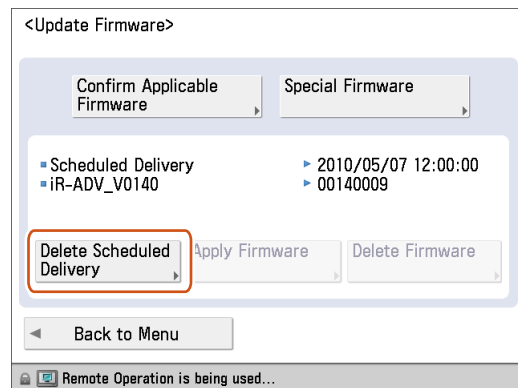
■ Deleting Firmware Distribution Schedule

- 1) Press [Updater] in the service mode menu.
- 2) Press [Update Firmware] button.



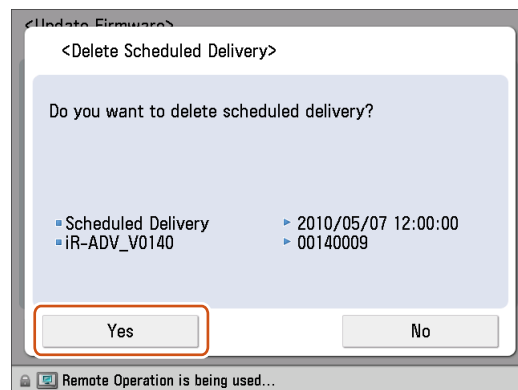
F-6-105

3) Press [Delete Scheduled Delivery] button.



F-6-106

4) Confirm the contents of the distribution schedule and press [Yes] button.



F-6-107

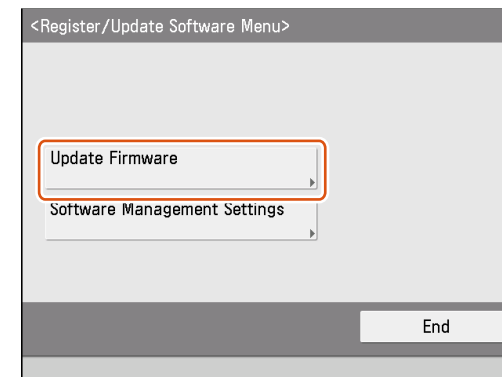
5) Confirm the result of deletion shown on the screen and press [OK] button.

Deleting Downloaded Firmware

This section describes how to delete the downloaded firmware using Updater.

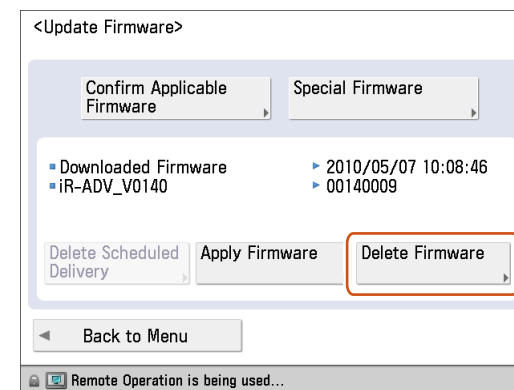
1) Press [Updater] in the service mode menu.

2) Press [Update Firmware] button.



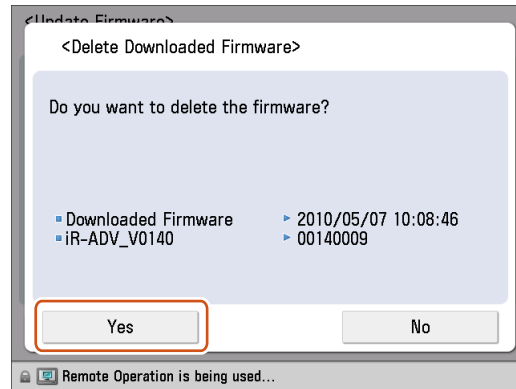
F-6-108

3) Press [Delete Firmware] button.



F-6-109

4) Confirm the downloaded firmware to be deleted and press [Yes] button.



F-6-110

5) 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: The setting of Sales Company's HQ is wrong.

Action: Use the following service mode to set the correct region.
COP IER > FUNCTION > INSTALL > CDS-CTL



F-6-111

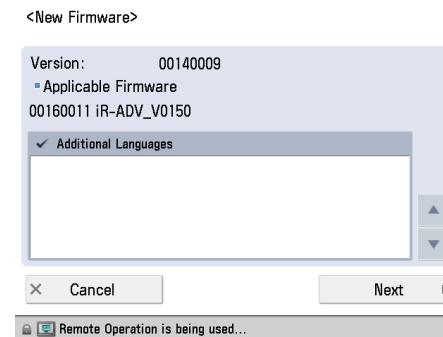
Cause: The version currently in use is not available for update.

Action: Download the release note from CDS separately to upgrade to the version available for update.

Cause: You try to download firmware from [Settings/ Registration] menu. You can download only the latest version of firmware from [Settings/ Registration] menu.

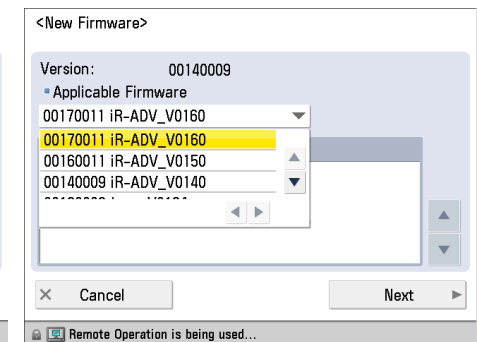
Action: Download from Service mode.

<[Settings/ Registration] menu>



F-6-112

<Service Mode>



F-6-113

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) Start the device by download mode.
 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).
- 2) Via SST, format the hard disk 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.

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.

Debug Logs**Obtaining Log Files**

Updater log files can be obtained by copy & paste from remote UI.

This procedure is shown below.

- 1) Set "1" in the following service mode, and restart the device.
 - COPIER > OPTION > FNC-SW > CDS-MEAP
 - COPIER > OPTION > FNC-SW > CDS-FIRM
- 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"

The screenshot displays the 'Register/Update Software' interface. On the left, a sidebar lists options: 'Install Application/Option' (Manual Installation), 'Update Firmware' (Delivered Update), and 'Confirm Delivery Server' (Display Logs/Communication Test). The main area shows the 'Display Logs/Communication Test' screen with a 'Communication Test' button and a 'Log View' dropdown menu set to 'System Logs'. The log content includes the following text:

```

2010/05/07 10:11:22] 4 130205 [DLThread:1]@File[597]>--- <<< Downloading Completed I >>> ---
[2010/05/07 10:11:22] 4 130204 [DLThread:1]@File[597]>@WAITING
[2010/05/07 10:11:22] 4 020036 ++DeliveryManager getHttpStatus() currentFunc:[8]requestFunc[8]
[2010/05/07 10:11:22] 3 033404 *** event downloading ***
[2010/05/07 10:11:22] 4 031801 download [290608222 / 307520906]
[2010/05/07 10:11:22] 4 130105 Download Finished Thread Found!
[2010/05/07 10:11:22] 4 130105 FILE INFO =====
[2010/05/07 10:11:22] 4 130105 INDEX:598
[2010/05/07 10:11:22] 4 130105
NAME: http://172.16.1.139:80/GingerFirm/20100428.014011_00140009/xjaibase-release-7.138.1-
auto201004141916.nlf
[2010/05/07 10:11:22] 4 130105 =====
[2010/05/07 10:11:22] 4 130201 [DLThread:1]@File[598]>Requested File Download
[2010/05/07 10:11:22] 4 130201 [DLThread:1]@File[598]>@HTTP-NOTIFIED
[2010/05/07 10:11:22] 4 130201 [DLThread:1]@File[598]>Requested File Download completed!
[2010/05/07 10:11:22] 4 130204 [DLThread:1]@File[598]>@EXIT WAITING
[2010/05/07 10:11:22] 4 130205 [DLThread:1]@File[598]>--- <<< Downloading >>> ---
[2010/05/07 10:11:22] 4 130500 [DLThread:1]@File[598]>Server Host[172.16.1.139:80] Port[80]
[2010/05/07 10:11:22] 4 130500 [DLThread:1]@File[598]>adapter connect no proxy.
[2010/05/07 10:11:22] 3 130209 [DLThread:0]@File[595]>Another 1M bytes downloaded
  
```

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NOTE:

See the section of "Setting Log Level" under "Various Setting", "System Management Operations" of "Updater" of Chapter 2 "Technology" of this manual for more 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 Updater

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 "Debug Logs" under "Version Upgrade via CDS", "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. Excluding delivery server stop, communication error to the delivery server occurred.	Set correct CDS URL in the Updater settings. 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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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.	Check the network environment of the device, and re-execute the job. If it recurs, obtain the log etc. (Refer to "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			In SOAP communication, failed to success after 1 min retry.	Set proxy and restart the communication test. If it recurs, obtain the log etc. (Refer to "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			No return of notifying version information	Re-connect the network cable and re-execute the job. If it recurs, obtain the log etc. (Refer to "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			Network cable was disconnected during notice of version information.	Re-execute the job. If it recurs, obtain the log etc. (Refer to "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
		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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.

No.	Messages	Timing of display	Cause	Remedy
		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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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) Immediate download (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 "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
			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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "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 "Debug Logs" under "Version Upgrade via CDS", "Version Upgrade" of Chapter 6 "Troubleshooting" of this manual.) and contact Support Div. of the sales company.
17	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

● Explanation on Error Codes and Their Remedies

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

An error code consists of a number of eight digits (hexadecimal number) displayed on the UI shown below.

The diagram illustrates the structure of an 8-digit hexadecimal error code. It shows two UI elements: a 'Local UI' (Control Panel) and an 'Error Message dialogue'. The Local UI displays 'Error Code: 84014206'. The Error Message dialogue displays 'Error Code: 81081014[CDS]'. Arrows from the digits of '84014206' point to a table that explains the meaning of each digit or group of digits.

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 A/B F	Category code Operation I/O Device SOAP communication HTTP communication Socket communication Other internal codes Internal modules Local CDS
The 6 - 8th digits Description code	000-	See Error code list

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■ Remedy by Error Code

● Remedy to Be Taken When an Error Code Starting with [81-----] Is Displayed

The remedy for an error code whose first two digits are "81" is shown below.

- 1) Refer to "List of Error Codes Starting with 81", and try the remedy.
- 2) If the symptom is not resolved by performing the remedy shown in the error code list, report it to the support department of the sales company with the following information.
 - Time of occurrence
 - Serial number of the device

● Remedy to Be Taken When an Error Code Starting with a Number Other than [81-----] Is Displayed

The remedy for an error code whose first two digits are not "81" is shown below.

- 1) Check the last four digits of the code, and try the remedy shown in "List of Error Codes Starting with a Number Other than 81".
- 2) In the case of an error message with a check mark on the "Network" column of "Cause of error" in the error code list, try the remedy shown below.
 - Execute the operation again.
 - Perform a communication test on the Touch Panel of the device.
 - Check the status of the network equipment (disconnection of the LAN cable, etc.).
 - Check the network settings of the device.
 - Check that there is no restriction on the network environment of the site (e.g. restriction on communication at night).
 - Check the proxy server of the customer. If it does not work properly, perform the remedy. If the problem still persists, clear the cache of the proxy server.
- 3) If the symptom is not resolved by performing the foregoing remedy, report it to the support department of the sales company with the following information.
 - The generated error code
 - The Sublog of the device
 - The update log of the device (Set the log level to 4, and then collect the log.)

● When an Error Code Not Included in the List of Error Codes Is Displayed

When an error code not included in the list of error codes is displayed, see "Error Codes Not Included in the Error Code List and Remedy for Them".

Error Code List

List of Error Codes Starting with 81

The list of error codes starting with 81 is shown below. This error is related to the CDS server.

Report the error to the support department of the sales company with the time of occurrence and the serial number of the device.

Error Code	Description	Remedy	Cause of error	
			CDS server	UP DATER
81--0001	No value is set in a mandatory data entry item	Contact the support department of the sales company.	✓	✓
81--0002	In the case of [81--0002] except follows. In a string type of a data entry item, digit number and/or character type is/are set against the regulations is displayed in the following cases:	(Attach information on the time of occurrence and the serial number of the device.)	✓	✓
81040002	<ul style="list-style-type: none"> 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. 	Enter the correct ID and password for Special Firmware. (User)	✓	✓
81060002	<ul style="list-style-type: none"> 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.) 	Register the correct e-mail address. If it occurs again, contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.) (Canon Inc. Only) In the case of an error in Firm Type, Firmware Version, or Firmware Group Version, register the correct firmware again.	✓	✓
81--0003	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.	✓	✓
81--0004	No applicable delivery information exists	(Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--0005	Error in the system settings		✓	-
Operation				
81--1001	In the case of [81--0001] except follows. 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)	If distribution of the firmware is necessary, search the applicable firmware again, and perform distribution of the firmware.	✓	✓
81071001	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	<ul style="list-style-type: none"> 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.		✓	✓
81--1002	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.	✓	-
81--1003	No mail template file exists	(Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--1004	The device serial number in the data entry item differs from that in delivery information		✓	-
81--1005	User is selected as Operator in the data entry items and the retrieval type is other than the latest		✓	-
81--1006	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)		✓	-
81--1007	The retrieval type in the data entry item is special and Operator is not Service person		✓	-

Error Code	Description	Remedy	Cause of error	
			CDS server	UP DATER
81--1008	As to the device serial number in the data entry items, there is no applicable device code product	Contact the support department of the sales Company. (Attach information on the time of occurrence and the serial number of the device.) (Canon Inc. Only) Check registration of LMS.	✓	-
81--1009	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.	✓	-
81--100A	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.	✓	-
81--100B	No approval information exists about EULA or the export criteria when the delivery is determined	Contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--100C	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.	✓	-
81--100D	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		✓	-
81--100E	The delivery status is New/Waiting to Distribute/Distributed/Applying/Finished/Failed	Contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--100F	The delivery code is other than Distributing. (Firmware distribution)		✓	-
81--1010	The delivery status is New/Waiting to Distribute/Distributing/Applying/Finished/Failed	Search the applicable firmware again, and perform distribution of the firmware.	✓	-
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.)			
81--1011	The delivery status is Distributing/Distributed/Applying/Finished/Failed	Contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--1012	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.	✓	-
81--1013	When the specified distribution time was within the time frame of CDS distribution stop. (Firmware distribution)	Contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--1014	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.	✓	-
81--1015	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.		✓	-
81--1016	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.	✓	-
81--1017	When the firmware distribution information notification showed an error in processing the distribution information.	Contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--1018	When the firmware distribution information notification showed an error in processing the scheduled update information.		✓	-
81--1019	When the status of the scheduled update information is "Set", "Finished", or "Failed".		✓	-

Error Code	Description	Remedy	Cause of error	
			CDS server	UP DATER
81--1020	When the status of the scheduled update information is "Waiting to Transmit" or "New".	Contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.)	✓	-
81--1021	When the status of the scheduled update information is "Set".		✓	-
81--1022	The scheduled update setting information differs between the input information and the distribution information.		✓	-
81--1023	When the distribution status is "Cancel".		✓	-
I/O				
81--1014	Device information corresponding to the target device serial number does not exist. (There is no relevant information on the device firmware group.)	Contact the support department of the sales company. (Attach information on the time of occurrence and the serial number of the device.)	✓	-

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List of Error Codes Starting with a Number Other than 81

The list of error codes starting with a number other than 81 is shown below. If such an error has occurred, search the remedy using the last four digits of the error code.

Report the error to the support department of the sales company with the Sublog and update log of the device.

The "CDS server" in the "Cause of error" column includes CDS distribution servers and CDS file servers.

Error Code	Description	Remedy	Cause of error		
			CDS server	UP DATER	Network
8X--1001	Processing exclusively	Start the operation again after terminating other Updater operations being executed simultaneously	-	✓	-
1002	Stopped	Restart the device, and start the operation again.	-	✓	-
1101	Failed to process preparation for use	Contact the support department of the sales company.	-	✓	-
1102	Failed to process use end	(Attach the Sublog and update log of the device.)	-	✓	-
1103	Time out during restart of readiness preparation		-	✓	-
1104	Session time-out excluding after application inquiry (after issuing delivery ID)	Start the operation again from the beginning	-	✓	-
1105	CDS URL is not set	Set CDS URL	-	✓	-
1106	Another job existed immediately before the firmware update processing.	Start the operation again after terminating the job of the device	-	✓	-
1202	Specifying of scheduled update for a model that does not support scheduled update	Contact the support department of the sales company.	✓	-	-
1203	Firmware processing for a model that does not support firmware processing	(Attach the Sublog and update log of the device.)	✓	-	-
1301	Security Token verification error		-	-	✓
1302	Privilege check error	Perform the authentication as a correct user.	-	-	✓
1303	Parameter error	Contact the support department of the sales company.	-	-	✓
1304	There is no distribution information from the server.	(Attach the Sublog and update log of the device.)	-	-	-
1305	Version notification is not required.		-	-	-
1306	Connection server information mismatch error	Check the connection server settings.	-	-	✓
I/O					
21XX	An internal error about file operation	Contact the support department of the sales company.	-	✓	-
22XX	An internal error about XML file operation	(Attach the Sublog and update log of the device.)	-	✓	-
2301	Failed to output the license file		-	✓	-
2401	Failure in creation of an auto shutdown stop file		-	✓	-
2402	Failure in deletion of the auto shutdown stop file		-	✓	-
Device					
31XX	An internal error in CPCA	Contact the support department of the sales company.	-	✓	-
32XX	An internal error in IMI	(Attach the Sublog and update log of the device.)	-	✓	-
33XX	An internal error in SMS		-	✓	-
34XX	An internal error in NLM		-	✓	-
35XX	Configuration Service property setting error		-	✓	-
36XX	An internal error related to APL_CDS partition		-	✓	-
37XX	DCM-related service error		-	✓	-

Error Code	Description	Remedy	Cause of error		
			CDS server	UP DATER	Network
SOAP communication					
4101	The processing thread stopped	Contact the support department of the sales company.	-	✓	-
4102	Processing SOAP communication now	(Attach the Sublog and update log of the device.)	-	✓	-
4103	The function type is not matched		-	✓	-
4104	An invalid SOAP response error	Check the network environment. When this problem recurs, contact the support department of the sales company.	✓	-	-
4105	No network cable connection (device side)	Check the network environment. If it occurs again, contact the support department of the sales company. (Attach the Sublog and update log of the device.)	✓	-	-
4201	An internal error about application information	Contact the support department of the sales company.	-	✓	-
4202	Config.xml is not found	(Attach the Sublog and update log of the device.)	-	✓	-
4203	Type.xml is not found		-	✓	-
4204	An error in binding type.xml		-	✓	-
4205	An error in creating a service tab		-	✓	-
4206	A runtime error in performing the web method		-	✓	✓
8X-4207	An unknown host error in performing the web method	<ul style="list-style-type: none"> 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 	✓	✓	✓
4301	The delivery server is stopped	Contact the support department of the sales company. (Attach the Sublog and update log of the device.)	✓	-	-
4302	<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.	✓	✓	-
HTTP communication					
5101	Specified Hash Algorithm is unknown	Contact the support department of the sales company. (Attach the Sublog and update log of the device.)	-	✓	-
5102	Download file URL is invalid	Check the URL setting of CDS server, reset the setting, and then start the operation again.	-	✓	-
5103	No network cable connection (device side)	Check the network environment of the device, and start the operation again.	-	✓	-
5201	Invalid HTTP request	Contact the support department of the sales company. (Attach the Sublog and update log of the device.)	✓	✓	✓
5202	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.	✓	✓	✓
5203	Failed to find the server	Check the network environment of the device (the proxy settings, etc.), and start the operation again.	✓	✓	✓
5204	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.	✓	✓	✓
5205	Failed to read a HTTP response		✓	✓	✓
5206	Error in a HTTP response	Check the network environment.	✓	✓	✓
5207	Generation of secure socket failed.	Contact the support department of the sales company.	✓	✓	✓
5208	Certificate check error	(Attach the Sublog and update log of the device.)	✓	✓	✓
5209	Connection time-out		-	✓	✓
5301	Failed to retrieve the data stream	Contact the support department of the sales company.	-	✓	✓
5302	Failed to create the file object for receipt	(Attach the Sublog and update log of the device.)	-	✓	✓
5303	Failed to create the data stream of the file for receipt		-	✓	✓
5304	Failed to receive the data	Check the network environment of the device, and start the operation again.	✓	✓	✓

Error Code	Description	Remedy	Cause of error		
			CDS server	UP DATER	Network
5305	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.	-	✓	-
5306	Failed to close the data stream	Contact the support department of the sales company.	-	✓	-
5307	Failed to close the file data for receipt	(Attach the Sublog and update log of the device.)	-	✓	-
5308	Invalid hash code of the download file	Check the network environment of the device, and start the operation again.	✓	✓	✓
5309	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)* * The following URL in the product of after iR-ADV C2200 series. a02.c-cdsknn.net (protocol: https) But, it excludes iR-ADV C5200/9200/7200 series.	-	✓	✓
8X--Socket communication					
6101	Failed to connect the eRDS	Contact the support department of the sales company.	-	✓	✓
6102	No response from eRDS	(Attach the Sublog and update log of the device.)	-	✓	✓
6103	No notice of start from the eRDS		-	✓	✓
6104	Error of socket reading		-	✓	✓
6105	Socket communication time-out		-	✓	✓
Other internal codes					
71XX	An error by using invalid API	Contact the support department of the sales company.	-	✓	-
72XX	An internal error in SMS	(Attach the Sublog and update log of the device.)	-	✓	-
7301	No existence of delivery ID		-	✓	-
7302	Invalid delivery ID		-	✓	-
7303	The updated firmware information is not identical with the firmware information after activation of the Updater		-	✓	-
7304	The process of firmware download is incomplete It occurs when the power of the device is turned OFF during download.		-	✓	-
7305	The update process is incomplete The power was turned OFF after completion of download and before start of update processing.		-	✓	-
7401	Failed to retrieve delivery information		-	✓	-
7501	Failed to execute the delivery process		-	✓	-
7502	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	-	✓	-
7503	The download results could not be obtained.	Contact the support department of the sales company.	-	✓	-
7504	There is no download list information.	(Attach the Sublog and update log of the device.)	-	✓	-
AXXX	Communication error in the internal module		-	✓	-

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List of Error Codes Related to Local CDS

A list of error codes related to Local CDS is shown below.

Error Code	Description	Remedy
81--F003	Firmware information not registered. Firmware information corresponding to the target device serial number does not exist.	Contact the support department of the sales company.
81--F007	Invalid firmware version. The firmware version at the time of registration of the distribution schedule differs from the current firmware version.	
81--F008	Invalid firmware information. Firmware information to be distributed does not exist.	
81--F009	Forcible termination. Distribution information is forcibly terminated from the server UI.	
81--F00F	Invalid distribution status. Distribution status of the server is in a condition where a requested method from the client cannot be accepted.	
81--F010	Invalid parameter. Requested parameter from the client is not correct.	
81--F011	Version information not registered. Version information corresponding to the specified serial number has not been registered.	
81--F012	Distribution time-out. Distribution has not been completed even after a certain period of time from the start of the distribution.	
81--F013	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.	
81--FFFE	DB error. General error to access DB.	
81--FFFF	DB error. Internal error other than error to access DB (file I/O, etc.).	
8X--1204	L-CDS update process for a model that does not support L-CDS	

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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	Description	Remedy
8--X0000	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).
8--X0002	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.
8--X0101	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).
8--X0303	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).
8--X0304	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.
8--X0706	Communication with Updater failed.	Restart the device, and perform the operation again after checking that Updater has been started.
8--X0707		When this problem recurs, obtain the sublog, and contact the support department of the sales company.
8--X0708		
8--X0709	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.

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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.

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● 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

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Backup/Restore

Overview

Backup/Restore Overview

It may sometimes become necessary to back up and restore the data in the machine during maintenance.

Examples of when it is necessary to back up and restore data are indicated below.

- Replacing the hard disk
- Replacing the machine

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.

This section describes the procedure for backup and restoration using SST or a USB device.

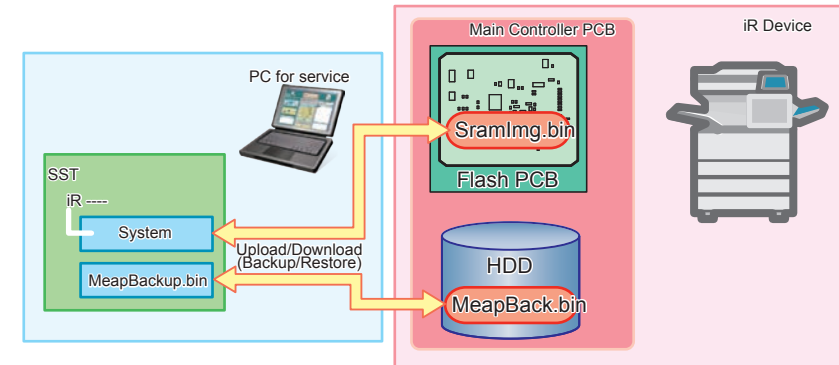
NOTE:

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.

Backup/Restoration using SST

Overview

Connect the PC in which SST is installed to the machine which has been started in download mode via a network cable, and back up/restore the data in the machine.



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Data in MEAP area

Backup data	Downloaded/Uploaded file names
Backup data RAM	SramImg.bin(to be uploaded / downloaded)
Data in MEAP area	MeapBack.bin(to be uploaded / downloaded)
For investigation in Dev	Sublog.bin((Uploadable))
Service Print	The text file of the contents which You output to paper with a service mode(Uploadable).

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- SramImg.bin can be backed up with SST but only to the hard disk of the PC.
- MeapBack is the MEAP application and its data stored in the MEAP area of the hard disk.

Data that can be backed up in 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)

Data is stored in Flash ROM.

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Settings

Enter download mode to back up/restore the machine using SST. The following IP address is automatically assigned to the machine when it enters download mode.

- IP address:172.16.1.100
- Subnet mask:255.255.255.0

In order to connect the PC to the machine, change the network address of the PC in which SST is installed as indicated below.

- IP address:172.16.1.xxx (except 172.16.1.100)
- Subnet mask:255.255.255.0
- Default gateway: arbitrary

CAUTION:

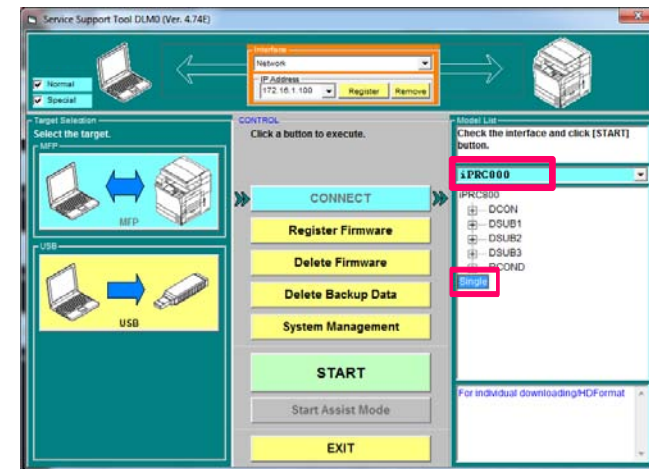
Disconnect USB memory storage device storage devices if connected.

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.

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.

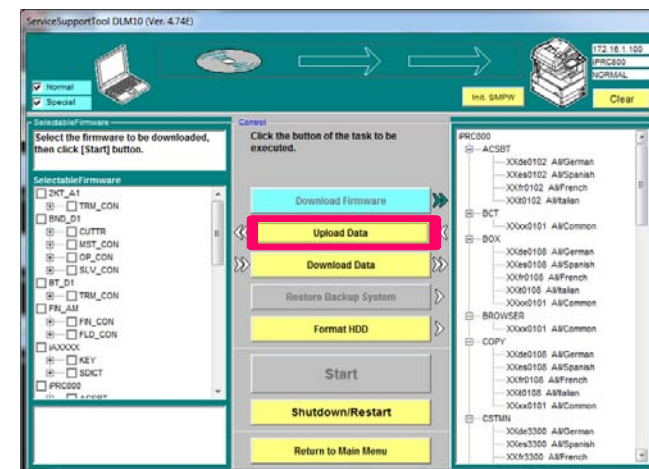
Backup Procedure

- 1) Use the cross cable to connect the machine to the PC with SST installed.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) Start SST.
- 4) Select the model of the machine from [Model List] and select [Single]. Check the network settings and click "Start".



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- 5) Click [Upload Data] button.



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NOTE:

If communication cannot be established with the machine, there may be a problem with the network (IP address) settings. Start the command prompt on the PC and execute the "ipconfig" command. As the network settings of the PC are displayed, check the IP address settings. Fix any problems with the settings.

```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection 2:

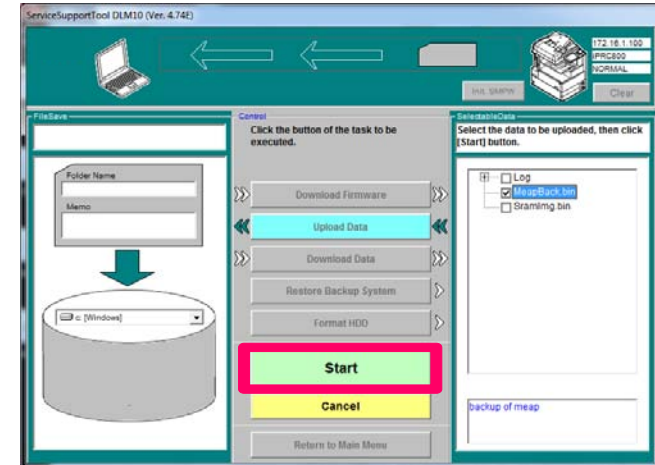
    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::81dd:77d9:92c1:4faf%12
    IPv4 Address. . . . . : 192.168.1.165
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :
```

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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.

6) Select [MeapBack.bin] to click [Start] button.

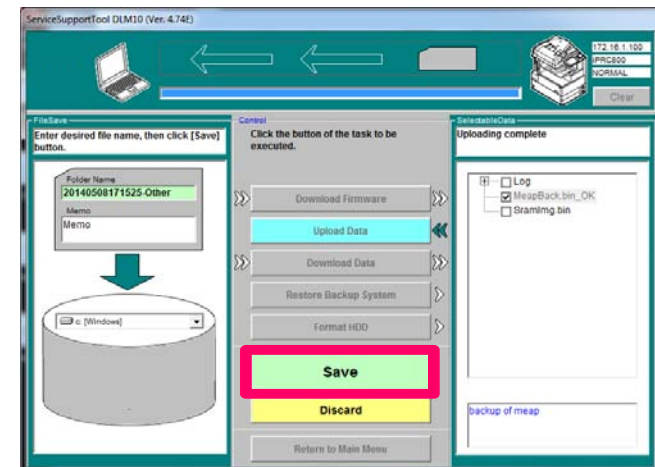


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CAUTION:

Do not select Sublog.bin.

7) Enter the file name to be saved and comments when necessary. Click [Save] button.



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8) Click [OK] button.

Restoration Procedure

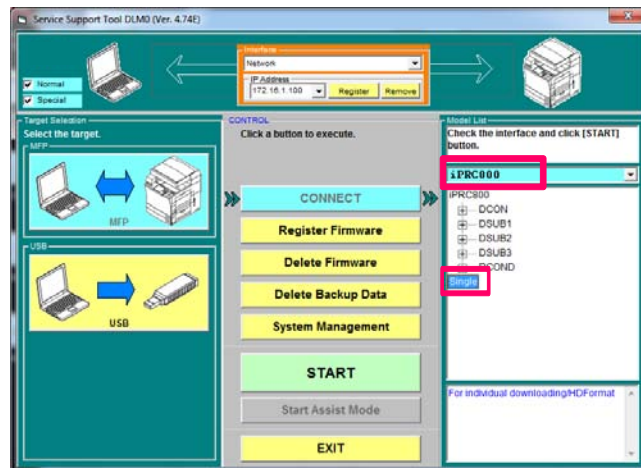
Restore data backed up from the machine with SST to the machine.

CAUTION:

The backup data can be downloaded to the machine from which the data were uploaded

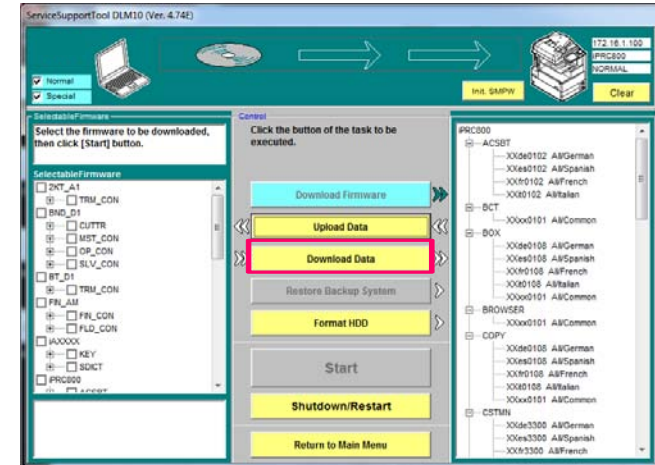
Listed below were the sample steps to download MeapBack.

- 1) Use the cross cable to connect the machine to the PC with SST installed.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) Start SST.
- 4) Select the model of the machine from [Model List] and select [Single]. Check the network settings and click "Start".



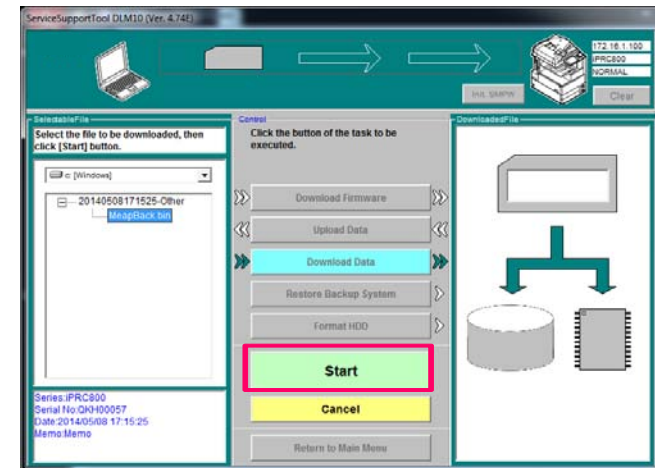
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- 5) Click [Download Data] button.



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- 6) Select the data to be downloaded and click [Start] button.



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- 7) When the data are successfully downloaded, click [OK] button.

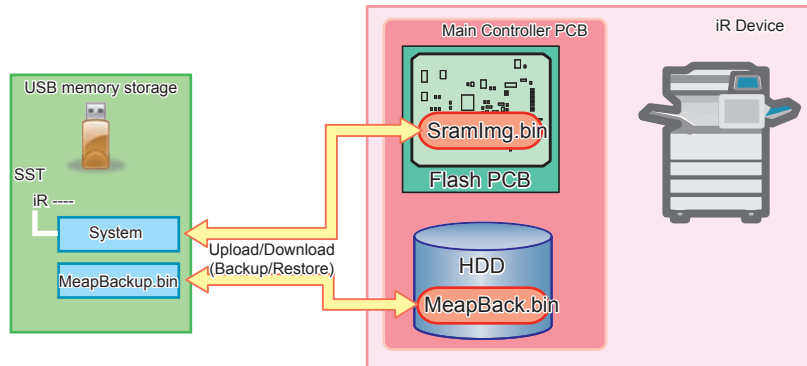
- 8) Restart the machine

Backup/Restoration Using a USB Device

Overview

Connect a USB device to the machine which has been started in download mode, and back up/restore the data in the machine.

The data in SRAMFLASH (Sramimg), MEAP applications and their data (Meapback) can be backed up/restored.



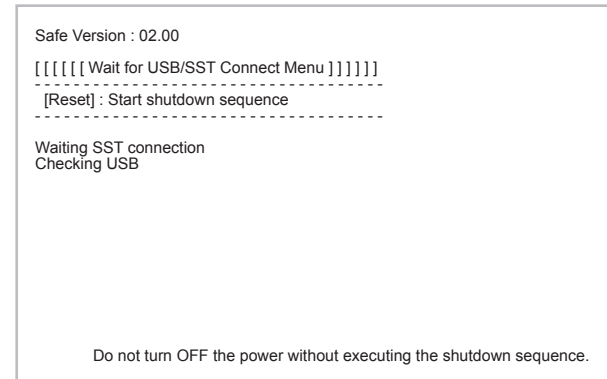
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The things required and the conditions for backing up/restoring the machine using a USB device are indicated below.

- Contains system software for the machine
- Formatted with the FAT file system
- Has 1 GB or more of free space (recommended)

Backup/Restoration Procedure

- 1) Remove the network cable if any network cable is connected to this machine.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) The following screen is displayed. Connect the USB memory storage device to the USB port.

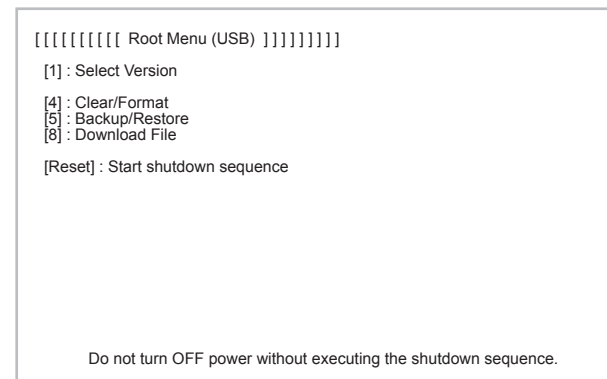


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NOTE:

The USB port at the back of the device can be used as well.

- 4) When the machine recognizes the USB memory storage device, the following menu is displayed on the control panel.



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CAUTION:

Depending on the manufacturer or the model, this machine may fail to recognize the USB memory storage device.

This machine retries recognition of a USB memory storage device for up to 60 seconds after power-ON. The above menu is not displayed if the machine fails to recognize a USB memory storage device within the time period.

In such a case, use another USB memory storage device.

5) When the following menu is displayed, press the numeric key for the desired menu.

```

[[[[[[[[[[ Backup/Restore Menu (USB) ]]]]]]]]]
-----
[1] : SRAM Backup
[2] : SRAM Restore
[3] : MEAP Backup
[4] : MEAP Restore
[C] : Download File

[Reset] : Start shutdown sequence

Do not turn OFF power without executing the shutdown sequence.

```

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No.	Menu	Contents
1	SRAM Backup	When replacing the Main Controller PCB, this function is used to temporarily save the data stored in SRAMFLASH to the Flash PCB.
2	Restore	This function is used to restore the data after replacing the Main Controller PCB. Note that this backup procedure is for backing up the data in SRAM to the Flash PCB but not for backing it up to a USB device.
3	MEAP Backup	This function is used to back up MEAP applications and their data (Meapback). It is used when replacing the hard disk.
4	MEAP Restore	This function is used to restore the backed-up MEAP applications and their data (Meapback). It is used when replacing the hard disk.
C	Return to Main	Returns to the main menu.

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6) The following screen is displayed when the processing is complete. Press any key.

Example screen of SRAM backup

```

Starting SRAM Backup
SRAM Backing OK.
---Please press any keys ---

Do not turn OFF power without executing the shutdown sequence.

```

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NOTE:

If there is no advance data backup, restoration is not available.

Formatting the Hard Disk with SST

Overview

Only hard disk formatting is available on this machine. hard disk formatting can be executed in the following cases:

- When installing the hard disk from other machine installed
- When the hard disk seems to be faulty and it is highly possible to solve the problem by formatting.

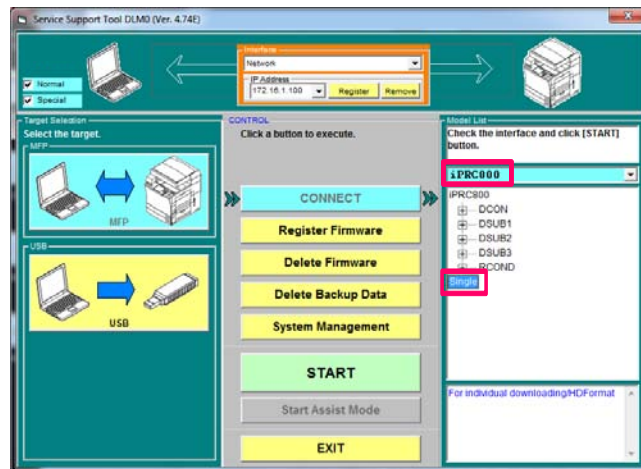
Executing Format ALL on the machine in use deletes all the user data in the hard disk as well as the MEAP application; therefore, be sure to gain agreement with the user.

NOTE:

For normal version update, there is no need to format the hard disk.

Steps of Formatting

- 1) Use the cross cable to connect the machine to the PC with SST installed.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) Start SST, select the model of the machine from [Model List] and then select [Single]. Check the network settings and click "Start".

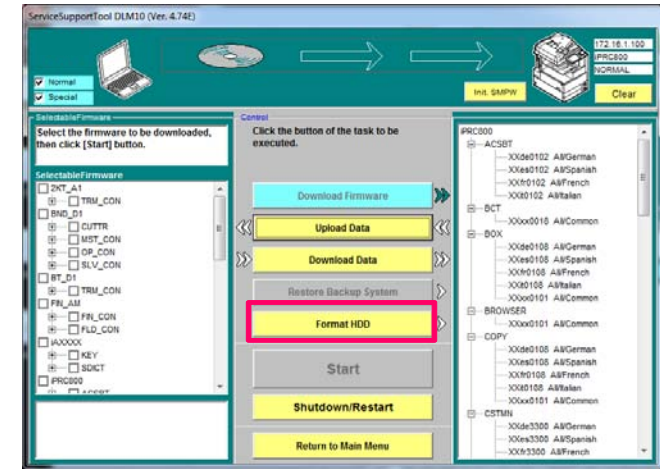


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NOTE:

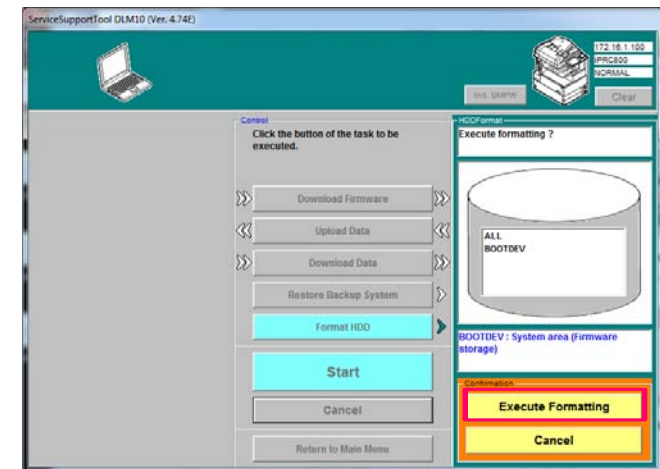
The hard disk cannot be formatted in assist mode.

- 4) Click "Format hard disk" button



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- 5) Click "Execute Format" button.



F-6-132

Hard disk is formatted at next startup.

The startup will take longer than normal for the hard disk format.

● Formatting FLASH PCB or Hard Disk by Download Mode

■ Format Overview

The following 3 types of formatting/initialization methods are available with this machine.

```

[[[[[[[[[[[[ Clear/Format Menu ]]]]]]]]]]]
-----
[1] : Disk Format
[2] : flash Format
[3] : HDD Encryption Board Initialize
[4] : Servicemode Password Clear
[5] : Download File Menu
[C] : Return to Main Menu

Do not turn OFF power without executing the shutdown sequence.

```

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- Disk Format: To initialize the entire hard disk
- Flash Format: To initialize the entire FLASH PCB
- HDD Encryption Board Initialize: To initialize the HDD Encryption Board

NOTE:

- With this machine, there is no function to format BOOTDEV only, which was available with the existing machines.
- For normal version update, there is no need to format the FLASH PCB/ hard disk.

■ Operation Procedure

● Overview

To format the entire hard disk or FLASH PCB

Executing format on the machine in use deletes all the user data in the hard disk or FLASH PCB as well as the MEAP application (caution); therefore, be sure to gain agreement with the user.

NOTE:

The MEAP application data can be restored to the hard disk later by backing up MeapBackup.bin before formatting. For details on the procedure, refer to "Backup/Restoration using SST" or "Backup/Restoration Using a USB Device".

● Operation Procedure

- 1) Remove the network cable if any network cable is connected to this machine.
- 2) Turn ON the machine power and execute the following service mode to enter download mode.
 - COPIER > FUNCTION > SYSTEM > DOWNLOAD
- 3) The following screen is displayed. Connect the USB memory storage device to the USB port.

```

Safe Version : 02.00
[[[[[[[[[[[[ Wait for USB/SST Connect Menu ]]]]]]]]]]]
-----
[Reset] : Start shutdown sequence
-----

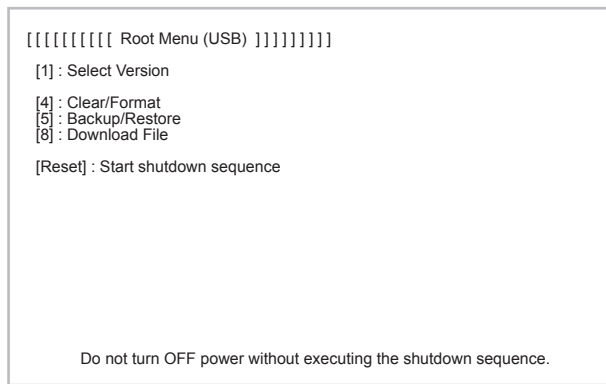
Waiting SST connection
Checking USB

Do not turn OFF the power without executing the shutdown sequence.

```

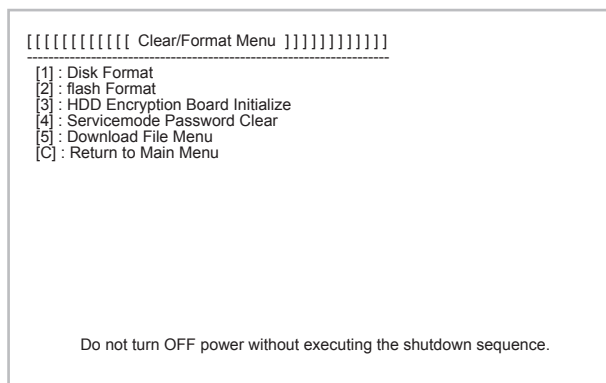
F-6-134

4) When [Root Menu (USB)] is displayed, press the numeric key 4.



F-6-135

5) When [Clear/Format Menu] is displayed, press the corresponding numeric key.



F-6-136

CAUTION:

Be sure to execute formatting after obtaining user's agreement since all user data and MEAP applications are deleted when formatting is executed in the machine being used.

- [1]: Disk Format
To initialize the entire hard disk
Formatting is necessary when replacing a service part hard disk. Note that recovery is not available by HD-CLEAR in service mode.
- [2]: Fash Format
To initialize the entire FLASH PCB
After executing format of the FLASH PCB, the user data in the FLASH PCB is initialized and the machine is started. Download of system software is not necessary because the system software is restored from the backup.
- [3]HDD Encryption Board Initialize
To initialize the HDD Encryption Board
To execute when using the hard disk and the HDD Encryption Board that were used with the other machine.
When initializing the Encryption Board, the data in the hard disk becomes inaccessible. Therefore, to the hard disk format is necessary for reuse.
Formatting is executed when the power is turned ON the next time. The message showing data initialization and wait time are displayed.



Error•Jam•Alarm

- Overview
- Error Code
- Jam Code
- Alarm Code

Overview

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
Error code	This code is displayed when an error occurs on the machine.
Jam code	This code is displayed when a jam occurs inside the machine.
Alarm code	This code is displayed when a function of the machine is malfunctioned.

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, jam code, and alarm code include the location information.

Location information is displayed as 2-digit numbers as follows.

In the error and jam display screen, the “L” row corresponds to the location code.

Device	JAM	ERR	ALARM
imageRUNNER ADVANCE C3300	00	Main Controller = 00 Printer engine = 05	-
Cassette Feeding Unit-AL1	00	05	-
Reader/DADF	01	04	-
Inner Finisher-G1	02	02	-
Staple / Booklet Finisher-U1	02	02	-
Super G3 FAX Board-AR1	-	07	-

T-7-2

Pickup position 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.)	00
Cassette 1	01
Cassette 2	02
Cassette 3	03
Cassette 4	04
Multi-purpose Tray	05
Duplex	F0

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 (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 User Authentication is, error such as not displayed login screen occurred. In this case, access SMS once and switch login application to User Authentication to recover to the normal status.

Points to Note When Clearing HDD

As a remedy for error codes (E602-XXXX), 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.

Error Code

Error Code Details

Error code	Detail Code	Location	Item	Description
E001	0001	05	Title	Fixing Main Thermistor high temperature detection error
			Detection description	The Fixing Main Thermistor in the Fixing Unit detected 284 deg C or higher for 0.2 sec or longer.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E001	0002	05	Title	Fixing Sub Thermistor (Front) high temperature detection error
			Detection description	The Fixing Sub Thermistor (Front) in the Fixing Unit detected 295 deg C or higher for 0.2 sec or longer.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E001	0003	05	Title	Fixing Sub Thermistor (Rear) high temperature detection error
			Detection description	The Fixing Sub Thermistor (Rear) in the Fixing Unit detected 295 deg C or higher for 0.2 sec or longer.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor <ol style="list-style-type: none"> DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E001	0004	05	Title	Fixing Main Thermistor high temperature detection error
			Detection description	The Fixing Main Thermistor in the Fixing Unit detected 287 deg C or higher for 0.2 sec or longer.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor <ol style="list-style-type: none"> DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E001	0005	05	Title	Fixing Sub Thermistor (Front) high temperature detection error
			Detection description	The Fixing Sub Thermistor (Front) in the Fixing Unit detected 297 deg C or higher for 0.2 sec or longer.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor <ol style="list-style-type: none"> DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E001	0006	05	Title	Fixing Sub Thermistor (Rear) high temperature detection error
			Detection description	The Fixing Sub Thermistor (Rear) in the Fixing Unit detected 297 deg C or higher for 0.2 sec or longer.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor <ol style="list-style-type: none"> DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E002	0001	05	Title	Fixing Main Thermistor open circuit detection error
			Detection description	The Fixing Main Thermistor detected a temperature of 40 deg C or lower for 3 sec or longer from when the Fixing Heater was turned ON until start of PI control.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E002	0002	05	Title	Fixing Sub Thermistor (Front) open circuit detection error
			Detection description	The Fixing Sub Thermistor (Front) detected a temperature of 40 deg C or lower for 3 sec or longer from when the Fixing Heater was turned ON until start of PI control.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E002	0003	05	Title	Fixing Sub Thermistor (Rear) open circuit detection error
			Detection description	The Fixing Sub Thermistor (Rear) detected a temperature of 40 deg C or lower for 3 sec or longer from when the Fixing Heater was turned ON until start of PI control.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E002	0004	05	Title	Fixing Main Thermistor temperature increase detection error
			Detection description	The Fixing Main Thermistor detected a temperature increase of 1 deg C for less than 5 sec from when the Fixing Heater was turned ON until start of PI control.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E003	0004	05	Title	Fixing Main Thermistor low temperature detection error
			Detection description	The Fixing Main Thermistor detected a temperature of 80 deg C or lower for 1 sec or longer from start of PI control until completion of the last rotation (the Fixing Heater was turned OFF).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E003	0005	05	Title	Fixing Sub Thermistor (Front) low temperature detection error
			Detection description	The Fixing Sub Thermistor (Front) detected a temperature of 80 deg C or lower for 1 sec or longer from start of PI control until completion of the last rotation (the Fixing Heater was turned OFF).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E003	0006	05	Title	Fixing Sub Thermistor (Rear) low temperature detection error
			Detection description	The Fixing Sub Thermistor (Rear) detected a temperature of 80 deg C or lower for 1 sec or longer from start of PI control until completion of the last rotation (the Fixing Heater was turned OFF).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Thermistor 1. DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DA) (Unit of replacement: FIXING DRAWER ASSEMBLY) 2. Fixing Drawer (J1001LA) to Relay Connector (8P) (Unit of replacement: CABLE, DRAWER RELAY) 3. Relay Connector (8P) to Fixing Thermistor (TH02) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the Low Voltage Power Supply PCB (UN01/J302) and the AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After performing the remedy work, go through the following to clear the error: COPIER> FUNCTION> CLEAR> ERR. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E004	0001	05	Title	Fixing Relay welding detection error
			Detection description	Zero cross interruption was detected although the Fixing Relay was not turned ON.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness from the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Harness between the DC Controller PCB (UN04/J121) and the Fixing Drawer (J1001DB) (Unit of replacement: FIXING DRAWER ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E004	0002	05	Title	Current detection circuit error
			Detection description	Current outside the specified range flowed to the Fixing Heater when the heater was turned ON. Or, failure of fixing current detection circuit was detected.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Low Voltage Power Supply PCB to the Fixing Heater 1. Low Voltage Power Supply PCB (UN01/J302) to AC Interlock Switch (SW12) (Unit of replacement: CABLE, AC INTERLOCK SWITCH) 2. AC Interlock Switch (SW12) to Fixing Drawer (J1001) (Unit of replacement: FIXING DRAWER ASSEMBLY) 3. Fixing Drawer (J1001) to Relay Connector (3P) (Unit of replacement: CABLE, DRAWER RELAY) 4. Relay Connector (3P) to Fixing Heater (H1 and H2/J1115) (Unit of replacement: FIXING FILM ASSEMBLY) Harness between the DC Controller PCB (UN04/J121) and the Fixing Drawer (J1001DB) (Unit of replacement: FIXING DRAWER ASSEMBLY) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E009	0000	05	Title	Fixing pressure timeout error
			Detection description	The Fixing Pressure Release Sensor did not detect ON status within 10 sec after the start of pressure application operation for fixing.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Pressure Release Sensor 1. DC Controller PCB (UN04/J122) to Relay Connector (11P) (Unit of replacement: CABLE, FEED) 2. Relay Connector (11P) to Fixing Pressure Release Sensor (PS13) (Unit of replacement: PAPER DELIVERY DRIVE ASSEMBLY) Harnesses from the DC Controller PCB to the Fixing Motor 1. DC Controller PCB (UN04/J122) to Relay Connector (8P) (Unit of replacement: CABLE, FEED) 2. Relay Connector (8P) to Fixing Motor (M09) (Unit of replacement: FIXING DRIVE MOTOR ASSEMBLY) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Fixing Pressure Release Sensor (PS13) Fixing Drive Unit (Unit of replacement: FIXING DRIVE ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E009	0001	05	Title	Fixing disengagement timeout error
			Detection description	The Fixing Pressure Release Sensor did not detect OFF status within 10 sec after the start of fixing disengagement operation.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Pressure Release Sensor 1. DC Controller PCB (UN04/J122) to Relay Connector (11P) (Unit of replacement: CABLE, FEED) 2. Relay Connector (11P) to Fixing Pressure Release Sensor (PS13) (Unit of replacement: PAPER DELIVERY DRIVE ASSEMBLY) Harnesses from the DC Controller PCB to the Fixing Motor 1. DC Controller PCB (UN04/J122) to Relay Connector (8P) (Unit of replacement: CABLE, FEED) 2. Relay Connector (8P) to Fixing Motor (M09) (Unit of replacement: FIXING DRIVE MOTOR ASSEMBLY) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Fixing Pressure Release Sensor (PS13) Fixing Drive Unit (Unit of replacement: FIXING DRIVE ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E010	0001	05	Title	Bk Drum_ITB Motor error
			Detection description	It did not become the specified speed for 0.5 consecutive sec although 0.8 sec have passed from the startup of the Bk Drum_ITB Motor in the Main Drive Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the Bk Drum_ITB Motor (M02/J1054) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) Bk Drum_ITB Motor (M02) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> If they cannot be rotated, replace the Main Drive Unit. If they can be rotated, check the harness between the Bk Drum_ITB Motor and the DC Controller PCB. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> Replace the Bk Drum_ITB Motor. Replace the DC Controller PCB. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E010	0002	05	Title	Bk Drum_ITB Motor error
			Detection description	The specified speed could not be maintained for 0.5 consecutive sec although it became the specified speed at least once from the startup of the Bk Drum_ITB Motor in the Main Drive Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the Bk Drum_ITB Motor (M02/J1054) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) • Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) • Bk Drum_ITB Motor (M02) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> a. If they cannot be rotated, replace the Main Drive Unit. b. If they can be rotated, check the harness between the Bk Drum_ITB Motor and the DC Controller PCB. 2. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the Bk Drum_ITB Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E010	0003	05	Title	Bk Drum_ITB Motor error
			Detection description	There was no FG signal input for 0.3 sec from the startup of the Bk Drum_ITB Motor in the Main Drive Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the Bk Drum_ITB Motor (M02/J1054) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) • Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) • Bk Drum_ITB Motor (M02) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> a. If they cannot be rotated, replace the Main Drive Unit. b. If they can be rotated, check the harness between the Bk Drum_ITB Motor and the DC Controller PCB. 2. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the Bk Drum_ITB Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E012	0001	05	Title	CL Drum Motor error
			Detection description	It did not become the specified speed for 0.5 consecutive sec although 0.8 sec have passed from the startup of the CL Drum Motor in the Main Drive Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the CL Drum Motor (M03/J1103) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) • Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) • CL Drum Motor (M03) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> a. If they cannot be rotated, replace the Main Drive Unit. b. If they can be rotated, check the harness between the CL Drum Motor and the DC Controller PCB. 2. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the CL Drum Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E012	0002	05	Title	CL Drum Motor error
			Detection description	The specified speed could not be maintained for 0.5 consecutive sec although it became the specified speed at least once from the startup of the CL Drum Motor in the Main Drive Unit. (The detection timing varies depending on the paper feed conditions.)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the CL Drum Motor (M03/J1103) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) • Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) • CL Drum Motor (M03) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> a. If they cannot be rotated, replace the Main Drive Unit. b. If they can be rotated, check the harness between the CL Drum Motor and the DC Controller PCB. 2. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the CL Drum Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E012	0003	05	Title	CL Drum Motor error
			Detection description	There was no FG signal input for 0.3 sec from the startup of the CL Drum Motor in the Main Drive Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the CL Drum Motor (M03/J1103) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) • Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) • CL Drum Motor (M03) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> a. If they cannot be rotated, replace the Main Drive Unit. b. If they can be rotated, check the harness between the CL Drum Motor and the DC Controller PCB. 2. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the CL Drum Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E013	0001	05	Title	Waste Toner Feed Motor error
			Detection description	After rotation speed of the Waste Toner Feed Motor was detected when the motor was driven, it was detected that the speed was not at the specified speed for 2 consecutive sec.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harnesses from the DC Controller PCB to the Waste Toner Feed Motor 1. DC Controller PCB (UN04/J132) to Relay Connector (13P) (Unit of replacement: CABLE, CASSETTE SIZE) 2. Relay Connector (13P) to Waste Toner Feed Motor (J1044) (Unit of replacement: CABLE, WASTE TONER SENSOR) • Waste Toner Container (Unit of replacement: WASTE TONER CASE ASSEMBLY) • Waste Toner Feed Unit (Unit of replacement: WASTE TONER PAPER FEED ASS'Y) • Waste Toner Feed Motor (M17) (Unit of replacement: WASTE TONER PAPER FEED ASS'Y) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Pull out the Waste Toner Container to check if the toner in the container is full. If the waste toner is full, remove the toner clogged in the Waste Toner Pipe. 2. Check/replace the related harness/cable, connector and parts. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E014	0001	05	Title	Fixing Motor error
			Detection description	It did not become the specified speed for 0.5 consecutive sec although 0.7 sec have passed from the startup of the Fixing Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harnesses from the DC Controller PCB to the Fixing Motor 1. DC Controller PCB (UN04/J122) to Relay Connector (8P) (Unit of replacement: CABLE, FEED) 2. Relay Connector (8P) to Fixing Motor (M09/J1019) (Unit of replacement: FIXING DRIVE ASSEMBLY) • Fixing Unit (Unit of replacement: FIXING ASSEMBLY) • Gears in the Fixing Unit 1. Cam Gear (Unit of replacement: CAM/GEAR, 3T/21T) 2. Pressure Roller Gear (Unit of replacement: GEAR, 36T) • Fixing Motor (M09) (Unit of replacement: FIXING DRIVE MOTOR ASSEMBLY) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check that the Fixing Unit is pushed into the host machine so the handle is locked. 2. Remove the Fixing Unit, and rotate the Cam Gear and the Pressure Roller Gear by hand to visually check that there is no bent or missing teeth or abnormal abrasion (edge of the gear is no longer tooth-shaped). 3. Replace the Fixing Unit. 4. Check the harness between the DC Controller PCB and the Fixing Motor. 5. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the Fixing Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E014	0002	05	Title	Fixing Motor error
			Detection description	The specified speed could not be maintained for 0.5 consecutive sec although it became the specified speed at least once from the startup of the Fixing Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harnesses from the DC Controller PCB to the Fixing Motor 1. DC Controller PCB (UN04/J122) to Relay Connector (8P) (Unit of replacement: CABLE, FEED) 2. Relay Connector (8P) to Fixing Motor (M09/J1019) (Unit of replacement: FIXING DRIVE ASSEMBLY) • Fixing Unit (Unit of replacement: FIXING ASSEMBLY) • Gears in the Fixing Unit 1. Cam Gear (Unit of replacement: CAM/GEAR, 3T/21T) 2. Pressure Roller Gear (Unit of replacement: GEAR, 36T) • Fixing Motor (M09) (Unit of replacement: FIXING DRIVE MOTOR ASSEMBLY) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check that the Fixing Unit is pushed into the host machine so the handle is locked. 2. Remove the Fixing Unit, and rotate the Cam Gear and the Pressure Roller Gear by hand to visually check that there is no bent or missing teeth or abnormal abrasion (edge of the gear is no longer tooth-shaped). 3. Replace the Fixing Unit. 4. Check the harness between the DC Controller PCB and the Fixing Motor. 5. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the Fixing Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E014	0003	05	Title	Fixing Motor error
			Detection description	There was no FG signal input for 0.3 sec from the startup of the Fixing Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Fixing Motor 1. DC Controller PCB (UN04/J122) to Relay Connector (8P) (Unit of replacement: CABLE, FEED) 2. Relay Connector (8P) to Fixing Motor (M09/J1019) (Unit of replacement: FIXING DRIVE ASSEMBLY) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) Gears in the Fixing Unit 1. Cam Gear (Unit of replacement: CAM/GEAR, 3T/21T) 2. Pressure Roller Gear (Unit of replacement: GEAR, 36T) Fixing Motor (M09) (Unit of replacement: FIXING DRIVE MOTOR ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check that the Fixing Unit is pushed into the host machine so the handle is locked. Remove the Fixing Unit, and rotate the Cam Gear and the Pressure Roller Gear by hand to visually check that there is no bent or missing teeth or abnormal abrasion (edge of the gear is no longer tooth-shaped). Replace the Fixing Unit. Check the harness between the DC Controller PCB and the Fixing Motor. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> Replace the Fixing Motor. Replace the DC Controller PCB. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	01A8	05	Title	ATR Sensor (Y) output error
			Detection description	The output value of the ATR Sensor (Y) in the Developing Unit (Y) did not fall within the range between 38 and 214 for 2 consecutive times during printing.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (Y) to the DC Controller PCB 1. ATR Sensor (Y) (UN21/J1050) to Developing Unit (Y) (J1040) (Unit of replacement: CABLE, DEVELOPING) 2. Developing Unit (Y) (J1040) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) 3. Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) Developing Unit (Y) (Unit of replacement: DEVELOPING ASSEMBLY, Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	01B8	05	Title	ATR Sensor (Y) output error
			Detection description	The output value did not exceed 120 although the control voltage of the ATR Sensor (Y) in the Developing Unit (Y) was increased to 192 or higher, or it did not fall below 120 although the voltage was decreased to 42 at initialization.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (Y) to the DC Controller PCB 1. ATR Sensor (Y) (UN21/J1050) to Developing Unit (Y) (J1040) (Unit of replacement: CABLE, DEVELOPING) 2. Developing Unit (Y) (J1040) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) 3. Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) Developing Unit (Y) (Unit of replacement: DEVELOPING ASSEMBLY, Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	01C8	05	Title	Error in take-up of Sealing Member (Y)
			Detection description	The patch output value (SigR) failed to be 900 or less during initialization of the Developing Unit (Y).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Registration Patch Sensor Unit to the DC Controller PCB 1. Registration Patch Sensor Unit to Relay Connector (16P) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) 2. Relay Connector (16P) to DC Controller PCB (UN04/J120) (Unit of replacement: NEW OLD SENSING HOLDER ASS'Y) Harness between the Secondary Transfer High Voltage PCB (UN03/J501 and J502) and the DC Controller PCB (UN04/J114 and J112) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Registration Patch Sensor Unit (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) Developing Unit (Y) (Unit of replacement: DEVELOPING ASSEMBLY, Y) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRANSFER H.V. PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	02A8	05	Title	ATR Sensor (M) output error
			Detection description	The output value of the ATR Sensor (M) in the Developing Unit (M) did not fall within the range between 38 and 214 for 2 consecutive times during printing.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (M) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (M) (UN22/J1051) to Developing Unit (M) (J1041) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (M) (J1041) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (M) (Unit of replacement: DEVELOPING ASSEMBLY, M) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	02B8	05	Title	ATR Sensor (M) output error
			Detection description	The output value did not exceed 120 although the control voltage of the ATR Sensor (M) in the Developing Unit (M) was increased to 192 or higher, or it did not fall below 120 although the voltage was decreased to 42 at initialization.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (M) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (M) (UN22/J1051) to Developing Unit (M) (J1041) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (M) (J1041) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (M) (Unit of replacement: DEVELOPING ASSEMBLY, M) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	02C8	05	Title	Error in take-up of Sealing Member (M)
			Detection description	The patch output value (SigR) failed to be 900 or less during initialization of the Developing Unit (M).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Registration Patch Sensor Unit to the DC Controller PCB <ol style="list-style-type: none"> Registration Patch Sensor Unit to Relay Connector (16P) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) Relay Connector (16P) to DC Controller PCB (UN04/J120) (Unit of replacement: NEW OLD SENSING HOLDER ASS'Y) <ul style="list-style-type: none"> Harness between the Secondary Transfer High Voltage PCB (UN03/J501 and J502) and the DC Controller PCB (UN04/J114 and J112) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Registration Patch Sensor Unit (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) Developing Unit (M) (Unit of replacement: DEVELOPING ASSEMBLY, M) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRANSFER H.V. PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	03A8	05	Title	ATR Sensor (C) output error
			Detection description	The output value of the ATR Sensor (C) in the Developing Unit (C) did not fall within the range between 38 and 214 for 2 consecutive times during printing.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (C) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (C) (UN23/J1052) to Developing Unit (C) (J1042) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (C) (J1042) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (C) (Unit of replacement: DEVELOPING ASSEMBLY, C) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	03B8	05	Title	ATR Sensor (C) output error
			Detection description	The output value did not exceed 120 although the control voltage of the ATR Sensor (C) in the Developing Unit (C) was increased to 192 or higher, or it did not fall below 120 although the voltage was decreased to 42 at initialization.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (C) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (C) (UN23/J1052) to Developing Unit (C) (J1042) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (C) (J1042) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (C) (Unit of replacement: DEVELOPING ASSEMBLY, C) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	03C8	05	Title	Error in take-up of Sealing Member (C)
			Detection description	The patch output value (SigR) failed to be 900 or less during initialization of the Developing Unit (C).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Registration Patch Sensor Unit to the DC Controller PCB <ol style="list-style-type: none"> Registration Patch Sensor Unit to Relay Connector (16P) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) Relay Connector (16P) to DC Controller PCB (UN04/J120) (Unit of replacement: NEW OLD SENSING HOLDER ASS'Y) <ul style="list-style-type: none"> Harness between the Secondary Transfer High Voltage PCB (UN03/J501 and J502) and the DC Controller PCB (UN04/J114 and J112) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Registration Patch Sensor Unit (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) Developing Unit (C) (Unit of replacement: DEVELOPING ASSEMBLY, C) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRANSFER H.V. PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	04A8	05	Title	ATR Sensor (Bk) output error
			Detection description	The output value of the ATR Sensor (Bk) in the Developing Unit (Bk) did not fall within the range between 38 and 214 for 2 consecutive times during printing.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (Bk) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (Bk) (UN24/J1053) to Developing Unit (Bk) (J1043) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (Bk) (J1043) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (Bk) (Unit of replacement: DEVELOPING ASSEMBLY, BK) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	04B8	05	Title	ATR Sensor (Bk) output error
			Detection description	The output value did not exceed 120 although the control voltage of the ATR Sensor (Bk) in the Developing Unit (Bk) was increased to 192 or higher, or it did not fall below 120 although the voltage was decreased to 42 at initialization.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (Bk) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (Bk) (UN24/J1053) to Developing Unit (Bk) (J1043) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (Bk) (J1043) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (Bk) (Unit of replacement: DEVELOPING ASSEMBLY, BK) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E020	04C8	05	Title	Error in take-up of Sealing Member (Bk)
			Detection description	The patch output value (SigR) failed to be 900 or less during initialization of the Developing Unit (Bk).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Registration Patch Sensor Unit to the DC Controller PCB 1. Registration Patch Sensor Unit to Relay Connector (16P) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) 2. Relay Connector (16P) to DC Controller PCB (UN04/J120) (Unit of replacement: NEW OLD SENSING HOLDER ASS'Y) Harness between the Secondary Transfer High Voltage PCB (UN03/J501 and J502) and the DC Controller PCB (UN04/J114 and J112) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Registration Patch Sensor Unit (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) Developing Unit (Bk) (Unit of replacement: DEVELOPING ASSEMBLY, BK) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRANSFER H.V. PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E021	0001	05	Title	Developing Motor error
			Detection description	It did not become the specified speed for 0.5 consecutive sec although 0.8 sec have passed from the startup of the Developing Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the Developing Motor (M10/J1190) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) Fuse in the Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) Developing Motor (M10) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> If they cannot be rotated, replace the Main Drive Unit. If they can be rotated, check the harness between the Developing Motor and the DC Controller PCB. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> Replace the Developing Motor. Replace the DC Controller PCB. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E021	0002	05	Title	Developing Motor error
			Detection description	The specified speed could not be maintained for 0.5 consecutive sec although it became the specified speed at least once from the startup of the Developing Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the Developing Motor (M10/J1190) and the DC Controller PCB (UN04/J129) (Unit of replacement: CABLE, MAIN DRIVE) • Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) • Fuse in the Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) • Developing Motor (M10) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check whether the gears of the Main Drive Unit can be rotated by hand. <ol style="list-style-type: none"> a. If they cannot be rotated, replace the Main Drive Unit. b. If they can be rotated, check the harness between the Developing Motor and the DC Controller PCB. 2. Measure the both ends of the fuse in the Low Voltage Power Supply PCB using a tester. <ol style="list-style-type: none"> a. If the measurement value is less than 1 ohm (conduction state), <ol style="list-style-type: none"> 1. Replace the Developing Motor. 2. Replace the DC Controller PCB. b. If the measurement value is 1 ohm or higher (non conduction state), replace the Low Voltage Power Supply PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E021	0120	05	Title	Developing Screw rotation detection error (Y)
			Detection description	The difference between the maximum and the minimum of sampling values detected by the ATR Sensor (Y) in the Developing Unit (Y) was 12 V or less during rotation of the Developing Screw.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harnesses from the ATR Sensor (Y) to the DC Controller PCB <ol style="list-style-type: none"> 1. ATR Sensor (Y) (UN21/J1050) to Developing Unit (Y) (J1040) (Unit of replacement: CABLE, DEVELOPING) 2. Developing Unit (Y) (J1040) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) 3. Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> • Developing Unit (Y) (Unit of replacement: DEVELOPING ASSEMBLY, Y) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E021	0220	05	Title	Developing Screw rotation detection error (M)
			Detection description	The difference between the maximum and the minimum of sampling values detected by the ATR Sensor (M) in the Developing Unit (M) was 12 V or less during rotation of the Developing Screw.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (M) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (M) (UN22/J1051) to Developing Unit (M) (J1041) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (M) (J1041) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (M) (Unit of replacement: DEVELOPING ASSEMBLY, M) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E021	0320	05	Title	Developing Screw rotation detection error (C)
			Detection description	The difference between the maximum and the minimum of sampling values detected by the ATR Sensor (C) in the Developing Unit (C) was 12 V or less during rotation of the Developing Screw.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (C) to the DC Controller PCB <ol style="list-style-type: none"> ATR Sensor (C) (UN23/J1052) to Developing Unit (C) (J1042) (Unit of replacement: CABLE, DEVELOPING) Developing Unit (C) (J1042) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) <ul style="list-style-type: none"> Developing Unit (C) (Unit of replacement: DEVELOPING ASSEMBLY, C) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E021	0420	05	Title	Developing Screw rotation detection error (Bk)
			Detection description	The difference between the maximum and the minimum of sampling values detected by the ATR Sensor (Bk) in the Developing Unit (Bk) was 12 V or less during rotation of the Developing Screw.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the ATR Sensor (Bk) to the DC Controller PCB 1. ART Sensor (Bk) (UN24/J1053) to Developing Unit (Bk) (J1043) (Unit of replacement: CABLE, DEVELOPING) 2. Developing Unit (Bk) (J1043) to Relay Connector (4P) (Unit of replacement: CABLE, RELAY) 3. Relay Connector (4P) to DC Controller PCB (UN04/J128) (Unit of replacement: CABLE, SENSOR) Developing Unit (Bk) (Unit of replacement: DEVELOPING ASSEMBLY, BK) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E025	0110	05	Title	Bottle Motor error (Y)
			Detection description	The Toner Supply Sensor (Y) did not detect change for 1 sec or longer while the Bottle Motor (YM) was rotated at toner supply.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (YM) to the DC Controller PCB 1. Bottle Motor (YM) (M04) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Harness between the Toner Supply Sensor (Y) (PS26/J1059) and DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Toner Supply Sensor (Y) Bottle Drive Unit (YM) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, Y, M) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E025	0120	05	Title	Bottle Motor error (Y)
			Detection description	Rotation of bottle was detected while the Toner Bottle Motor (Y) of replacement: CABLE, TONER BOTTLE was OFF.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (YM) to the DC Controller PCB 1. Bottle Motor (YM) (M04) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Harness between the Toner Supply Sensor (Y) (PS26/J1059) and DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Toner Supply Sensor (Y) Bottle Drive Unit (YM) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, Y, M) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E025	0168	05	Title	No toner detection error (Y)
			Detection description	The state without toner was detected although the recovery sequence was performed for 5 times after replacement of the Toner Container (Y).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Toner Container (Y) Bottle Drive Unit (YM) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, Y, M) Developing Unit (Y) (UN21) (Unit of replacement: DEVELOPING ASSEMBLY, Y) <p>ITB Rail Rear Unit (Unit of replacement: I.T.B. RAIL ASSEMBLY, REAR)</p> <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p>

Error code	Detail Code	Location	Item	Description
E025	0210	05	Title	Bottle Motor error (M)
			Detection description	The Toner Supply Sensor (M) did not detect change for 1 sec or longer while the Bottle Motor (YM) was rotated at toner supply.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (YM) to the DC Controller PCB 1. Bottle Motor (YM) (M04) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Harness between the Toner Supply Sensor (M) (PS27/J1060) and DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Toner Supply Sensor (M) Bottle Drive Unit (YM) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, Y, M) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E025	0220	05	Title	Bottle Motor error (M)
			Detection description	Rotation of bottle was detected while the Toner Bottle Motor (M) was OFF.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (YM) to the DC Controller PCB 1. Bottle Motor (YM) (M04) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Harness between the Toner Supply Sensor (M) (PS27/J1060) and DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Toner Supply Sensor (M) Bottle Drive Unit (YM) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, Y, M) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E025	0268	05	Title	No toner detection error (M)
			Detection description	The state without toner was detected although the recovery sequence was performed for 5 times after replacement of the Toner Container (M).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Toner Container (M) Bottle Drive Unit (YM) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, Y, M) Developing Unit (M) (UN22) (Unit of replacement: DEVELOPING ASSEMBLY, M) <p>ITB Rail Rear Unit (Unit of replacement: I.T.B. RAIL ASSEMBLY, REAR)</p> <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p>

Error code	Detail Code	Location	Item	Description
E025	0310	05	Title	Bottle Motor error (C)
			Detection description	The Toner Supply Sensor (C) did not detect change for 1 sec or longer while the Bottle Motor (CK) was rotated at toner supply.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (CK) to the DC Controller PCB 1. Bottle Motor (CK) (M05) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Harness between the Toner Supply Sensor (C) (PS28/J1061) and the DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Toner Supply Sensor (C) Bottle Drive Unit (CK) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, C, K) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E025	0320	05	Title	Bottle Motor error (C)
			Detection description	Rotation of bottle was detected while the Toner Bottle Motor (C) was OFF.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (CK) to the DC Controller PCB 1. Bottle Motor (CK) (M05) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) <p>-Harness between the Toner Supply Sensor (C) (PS28/J1061) and the DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE)</p> <ul style="list-style-type: none"> Toner Supply Sensor (C) Bottle Drive Unit (CK) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, C, K) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E025	0368	05	Title	No toner detection error (C)
			Detection description	The state without toner was detected although the recovery sequence was performed for 5 times after replacement of the Toner Container (C).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Toner Container (C) Bottle Drive Unit (CK) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, C, K) Developing Unit (C) (UN23) (Unit of replacement: DEVELOPING ASSEMBLY, C) <p>ITB Rail Rear Unit (Unit of replacement: I.T.B. RAIL ASSEMBLY, REAR)</p> <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p>

Error code	Detail Code	Location	Item	Description
E025	0410	05	Title	Bottle Motor error (Bk)
			Detection description	The Toner Supply Sensor (Bk) did not detect change for 1 sec or longer while the Bottle Motor (CK) was rotated at toner supply.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (CK) to the DC Controller PCB 1. Bottle Motor (CK) (M05) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) <ul style="list-style-type: none"> Harness between the Toner Supply Sensor (Bk) (PS29/J1062) and the DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Toner Supply Sensor (Bk) Bottle Drive Unit (CK) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, C, K) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E025	0420	05	Title	Bottle Motor error (Bk)
			Detection description	Rotation of bottle was detected while the Toner Bottle Motor (Bk) was OFF.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Bottle Motor (CK) to the DC Controller PCB 1. Bottle Motor (CK) (M05) to Relay Connector (2P) (Unit of replacement: CABLE, BOTTLE DRIVE MOTOR) 2. Relay Connector (2P) to DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Harness between the Toner Supply Sensor (Bk) (PS29/J1062) and the DC Controller PCB (UN04/J127) (Unit of replacement: CABLE, TONER BOTTLE) Toner Supply Sensor (Bk) Bottle Drive Unit (CK) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, C, K) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E025	0468	05	Title	No toner detection error (Bk)
			Detection description	The state without toner was detected although the recovery sequence was performed for 5 times after replacement of the Toner Container (Bk).
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Toner Container (Bk) Bottle Drive Unit (CK) (Unit of replacement: BOTTLE DRIVE ASSEMBLY, C, K) Developing Unit (Bk) (UN24) (Unit of replacement: DEVELOPING ASSEMBLY, BK) ITB Rail Rear Unit (Unit of replacement: I.T.B. RAIL ASSEMBLY, REAR) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p>

Error code	Detail Code	Location	Item	Description
E029	5008	05	Title	Registration Patch Sensor (Front) density error
			Detection description	The background regular reflection output of the Registration Patch Sensor Unit (Front) did not fall within the range from 115 to 1000 at initialization of the Developing Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Registration Patch Sensor Unit (Front) to the DC Controller PCB 1. Registration Patch Sensor Unit (Front) (UN26/J1022) to Relay Connector (16P) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) 2. Relay Connector (16P) to DC Controller PCB (UN04/J120) (Unit of replacement: NEW OLD SENSING HOLDER UNIT) Registration Patch Sensor Unit (Front) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) DC Controller PCB (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check if the sensor window of the Registration Patch Sensor Unit (Front) is soiled. If it is soiled, clean it with lint-free paper moistened with water. Check/replace the related harness/cable, connector and parts. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E029	7008	05	Title	Registration Patch Sensor (Rear) density error
			Detection description	The background regular reflection output of the Registration Patch Sensor Unit (Rear) did not fall within the range from 115 to 1000 at initialization of the Developing Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Registration Patch Sensor Unit (Rear) to the DC Controller PCB 1. Registration Patch Sensor Unit (Rear) (UN25/J1066) to Relay Connector (16P) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) 2. Relay Connector (16P) to DC Controller PCB (UN04/J120) (Unit of replacement: NEW OLD SENSING HOLDER UNIT) Registration Patch Sensor Unit (Rear) (Unit of replacement: REGISTRATION SENSOR ASSEMBLY) DC Controller PCB (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check if the sensor window of the Registration Patch Sensor Unit (Rear) is soiled. If it is soiled, clean it with lint-free paper moistened with water. Check/replace the related harness/cable, connector and parts. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E073	0001	05	Title	Interlock error
			Detection description	The Interlock (24 V) was not detected although all the doors of the host machine were closed.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Interlock Switch 1 and 2 to the DC Controller PCB 1. Interlock Switch 1 and 2 (SW02 and SW03) to Relay Connector (9P) (Unit of replacement: CABLE, INTERLOCK SWITCH) 2. Relay Connector (9P) to DC Controller PCB (UN04/J133) (Unit of replacement: CABLE, SENSOR) Harness between the Low Voltage Power Supply PCB (UN01/J315 and J322) and the DC Controller PCB (UN04/J100 and J115) (Unit of replacement: POWER SUPPLY ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E074	0001	05	Title	ITB HP time out error
			Detection description	The HP Sensor in the Main Drive Unit did not detect home position within the specified period of time.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Primary Transfer Roller Disengagement HP Sensor 1. DC Controller PCB (UN04/J131) to Relay Connector (3P) (Unit of replacement: CABLE, MAIN DRIVE) 2. Relay Connector (3P) to Primary Transfer Roller Disengagement HP Sensor (PS33/J1189) (Unit of replacement: CABLE, SENSOR) Harness between the DC Controller PCB (UN04/J131) and the Primary Transfer Roller Disengagement Motor (M08/J1201) (Unit of replacement: CABLE, MAIN DRIVE) Harness between the DC Controller PCB (UN04/J129) and the Bk Drum_ITB Motor (M02/J1054) (Unit of replacement: CABLE, MAIN DRIVE) Primary Transfer Roller Disengagement HP Sensor (PS33) Primary Transfer Roller Disengagement Motor (M08) Bk Drum_ITB Motor (M02) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) ITB Unit (Unit of replacement: INTER. TRANSFER BELT ASS'Y) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E074	0002	05	Title	ITB HP time out error
			Detection description	There was no change after the HP Sensor in the Main Drive Unit detected home position.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Primary Transfer Roller Disengagement HP Sensor 1. DC Controller PCB (UN04/J131) to Relay Connector (3P) (Unit of replacement: CABLE, MAIN DRIVE) 2. Relay Connector (3P) to Primary Transfer Roller Disengagement HP Sensor (PS33/J1189) (Unit of replacement: CABLE, SENSOR) Harness between the DC Controller PCB (UN04/J131) and the Primary Transfer Roller Disengagement Motor (M08/J1201) (Unit of replacement: CABLE, MAIN DRIVE) Harness between the DC Controller PCB (UN04/J129) and the Bk Drum_ITB Motor (M02/J1054) (Unit of replacement: CABLE, MAIN DRIVE) Primary Transfer Roller Disengagement HP Sensor (PS33) Primary Transfer Roller Disengagement Motor (M08) Bk Drum_ITB Motor (M02) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Main Drive Unit (Unit of replacement: MAIN DRIVE ASSEMBLY) ITB Unit (Unit of replacement: INTER. TRANSFER BELT ASS'Y) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E100	0001	05	Title	BD error
			Detection description	The BD lock was unlocked although it had been locked once.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flat Cable between the Y/M Laser Driver PC (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) Flat Cable between the Main Controller PCB (UN05/J19) and the Y/M Laser Driver PCB (UN08/J201) (Unit of replacement: FLEXIBLE FLAT CABLE ASSEMBLY) Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) C/Bk Laser Driver PCB (UN09) (Unit of replacement: LASER SCANNER ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch". <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E110	0001	05	Title	Scanner Motor error
			Detection description	The speed was not locked by FG control within 5.5 sec after startup of the Scanner Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flat Cable between the Y/M Laser Driver PC (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) Flat Cable between the Main Controller PCB (UN05/J19) and the Y/M Laser Driver PCB (UN08/J201) (Unit of replacement: FLEXIBLE FLAT CABLE ASSEMBLY) Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) C/Bk Laser Driver PCB (UN09) (Unit of replacement: LASER SCANNER ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch". <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E110	0002	05	Title	Scanner Motor error
			Detection description	The speed was not locked by BD control within 5.5 sec after startup of the Scanner Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flat Cable between the Y/M Laser Driver PC (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) Flat Cable between the Main Controller PCB (UN05/J19) and the Y/M Laser Driver PCB (UN08/J201) (Unit of replacement: FLEXIBLE FLAT CABLE ASSEMBLY) Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) C/Bk Laser Driver PCB (UN09) (Unit of replacement: LASER SCANNER ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch". <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E110	0003	05	Title	Scanner Motor error
			Detection description	The phase was not locked by BD control within 5.5 sec after startup of the Scanner Motor.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flat Cable between the Y/M Laser Driver PC (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) Flat Cable between the Main Controller PCB (UN05/J19) and the Y/M Laser Driver PCB (UN08/J201) (Unit of replacement: FLEXIBLE FLAT CABLE ASSEMBLY) Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) C/Bk Laser Driver PCB (UN09) (Unit of replacement: LASER SCANNER ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch". <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E110	0004	05	Title	Scanner Motor error
			Detection description	Correction in timing of laser exposure to the Polygon Mirror was not detected after the phase lock by BD control.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flat Cable between the Y/M Laser Driver PC (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) Flat Cable between the Main Controller PCB (UN05/J19) and the Y/M Laser Driver PCB (UN08/J201) (Unit of replacement: FLEXIBLE FLAT CABLE ASSEMBLY) Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) C/Bk Laser Driver PCB (UN09) (Unit of replacement: LASER SCANNER ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch". <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E193	0001	05	Title	Communication error
			Detection description	Communication between the DC Controller PCB (CPU) and the Main Controller PCB (ASIC) could not be established.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J110) and the Main Controller PCB (UN05/J18) (Unit of replacement: DDIP, CABLE) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E196	0000	05	Title	Communication error
			Detection description	The NACK (a negative reply sent by the reception side to the sending side) was received 3 times at DCON EEPROM communication.
			Remedy	<p>[Remedy] Check/replace the DC Controller PCB (UN04). (Unit of replacement: DC CONTROLLER PCB ASSEMBLY)</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E196	0001	05	Title	Communication error
			Detection description	Although access to the EEPROM from the CPU of the DC Controller PCB was performed 3 times, no response was received and timeout occurred.
			Remedy	<p>[Remedy] Check/replace the DC Controller PCB (UN04). (Unit of replacement: DC CONTROLLER PCB ASSEMBLY)</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E196	000F	05	Title	Communication error
			Detection description	The number of read/write job data to the DCON EEPROM exceeded 100.
			Remedy	[Remedy] Turn OFF and then ON the main power. [Reference] Data (device information) is reset by turning OFF and then ON the main power.
E196	0100	05	Title	Communication error
			Detection description	The NACK (a negative reply sent by the reception side to the sending side) was received 3 times in communication from the DC Controller PCB (CPU) to the SCNR EEPROM.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Harness between the DC Controller PCB (UN04/J114) and the Secondary Transfer High Voltage PCB (UN03/J501) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRNSFR. H.V. PCB ASS'Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E196	0101	05	Title	Communication error
			Detection description	Although access to the SCNR EEPROM from the DC Controller PCB (CPU) was performed 3 times, no response was received and timeout occurred.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Harness between the DC Controller PCB (UN04/J114) and the Secondary Transfer High Voltage PCB (UN03/J501) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRNSFR. H.V. PCB ASS'Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E196	010F	05	Title	Communication error
			Detection description	The number of read/write job data to the SCNR EEPROM exceeded 100.
			Remedy	[Remedy] Turn OFF and then ON the main power. [Reference] Data (device information) is reset by turning OFF and then ON the main power.

Error code	Detail Code	Location	Item	Description
E196	0800	05	Title	Communication error
			Detection description	The NACK (a negative reply sent by the reception side to the sending side) was received 3 times in communication from the DC Controller PCB (CPU) to the HVT EEPROM.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Harness between the DC Controller PCB (UN04/J114) and the Secondary Transfer High Voltage PCB (UN03/J501) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRNSFR. H.V. PCB ASS'Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E196	0801	05	Title	Communication error
			Detection description	Although access to the HVT EEPROM from the DC Controller PCB (CPU) was performed 3 times, no response was received and timeout occurred.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Harness between the DC Controller PCB (UN04/J114) and the Secondary Transfer High Voltage PCB (UN03/J501) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRNSFR. H.V. PCB ASS'Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E196	080F	05	Title	Communication error
			Detection description	The number of read/write job data to the HVT EEPROM exceeded 100.
			Remedy	<p>[Remedy] Turn OFF and then ON the main power.</p> <p>[Reference] Data (device information) is reset by turning OFF and then ON the main power.</p>

Error code	Detail Code	Location	Item	Description
E197	0B11	05	Title	Serial communication error
			Detection description	Communication between the DC Controller PCB and the Second/Third Delivery PCB was not completed.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J123) and the Second/Third Delivery Unit (J701) (Unit of replacement: CABLE, FEED) Second/Third Delivery Unit (Unit of replacement: 2ND/3RD DELIVERY DRIVE ASS'Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E197	0B20	05	Title	Serial communication error
			Detection description	A communication error of ASIC in the DC Controller PCB was detected.
			Remedy	[Remedy] Replace the DC Controller PCB (UN04). (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E197	0B21	05	Title	Serial communication error
			Detection description	A communication error between the DC Controller PCB and the Cassette Unit PCB was detected.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J126) and the Cassette Unit PCB (Unit of replacement: CABLE, FEED MOTOR) Cassette Unit PCB (Unit of replacement: CASSETTE ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E197	1001	05	Title	Serial communication error
			Detection description	A communication error between the CPU of the DC Controller PCB and KONA1 (ASIC) in the DC Controller PCB was detected.
			Remedy	[Remedy] Replace the DC Controller PCB (UN04). (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E197	1002	05	Title	Serial communication error
			Detection description	A communication error between the CPU of the DC Controller PCB and KONA2 (ASIC) in the DC Controller PCB was detected.
			Remedy	[Remedy] Replace the DC Controller PCB (UN04). (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E197	1004	05	Title	Serial communication error
			Detection description	Communication between the DC Controller PCB and the Laser Driver PCB was not completed.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J111) and the Y/M Laser Driver PCB (UN08/J202) (Unit of replacement: CABLE, CASSETTE SIZE) Flat Cable between the Y/M Laser Driver PCB (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) C/Bk Laser Driver PCB (UN09) (Unit of replacement: LASER SCANNER ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch". <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E197	1081	05	Title	Serial communication error
			Detection description	A communication error between the CPU of the DC Controller PCB and KONA1 (ASIC) in the DC Controller PCB was detected. (An error caused by software)
			Remedy	<p>[Remedy] Turn OFF and then ON the main power.</p> <p>[Reference] Data (device information) is reset by turning OFF and then ON the main power.</p>
E197	1082	05	Title	Serial communication error
			Detection description	A communication error between the CPU of the DC Controller PCB and KONA2 (ASIC) in the DC Controller PCB was detected. (An error caused by software)
			Remedy	<p>[Remedy] Turn OFF and then ON the main power.</p> <p>[Reference] Data (device information) is reset by turning OFF and then ON the main power.</p>

Error code	Detail Code	Location	Item	Description
E197	1084	05	Title	Serial communication error
			Detection description	A communication error between the DC Controller PCB and the Laser Driver PCB was detected. (An error caused by software)
			Remedy	<p>[Remedy] Turn OFF and then ON the main power.</p> <p>[Reference] Data (device information) is reset by turning OFF and then ON the main power.</p>
E197	5000	05	Title	Serial communication error
			Detection description	A communication error between the DC Controller PCB and the Secondary Transfer High Voltage PCB was detected at power-on.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J112 and J114) and the Secondary Transfer High Voltage PCB (UN03/J502 and J501) (Unit of replacement: CABLE, 2ND TRNSFR. H.V. PCB) Secondary Transfer High Voltage PCB (UN03) (Unit of replacement: 2ND TRANSFER H.V. PCB ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E197	5001	05	Title	Serial communication error
			Detection description	A communication error between the DC Controller PCB and the Primary Transfer High Voltage PCB was detected at power-on.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J113) and the Primary Transfer High Voltage PCB (UN02/J401) (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Primary Transfer High Voltage PCB (UN02) (Unit of replacement: 1ST TRNSFR. H.V. PCB ASS'Y) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E202	0001	04	Title	Scanner HP error
			Detection description	The DADF Scanner Unit could not detect the home position when starting scanning operation.
			Remedy	[Related parts] <ul style="list-style-type: none"> • Harness between the Scanner Motor (M1/J5015) and the Main Controller PCB (UN05/J36) (Unit of replacement: CABLE, MOTOR) • Harness between the Scanner Unit HP Sensor (PS2/J5009) and the Main Controller PCB (UN05/J37) (Unit of replacement: CABLE, SENSOR) • Scanner Unit HP Sensor (PS2) • Scanner Motor (M1) (Unit of replacement: MOTOR ASS'Y) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.
E202	0002	04	Title	Scanner HP error
			Detection description	The DADF Scanner Unit could not detect the home position when completing scanning operation.
			Remedy	[Related parts] <ul style="list-style-type: none"> • Harness between the Scanner Motor (M1/J5015) and the Main Controller PCB (UN05/J36) (Unit of replacement: CABLE, MOTOR) • Harness between the Scanner Unit HP Sensor (PS2/J5009) and the Main Controller PCB (UN05/J37) (Unit of replacement: CABLE, SENSOR) • Scanner Unit HP Sensor (PS2) • Scanner Motor (M1) (Unit of replacement: MOTOR ASS'Y) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E202	0003	04	Title	Scanner HP error
			Detection description	An error in the Scanner Unit (Paper Front) position was detected when reading of a job was started.
			Remedy	[Related parts] <ul style="list-style-type: none"> • Harness between the Scanner Motor (M1/J5015) and the Main Controller PCB (UN05/J36) (Unit of replacement: CABLE, MOTOR) • Harness between the Scanner Unit HP Sensor (PS2/J5009) and the Main Controller PCB (UN05/J37) (Unit of replacement: CABLE, SENSOR) • Scanner Unit HP Sensor (PS2) • Scanner Motor (M1) (Unit of replacement: MOTOR ASS'Y) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E227	0001	04	Title	Power supply (24 V) error
			Detection description	The Main Controller PCB did not detect 24 V at power-on.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Main Controller PCB to the ADF Driver PCB <ol style="list-style-type: none"> Main Controller PCB (UN05/J38) to Relay Connector (2P) (Unit of replacement: CABLE, ADF POWER CONNECTING) Relay Connector (2P) to ADF Driver PCB (PCB1/J1411) <ul style="list-style-type: none"> Harness between the Main Controller PCB (UN05/J20) and the Low Voltage Power Supply PCB (UN01/J313) (Unit of replacement: POWER SUPPLY ASSEMBLY) ADF Driver PCB (PCB1) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> When an error is detected, conduction of 24 V is stopped. At power check, check if 24 V is conducted by repeating power cycling of the machine. <ol style="list-style-type: none"> Measure the Low Voltage Power Supply PCB (J313/pin 3) using a tester. When 24 V is not output to the Low Voltage Power Supply PCB (J313/pin 3), replace the Low Voltage Power Supply PCB. When 24 V is output to the Low Voltage Power Supply PCB (J313/pin 3), measure the Main Controller PCB (J20/pin 3) using a tester. When 24 V is not output to the Main Controller PCB (J20/pin 3), check the harness between the Main Controller PCB and the Low Voltage Power Supply PCB. When 24 V is output to the Main Controller PCB (J20/pin 3), measure the Main Controller PCB (J38/pin 2) using a tester. When 24 V is not output to the Main Controller PCB (J38/pin 2), replace the Main Controller PCB. When 24 V is output to the Main Controller PCB (J38/pin 2), measure the ADF Driver PCB (J1411/pin 2) using a tester. When 24 V is not output to the ADF Driver PCB (J1411/pin 2), check the harnesses from the Main Controller PCB to the ADF Driver PCB. When 24 V is output to the ADF Driver PCB (J1411/pin 2), replace the ADF Driver PCB.

Error code	Detail Code	Location	Item	Description
E227	0101	04	Title	Power supply (24 V) error
			Detection description	The ADF Driver PCB did not detect 24 V after the start of a job.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the Main Controller PCB to the ADF Driver PCB <ol style="list-style-type: none"> Main Controller PCB (UN05/J38) to Relay Connector (2P) (Unit of replacement: CABLE, ADF POWER CONNECTING) Relay Connector (2P) to ADF Driver PCB (PCB1/J1411) <ul style="list-style-type: none"> Harness between the Main Controller PCB (UN05/J20) and the Low Voltage Power Supply PCB (UN01/J313) (Unit of replacement: POWER SUPPLY ASSEMBLY) ADF Driver PCB (PCB1) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> When an error is detected, conduction of 24 V is stopped. At power check, check if 24 V is conducted by repeating power cycling of the machine. <ol style="list-style-type: none"> Measure the Low Voltage Power Supply PCB (J313/pin 3) using a tester. When 24 V is not output to the Low Voltage Power Supply PCB (J313/pin 3), replace the Low Voltage Power Supply PCB. When 24 V is output to the Low Voltage Power Supply PCB (J313/pin 3), measure the Main Controller PCB (J20/pin 3) using a tester. When 24 V is not output to the Main Controller PCB (J20/pin 3), check the harness between the Main Controller PCB and the Low Voltage Power Supply PCB. When 24 V is output to the Main Controller PCB (J20/pin 3), measure the Main Controller PCB (J38/pin 2) using a tester. When 24 V is not output to the Main Controller PCB (J38/pin 2), replace the Main Controller PCB. When 24 V is output to the Main Controller PCB (J38/pin 2), measure the ADF Driver PCB (J1411/pin 2) using a tester. When 24 V is not output to the ADF Driver PCB (J1411/pin 2), check the harnesses from the Main Controller PCB to the ADF Driver PCB. When 24 V is output to the ADF Driver PCB (J1411/pin 2), replace the ADF Driver PCB.

Error code	Detail Code	Location	Item	Description
E240	0000	00	Title	Controller communication error
			Detection description	A sequence error with the controller occurred.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flexible Cable between the DC Controller PCB (UN04/J110) and the Main Controller PCB (UN05/J18) (Unit of replacement: CABLE, FLAT) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) <p>[Points to note at work] When checking the harness/cable or connector, perform the following work.</p> <ol style="list-style-type: none"> Disconnect and then connect the connector to check that there is no bent pin and cable disconnection. Visually check that the harness is not caught or open circuit. If there is any error, replace the corresponding harness/cable. <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check the harness between the DC Controller PCB and the Main Controller PCB. Turn ON the power, and check if the initialization is executed at startup. <p>2-1. If the initialization is not executed, replace the DC Controller PCB.</p> <p>2-2. If the initialization is executed, replace the Main Controller PCB.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E246	0001	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E246	0002	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E246	0003	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.

Error code	Detail Code	Location	Item	Description
E246	0005	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E247	0001	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E247	0002	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E247	0003	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E247	0004	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E248	0001	04	Title	EEPROM error
			Detection description	The Controller IC of the Main Controller PCB detected an error at reading or rewriting of the Reader backup value in the Scanner Unit.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Harnesses from the Main Controller PCB to the ADF Driver PCB <ol style="list-style-type: none"> Main Controller PCB (UN05/J38) to Relay Connector (2P) (Unit of replacement: CABLE, ADF POWER CONNECTING) Relay Connector (2P) to ADF Driver PCB (PCB1/J1411) <ul style="list-style-type: none"> Scanner Unit (Unit of replacement: SCANNER UNIT) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) ADF Driver PCB (PCB1) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p>

Error code	Detail Code	Location	Item	Description
E260	0001	05	Title	Power supply error
			Detection description	Short-circuit was detected at power-on.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J100 and J115) and the Low Voltage Power Supply PCB (UN01/J315 and J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E260	0002	05	Title	Power supply error
			Detection description	Open circuit was detected at power-on.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J100 and J115) and the Low Voltage Power Supply PCB (UN01/J315 and J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E270	0001	04	Title	Scanner Unit communication error
			Detection description	The vertical scanning synchronous signal (VSYNC) was not transmitted normally at the Scanner Unit side that communicates with the Main Controller PCB.
			Remedy	[Related parts] <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Check/replace the related harness/cable, connector and parts.
E270	0002	04	Title	Scanner Unit communication error
			Detection description	The vertical scanning synchronous signal (VSYNC) was not transmitted due to horizontal scanning synchronous signal (HSYNC) error which is sent to the Main Controller PCB.
			Remedy	[Related parts] <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Check/replace the related harness/cable, connector and parts.
E280	0001	04	Title	Scanner Unit communication error
			Detection description	Communication between the Main Controller and the Scanner Unit was not started within the specified period of time.
			Remedy	[Related parts] <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Check/replace the related harness/cable, connector and parts.
E280	0002	04	Title	Scanner Unit communication error
			Detection description	Disconnection of FFC between the Main Controller and the Scanner Unit was detected.
			Remedy	[Related parts] <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E280	0003	04	Title	Scanner Unit communication error
			Detection description	Reading or writing error was detected between the Main Controller and the Scanner Unit.
			Remedy	[Related parts] <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Check/replace the related harness/cable, connector and parts.
E280	0004	04	Title	Scanner Unit communication error
			Detection description	A communication error was detected in the Scanner Unit.
			Remedy	[Related parts] <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Check/replace the related harness/cable, connector and parts.
E302	0001	04	Title	Shading error
			Detection description	An error in the shading value was detected at white shading.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the Scanner Unit and the LED PCB (Unit of replacement: LASER SCANNER ASSEMBLY) Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) Stream Reading Glass (Unit of replacement: GLASS, READER) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E302	0002	04	Title	Shading error
			Detection description	An error in the shading value was detected at black shading.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the Scanner Unit and the LED PCB (Unit of replacement: LASER SCANNER ASSEMBLY) Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) Scanner Unit (Unit of replacement: SCANNER UNIT) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) Stream Reading Glass (Unit of replacement: GLASS, READER) [Remedy] Check/replace the related harness/cable, connector and parts.
E315	0007	00	Title	Image processing device error
			Detection description	JBIG encode error was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	000D	00	Title	Image processing device error
			Detection description	JBIG decode error was detected.
			Remedy	[Related parts] <ul style="list-style-type: none"> Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) HDD (Unit of replacement: HARD DISK DRIVE) [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> Turn OFF and then ON the main power, and check whether the error is cleared. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "5", and execute "HD-CLEAR". Then, turn OFF and then ON the main power (so the current job is deleted). After turning OFF the main power, replace the HDD and the Main Controller PCB at the same time. Execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory.

Error code	Detail Code	Location	Item	Description
E315	000E	00	Title	Image processing device error
			Detection description	An error was detected at software decoding.
			Remedy	[Related parts] <ul style="list-style-type: none"> Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) HDD (Unit of replacement: HARD DISK DRIVE) [Remedy] Perform the following in the order while checking whether the error is cleared. 1. Turn OFF and then ON the main power, and check whether the error is cleared. 2. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "5", and execute "HD-CLEAR". Then, turn OFF and then ON the main power (so the current job is deleted). 3. After turning OFF the main power, replace the HDD and the Main Controller PCB at the same time. 4. Execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory.
E315	000F	00	Title	Image processing device error
			Detection description	MemoryCopy error was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0027	00	Title	Image processing device error
			Detection description	ROTU timeout error was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0035	00	Title	Image processing device error
			Detection description	MemFill timeout error was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0100	00	Title	Image processing device error
			Detection description	PRIO overrun.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0500	00	Title	Device timeout error
			Detection description	An image synchronous signal from the Main Controller PCB to the Reader could not be detected for 30 sec or longer.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)

Error code	Detail Code	Location	Item	Description
E315	0501	00	Title	Image processing device error
			Detection description	An abnormal signal from the Main Controller PCB to the Reader was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0510	00	Title	Device timeout error
			Detection description	An image synchronous signal from the Main Controller PCB to the Reader could not be detected for 30 sec or longer.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0511	00	Title	Image processing device error
			Detection description	An abnormal signal from the Main Controller PCB to the Reader was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0520	00	Title	Device timeout error
			Detection description	An image synchronous signal from the Main Controller PCB to the Reader could not be detected for 30 sec or longer.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0521	00	Title	Image processing device error
			Detection description	An abnormal signal from the Main Controller PCB to the Reader was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0530	00	Title	Device timeout error
			Detection description	An image synchronous signal from the Main Controller PCB to the Reader could not be detected for 30 sec or longer.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0531	00	Title	Image processing device error
			Detection description	An abnormal signal from the Main Controller PCB to the Reader was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0540	00	Title	Device timeout error
			Detection description	An image synchronous signal from the Main Controller PCB to the Reader could not be detected for 30 sec or longer.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0541	00	Title	Image processing device error
			Detection description	An abnormal signal from the Main Controller PCB to the Reader was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)

Error code	Detail Code	Location	Item	Description
E315	0550	00	Title	Device timeout error
			Detection description	An image synchronous signal from the Main Controller PCB to the Reader could not be detected for 30 sec or longer.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E315	0551	00	Title	Image processing device error
			Detection description	An abnormal signal from the Main Controller PCB to the Reader was detected.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E350	0000	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E350	0001	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E350	0002	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E350	0003	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E350	3000	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E351	0000	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E354	0001	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E354	0002	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.

Error code	Detail Code	Location	Item	Description
E355	0001	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E355	0002	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E355	0003	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E355	0004	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E400	0002	04	Title	Communication error
			Detection description	A communication error between the Main Controller PCB and the ADF Driver PCB was detected.
			Remedy	[Related parts] <ul style="list-style-type: none"> • Harnesses from the Main Controller PCB to the ADF Driver PCB 1. Main Controller PCB (UN05/J35) to Relay Connector (19P) (Unit of replacement: CABLE, ADF DATA CONNECTING) 2. Relay Connector (19P) to ADF Driver PCB (PCB1/J1410) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) • ADF Driver PCB (PCB1) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E500	0000	02	Title	Communication error
			Detection description	A communication error between the host machine and the Finisher was detected.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the DC Controller PCB to the Finisher Controller PCB Finisher Controller PCB (PCB1) DC Controller PCB [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> Check/replace the harness and connector between the DC Controller PCB and the Finisher Controller PCB. Replace the Finisher Controller PCB. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual. <ol style="list-style-type: none"> Replace the DC Controller PCB. [Reference] Before replacing the DC Controller PCB, back up the service mode data and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E501	0091	02	Title	Communication error
			Detection description	A communication error between the Finisher and the Buffer Pass was detected.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Buffer Pass Controller PCB to the Finisher Controller PCB Buffer Pass Controller PCB (PCB201) Finisher Controller PCB (PCB1) [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> Check/replace the harness and connector between the Buffer Pass Controller PCB and the Finisher Controller PCB. Replace the Buffer Pass Controller PCB. Replace the Finisher Controller PCB. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E503	0002	02	Title	Communication error
			Detection description	A communication error between the Finisher Controller PCB and the Saddle Stitcher Controller PCB was detected.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Finisher Controller PCB to the Saddle Stitcher Controller PCB Finisher Controller PCB (PCB1) Saddle Stitcher Controller PCB (PCB2) [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> Check/replace the harness and connector between the Finisher Controller PCB and the Saddle Stitcher Controller PCB. Replace the Finisher Controller PCB. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual. <ol style="list-style-type: none"> Replace the Saddle Stitcher Controller PCB.
E505	0001	02	Title	Error in EEPROM of the Finisher
			Detection description	An error was detected in the check sum value of data read from EEPROM on the Finisher Controller PCB.
			Remedy	[Related parts] Finisher Controller PCB (PCB1) [Remedy] Check/replace the Finisher Controller PCB (PCB1). [Reference] Before replacing the Finisher Controller PCB, back up the service mode data and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: SORTER (LEVEL1)> FUNCTION> SYSTEM> FIN-BK-R Restoration: SORTER (LEVEL1)> FUNCTION> SYSTEM> FIN-BK-W
E505	0004	02	Title	Error in CPU of the Buffer Pass
			Detection description	An error was detected in the check sum value of data read from CPU on the Buffer Pass Controller PCB.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] Buffer Pass Controller PCB (PCB201) [Remedy] Check/replace the Buffer Pass Controller PCB (PCB201).

Error code	Detail Code	Location	Item	Description
E514	0002	02	Title	Assist Motor error
			Detection description	<ul style="list-style-type: none"> The Assist HP Sensor was not turned ON although 3 seconds had passed after the Assist Motor operation started. The Assist HP Sensor was not turned ON when starting operation.
			Remedy	<p>INNER FIN-G1 [Related parts]</p> <ul style="list-style-type: none"> Harnesses and connectors from the Finisher Controller PCB to the Assist HP Sensor Harnesses and connectors from the Finisher Controller PCB to the Assist Motor Assist HP Sensor (PS7) Assist Motor (M5) Finisher Controller PCB (PCB1) <p>[Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E514	8001	02	Title	<p>a. Assist Motor error</p> <p>b. Rear End Assist Guide HP error</p>
			Detection description	<p>a. The Assist HP Sensor was not turned OFF although 1 second had passed after the Assist Motor operation started.</p> <p>b. The rear end assist guide does not come off the Rear End Assist Guide HP Sensor although the Rear End Assist Guide Motor has been driven for 3 seconds.</p>
			Remedy	<p>a. INNER FIN-G1 [Related parts]</p> <ul style="list-style-type: none"> Harnesses and connectors from the Finisher Controller PCB to the Assist HP Sensor Harnesses and connectors from the Finisher Controller PCB to the Assist Motor Assist HP Sensor (PS7) Assist Motor (M5) Finisher Controller PCB (PCB1) <p>b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts]</p> <ul style="list-style-type: none"> Harnesses and connectors from the Finisher Controller PCB to the Rear End Assist Guide HP Sensor Harnesses and connectors from the Finisher Controller PCB to the Rear End Assist Guide Motor Rear end assist guide drive mechanism Rear End Assist Guide HP Sensor (PI109) Rear End Assist Guide Motor (M109) Finisher Controller PCB (PCB1) <p>[Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E514	8002	02	Title	Rear End Assist Guide HP error
			Detection description	The Rear End Assist Guide HP Sensor does not detect the rear end assist guide although the Rear End Assist Guide Motor has been driven for 3 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Rear End Assist Guide HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Rear End Assist Guide Motor • Rear end assist guide drive mechanism • Rear End Assist Guide HP Sensor (PI109) • Rear End Assist Guide Motor (M109) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.
E516	0001	02	Title	Paddle Motor error
			Detection description	<ul style="list-style-type: none"> • The Paper Fold HP Sensor was not turned OFF although 3 seconds had passed after the Paddle Motor operation started. • The last paper fold operation is not finished when driving the Paddle Motor.
			Remedy	INNER FIN-G1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Paper Fold HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Paddle Motor • Paper Fold HP Sensor (PS8) • Paddle Motor (M10) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E516	0002	02	Title	Paddle Motor error
			Detection description	<ul style="list-style-type: none"> • The Paper Fold HP Sensor was not turned ON although 3 seconds had passed after the Paddle Motor operation started. • The last paper fold operation is not finished when driving the Paddle Motor.
			Remedy	INNER FIN-G1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Paper Fold HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Paddle Motor • Paper Fold HP Sensor (PS8) • Paddle Motor (M10) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E530	8001	02	Title	a. Rear Alignment Motor error b. Front Aligning Plate HP error
			Detection description	a. The Rear Alignment Plate HP Sensor was not turned OFF although 1 second had passed after the Rear Alignment Motor operation started. b. The front aligning plate does not come off the Front Aligning Plate HP Sensor although the Front Aligning Plate Motor has been driven for 4 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Rear Alignment Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Rear Alignment Motor • Rear Alignment Plate HP Sensor (PS5) • Rear Alignment Motor (M4) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Front Aligning Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Front Aligning Plate Motor • Front aligning plate drive mechanism • Front Aligning Plate HP Sensor (PI106) • Front Aligning Plate Motor (M103) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E530	8002	02	Title	a. Rear Alignment Motor error b. Front Aligning Plate HP error
			Detection description	a. The Rear Alignment Plate HP Sensor was not turned ON although 5 seconds had passed after the Rear Alignment Motor operation started. b. The Front Aligning Plate HP Sensor does not detect the front aligning plate although the Front Aligning Plate Motor has been driven for 4 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Rear Alignment Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Rear Alignment Motor • Rear Alignment Plate HP Sensor (PS5) • Rear Alignment Motor (M4) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Front Aligning Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Front Aligning Plate Motor • Front aligning plate drive mechanism • Front Aligning Plate HP Sensor (PI106) • Front Aligning Plate Motor (M103) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E531	8001	02	Title	a. Stapler Motor error b. Staple HP error
			Detection description	a. The Staple HP Sensor was not turned OFF although 0.4 seconds had passed after the Stapler Motor operation started. b. The staple does not come off the Staple HP Sensor although the Staple Motor has been driven for 0.4 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Unit • Stapler Unit (including the Stapler Motor and the Staple HP Sensor) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Unit • Stapler Unit (including the Staple Motor (M111) and the Staple HP Sensor (PI50)) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E531	8002	02	Title	a. Stapler Motor error b. Staple HP error
			Detection description	a. The Staple HP Sensor was not turned ON although 0.4 seconds had passed after the Stapler Motor operation started. b. The Staple HP Sensor does not detect the staple although the Staple Motor has been driven for 0.4 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Unit • Stapler Unit (including the Stapler Motor and the Staple HP Sensor) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Unit • Stapler Unit (including the Staple Motor (M111) and the Staple HP Sensor (PI50)) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E532	8001	02	Title	a. Stapler Shift Motor error b. Stapler Shift HP error
			Detection description	a. The Stapler Shift HP Sensor was not turned OFF although 1 second had passed after the Stapler Shift Motor operation started. b. The stapler unit does not come off the Stapler Shift HP Sensor although the Stapler Shift Motor has been driven for 5 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift Motor • Stapler Shift HP Sensor (PS11) • Stapler Shift Motor (M7) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift Motor • Stapler Shift HP Sensor (PI110) • Stapler Shift Motor (M105) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E532	8002	02	Title	a. Stapler Shift Motor error b. Stapler Shift HP error
			Detection description	a. The Stapler Shift HP Sensor was not turned ON although 10 seconds had passed after the Stapler Shift Motor operation started. b. The Stapler Shift HP Sensor does not detect the stapler unit although the Stapler Shift Motor has been driven for 20 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift Motor • Stapler Shift HP Sensor (PS11) • Stapler Shift Motor (M7) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Stapler Shift Motor • Stapler Shift HP Sensor (PI110) • Stapler Shift Motor (M105) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E535	0001	02	Title	Return Belt Motor error
			Detection description	The Return Belt HP Sensor was not turned OFF although 1 second had passed after the Return Belt Motor operation started.
			Remedy	INNER FIN-G1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Return Belt HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Return Belt Motor • Return Belt HP Sensor (PS3) • Return Belt Motor (M2) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.
E535	0002	02	Title	Return Belt Motor error
			Detection description	The Return Belt HP Sensor was not turned ON although 1 second had passed after the Return Belt Motor operation started.
			Remedy	INNER FIN-G1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Return Belt HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Return Belt Motor • Return Belt HP Sensor (PS3) • Return Belt Motor (M2) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E535	8001	02	Title	Swing Guide HP error
			Detection description	The swing guide does not come off the Swing Guide HP Sensor although the Swing Guide Motor has been driven for 3 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Swing Guide HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Swing Guide Motor • Swing guide drive mechanism • Swing Guide HP Sensor (PI105) • Swing Guide Motor (M106) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.
E535	8002	02	Title	Swing Guide HP error
			Detection description	The Swing Guide HP Sensor does not detect the swing guide although the Swing Guide Motor has been driven for 3 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Swing Guide HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Swing Guide Motor • Swing guide drive mechanism • Swing Guide HP Sensor (PI105) • Swing Guide Motor (M106) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E537	8001	02	Title	a. Front Alignment Motor error b. Rear Aligning Plate HP error
			Detection description	a. The Front Alignment Plate HP Sensor was not turned OFF although 1 second had passed after the Front Alignment Motor operation started. b. The rear aligning plate does not come off the Rear Aligning Plate HP Sensor although the Rear Aligning Plate Motor has been driven for 4 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Front Alignment Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Front Alignment Motor • Front Alignment Plate HP Sensor (PS4) • Front Alignment Motor (M3) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Rear Aligning Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Rear Aligning Plate Motor • Rear aligning plate drive mechanism • Rear Aligning Plate HP Sensor (PI107) • Rear Aligning Plate Motor (M104) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E537	8002	02	Title	a. Front Alignment Motor error b. Rear Aligning Plate HP error
			Detection description	a. The Front Alignment Plate HP Sensor was not turned ON although 5 seconds had passed after the Front Alignment Motor operation started. b. The Rear Aligning Plate HP Sensor does not detect the rear aligning plate although the Rear Aligning Plate Motor has been driven for 4 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Front Alignment Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Front Alignment Motor • Front Alignment Plate HP Sensor (PS4) • Front Alignment Motor (M3) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Rear Aligning Plate HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Rear Aligning Plate Motor • Rear aligning plate drive mechanism • Rear Aligning Plate HP Sensor (PI107) • Rear Aligning Plate Motor (M104) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E540	8001	02	Title	a. Tray Shift Motor error b. Tray 1 timeout error
			Detection description	a. The Stack Tray Paper Height Sensor was not turned ON although 5 seconds had passed after the Tray Shift Motor operation started. b. The tray does not return to its home position although the Tray 1 Shift Motor has been driven for 25 seconds. • The tray does not move to the other area although the Tray 1 Shift Motor has been driven for 5 seconds.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stack Tray Paper Height Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray Shift Motor • Stack Tray Paper Height Sensor (PS9) • Tray Shift Motor (M6) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Paper Surface Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Shift Area Sensor PCB • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Shift Motor • Tray 1 drive mechanism • Tray 1 Paper Surface Sensor (PI114) • Tray 1 Shift Area Sensor PCB (PCB4) • Tray 1 Shift Motor (M107) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E540	8002	02	Title	a. Tray Shift Motor error b. Tray 1 shift area error
			Detection description	a. The Front Alignment Plate HP Sensor was not turned OFF or the Stack Tray Lower Limit Sensor was not turned ON although 3.5 seconds had passed after the Front Alignment Motor operation started in the tray down operation. • The Front Alignment Plate HP Sensor was not turned OFF after the tray was moved down in the paper level detection operation. b. The tray exceeded the upper/lower limit before the Tray 1 Paper Surface Sensor detects the paper surface during the paper surface detection operation. • A non-contiguous area was detected during the tray shift operation.
			Remedy	a. INNER FIN-G1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Stack Tray Paper Height Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray Shift Motor • Stack Tray Paper Height Sensor (PS9) • Tray Shift Motor (M6) • Finisher Controller PCB (PCB1) b. STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Paper Surface Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Shift Area Sensor PCB • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Shift Motor • Tray 1 drive mechanism • Tray 1 Paper Surface Sensor (PI114) • Tray 1 Shift Area Sensor PCB (PCB4) • Tray 1 Shift Motor (M107) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E540	8003	02	Title	Safety switch ON error
			Detection description	The Swing Guide Safety Switch or Tray 1 Safety Switch was turned ON during the tray shift operation.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Paper Surface Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Shift Area Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray 1 Shift Motor • Tray 1 drive mechanism • Tray 1 Paper Surface Sensor (PI114) • Tray 1 Shift Area Sensor (PCB4) • Tray 1 Shift Motor (M107) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.
E542	8001	02	Title	Tray 2 timeout error
			Detection description	<ul style="list-style-type: none"> • The tray does not return to its home position although the Tray 2 Shift Motor has been driven for 25 seconds. • The tray does not move to the other areas although the Tray 2 Shift Motor has been driven for 5 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Paper Surface Sensor 1 • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Paper Surface Sensor 2 • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Shift Area Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Shift Motor • Tray 2 drive mechanism • Tray 2 Paper Surface Sensor 1 (PI115) • Tray 2 Paper Surface Sensor 2 (PI120) • Tray 2 Shift Area Sensor (PCB5) • Tray 2 Shift Motor (M108) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E542	8002	02	Title	Tray 2 shift area error
			Detection description	<ul style="list-style-type: none"> • The tray exceeded the upper or lower limit before the Tray 2 Paper Surface Sensor 1 detects the paper surface during the paper surface detection operation. • A non-contiguous area was detected during the tray shift operation. • The tray reached the area that passed through Tray 2 Paper Surface Sensor 2 before the Tray 2 Paper Surface Sensor 2 detects the paper surface during the tray escape operation.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Paper Surface Sensor 1 • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Paper Surface Sensor 2 • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Shift Area Sensor • Harnesses and connectors from the Finisher Controller PCB to the Tray 2 Shift Motor • Tray 2 drive mechanism • Tray 2 Paper Surface Sensor 1 (PI115) • Tray 2 Paper Surface Sensor 2 (PI120) • Tray 2 Shift Area Sensor (PCB5) • Tray 2 Shift Motor (M108) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.
E551	0001	02	Title	Buffer Pass Power Supply Cooling Fan error
			Detection description	The fan lock signal is detected 1.2 seconds or more while the fan operates.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Buffer Pass Controller PCB to the Buffer Pass Power Supply Cooling Fan • Buffer Pass Power Supply Cooling Fan (FM201) • Buffer Pass Controller PCB (PCB201) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E551	0002	02	Title	Buffer Pass Power Supply Cooling Fan error
			Detection description	The fan lock signal is released when the fan stops.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Buffer Pass Controller PCB to the Buffer Pass Power Supply Cooling Fan • Buffer Pass Power Supply Cooling Fan (FM201) • Buffer Pass Controller PCB (PCB201) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E551	0003	02	Title	Buffer Pass Cooling Fan error
			Detection description	The fan lock signal is detected 1.2 seconds or more while the fan operates.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Buffer Pass Controller PCB to the Buffer Pass Cooling Fan • Buffer Pass Cooling Fan (FM202) • Buffer Pass Controller PCB (PCB201) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E551	0004	02	Title	Buffer Pass Cooling Fan error
			Detection description	The fan lock signal is released when the fan stops.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Buffer Pass Controller PCB to the Buffer Pass Cooling Fan • Buffer Pass Cooling Fan (FM202) • Buffer Pass Controller PCB (PCB201) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E577	0002	02	Title	Paddle Motor error
			Detection description	<ul style="list-style-type: none"> • The Return Belt HP Sensor was not turned ON although 1 second had passed after the Paddle Motor operation started. • The last paddle operation is not finished when driving the Paddle Motor.
			Remedy	INNER FIN-G1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Return Belt HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Paddle Motor • Return Belt HP Sensor (PS3) • Paddle Motor (M10) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.
E577	8001	02	Title	Paddle Motor error
			Detection description	<ul style="list-style-type: none"> • The Return Belt HP Sensor was not turned ON although 1 second had passed after the Paddle Motor operation started. • The last paddle operation is not finished when driving the Paddle Motor.
			Remedy	INNER FIN-G1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Return Belt HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Paddle Motor • Return Belt HP Sensor (PS3) • Paddle Motor (M10) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E584	0002	02	Title	Shutter HP error
			Detection description	The Shutter HP Sensor does not detect the shutter although the Stack Ejection Motor has been driven for 3 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Shutter HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Stack Ejection Motor • Harnesses and connectors from the Finisher Controller PCB to the Stack Ejection Lower Roller Clutch • Harnesses and connectors from the Finisher Controller PCB to the Shutter Clutch • Shutter drive mechanism • Shutter HP Sensor (PI113) • Stack Ejection Motor (M102) • Stack Ejection Lower Roller Clutch (CL102) • Shutter Clutch (CL101) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.
E584	8001	02	Title	Shutter HP error
			Detection description	The shutter does not come off the Shutter HP Sensor although the Stack Ejection Motor has been driven for 3 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Finisher Controller PCB to the Shutter HP Sensor • Harnesses and connectors from the Finisher Controller PCB to the Stack Ejection Motor • Harnesses and connectors from the Finisher Controller PCB to the Stack Ejection Lower Roller Clutch • Harnesses and connectors from the Finisher Controller PCB to the Shutter Clutch • Shutter drive mechanism • Shutter HP Sensor (PI113) • Stack Ejection Motor (M102) • Stack Ejection Lower Roller Clutch (CL102) • Shutter Clutch (CL101) • Finisher Controller PCB (PCB1) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts. [Reference] When replacing the Finisher Controller PCB, refer to "Adjustment> Adjustment when Replacing the Parts" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E5F0	8001	02	Title	Paper positioning Plate HP error
			Detection description	The Saddle Paper Positioning Plate HP Sensor does not detect the paper positioning plate although the Saddle Paper Positioning Plate Motor has been driven for 1500 pulses.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Positioning Plate HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Positioning Plate Motor • Paper positioning plate drive mechanism • Saddle Paper Positioning Plate HP Sensor (PI7) • Saddle Paper Positioning Plate Motor (M4) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F0	8002	02	Title	Paper positioning Plate HP error
			Detection description	The paper positioning plate does not come off the Saddle Paper Positioning Plate HP Sensor although the Saddle Paper Positioning Plate Motor has been driven for 300 pulses.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Positioning Plate HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Positioning Plate Motor • Paper positioning plate drive mechanism • Saddle Paper Positioning Plate HP Sensor (PI7) • Saddle Paper Positioning Plate Motor (M4) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E5F1	8001	02	Title	Saddle Paper Folding Motor clock error
			Detection description	The drive speed of the Saddle Paper Folding Motor became 5 mm/sec or less (2 mm/sec or less at initial operation).
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Folding Motor Clock Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Folding HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Folding Motor • Paper folding roller drive mechanism • Saddle Paper Folding Motor Clock Sensor (PI4) • Saddle Paper Folding HP Sensor (PI21) • Saddle Paper Folding Motor (M2) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F1	8002	02	Title	Saddle Paper Folding HP error
			Detection description	The Saddle Paper Folding HP Sensor does not detect the home position of the paper fold roller although the Saddle Paper Folding Motor has been driven for 2 seconds (3 seconds at initial operation).
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Folding Motor Clock Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Folding HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Folding Motor • Paper folding roller drive mechanism • Saddle Paper Folding Motor Clock Sensor (PI4) • Saddle Paper Folding HP Sensor (PI21) • Saddle Paper Folding Motor (M2) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E5F2	8001	02	Title	Saddle Guide HP error
			Detection description	The Saddle Guide HP Sensor does not detect the guide plate although the Saddle Guide Motor has been driven for 700 pulses.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Guide HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Guide Motor • Guide plate drive mechanism • Saddle Guide HP Sensor (PI13) • Saddle Guide Motor (M3) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F2	8002	02	Title	Saddle Guide HP error
			Detection description	The guide plate does not come off the Saddle Guide HP Sensor although the Saddle Guide Motor has been driven for 50 pulses.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Guide HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Guide Motor • Guide plate drive mechanism • Saddle Guide HP Sensor (PI13) • Saddle Guide Motor (M3) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F3	8001	02	Title	Saddle Alignment Plate HP error
			Detection description	The Saddle Alignment Plate HP Sensor does not detect the alignment plate although the Saddle Alignment Motor has been driven for 500 pulses.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Alignment Plate HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Alignment Motor • Alignment plate drive mechanism • Saddle Alignment Plate HP Sensor (PI5) • Saddle Alignment Motor (M5) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E5F3	8002	02	Title	Saddle Alignment Plate HP error
			Detection description	The alignment plate does not come off the Saddle Alignment Plate HP Sensor although the Saddle Alignment Motor has been driven for 50 pulses.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Alignment Plate HP Sensor Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Alignment Motor Alignment plate drive mechanism Saddle Alignment Plate HP Sensor (PI5) Saddle Alignment Motor (M5) Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F4	8001	02	Title	Stitcher (Rear) HP error
			Detection description	The Stitcher HP Switch (Rear) does not detect the stitcher (rear) although the Stitcher Motor (Rear) has been driven for 0.48 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Saddle Stitcher Controller PCB to the Stitcher Unit (Rear) Stitcher Unit (Rear) (including the Stitcher Motor (Rear) (M6) and the Stitcher HP Switch (Rear) (SW5)) Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F4	8002	02	Title	Stitcher (Rear) HP error
			Detection description	The stitcher (rear) does not come off the Stitcher HP Switch (Rear) although the Stitcher Motor (Rear) has been driven for 0.48 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Saddle Stitcher Controller PCB to the Stitcher Unit (Rear) Stitcher Unit (Rear) (including the Stitcher Motor (Rear) (M6) and the Stitcher HP Switch (Rear) (SW5)) Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E5F5	8001	02	Title	Stitcher (Front) HP error
			Detection description	The Stitcher HP Switch (Front) does not detect the stitcher (front) although the Stitcher Motor (Front) has been driven for 0.48 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Saddle Stitcher Controller PCB to the Stitcher Unit (Front) Stitcher Unit (Rear) (including the Stitcher Motor (Front) (M7) and the Stitcher HP Switch (Front) (SW7)) Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F5	8002	02	Title	Stitcher (Front) HP error
			Detection description	The stitcher (front) does not come off the Stitcher HP Switch (Front) although the Stitcher Motor (Front) has been driven for 0.48 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Saddle Stitcher Controller PCB to the Stitcher Unit (Front) Stitcher Unit (Rear) (including the Stitcher Motor (Front) (M7) and the Stitcher HP Switch (Front) (SW7)) Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F6	8001	02	Title	Paper Pushing Plate HP error
			Detection description	The Saddle Paper Pushing Plate HP Sensor does not detect the paper pushing plate although the Saddle Paper Pushing Plate Motor has been driven for 0.5 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate HP Sensor Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Motor Paper pushing plate drive mechanism Saddle Paper Pushing Plate HP Sensor (PI14) Saddle Paper Pushing Plate Motor (M8) Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E5F6	8002	02	Title	Paper Pushing Plate HP error
			Detection description	The paper pushing plate does not come off the Saddle Paper Pushing Plate HP Sensor although the Saddle Paper Pushing Plate Motor has been driven for 0.15 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate HP Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Motor • Paper pushing plate drive mechanism • Saddle Paper Pushing Plate HP Sensor (PI14) • Saddle Paper Pushing Plate Motor (M8) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F6	8003	02	Title	Saddle Paper Pushing Plate Motor clock error
			Detection description	The clock detection of the Saddle Paper Pushing Plate Motor became 6 clocks or less.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Motor Clock Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Motor • Paper pushing plate drive mechanism • Saddle Paper Pushing Plate Motor Clock Sensor (PI1) • Saddle Paper Pushing Plate Motor (M8) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.
E5F6	8004	02	Title	Paper Pushing Plate position error
			Detection description	The paper pushing plate does not come off the paper folding position although the Saddle Paper Pushing Plate Motor has been driven for 0.1 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Top Position Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Motor • Paper pushing plate drive mechanism • Saddle Paper Pushing Plate Top Position Sensor (PI15) • Saddle Paper Pushing Plate Motor (M8) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E5F6	8005	02	Title	Paper Pushing Plate position error
			Detection description	The paper pushing plate does not return to the paper pushing position although the Saddle Paper Pushing Plate Motor has been driven for 0.5 seconds.
			Remedy	STAPLE FIN-U1/BOOKLET FIN-U1 [Related parts] <ul style="list-style-type: none"> • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Top Position Sensor • Harnesses and connectors from the Saddle Stitcher Controller PCB to the Saddle Paper Pushing Plate Motor • Paper pushing plate drive mechanism • Saddle Paper Pushing Plate Top Position Sensor (PI15) • Saddle Paper Pushing Plate Motor (M8) • Saddle Stitcher Controller PCB (PCB2) [Remedy] Check/replace the corresponding harnesses/cables or connectors or the parts.

Error code	Detail Code	Location	Item	Description
E602	0001	00	Title	HDD error
			Detection description	HDD failed to be Ready, or HDD was not formatted. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) Encryption Board (if it is installed) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check the cable between the Main Controller PCB and the HDD. <p>[CAUTION] If the Encryption Board is installed, check the connection of the board.</p> <ol style="list-style-type: none"> Turn ON the main power, and check whether the error is cleared. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> If the Encryption Board is installed, remove the board and then format the HDD again. If the error is cleared, replace the Encryption Board. After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0101	00	Title	HDD error
			Detection description	An error was detected in the PDL-related file storage area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "1", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.
E602	0111	00	Title	HDD error
			Detection description	An error was detected in the PDL-related file storage are(File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "1", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0201	00	Title	HDD error
			Detection description	An error was detected in the storage area of image data after startup. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "2", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "2", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0211	00	Title	HDD error
			Detection description	An error was detected in the storage area of image data after startup. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "2", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "2", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0301	00	Title	HDD error
			Detection description	An error was detected in the MEAP-related area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "3", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "3", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0311	00	Title	HDD error
			Detection description	An error was detected in the MEAP-related area. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "3", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "3", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0401	00	Title	HDD error
			Detection description	Logical partition error was detected. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0411	00	Title	HDD error
			Detection description	Logical partition error was detected. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0501	00	Title	HDD error
			Detection description	An error was detected in the storage area of image data after startup. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "5", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "5", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0511	00	Title	HDD error
			Detection description	An error was detected in the storage area of image data after startup. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "5", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "5", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0601	00	Title	HDD error
			Detection description	An error was detected in the storage area of image data after startup. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "6", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "6", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0611	00	Title	HDD error
			Detection description	An error was detected in the storage area of image data after startup. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "6", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "6", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0701	00	Title	HDD error
			Detection description	An error was detected in general application temporary area (temporary file). (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "7", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "7", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0711	00	Title	HDD error
			Detection description	An error was detected in general application temporary area (temporary file). (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "7", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "7", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0801	00	Title	HDD error
			Detection description	An error was detected in the general application-related area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0811	00	Title	HDD error
			Detection description	An error was detected in the general application-related area. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0901	00	Title	HDD error
			Detection description	An error was detected in PDL spool data (temporary file). (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "9", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "9", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	0911	00	Title	HDD error
			Detection description	An error was detected in PDL spool data (temporary file). (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "9", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "9", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1001	00	Title	HDD error
			Detection description	An error was detected in the SEND-related area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "10", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "10", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1011	00	Title	HDD error
			Detection description	An error was detected in the SEND-related area. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "10", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "10", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1101	00	Title	HDD error
			Detection description	An error was detected in the update-related area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "11", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "11", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1111	00	Title	HDD error
			Detection description	An error was detected in the update-related area. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "11", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "11", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1201	00	Title	HDD error
			Detection description	An error was detected in the license-related area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "12", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1211	00	Title	HDD error
			Detection description	An error was detected in the license-related area. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "12", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1301	00	Title	HDD error
			Detection description	An error was detected in the system area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Related parts] <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> Check the cable between the Main Controller PCB and the HDD. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "13", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. [Reference] All data in the HDD is deleted. <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1311	00	Title	HDD error
			Detection description	An error was detected in the system area. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	[Related parts] <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> Check the cable between the Main Controller PCB and the HDD. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "13", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. [Reference] All data in the HDD is deleted. <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.
E602	1401	00	Title	HDD error
			Detection description	An error was detected in SWAP (temporary file/alternative memory area). (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Related parts] <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "14", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. [Reference] All data in the HDD is deleted. <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1411	00	Title	HDD error
			Detection description	An error was detected in SWAP (temporary file/alternative memory area). (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "14", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1701	00	Title	HDD error
			Detection description	An error was detected in the debug log area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "17", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "17", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1711	00	Title	HDD error
			Detection description	An error was detected in the debug log area. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "17", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "17", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1801	00	Title	HDD error
			Detection description	An error was detected in the image data storage area in Advanced Box. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "18", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "18", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1811	00	Title	HDD error
			Detection description	An error was detected in the image data storage area in Advanced Box. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "18", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "18", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1901	00	Title	HDD error
			Detection description	An error was detected in the storage area of data for printing. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "19", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "19", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	1911	00	Title	HDD error
			Detection description	An error was detected in the storage area of data for printing. (File could not be written in the HDD after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "19", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "19", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	2000	00	Title	Authentication error between the host machine and the Encryption Board
			Detection description	Authentication between the host machine and the Encryption Board could not be performed because I/O error occurred in the file system after startup
			Remedy	<p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Check that the HDD Encryption Board is installed properly by removing and then installing it again. Execute the key clear using SST (to make an unformatted disk). <p>[CAUTION] E602-0001 will be indicated if activating the machine with the unformatted disk. Therefore, be sure to format the HDD.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. Reinstall the necessary application software.
E602	5001	00	Title	Authentication error between the host machine and the Encryption Board
			Detection description	Mistake in the procedure for installing the HDD Encryption Board
			Remedy	<p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> After removing the HDD Encryption Board, install the HDD only. Then, turn ON the main power. Execute COPIER> FUNCTION> INSTALL> HD-CRYP. Install the HDD Encryption Board.
E602	5002	00	Title	HDD error
			Detection description	A non-genuine HDD was detected.
			Remedy	<p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> Install a genuine HDD. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. Reinstall the necessary application software.

Error code	Detail Code	Location	Item	Description
E602	FF01	00	Title	HDD error
			Detection description	An HDD error was detected at startup. (Unidentified) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E602	FF11	00	Title	HDD error
			Detection description	An HDD error was detected after startup. (Unidentified)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared. When prioritizing clearing of the error, perform Remedy 3 and later.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. <p>[Reference] All data in the HDD is deleted.</p> <ol style="list-style-type: none"> After replacing the HDD, format the HDD. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E614	0001	00	Title	Flash PCB error
			Detection description	The Flash PCB could not be recognized, or the Flash PCB was not formatted.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB.
E614	0002	00	Title	Error in file system on the Flash PCB
			Detection description	The file system could not be initialized normally at startup. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E614	0006	00	Title	Error in file system on the Flash PCB
			Detection description	Bootable was not found on the Flash PCB.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB.
E614	0101	00	Title	Flash PCB error
			Detection description	An error was detected in the system area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0111	00	Title	Flash PCB error
			Detection description	An error was detected in the system area. (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment > Actions after Replacement" and "Appendix > Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0201	00	Title	Flash PCB error
			Detection description	An error was detected in the system area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment > Actions after Replacement" and "Appendix > Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0211	00	Title	Flash PCB error
			Detection description	An error was detected in the system area. (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment > Actions after Replacement" and "Appendix > Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0301	00	Title	Flash PCB error
			Detection description	An error was detected in the system area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment > Actions after Replacement" and "Appendix > Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0311	00	Title	Flash PCB error
			Detection description	An error was detected in the system area. (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment > Actions after Replacement" and "Appendix > Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0401	00	Title	Flash PCB error
			Detection description	<p>Logical partition error was detected. (Initialization failed at startup or I/O error at startup)</p> <p>When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.</p>
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment > Actions after Replacement" and "Appendix > Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0411	00	Title	Flash PCB error
			Detection description	Logical partition error was detected. (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After turning OFF the main power, remove and then install the Flash PCB to check that it is installed properly. Turn ON the main power, and check whether the error is cleared. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0501	00	Title	Flash PCB error
			Detection description	An error was detected in the general application-related area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Although the error is cleared by "HD-CHECK", it may occur again. Thus, perform Remedies 1 to 3. When prioritizing clearing of the error, perform Remedy 3 and later. Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format > [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0511	00	Title	Flash PCB error
			Detection description	An error was detected in the general application-related area. (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Although the error is cleared by "HD-CHECK", it may occur again. Thus, perform Remedies 1 to 3. When prioritizing clearing of the error, perform Remedy 3 and later. Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0601	00	Title	Flash PCB error
			Detection description	An error was detected in the license-related area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>
E614	0611	00	Title	Flash PCB error
			Detection description	An error was detected in the license-related area. (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0701	00	Title	Flash PCB error
			Detection description	An error was detected in system setting value (service mode, etc.) storage area. (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Although the error is cleared by "HD-CHECK", it may occur again. Thus, perform Remedies 1 to 3. When prioritizing clearing of the error, perform Remedy 3 and later. Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	0711	00	Title	Flash PCB error
			Detection description	An error was detected in system setting value (service mode, etc.) storage area. (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Although the error is cleared by "HD-CHECK", it may occur again. Thus, perform Remedies 1 to 3. When prioritizing clearing of the error, perform Remedy 3 and later. Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "8", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] Only the data in the corresponding partitions is deleted.</p> <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E614	4000	00	Title	Error in file system on the Flash PCB
			Detection description	The OS could not be recognized. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.
E614	4001	00	Title	Error in file system on the Flash PCB
			Detection description	The OS boot file was not found. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.

Error code	Detail Code	Location	Item	Description
E614	4002	00	Title	Error in file system on the Flash PCB
			Detection description	The OS kernel was not found. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.
E614	4003	00	Title	Error in file system on the Flash PCB
			Detection description	The OS boot loader was not found. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.
E614	4010	00	Title	Error in file system on the Flash PCB
			Detection description	The OS in safe mode could not be recognized. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.

Error code	Detail Code	Location	Item	Description
E614	4011	00	Title	Error in file system on the Flash PCB
			Detection description	The file for booting the OS in safe mode was not found. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.
E614	4012	00	Title	Error in file system on the Flash PCB
			Detection description	The kernel in safe mode was not found. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.
E614	9000	00	Title	Error in file system on the Flash PCB
			Detection description	SRAM device access-related error (at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.

Error code	Detail Code	Location	Item	Description
E614	9001	00	Title	Error in file system on the Flash PCB
			Detection description	Error in memory allocation/invalid memory (at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.
E614	9002	00	Title	Error in file system on the Flash PCB
			Detection description	Setting file error was detected at startup. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.

Error code	Detail Code	Location	Item	Description
E614	9003	00	Title	Error in file system on the Flash PCB
			Detection description	Parameter error was detected at startup. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.
E614	9004	00	Title	Error in file system on the Flash PCB
			Detection description	Startup error was detected. When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connectors of the Flash PCB (UN61) and the Main Power Switch, and check if there is any bent pin or cable disconnection. 2. Format the system. 2-1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2-2. Reinstall the system software using SST or a USB memory. 3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.

Error code	Detail Code	Location	Item	Description
E614	FF01	00	Title	Flash PCB error
			Detection description	Flash error (Unidentified) (Initialization failed at startup or I/O error at startup) When this error occurs, the system has not been started normally. Therefore, it may not be recorded in the error log.
			Remedy	[Related parts] • Flash PCB (UN61) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) [Remedy] Perform the following in the order while checking whether the error is cleared. • Although the error is cleared by "HD-CHECK", it may occur again. Thus, perform Remedies 1 to 3. • Reinstall the necessary application software and restore the backup data once the error is cleared. 1. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CHECK". Then, turn OFF and then ON the main power. 2. Obtain the necessary backup data by referring to the backup data list. 3. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. [Reference] All the partitions that can be deleted are deleted. 4. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 5. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. 6. Replace the Main Controller PCB. [Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.

Error code	Detail Code	Location	Item	Description
E614	FF11	00	Title	Flash PCB error
			Detection description	Flash error (Unidentified) (File could not be written in the Flash PCB after startup or I/O error after startup)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flash PCB (UN61) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASS'Y) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Although the error is cleared by "HD-CHECK", it may occur again. Thus, perform Remedies 1 to 3. Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CHECK". Then, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. Select COPIER> FUNCTION> SYSTEM> CHK-TYPE> "0", and execute "HD-CLEAR". Then, turn OFF and then ON the main power. <p>[Reference] All the partitions that can be deleted are deleted.</p> <ol style="list-style-type: none"> Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB, reinstall the system software using SST or a USB memory. Replace the Main Controller PCB. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>

Error code	Detail Code	Location	Item	Description
E615	0001	00	Title	Error in self-diagnosis of the encryption module
			Detection description	An error was detected in self-diagnosis of the encryption library.
			Remedy	<p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ul style="list-style-type: none"> Reinstall the necessary application software and restore the backup data once the error is cleared. <ol style="list-style-type: none"> After reinstalling the system software using SST or a USB memory, turn OFF and then ON the main power. Obtain the necessary backup data by referring to the backup data list. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. After replacing the Flash PCB (UN61), reinstall the system software using SST or a USB memory. <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>
E674	0001	07	Title	Fax Board communication error
			Detection description	An error was detected for the specified number of times in communication with the Fax Board.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the Fax Board and the Main Controller PCB (UN05/J30) (Unit of replacement: CABLE, SIGNAL) Fax Board Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p>
E674	0004	07	Title	Fax Board communication error
			Detection description	A communication error occurred when accessing the modem IC used for fax.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the Fax Board and the Main Controller PCB (UN05/J30) (Unit of replacement: CABLE, SIGNAL) Fax Board Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p>

Error code	Detail Code	Location	Item	Description
E674	0008	07	Title	Fax Board communication error
			Detection description	A communication error occurred when accessing the port IC used for On Board Fax.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the Fax Board and the Main Controller PCB (UN05/J30) (Unit of replacement: CABLE, SIGNAL) Fax Board Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.
E674	000C	07	Title	Fax Board communication error
			Detection description	An error was detected when accessing the modem IC and the port IC used for fax.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the Fax Board and the Main Controller PCB (UN05/J30) (Unit of replacement: CABLE, SIGNAL) Fax Board Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.
E674	0010	07	Title	Fax Board communication error
			Detection description	A communication error occurred when opening the Timer Device used for fax.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E674	0011	07	Title	Fax Board communication error
			Detection description	A communication error occurred when starting the Timer Device used for fax.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E674	0020	07	Title	Fax Board communication error
			Detection description	An error occurred in the modem IC used for fax.
			Remedy	[Related parts] <ul style="list-style-type: none"> Harness between the Fax Board and the Main Controller PCB (UN05/J30) (Unit of replacement: CABLE, SIGNAL) Fax Board Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E674	0100	07	Title	Fax Board communication error
			Detection description	After completion of fax communication, writing of the communication information (log) failed, and the log could not be read.
			Remedy	[Remedy] Turn OFF and then ON the main power. [CAUTION] The previous communication information (log) will be cleared by turning OFF and then ON the main power.
E674	0200	07	Title	HDD access error
			Detection description	An error occurred when accessing the HDD.
			Remedy	[Related parts] <ul style="list-style-type: none"> HDD (Unit of replacement: HARD DISK DRIVE) Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Perform the following in the order while checking whether the error is cleared. <ol style="list-style-type: none"> After deleting the system software using a USB memory, reinstall it using SST or a USB memory. After replacing the HDD, execute [4] Clear/Format> [1] Disk Format (HDD format) using SST or a USB memory. Replace the Main Controller PCB.

Error code	Detail Code	Location	Item	Description
E713	0010	05	Title	Communication error
			Detection description	Communication between the DC Controller PCB and the Finisher timed out.
			Remedy	<p>[Related parts]</p> <p>a. STAPLE/BOOKLET FINISHER-U1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> Harness between the Low Voltage Power Supply PCB (UN01/J306) and the Relay Path Unit (J1186) (Unit of replacement: CABLE, HEATER) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES <p>b. INNER FINISHER-G1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E713	0011	05	Title	Communication error
			Detection description	A communication error between the DC Controller PCB and the Finisher was detected.
			Remedy	<p>[Related parts]</p> <p>a. STAPLE/BOOKLET FINISHER-U1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> Harness between the Low Voltage Power Supply PCB (UN01/J306) and the Relay Path Unit (J1186) (Unit of replacement: CABLE, HEATER) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES <p>b. INNER FINISHER-G1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E713	0020	05	Title	Communication error
			Detection description	A communication error between the DC Controller PCB and the Finisher was detected.
			Remedy	<p>[Related parts]</p> <p>a. STAPLE/BOOKLET FINISHER-U1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> Harness between the Low Voltage Power Supply PCB (UN01/J306) and the Relay Path Unit (J1186) (Unit of replacement: CABLE, HEATER) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES <p>b. INNER FINISHER-G1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E713	0021	05	Title	Communication error
			Detection description	A communication error between the DC Controller PCB and the Finisher was detected.
			Remedy	<p>[Related parts]</p> <p>a. STAPLE/BOOKLET FINISHER-U1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> Harness between the Low Voltage Power Supply PCB (UN01/J306) and the Relay Path Unit (J1186) (Unit of replacement: CABLE, HEATER) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES <p>b. INNER FINISHER-G1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) Relay Path Unit to Finisher Controller PCB <ul style="list-style-type: none"> DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E713	0022	05	Title	Communication error
			Detection description	A communication error between the DC Controller PCB and the Finisher was detected.
			Remedy	<p>[Related parts]</p> <p>a. STAPLE/BOOKLET FINISHER-U1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB 1. DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) 2. Relay Path Unit to Finisher Controller PCB Harness between the Low Voltage Power Supply PCB (UN01/J306) and the Relay Path Unit (J1186) (Unit of replacement: CABLE, HEATER) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES <p>b. INNER FINISHER-G1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB 1. DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) 2. Relay Path Unit to Finisher Controller PCB DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E713	0030	05	Title	Communication error
			Detection description	Communication between the DC Controller PCB and the Finisher was not completed.
			Remedy	<p>[Related parts]</p> <p>a. STAPLE/BOOKLET FINISHER-U1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB 1. DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) 2. Relay Path Unit to Finisher Controller PCB Harness between the Low Voltage Power Supply PCB (UN01/J306) and the Relay Path Unit (J1186) (Unit of replacement: CABLE, HEATER) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES <p>b. INNER FINISHER-G1</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Finisher Controller PCB 1. DC Controller PCB (UN04/J182) to Relay Path Unit (Unit of replacement: CABLE, PRIMARY TRANSFER H.V.) 2. Relay Path Unit to Finisher Controller PCB DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Relay Path Unit Finisher Controller PCB <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E719	0001	00	Title	Coin vendor error
			Detection description	The coin vendor which was connected before turning OFF the main power was not connected at power-on.
			Remedy	[Related parts] Cable between the charging management equipment and the host machine [Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connector to check that there is no bent pin and cable disconnection. 2. Visually check that the harness is not caught or open circuit. 3. If there is any error, replace the corresponding harness/cable. [Reference] When operating the machine without the charging management equipment, execute "COPIER> FUNCTION> CLEAR> ERR". (It is designed to generate an error to prevent the misuse by removing the charging management equipment.)
E719	0002	00	Title	Coin vendor error
			Detection description	IPC error when the coin vendor is running • Open circuit of the IPC, or IPC communication could not be recovered. • Open circuit of the pickup/delivery signal cable was detected. • Invalid connection was detected.
			Remedy	[Related parts] Cable between the charging management equipment and the host machine [Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connector to check that there is no bent pin and cable disconnection. 2. Visually check that the harness is not caught or open circuit. 3. If there is any error, replace the corresponding harness/cable. [Reference] When operating the machine without the charging management equipment, execute "COPIER> FUNCTION> CLEAR> ERR". (It is designed to generate an error to prevent the misuse by removing the charging management equipment.)

Error code	Detail Code	Location	Item	Description
E719	0003	00	Title	Coin vendor error
			Detection description	A communication error with the coin vendor was detected during unit price acquisition at startup.
			Remedy	[Related parts] Cable between the charging management equipment and the host machine [Remedy] Perform the following in the order while checking whether the error is cleared. 1. Disconnect and then connect the connector to check that there is no bent pin and cable disconnection. 2. Visually check that the harness is not caught or open circuit. 3. If there is any error, replace the corresponding harness/cable. [Reference] When operating the machine without the charging management equipment, execute "COPIER> FUNCTION> CLEAR> ERR". (It is designed to generate an error to prevent the misuse by removing the charging management equipment.)
E719	0031	00	Title	Card Reader communication error
			Detection description	Communication with the Card Reader could not be established at startup.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Check the harness between the Card Reader and the Main Controller PCB (UN05/J14). 2. Replace the Card Reader. [Reference] In the case of operating the device without the Card Reader which had been used, execute "COPIER> FUNCTION> CLEAR> CARD" after removing the Card Reader.
E719	0032	00	Title	Card Reader communication error
			Detection description	Although communication with the Card Reader was available at startup, it became unavailable in the middle of it.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Check the harness between the Card Reader and the Main Controller PCB (UN05/J14). 2. Replace the Card Reader. [Reference] In the case of operating the device without the Card Reader which had been used, execute "COPIER> FUNCTION> CLEAR> CARD" after removing the Card Reader.
E720	0001	05	Title	Error due to non-compatible Finisher
			Detection description	A finisher which cannot be connected to the host machine was detected.
			Remedy	[Remedy] Connect the finisher (INNER FINISHER-G1, BOOKLET/STAPLE FINISHER-U1) for this model.

Error code	Detail Code	Location	Item	Description
E730	A006	00	Title	PDL communication error
			Detection description	Response from PDL could not be detected.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Select "Settings/Registration> Function Settings> Printer> Printer Settings> Utility> Initialize Printer", and execute PDL reset processing. 2. Reinstall the system software. 3. Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E730	A007	00	Title	Mismatch of PDL version
			Detection description	Version of the host machine control software and version of PDL control software were different.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Reinstall the system software. 2. Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E730	B013	00	Title	PDL embedded font error
			Detection description	Font data was corrupted.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Reinstall the system software. 2. Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E732	0001	04	Title	Scanner communication error
			Detection description	DDI-S communication error was detected.
			Remedy	[Related parts] • Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) • Scanner Unit (Unit of replacement: LASER SCANNER ASSEMBLY) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E732	0010	00	Title	Scanner communication error
			Detection description	DDI-S communication error (Vsync detection error) was detected.
			Remedy	[Related parts] • Flat Cable between the Main Controller PCB (UN05/J33) and the Scanner Unit (Unit of replacement: CABLE, FLAT) • Scanner Unit (Unit of replacement: LASER SCANNER ASSEMBLY) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.
E733	0000	05	Title	Printer communication error
			Detection description	A communication error between the DC Controller PCB and the Main Controller PCB was detected at startup.
			Remedy	[Related parts] • Harness between the DC Controller PCB (UN04/J110) and the Main Controller PCB (UN05/J18) (Unit of replacement: DDIP, CABLE) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) [Remedy] Perform the following in the order while checking whether the error is cleared. 1. Check the harness between the DC Controller PCB and the Main Controller PCB. 2. Turn ON the power, and check if the initialization is executed at startup. 2-1. If the initialization is not executed, replace the DC Controller PCB. 2-2. If the initialization is executed, replace the Main Controller PCB. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E733	0001	05	Title	Printer communication error
			Detection description	<ul style="list-style-type: none"> • DDI-P communication error • DDI-L communication error (parity error)
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the DC Controller PCB (UN04/J110) and the Main Controller PCB (UN05/J18) (Unit of replacement: DDIP, CABLE) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check the harness between the DC Controller PCB and the Main Controller PCB. 2. Turn ON the power, and check if the initialization is executed at startup. <ol style="list-style-type: none"> 2-1. If the initialization is not executed, replace the DC Controller PCB. 2-2. If the initialization is executed, replace the Main Controller PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E733	0002	05	Title	Printer communication error
			Detection description	DDI-P communication error (invalid packet) was detected.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the DC Controller PCB (UN04/J110) and the Main Controller PCB (UN05/J18) (Unit of replacement: DDIP, CABLE) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Check the harness between the DC Controller PCB and the Main Controller PCB. 2. Turn ON the power, and check if the initialization is executed at startup. <ol style="list-style-type: none"> 2-1. If the initialization is not executed, replace the DC Controller PCB. 2-2. If the initialization is executed, replace the Main Controller PCB. <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E733	0F01	05	Title	Printer communication error
			Detection description	Communication error that can be recovered by reboot If it is detected again immediately after reboot, E733-0001 is generated.
			Remedy	[Remedy] It is not necessary to perform a remedy because the machine is automatically rebooted after log collection.
E733	0F02	05	Title	Printer communication error
			Detection description	Communication error that can be recovered by reboot If it is detected again immediately after reboot, E733-0002 is generated.
			Remedy	[Remedy] It is not necessary to perform a remedy because the machine is automatically rebooted after log collection.
E733	F001	05	Title	Printer communication error
			Detection description	Disconnection of a cable between the Main Controller PCB and the DC Controller PCB was detected.
			Remedy	[Remedy] Check/replace the harness between the DC Controller PCB (UN04/J110) and the Main Controller PCB (UN05/J18). (Unit of replacement: DDIP, CABLE)

Error code	Detail Code	Location	Item	Description
E733	F002	05	Title	Printer communication error
			Detection description	Disconnection of a cable between the Main Controller PCB and the Y/M Laser Driver PCB was detected.
			Remedy	[Related parts] <ul style="list-style-type: none"> Flat Cable between the Main Controller PCB (UN05/J19) and the Y/M Laser Driver PCB (UN08/J201) (Unit of replacement: FLEXIBLE FLAT CABLE ASSEMBLY) Flat Cable between the Y/M Laser Driver PC (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) [Remedy] Check/replace the related harness/cable, connector and parts.
E743	0001	04	Title	DDI communication error
			Detection description	Software sequence error
			Remedy	[Remedy] Turn OFF and then ON the main power.
E744	0001	00	Title	Language file error
			Detection description	The language file in the Flash PCB was not supported by the version of Bootable.
			Remedy	[Remedy] Reinstall the correct language file or system software using SST or a USB memory.
E744	4000	05	Title	Error due to the DC Controller PCB not compatible with the model
			Detection description	The DC Controller PCB which was used with another model was detected.
			Remedy	[Remedy] Replace the DC Controller PCB (UN04). (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E746	0022	00	Title	Image Analysis Board error
			Detection description	Wrong version of the Image Analysis Board was detected.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Reinstall the firmware of the Image Analysis Board or the system software which version is supported by this model using SST or a USB memory. 2. After replacing the Image Analysis Board, perform step 1.

Error code	Detail Code	Location	Item	Description
E746	0023	00	Title	Image Analysis Board error
			Detection description	Communication from the Image Analysis Board could not be detected.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Check that the Image Analysis Board is installed properly by removing and then installing it again. 2. Turn OFF and then ON the main power, and check whether the error is cleared. 3. After replacing the Image Analysis Board, reinstall the firmware of the Image Analysis Board or the system software which version is supported by this model using SST or a USB memory.
E746	0024	00	Title	Image Analysis Board error
			Detection description	An error in the operation of the Image Analysis Board was detected.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Check that the Image Analysis Board is installed properly by removing and then installing it again. 2. Turn OFF and then ON the main power, and check whether the error is cleared. 3. After replacing the Image Analysis Board, reinstall the firmware of the Image Analysis Board or the system software which version is supported by this model using SST or a USB memory.
E746	0031	00	Title	TPM error
			Detection description	A communication error between the Main Controller PCB and the TPM PCB was detected at startup.
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Turn OFF and then ON the main power, and check whether the error is cleared. 2. After turning OFF the main power, replace the TPM PCB. (Unit of replacement: TPM PCB ASSEMBLY) 3. If the TPM key was backed up, restore the key. 3-1. Connect the USB memory which stores the TPM key. 3-2. Execute "Settings/Registration> Log In> Management Settings> Data Management> TPM Settings> Restore TPM Key". [CAUTION] Ask the customer to enter "System Manager ID" and "System Manager PIN" when logging in. 3-3. Enter the password set at backup operation. 3-4. When the restoration completion screen is displayed, click "OK". Remove the USB memory, and turn OFF and then ON the main power.

Error code	Detail Code	Location	Item	Description
E746	0032	00	Title	TPM error
			Detection description	Mismatch of the TPM key was detected.
			Remedy	<p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> 1. Format the system. <ol style="list-style-type: none"> 1-1. Enter safe mode using (2+8) startup, and execute [4]: Clear/Format> [2]: Flash Format (Flash format) using a USB memory. 1-2. Reinstall the system software using SST or a USB memory. 2. Replace the TPM PCB. (Unit of replacement: TPM PCB ASSEMBLY) 3. If the TPM key was backed up, restore the key. <ol style="list-style-type: none"> 3-1. Connect the USB memory which stores the TPM key. 3-2. Execute "Settings/Registration> Log In> Management Settings> Data Management> TPM Settings> Restore TPM Key". [CAUTION] Ask the customer to enter "System Manager ID" and "System Manager PIN" when logging in. 3-3. Enter the password set at backup operation. 3-4. When the restoration completion screen is displayed, click "OK". Remove the USB memory, and turn OFF and then ON the main power.

Error code	Detail Code	Location	Item	Description
E746	0033	00	Title	TPM error
			Detection description	It was detected that data in TPM was inconsistent.
			Remedy	<p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <p>Perform the appropriate remedy according to the status whether the TPM key was backed up.</p> <ol style="list-style-type: none"> a. If the TPM key was backed up, restore the key. <ol style="list-style-type: none"> 1. Connect the USB memory which stores the TPM key. 2. Execute "Settings/Registration> Log In> Management Settings> Data Management> TPM Settings> Restore TPM Key". [CAUTION] Ask the customer to enter "System Manager ID" and "System Manager PIN" when logging in. 3. Enter the password set at backup operation. 4. When the restoration completion screen is displayed, click "OK". Remove the USB memory, and turn OFF and then ON the main power. b. If the TPM key was not backed up, format the system. <ol style="list-style-type: none"> 1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory. 2. Reinstall the system software using SST or a USB memory.

Error code	Detail Code	Location	Item	Description
E746	0034	00	Title	TPM auto-recovery error
			Detection description	The error occurred when clearing HDD while TPM setting was ON.
			Remedy	<p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <p>1. Turn OFF and then ON the main power, and check whether the error is cleared.</p> <p>a. If the error is cleared, execute "Settings/Registration> Log In> Management Settings> Data Management> Initialize All Data/Settings".</p> <p>b. If the error is not cleared, format the system.</p> <p>1. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory.</p> <p>2. Reinstall the system software using SST or a USB memory.</p> <p>2. If the TPM key was backed up, restore the key.</p> <p>2-1. Connect the USB memory which stores the TPM key.</p> <p>2-2. Execute "Settings/Registration> Log In> Management Settings> Data Management> TPM Settings> Restore TPM Key".</p> <p>[CAUTION] Ask the customer to enter "System Manager ID" and "System Manager PIN" when logging in.</p> <p>2-3. Enter the password set at backup operation.</p> <p>2-4. When the restoration completion screen is displayed, click "OK". Remove the USB memory, and turn OFF and then ON the main power.</p>
E746	0035	00	Title	TPM version error
			Detection description	TPM PCB which cannot be used in this machine was installed.
			Remedy	[Remedy] Install the TPM PCB for this model. (Unit of replacement: TPM PCB ASSEMBLY)

Error code	Detail Code	Location	Item	Description
E748	2010	00	Title	Flash PCB error / HDD error
			Detection description	IPL (startup program) was not found, or the HDD could not be recognized.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Cable between the Main Controller PCB (UN05/J29 and J23) and the HDD (Unit of replacement: CABLE, SATA POWER, CABLE, SATA SIGNAL) Flash PCB (UN61) <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <p>1. Disconnect the cable between the Main Controller PCB and the HDD, and turn ON the main power.</p> <p>a. When the error code has not been changed:</p> <p>1. Obtain the necessary backup data by referring to the backup data list.</p> <p>2. Enter safe mode using (2+8) startup, and execute [4] Clear/Format> [2] Flash Format (Flash format) using a USB memory.</p> <p>3. After replacing the Flash PCB, reinstall the system software using SST or a USB memory.</p> <p>4. Restore the backup data.</p> <p>b. When the error code has been changed to another one, see the remedy for the corresponding code.</p> <p>[Reference] For backup and restoration, refer to "Adjustment> Actions after Replacement" and "Appendix> Backup Data List" in the Service Manual.</p>
E748	9000	00	Title	System error
			Detection description	System error
			Remedy	Contact to the sales company.
E749	0005	00	Title	Error due to change in hardware configuration
			Detection description	There was a change in option configuration that requires turning OFF and then ON the main power. On the screen, only the message "Turn the main power switch OFF and ON" is displayed instead of displaying the error code. The error log is not recorded in COPIER> DISPLAY> ERR.
			Remedy	[Remedy] Turn OFF and then ON the main power. [Reference] Options are recognized again by turning OFF and then ON the main power.
E749	0006	00	Title	Error due to change in hardware configuration
			Detection description	There was a change in option configuration during quick off. On the screen, only the message "Turn the main power switch OFF and ON" is displayed instead of displaying the error code. The error log is not recorded in COPIER> DISPLAY> ERR.
			Remedy	[Remedy] Turn OFF and then ON the main power. [Reference] Options are recognized again by turning OFF and then ON the main power.

Error code	Detail Code	Location	Item	Description
E753	0001	00	Title	Download error
			Detection description	Update of the Main Controller PCB ended in failure. (Power supply was interrupted during update without backup.)
			Remedy	[Remedy] Perform the following in the order while checking whether the error is cleared. 1. Reinstall the system software using SST or a USB memory. 2. After replacing the Flash PCB (UN61), reinstall the system software using SST or a USB memory. 3. Collect debug log and contact to the sales company.
E804	0000	00	Title	Power Supply Cooling Fan error
			Detection description	It was detected that the Power Supply Cooling Fan was locked.
			Remedy	[Related parts] • Harness between the Low Voltage Power Supply PCB (UN01/J323) and the Power Supply Cooling Fan (FM02/J1008) (Unit of replacement: POWER SUPPLY ASSEMBLY) • Power Supply Cooling Fan (FM02) (Unit of replacement: FAN) • Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) [Remedy] Check/replace the related harness/cable, connector and parts.
E806	0100	05	Title	Front Fan error
			Detection description	Unlocked state was detected 2 consecutive times in 3 sec when the Front Fan was driven.
			Remedy	[Related parts] • Harnesses from the DC Controller PCB to the Front Fan 1. DC Controller PCB (UN04/J133) to Relay Connector (9P) (Unit of replacement: CABLE, SENSOR) 2. Relay Connector (9P) to Front Fan (FM01/J1260) (Unit of replacement: CABLE, INTERLOCK SWITCH) • DC Controller PCB (UN04/J133) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Front Fan (FM01) (Unit of replacement: FAN, FRONT) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E806	0101	05	Title	Front Fan error
			Detection description	A state of caught cable was detected within 15 sec when the Front Fan was driven.
			Remedy	[Related parts] • Harnesses from the DC Controller PCB to the Front Fan 1. DC Controller PCB (UN04/J133) to Relay Connector (9P) (Unit of replacement: CABLE, SENSOR) 2. Relay Connector (9P) to Front Fan (FM01/J1260) (Unit of replacement: CABLE, INTERLOCK SWITCH) • DC Controller PCB (UN04/J133) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Front Fan (FM01) (Unit of replacement: FAN, FRONT) [Remedy] Check/replace the related harness/cable, connector and parts. [Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected. • Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP • Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E806	0200	05	Title	Motor Fan error
			Detection description	Unlocked state was detected 2 consecutive times in 3 sec when the Motor Fan was driven.
			Remedy	[Related parts] • Harness between the DC Controller PCB (UN04/J134) and the Motor Fan (FM03/J1342) (Unit of replacement: POWER SUPPLY ASSEMBLY) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Motor Fan (FM03) [Remedy] Check/replace the related harness/cable, connector and parts.
E806	0201	05	Title	Motor Fan error
			Detection description	A state of caught cable was detected within 15 sec when the Motor Fan was driven.
			Remedy	[Related parts] • Harness between the DC Controller PCB (UN04/J134) and the Motor Fan (FM03/J1342) (Unit of replacement: POWER SUPPLY ASSEMBLY) • DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) • Motor Fan (FM03) [Remedy] Check/replace the related harness/cable, connector and parts.

Error code	Detail Code	Location	Item	Description
E808	0001	05	Title	Zero cross signal detection error
			Detection description	After the start of the zero cross signal detection, the frequency between 43 Hz and 67 Hz could not be detected for 0.5 consecutive sec.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E808	0002	05	Title	Zero cross signal detection error
			Detection description	Error due to disconnection of the fixing loopback signal After the frequency of zero cross signal fell into the specified frequency band, the frequency between 43 Hz and 67 Hz could not be detected for 0.5 consecutive sec.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the DC Controller PCB (UN04/J115) and the Low Voltage Power Supply PCB (UN01/J322) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04/J121) to Fixing Drawer (J1001) (Unit of replacement: FIXING DRAWER ASSEMBLY) Low Voltage Power Supply PCB (UN01) (Unit of replacement: POWER SUPPLY ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES

Error code	Detail Code	Location	Item	Description
E811	0000	05	Title	Fuse in the Fixing Fuse PCB blowout error
			Detection description	The fuse in the Fixing Fuse PCB was not blown out at power-on.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Fixing Fuse PCB (UN31) (Unit of replacement: FIXING FUSE PCB ASSEMBLY) Fixing Unit (Unit of replacement: FIXING ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) Harnesses from the DC Controller PCB to the Fixing Fuse PCB <ol style="list-style-type: none"> DC Controller PCB (UN04/J121) to Fixing Drawer (J1001DB) (Unit of replacement: FIXING DRAWER ASSEMBLY) Fixing Drawer (J1001LB) to Fixing Fuse PCB (Unit of replacement: CABLE, DRAWER RELAY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E880	0001	00	Title	Controller Fan error
			Detection description	It was detected that the Controller Fan was locked.
			Remedy	[Remedy] Replace the Main Controller PCB (UN05). (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)
E881	0001	00	Title	Board over heat error
			Detection description	It was detected that temperature of the CPU of the Main Controller PCB was abnormal.
			Remedy	<p>[Related parts] Main Controller PCB (UN05) (Unit of replacement: MAIN CONTROLLER PCB ASSEMBLY)</p> <p>[Remedy] Perform the following in the order while checking whether the error is cleared.</p> <ol style="list-style-type: none"> If the error occurred during a service visit and then occurred again, replace the Main Controller PCB. If the error does not occur during a service visit but is found in the log: <ol style="list-style-type: none"> Clean the inlet on the side where the fan is installed and remove dust. Remove dust from the fan in the Controller Box. If the space on the side where the fan is installed is less than 10 cm, ask the customer to secure enough space.

Error code	Detail Code	Location	Item	Description
E890	0001	05	Title	Temperature detection error
			Detection description	The Environment Sensor did not detect change in temperature.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harnesses from the DC Controller PCB to the Environment Sensor Unit <ol style="list-style-type: none"> DC Controller PCB (UN04/J133) to Relay Connector (9P) (Unit of replacement: CABLE, SENSOR) Relay Connector (9P) to Environment Sensor Unit (UN27/J1107) (Unit of replacement: CABLE, INTERLOCK SWITCH) <ul style="list-style-type: none"> Environment Sensor Unit (UN27) (Unit of replacement: ENVIRONMENT SENSOR ASSEMBLY) DC Controller PCB (UN04) (Unit of replacement: DC CONTROLLER PCB ASSEMBLY) <p>[Remedy] Check/replace the related harness/cable, connector and parts.</p> <p>[Reference] Before replacing the DC Controller PCB, back up the service mode data (approx. 2 min) and restore the backup data after the replacement so the data may be able to be protected.</p> <ul style="list-style-type: none"> Backup: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMBUP Restoration: COPIER (LEVEL2)> FUNCTION> SYSTEM> DSRAMRES
E890	0002	05	Title	Temperature detection error
			Detection description	The thermistor in the Laser Scanner Unit consecutively detected a temperature outside of the specified range.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Harness between the Y/M Laser Driver PCB (UN08/J204) and the Thermistor in the Laser Scanner Unit (TH04) (Unit of replacement: LASER SCANNER ASSEMBLY) Y/M Laser Driver PCB (UN08) (Unit of replacement: LASER SCANNER ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch".

Error code	Detail Code	Location	Item	Description
E890	0003	05	Title	Temperature detection error
			Detection description	The thermistor in the Laser Driver PCB consecutively detected a temperature outside of the specified range.
			Remedy	<p>[Related parts]</p> <ul style="list-style-type: none"> Flat Cable between the Y/M Laser Driver PCB (UN08/J203) and the C/Bk Laser Driver PCB (UN09/J801) (Unit of replacement: CABLE, FLAT) C/Bk Laser Driver PCB (UN09) (Unit of replacement: LASER SCANNER ASSEMBLY) <p>[Remedy]</p> <ol style="list-style-type: none"> Check/replace the related harness/cable, connector and parts. After replacement of the Laser Driver PCB, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch".
E996	0071	04	Title	Error for collecting sequence jam log (ADF)
			Detection description	Error for collecting jam log (ADF)
			Remedy	<p>[Remedy] Collect debug log and contact to the sales company.</p> <p>[Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-R" to "0" (default), it is handled as a jam, instead of an error.</p>
E996	0CA1	05	Title	Error for collecting sequence jam log (Printer)
			Detection description	Error for collecting jam log (Printer) Continuous 0CA1 jam was detected.
			Remedy	<p>[Remedy] Collect debug log and contact to the sales company.</p> <p>[Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-D" to "1", it is handled as an error instead of a jam from the first occurrence.</p>
E996	0CA2	05	Title	Error for collecting sequence jam log (Printer)
			Detection description	Error for collecting jam log (Printer) Continuous 0CA2 jam was detected.
			Remedy	<p>[Remedy] Collect debug log and contact to the sales company.</p> <p>[Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-D" to "1", it is handled as an error instead of a jam from the first occurrence.</p>
E996	0CA3	05	Title	Error for collecting sequence jam log (Printer)
			Detection description	Error for collecting jam log (Printer) Continuous 0CA3 jam was detected.
			Remedy	<p>[Remedy] Collect debug log and contact to the sales company.</p> <p>[Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-D" to "1", it is handled as an error instead of a jam from the first occurrence.</p>

Error code	Detail Code	Location	Item	Description
E996	0CF0	05	Title	Error for collecting sequence jam log (Printer)
			Detection description	Error for collecting jam log (Printer) Continuous 0CF0 jam was detected.
			Remedy	[Remedy] Collect debug log and contact to the sales company. [Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-D" to "1", it is handled as an error instead of a jam from the first occurrence.
E996	0CF3	05	Title	Error for collecting sequence jam log (Printer)
			Detection description	Error for collecting jam log (Printer) Continuous 0CF3 jam was detected.
			Remedy	[Remedy] Collect debug log and contact to the sales company. [Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-D" to "1", it is handled as an error instead of a jam from the first occurrence.
E996	0CF4	05	Title	Error for collecting sequence jam log (Printer)
			Detection description	Error for collecting jam log (Printer) Continuous 0CF4 jam was detected.
			Remedy	[Remedy] Collect debug log and contact to the sales company. [Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-D" to "1", it is handled as an error instead of a jam from the first occurrence.
E996	0CF5	05	Title	Error for collecting sequence jam log (Printer)
			Detection description	Error for collecting jam log (Printer) Continuous 0CF5 jam was detected.
			Remedy	[Remedy] Collect debug log and contact to the sales company. [Reference] By setting "COPIER (LEVEL2)> OPTION> FNC-SW> JM-ERR-D" to "1", it is handled as an error instead of a jam from the first occurrence.

T-7-4

Jam Code

Jam Type

Type	Overview of detection	Check items (in arbitrary order)
Delay	A delay jam occurs when a sensor was not turned ON although a specified period of time had passed after the start of detection by the sensor.	<ul style="list-style-type: none"> Remaining paper at the upstream of the target sensor Soiling on the target sensor Displacement of the target sensor position Failure of the target sensor Soiling (grease)/deterioration/failure of a drive motor located upstream of the target sensor Soiling (paper dust)/deterioration/failure of a drive roller located upstream of the target sensor
Stationary	A stationary jam occurs when a sensor was not turned OFF although a specified period of time had passed after the sensor was turned ON.	<ul style="list-style-type: none"> Remaining paper near the target sensor Soiling on the target sensor Displacement of the target sensor position Failure of the target sensor Soiling (grease)/deterioration/failure of a drive motor located upstream of the target sensor Soiling (paper dust)/deterioration/failure of a drive roller located upstream of the target sensor
Door open	A door open jam occurs when a sensor detected door open during printing operation.	<ul style="list-style-type: none"> Door open during printing
Sequence	A sequence jam occurs when there was an error in sensor detection signal at printing operation sequence. Since the jam may occur due to sporadic noise with software of each equipment or communication line (interruption of communication), failure of the part is not the cause of the jam. After the jam is removed, the machine works.	<ul style="list-style-type: none"> Opening/closing of the door Turning OFF and then ON the power Error near the target sensor (soiling/displacement/failure of the sensor, error in harness/open circuit of harness, soiling (grease)/deterioration/failure of a drive motor, or soiling (paper dust)/deterioration/failure of a drive roller)
Power-on	A power-on jam occurs when a sensor detected ON state at power-on.	<ul style="list-style-type: none"> Remaining paper in the machine Soiling on the target sensor Failure of the target sensor Foreign matter on the target sensor (paper dust, paper lint)

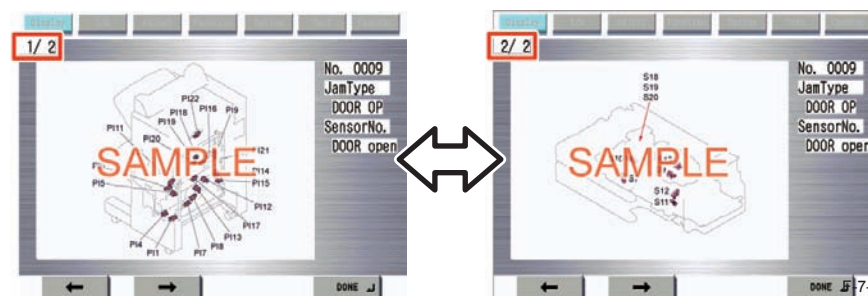
Type	Overview of detection	Check items (in arbitrary order)
Error avoidance	An error avoidance jam occurs when an error in the machine (excluding parts failure) was detected. Printing operation is suspended to avoid error occurrence by error code; therefore, parts failure is not the cause of the jam. After the jam is removed, the machine works. If it is due to parts failure, an error code instead of the error avoidance jam is displayed on UI and printing operation is suspended. In such case, service technician should perform remedial work for the error code.	<ul style="list-style-type: none"> Opening/closing of the door after jam removal Turning OFF and then ON the power after jam removal
Size error	A size error jam occurs when the difference between the paper length detected by the Cassette Guide Plate/specified on the Control Panel and the length measured by the Registration Sensor is out of the specified range.	<ul style="list-style-type: none"> Difference in paper size Wrong paper size setting Error in the Document Size Sensor (soiling/displacement/failure of the sensor) Error in the Paper Size Detection Unit (failure of mechanical structure for size detection, failure of the Guide Plate, or failure of the Cassette Size Switch)
Different media	A different media jam occurs when the paper type specified from a PC or the Control Panel differed from the one detected by the sensor.	<ul style="list-style-type: none"> Difference in paper type Wrong paper type setting Error in the Transparency Sensor (soiling/displacement/failure of the sensor) Soiling on the Reflection Plate of the Transparency Sensor

T-7-5

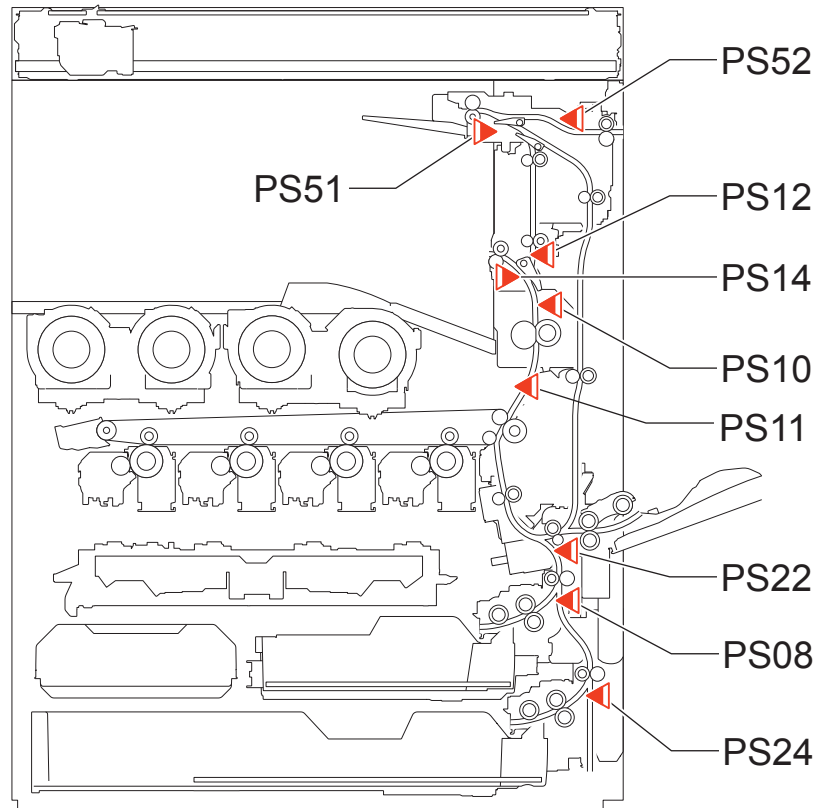
Jam screen display specification

Due to one jam code being used for multiple options, the illustration for the different option may be displayed on the jam screen.

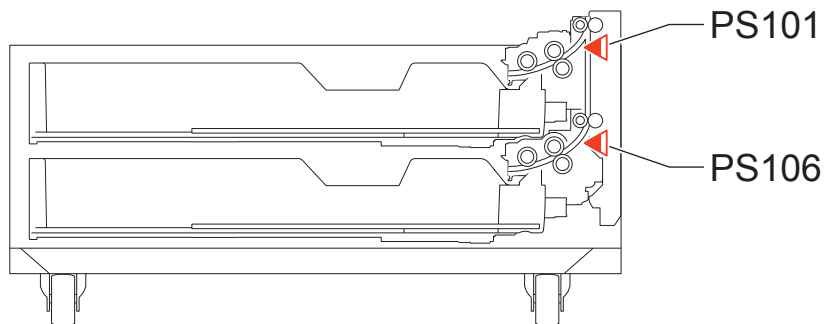
In this case, "1/2" or similar information is displayed on top left side of the screen and this area can be pushed. This operation can be used to switch information on the screen.



Host machine / Cassette Pedestal



F-7-2



F-7-3

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
00	0101	Delay jam	Cassette 1 Vertical Path Sensor	PS08
00	0102	Delay jam	Cassette 2 Vertical Path Sensor	PS24
00	0103	Delay jam	Cassette 3 Vertical Path Sensor	PS101
00	0104	Delay jam	Cassette 4 Vertical Path Sensor	PS106
00	0106	Delay jam	Fixingt Delivery Sensor	PS10
00	0107	Delay jam	First Delivery Sensor	PS14
00	0108	Delay jam	Second delivery / Reverse sensor	PS51
00	0109	Delay jam	Third delivery sensor	PS52
00	010A	Delay jam	Reverse Sensor	PS12
00	010B	Delay jam	Pre-Registration Sensor	PS22
00	0190	Delay jam	When paper reached the Registration Roller, it had not been fed in time for image formation.	-
00	0206	Stationary jam	Fixingt Delivery Sensor	PS10
00	0207	Stationary jam	First Delivery Sensor	PS14
00	0208	Stationary jam	Second delivery / Reverse sensor	PS51
00	0209	Stationary jam	Third delivery sensor	PS52
00	020A	Stationary jam	Reverse Sensor	PS12
00	020B	Stationary jam	Pre-Registration Sensor	PS22
00	0706	Wrap jam	Fixingt Delivery Sensor	PS10
00	0A01	Power ON jam	Cassette 1 Vertical Path Sensor	PS08
00	0A02	Power ON jam	Cassette 2 Vertical Path Sensor	PS24
00	0A03	Power ON jam	Cassette 3 Vertical Path Sensor	PS101
00	0A04	Power ON jam	Cassette 4 Vertical Path Sensor	PS106
00	0A06	Power ON jam	Fixingt Delivery Sensor	PS10
00	0A07	Power ON jam	First Delivery Sensor	PS14
00	0A08	Power ON jam	Second delivery / Reverse sensor	PS51
00	0A09	Power ON jam	Third delivery sensor	PS52
00	0A0A	Power ON jam	Reverse Sensor	PS12
00	0A0B	Power ON jam	Pre-Registration Sensor	PS22
00	0A0C	Power ON jam	Arch sensor	PS11
00	0B00	Door Open jam	Right Door Open/Close Detection Switch, Front Door Switch, Right Upper Door Open/Close Detection Switch, Cassette Right Door Open/Close Detection Switch	SW11, SW26, SW27, SW101
00	0B0D	No drum jam	-	-
00	0CA1	Sequence jam *1	-	-
00	0CA2	Sequence jam *1	-	-
00	0CA3	Sequence jam *1	-	-
00	0CA4	Sequence jam *1	-	-
00	0CA5	Sequence jam *1	-	-
00	0CA7	Sequence jam *1	-	-
00	0CA8	Sequence jam *1	-	-
00	0CAE	Sequence jam *1	-	-
00	0CAF	Sequence jam *1	-	-

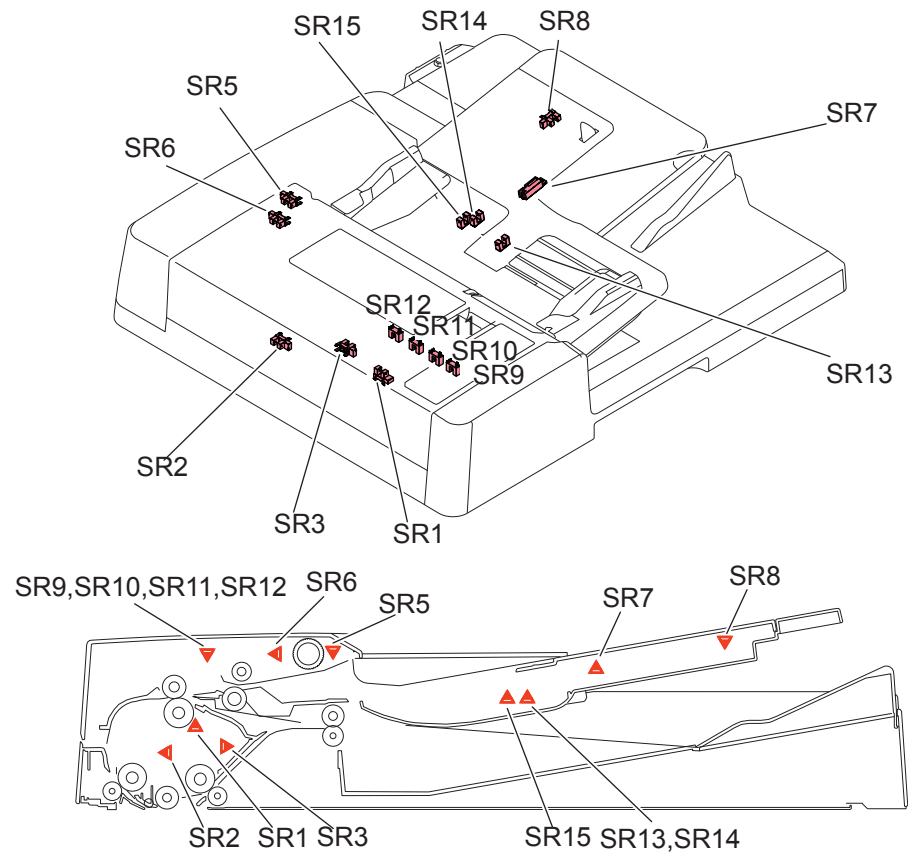
ACC ID	Jam Code	Type	Sensor Name	Sensor ID
00	0CB0	Sequence jam *1	-	-
00	0CB3	Sequence jam *1	-	-
00	0CB4	Sequence jam *1	-	-
00	0CB8	Sequence jam *1	-	-
00	0CF0	Sequence jam *1	-	-
00	0CF1	Retry Error jam*2	-	-
00	0CF3	Sequence jam *1	-	-
00	0CF4	Sequence jam *1	-	-
00	0CF5	Sequence jam *1	-	-
00	0D91	Media/Size Error	-	-
00	1F01	Sequence jam *1	-	-

T-7-6

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

*2 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.


DADF-AQ1


F-7-4

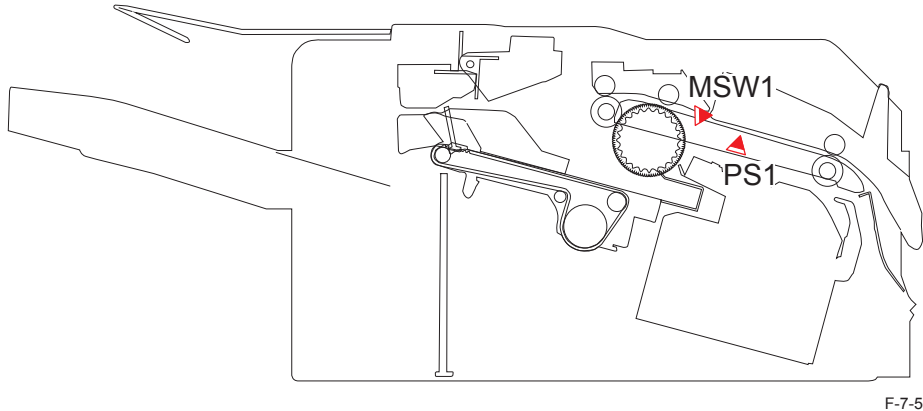
ACC ID	Jam Code	Type	Sensor Name	Sensor ID
01	0003	Delay	Registration sensor	SR1
01	0004	Stationary	Registration sensor	PS24
01	0009	Delay	Read sensor	PS101
01	0010	Stationary	Read sensor	PS106
01	0013	Delay	Delivery reversal sensor	PS10
01	0014	Stationary	Delivery reversal sensor	PS14
01	0043	Delay	Registration sensor (1st sheet)	PS51
01	0044	Stationary	Registration sensor (1st sheet)	PS52
01	0049	Delay	Read sensor (1st sheet)	PS12
01	0050	Stationary	Read sensor (1st sheet)	PS22
01	0053	Delay	Delivery sensor (1st sheet)	-
01	0054	Stationary	Delivery sensor (1st sheet)	PS10
01	0071	Sequence *1	-	PS14
01	0090	ADF Open	Copyboard Cover Open/Closed Sensor (front/rear)	PS51
01	0091	ADF Open	Copyboard Cover Open/Closed Sensor (front/rear) (When paper is stopped temporarily)	PS52
01	0092	Cover Open	Cover open/closed sensor	PS12
01	0093	Cover Open	Cover open/closed sensor (When paper is stopped temporarily)	PS22
01	0095	Pickup Error	Registration sensor/Document set sensor	PS10
01	0096	Jam upon entering limited functions mode*2	-	PS08
01	00A1	Power ON	Registration sensor	PS24
01	00A2	Power ON	Read sensor	PS101
01	00A3	Power ON	Delivery reversal sensor	PS106

T-7-7

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

*2 Jam code generated to prompt a user to remove the original that remains inside the machine when an error occurs during a job and the machine enters limited functions mode. Troubleshooting using this jam code is not possible.

Inner Finisher-G1

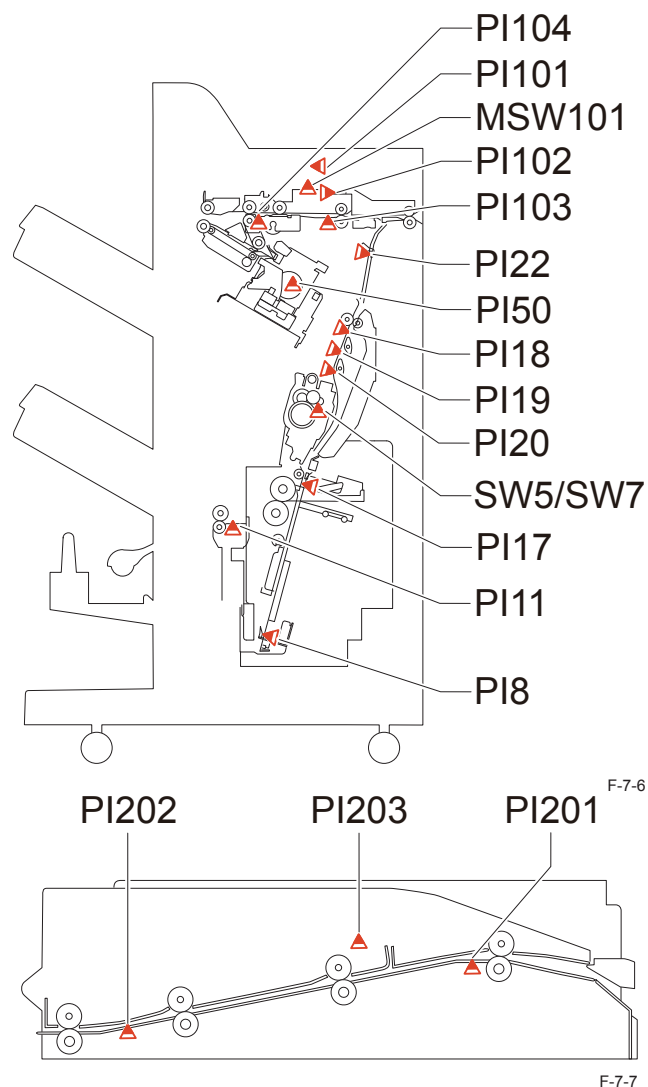


ACC ID	Jam Code	Type	Sensor Name	Sensor ID
02	1001	Delay	Delivery sensor	PS1
02	1101	Stationary	Delivery sensor	PS24
02	1200	Early jams	-	PS101
02	1300	Power ON	Delivery sensor	PS106
02	1400	Door Open	Front Cover Switch	PS10
02	1500	Staple	-	PS14
02	1701	Idle rotation stationary jam	Delivery sensor	PS51
02	1801	Staple-less binding jam	Staple-less binding jam (Clinch Motor Drive Sensor error)	PS52
02	1802	Staple-less binding jam	Staple-less binding jam (Clinch HP Sensor error)	PS12
02	1803	Staple-less binding jam	Staple-less binding jam (Clinch Motor error)	PS22
02	1804	Staple-less binding jam	Staple-less binding jam (time-out error of binding operation)	-
02	1805	Staple-less binding jam	Staple-less binding jam (time-out error of return operation after binding)	PS10
02	1C14	Retry Error *1	Assist Motor error	PS14
02	1C16	Retry Error *1	Paddle Motor error	PS51
02	1C30	Retry Error *1	Rear Alignment Motor error	PS52
02	1C32	Retry Error *1	Staple Motor error	PS12
02	1C35	Retry Error *1	Return Belt Motor error	PS22
02	1C37	Retry Error *1	Front Alignment Motor error	PS10
02	1C40	Retry Error *1	Tray Lifting Motor error	PS08
02	1C77	Retry Error *1	Paddle Motor error	PS24
02	1F01	Other jams	Paper feed cancellation jam	PS101
02	1F32	Other jams	Manual stack insertion jam	PS106
02	1F90	Other jams	Time-out jam	PS10

T-7-8

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

Booklet Finisher-U1/Staple Finisher-U1/Buffer Pass Unit



ACC ID	Jam Code	Type	Sensor Name	Sensor ID
02	1001	Delay	Entrance sensor	PI103
02	1101	Stationary	Entrance sensor	PI103

ACC ID	Jam Code	Type	Sensor Name	Sensor ID
02	1200	Early jams	Entrance sensor	PI103
02	1300	Power ON	Entrance sensor, Feed Path Sensor	PI103, PI104
02	1400	Door Open	Upper Cover Sensor, Front Cover Sensor, Front Cover Switch	PI101, PI102, MSW101
02	1500	Staple	stapler HP sensor	PI50
02	1004	Delay	Feed Path Sensor	PI104
02	1005	Delay	Buffer Pass Inlet Sensor	PI201
02	1006	Delay	Buffer Pass Outlet Sensor	PI202
02	1007	Delay	Saddle Inlet Sensor	PI22
02	1008	Delay	Saddle No.1 Paper Sensor	PI18
02	1009	Delay	Saddle Delivery Sensor	PI11
02	1104	Stationary	Feed Path Sensor	PI104
02	1105	Stationary	Buffer Pass Inlet Sensor	PI201
02	1106	Stationary	Buffer Pass Outlet Sensor	PI202
02	1107	Stationary	Saddle Inlet Sensor	PI22
02	1108	Stationary	Saddle No.1 Paper Sensor, Saddle No.2 Paper Sensor, Saddle No.3 Paper Sensor	PI18, PI19, PI20
02	1109	Stationary	Saddle Delivery Sensor	PI11
02	1205	Early jams	Buffer Pass Inlet Sensor	PI201
02	1305	Power ON	Buffer Pass Inlet Sensor	PI201
02	1306	Power ON	Buffer Pass Outlet Sensor	PI202
02	1380	Power ON	Saddle Delivery Sensor, Saddle Vertical Path Paper Sensor, Saddle No.1 Paper Sensor, Saddle No.2 Paper Sensor, Saddle No.3 Paper Sensor, Saddle Inlet Sensor	PI11, PI17, PI18, PI19, PI20, PI22
02	1405	Door Open	Buffer Pass Open/Closed Sensor	PI203
02	1480	Door Open	Upper Cover Sensor, Front Cover Sensor, Front Cover Switch	PI101, PI102, MSW101
02	1580	Staple	Stitcher HP Sensor (Rear), Stitcher HP Sensor (Front)	SW5, SW7
02	1700	Idle rotation stationary jam	Entrance sensor, Feed Path Sensor	PI103, PI104
02	1705	Idle rotation stationary jam	Buffer Pass Inlet Sensor, Buffer Pass Outlet Sensor	PI201, PI202
02	1780	Idle rotation stationary jam	Saddle Delivery Sensor, Saddle Vertical Path Paper Sensor, Saddle No.1 Paper Sensor, Saddle No.2 Paper Sensor, Saddle No.3 Paper Sensor, Saddle Inlet Sensor	PI11, PI17, PI18, PI19, PI20, PI22
02	1C2F	Retry Error *1	Finisher error avoidance jam	-
02	1C8F	Retry Error *1	Saddle error avoidance jam	-
02	1F2E	Sequence *1	Finisher sequence error jam	-
02	1F3E	Sequence *1	Buffer path sequence error jam	-
02	1F8E	Sequence *1	Saddle sequence error jam	-

*1 The state is recovered by opening and closing the Door, or turning OFF and then ON the power supply.

T-7-9

Alarm Code

Location Code	Alarm Code	Description	Details
00	0085	A notice of stat	-
00	0246	For R&D	-
00	0247	For R&D	-
01	0010	The configuration of an option controlled by the Main Controller has been changed	A change in configuration of an option such as a change in the configuration of the Fax Board, a change in the configuration of the Voice Board, or a change in the configuration of the option HDD, which requires turning OFF and then ON the power, was detected. Detection condition/timing: At the time of startup only Remedy: Turn OFF and then ON the main power.
01	0020	The configuration of an option controlled by the RCON has been changed	Due to a change in the configuration related to the scanner, a change in the hardware configuration which requires turning OFF and then ON the power was detected. Detection condition/timing: At the time of startup only Remedy: Turn OFF and then ON the main power.
01	0030	The configuration of an option controlled by the DCON has been changed	Due to a change in the configuration related to the printer, a change in the hardware configuration which requires turning OFF and then ON the power was detected. Detection condition/timing: At the time of startup only Remedy: Turn OFF and then ON the main power.
02	0025	Insufficient Scanner Unit LED light intensity alarm	In the case that the light intensity is insufficient at LED lighting. (Some of the LEDs are OFF. Scanning can be continued.)

Location Code	Alarm Code	Description	Details
04	0001	Cassette 1 Lifter error	<p>Cause: Error in the Lifter Motor or the Lifter Sensor.</p> <p>Measures:</p> <ol style="list-style-type: none"> 1. While the Cassette 1 is removed, turn ON the power and then insert the Cassette 1, and check the operation sound of the motor. When there is operation sound of the motor, check if the Middle Plate has been lifted up. When the Middle Plate has been lifted up: <ol style="list-style-type: none"> 1-1. Check that the Cassette 1 Lifter Sensor has been properly installed. 1-2. Check the harness/connector between the DC Controller and the Cassette 1 Lifter Sensor. 1-3. Check the Cassette 1 Lifter Sensor. 1-4. Replace the DC Controller PCB. <p>When the Middle Plate has not been lifted up:</p> <ol style="list-style-type: none"> 2-1. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 2-2. Check the Cassette 1 Lifter Motor. 2-3. Replace the DC Controller PCB. When there is no operation sound of the motor, check the followings: <ol style="list-style-type: none"> 3-1. Check the harness/connector between the DC Controller and the Cassette 1 Lifter Motor. 3-2. Check conduction of the fuse in the DC Controller. 3-3. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 3-4. Check the Cassette 1 Lifter Motor. 3-5. Replace the DC Controller.

Location Code	Alarm Code	Description	Details
04	0002	Cassette 2 Lifter error	<p>Cause: Error in the Lifter Motor or the Lifter Sensor.</p> <p>Measures:</p> <p>1. While the Cassette 2 is removed, turn ON the power and then insert the Cassette 2, and check the operation sound of the motor. When there is operation sound of the motor, check if the Middle Plate has been lifted up. When the Middle Plate has been lifted up:</p> <p>1-1. Check that the Cassette 2 Lifter Sensor has been properly installed. 1-2. Check the harness/connector between the DC Controller and the Cassette 2 Lifter Sensor. 1-3. Check the Cassette 2 Lifter Sensor. 1-4. Replace the DC Controller PCB.</p> <p>When the Middle Plate has not been lifted up:</p> <p>2-1. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 2-2. Check the Cassette 2 Lifter Motor. 2-3. Replace the DC Controller PCB.</p> <p>When there is no operation sound of the motor, check the followings:</p> <p>3-1. Check the harness/connector between the DC Controller and the Cassette 2 Lifter Motor. 3-2. Check conduction of the fuse in the DC Controller. 3-3. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 3-4. Check the Cassette 2 Lifter Motor. 3-5. Replace the DC Controller.</p>

Location Code	Alarm Code	Description	Details
04	0003	Cassette 3 Lifter error	<p>Cause: Error in the Lifter Motor or the Lifter Sensor.</p> <p>Measures:</p> <p>1. While the Cassette 3 is removed, turn ON the power and then insert the Cassette 3, and check the operation sound of the motor. When there is operation sound of the motor, check if the Middle Plate has been lifted up. When the Middle Plate has been lifted up:</p> <p>1-1. Check that the Cassette 3 Lifter Sensor has been properly installed. 1-2. Check the harness/connector between the DC Controller and the Cassette 3 Lifter Sensor. 1-3. Check the Cassette 3 Lifter Sensor. 1-4. Replace the DC Controller PCB.</p> <p>When the Middle Plate has not been lifted up:</p> <p>2-1. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 2-2. Check the Cassette 3 Lifter Motor. 2-3. Replace the DC Controller PCB.</p> <p>When there is no operation sound of the motor, check the followings:</p> <p>3-1. Check the harness/connector between the DC Controller and the Cassette 3 Lifter Motor. 3-2. Check conduction of the fuse in the DC Controller. 3-3. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 3-4. Check the Cassette 3 Lifter Motor. 3-5. Replace the DC Controller.</p>

Location Code	Alarm Code	Description	Details
04	0004	Cassette 4 Lifter error	<p>Cause: Error in the Lifter Motor or the Lifter Sensor.</p> <p>Measures:</p> <ol style="list-style-type: none"> 1. While the Cassette 4 is removed, turn ON the power and then insert the Cassette 4, and check the operation sound of the motor. When there is operation sound of the motor, check if the Middle Plate has been lifted up. When the Middle Plate has been lifted up: <ol style="list-style-type: none"> 1-1. Check that the Cassette 4 Lifter Sensor has been properly installed. 1-2. Check the harness/connector between the DC Controller and the Cassette 4 Lifter Sensor. 1-3. Check the Cassette 4 Lifter Sensor. 1-4. Replace the DC Controller PCB. When the Middle Plate has not been lifted up: <ol style="list-style-type: none"> 2-1. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 2-2. Check the Cassette 4 Lifter Motor. 2-3. Replace the DC Controller PCB. <p>When there is no operation sound of the motor, check the followings:</p> <ol style="list-style-type: none"> 3-1. Check the harness/connector between the DC Controller and the Cassette 4 Lifter Motor. 3-2. Check conduction of the fuse in the DC Controller. 3-3. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 3-4. Check the Cassette 4 Lifter Motor. 3-5. Replace the DC Controller.

Location Code	Alarm Code	Description	Details
04	0007	MP Tray Lifter error	<p>Cause: Error in the Pullout Motor or the HP Sensor.</p> <p>Measures:</p> <ol style="list-style-type: none"> 1. Operate the Pullout Motor in the direction of the Multi-purpose Tray feed direction, and check the operation sound of the motor. When there is operation sound of the motor, check if the Pickup Roller moves up and down. When the Pickup Roller moves up and down: <ol style="list-style-type: none"> 1-1. Check that the HP Sensor has been properly installed. 1-2. Check the sensor shield plate. 1-3. Check the harness/connector between the DC Controller and the HP Sensor. 1-4. Check the HP Sensor. 1-5. Replace the DC Controller. When the Pickup Roller does not move up and down: <ol style="list-style-type: none"> 2-1. Check the gear on the host machine side and the gear on the Right Door side (missing, rotation, swing, etc.) 2-2. Check the Pullout Motor. 2-3. Check the DC Controller. When there is no operation sound: <ol style="list-style-type: none"> 3-1. Check the harness/connector between the DC Controller and the Pullout Motor. 3-2. Check conduction of the fuse in the DC Controller. 3-3. Check the condition of the gear at the host machine side (to see if there is missing or swing with the gear). 3-4. Check the Pullout Motor. 3-5. Replace the DC Controller.
04	0011	Cassette 1 paper feed retry error	<p>Movement: Nothing in particular.</p> <p>Cause: The paper does not picked up even if the paper feed retry operation is carried out 4 times.</p> <p>Measures: Check the Cassette 1 Pickup and Feed and Separation Rollers. -> Check whether a scrap of paper remains around the paper feed area or not.</p>
04	0012	Cassette 2 paper feed retry error	<p>Movement: Nothing in particular.</p> <p>Cause: The paper does not picked up even if the paper feed retry operation is carried out 4 times.</p> <p>Measures: Check the Cassette 2 Pickup and Feed and Separation Rollers. -> Check whether a scrap of paper remains around the paper feed area or not.</p>

Location Code	Alarm Code	Description	Details
04	0013	Cassette 3 paper feed retry error	Movement: Nothing in particular. Cause: The paper does not picked up even if the paper feed retry operation is carried out 4 times. Measures: Check the Cassette 3 Pickup and Feed and Separation Rollers. -> Check whether a scrap of paper remains around the paper feed area or not.
04	0014	Cassette 4 paper feed retry error	Movement: Nothing in particular. Cause: The paper does not picked up even if the paper feed retry operation is carried out 4 times. Measures: Check the Cassette 4 Pickup and Feed and Separation Rollers. -> Check whether a scrap of paper remains around the paper feed area or not.
04	0017	Multi-purpose tray paper feed retry error	Movement: Nothing in particular. Cause: The paper does not picked up even if the paper feed retry operation is carried out 4 times. Measures: Check the Multi-purpose Tray Pickup and Pullout Rollers. -> Check whether a scrap of paper remains around the paper feed area or not.
09	0010	Drum memory tag detection error (Y)	Unable to detect the memory tag of the Drum Unit (Y).
09	0011	Drum memory tag detection error (M)	Unable to detect the memory tag of the Drum Unit (M).
09	0012	Drum memory tag detection error (C)	Unable to detect the memory tag of the Drum Unit (C).
09	0013	Drum memory tag detection error (Bk)	Unable to detect the memory tag of the Drum Unit (Bk).

Location Code	Alarm Code	Description	Details
10	0006	Patch Sensor error 1	<p>Cause: Soiled Patch Sensor window, shutter failure, or Patch Sensor failure</p> <p>Measures: In order to clear this alarm, auto gradation adjustment (quick) needs to be executed. Execute auto gradation adjustment (quick) every time one of the following steps is performed.</p> <ol style="list-style-type: none"> 1. Check and clean the sensor window of the Registration Sensor Unit. 2. Check that the Registration Sensor Unit Shutter is properly installed and it is not damaged. 3. Check the operation of the Shutter Solenoid. 4. Check the harness/connector between the DC Controller PCB and the Registration Sensor. 5. Replace the Registration Sensor Unit. 6. Replace the DC Controller PCB. (At this time, be sure to perform backup and restoration according to the steps to be taken before/after replacing the DC Controller.) <p>Detection condition/timing:</p> <ul style="list-style-type: none"> • When it is judged that the window is soiled • When the laser power cannot be determined. <p>Remedy:</p> <p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the Registration Sensor and the DCON • Registration Sensor Unit • DCON <p>[Measures]</p> <ol style="list-style-type: none"> 1. Check the background regular reflection output. When the value is less than 115, go to step 2; when it is higher than 1000, go to step 5. 2. Check and clean the sensor window of the Registration Sensor Unit. 3. Check that the Registration Sensor Unit Shutter is properly installed and it is not damaged. 4. Check the operation of the Shutter Solenoid. 5. Check the harness/connector between the DC Controller PCB and the Registration Sensor. 6. Replace the Registration Sensor Unit. 7. Replace the DC Controller PCB. (At this time, be sure to perform backup and restoration according to the steps to be taken before/after replacing the DC Controller.)

Location Code	Alarm Code	Description	Details
10	0007	Patch Sensor error 2	<p>Cause: Soiled Patch Sensor window, shutter failure, or Patch Sensor failure</p> <p>Measures: In order to clear this alarm, auto gradation adjustment (quick) needs to be executed. Execute auto gradation adjustment (quick) every time one of the following steps is performed.</p> <ol style="list-style-type: none"> 1. Check and clean the sensor window of the Registration Sensor Unit. 2. Check that the Registration Sensor Unit Shutter is properly installed and it is not damaged. 3. Check the operation of the Shutter Solenoid. 4. Check the harness/connector between the DC Controller PCB and the Registration Sensor. 5. Replace the Registration Sensor Unit. 6. Replace the DC Controller PCB. (At this time, be sure to perform backup and restoration according to the steps to be taken before/after replacing the DC Controller.) <p>Detection condition/timing:</p> <ul style="list-style-type: none"> • When it is judged that the window is soiled • When the laser power cannot be determined. <p>Remedy:</p> <p>[Related parts]</p> <ul style="list-style-type: none"> • Harness between the Registration Sensor and the DCON • Registration Sensor Unit • DCON <p>[Measures]</p> <ol style="list-style-type: none"> 1. Check the background regular reflection output. When the value is less than 115, go to step 2; when it is higher than 1000, go to step 5. 2. Check and clean the sensor window of the Registration Sensor Unit. 3. Check that the Registration Sensor Unit Shutter is properly installed and it is not damaged. 4. Check the operation of the Shutter Solenoid. 5. Check the harness/connector between the DC Controller PCB and the Registration Sensor. 6. Replace the Registration Sensor Unit. 7. Replace the DC Controller PCB. (At this time, be sure to perform backup and restoration according to the steps to be taken before/after replacing the DC Controller.)
10	0017	Toner (Y) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of Toner level detect value has reached the value set in COPIER > OPTION > FNC-SW > T-DLV-CL.

Location Code	Alarm Code	Description	Details
10	0018	Toner (M) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of Toner level detect value has reached the value set in COPIER > OPTION > FNC-SW > T-DLV-CL.
10	0019	Toner (C) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of Toner level detect value has reached the value set in COPIER > OPTION > FNC-SW > T-DLV-CL.
10	0020	Toner (Bk) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of Toner level detect value has reached the value set in COPIER > OPTION > FNC-SW > T-DLV-BK.
10	0100	Toner bottle replacement completion alarm	The replacement of the Toner Container was detected.
11	0001	Waste Toner Container full level	<p>Movement: A message is displayed on the Control Panel and the machine is stopped.</p> <p>Cause: The value of the Waste Toner Counter has reached the full level.</p> <p>Measures: Replace the Waste Toner Container.</p>
11	0010	Display of Waste Toner Container preparation warning	<p>Movement: A message is displayed on the Control Panel. (Continuous printing is enabled.)</p> <p>Cause: Display of Waste Toner Box preparation warning</p>

Location Code	Alarm Code	Description	Details
29	0101	Drum (Y) pre-exposure alarm	<p>An error in pre-exposure of the drum (Y) was detected.</p> <p>Detection condition/timing: Warm-up rotation Detection condition: When the difference in detection value is within the specified value when the pre-exposure light intensity is changed</p> <p>Remedy:</p> <ol style="list-style-type: none"> Visual check in service mode>COPIER->FUNCTION->MISC-P->PRE-EXP If the LED is OFF, perform the following measures. <ol style="list-style-type: none"> 1-1. Check the harness/connector between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-2. Check the harness/connector between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-3. Replace the harness between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-4. Replace the harness between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-5. Replace the Pre-exposure LED Driver (DCDC). 1-6. Replace the DC Controller PCB. 1-7. Check the harness/connector between the Relay (J1422) and each LED PCB. 1-8. Replace the harness between the Relay (J1422) and each LED PCB. 1-9. Replace each LED PCB. <p><Target parts> FM1-C993-000 DC CONTROLLER FM1-D808-000 Pre-exposure LED Driver PCB(DCDC) FM1-D807-000 LED PCB FM1-D865 LED_DRV_RELAY_CABLE FM1-D864 DCON_LED_DRV_CABLE FM1-D866 EXP_LED_CABLE</p>

Location Code	Alarm Code	Description	Details
29	0201	Drum (M) pre-exposure alarm	<p>An error in pre-exposure of the drum (M) was detected.</p> <p>Detection condition/timing: Warm-up rotation Detection condition: When the difference in detection value is within the specified value when the pre-exposure light intensity is changed</p> <p>Remedy:</p> <ol style="list-style-type: none"> Visual check in service mode>COPIER->FUNCTION->MISC-P->PRE-EXP If the LED is OFF, perform the following measures. <ol style="list-style-type: none"> 1-1. Check the harness/connector between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-2. Check the harness/connector between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-3. Replace the harness between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-4. Replace the harness between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-5. Replace the Pre-exposure LED Driver (DCDC). 1-6. Replace the DC Controller PCB. 1-7. Check the harness/connector between the Relay (J1422) and each LED PCB. 1-8. Replace the harness between the Relay (J1422) and each LED PCB. 1-9. Replace each LED PCB. <p><Target parts> FM1-C993-000 DC CONTROLLER FM1-D808-000 Pre-exposure LED Driver PCB(DCDC) FM1-D807-000 LED PCB FM1-D865 LED_DRV_RELAY_CABLE FM1-D864 DCON_LED_DRV_CABLE FM1-D866 EXP_LED_CABLE</p>

Location Code	Alarm Code	Description	Details
29	0301	Drum (C) pre-exposure alarm	<p>An error in pre-exposure of the drum (C) was detected.</p> <p>Detection condition/timing: Warm-up rotation Detection condition: When the difference in detection value is within the specified value when the pre-exposure light intensity is changed</p> <p>Remedy:</p> <ol style="list-style-type: none"> Visual check in service mode>COPIER->FUNCTION->MISC-P->PRE-EXP If the LED is OFF, perform the following measures. <ol style="list-style-type: none"> 1-1. Check the harness/connector between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-2. Check the harness/connector between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-3. Replace the harness between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-4. Replace the harness between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-5. Replace the Pre-exposure LED Driver (DCDC). 1-6. Replace the DC Controller PCB. 1-7. Check the harness/connector between the Relay (J1422) and each LED PCB. 1-8. Replace the harness between the Relay (J1422) and each LED PCB. 1-9. Replace each LED PCB. <p><Target parts> FM1-C993-000 DC CONTROLLER FM1-D808-000 Pre-exposure LED Driver PCB(DCDC) FM1-D807-000 LED PCB FM1-D865 LED_DRV_RELAY_CABLE FM1-D864 DCON_LED_DRV_CABLE FM1-D866 EXP_LED_CABLE</p>

Location Code	Alarm Code	Description	Details
29	0401	Drum (K) pre-exposure alarm	<p>An error in pre-exposure of the drum (K) was detected.</p> <p>Detection condition/timing: Warm-up rotation Detection condition: When the difference in detection value is within the specified value when the pre-exposure light intensity is changed</p> <p>Remedy:</p> <ol style="list-style-type: none"> Visual check in service mode>COPIER->FUNCTION->MISC-P->PRE-EXP If the LED is OFF, perform the following measures. <ol style="list-style-type: none"> 1-1. Check the harness/connector between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-2. Check the harness/connector between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-3. Replace the harness between the DC Controller (J137) and the Pre-exposure LED Driver (J138). 1-4. Replace the harness between the Pre-exposure LED Driver (J139) and the Relay (J1422). 1-5. Replace the Pre-exposure LED Driver (DCDC). 1-6. Replace the DC Controller PCB. 1-7. Check the harness/connector between the Relay (J1422) and each LED PCB. 1-8. Replace the harness between the Relay (J1422) and each LED PCB. 1-9. Replace each LED PCB. <p><Target parts> FM1-C993-000 DC CONTROLLER FM1-D808-000 Pre-exposure LED Driver PCB(DCDC) FM1-D807-000 LED PCB FM1-D865 LED_DRV_RELAY_CABLE FM1-D864 DCON_LED_DRV_CABLE FM1-D866 EXP_LED_CABLE</p>

Location Code	Alarm Code	Description	Details
30	0025	A voltage value below the threshold value was detected with primary transfer ATVC control for yellow	Remedy: 1. Check the harness between the Primary Transfer High Voltage PCB and the DC Controller PCB (open circuit, caught cable, connector disconnection). -> Replace the harness if it is faulty 2. Check the contact point between the ITB Unit and the Primary Transfer Power Feed Unit. 3. Execute primary transfer ATVC again. -> If the abnormality is found again, perform the remedy shown below. If abnormality is not found, continue use with careful attention. 4. Replace the Drum Unit of the corresponding station. 5. Replace the ITB Unit. 6. Replace the Primary Transfer High Voltage PCB. 7. Replace the DC Controller PCB.
30	0026	A voltage value below the threshold value was detected with primary transfer ATVC control for magenta	Remedy: 1. Check the harness between the Primary Transfer High Voltage PCB and the DC Controller PCB (open circuit, caught cable, connector disconnection). -> Replace the harness if it is faulty 2. Check the contact point between the ITB Unit and the Primary Transfer Power Feed Unit. 3. Execute primary transfer ATVC again. -> If the abnormality is found again, perform the remedy shown below. If abnormality is not found, continue use with careful attention. 4. Replace the Drum Unit of the corresponding station. 5. Replace the ITB Unit. 6. Replace the Primary Transfer High Voltage PCB. 7. Replace the DC Controller PCB.

Location Code	Alarm Code	Description	Details
30	0027	A voltage value below the threshold value was detected with primary transfer ATVC control for cyan	Remedy: 1. Check the harness between the Primary Transfer High Voltage PCB and the DC Controller PCB (open circuit, caught cable, connector disconnection). -> Replace the harness if it is faulty 2. Check the contact point between the ITB Unit and the Primary Transfer Power Feed Unit. 3. Execute primary transfer ATVC again. -> If the abnormality is found again, perform the remedy shown below. If abnormality is not found, continue use with careful attention. 4. Replace the Drum Unit of the corresponding station. 5. Replace the ITB Unit. 6. Replace the Primary Transfer High Voltage PCB. 7. Replace the DC Controller PCB.
30	0028	A voltage value below the threshold value was detected with primary transfer ATVC control for black	Remedy: 1. Check the harness between the Primary Transfer High Voltage PCB and the DC Controller PCB (open circuit, caught cable, connector disconnection). -> Replace the harness if it is faulty 2. Check the contact point between the ITB Unit and the Primary Transfer Power Feed Unit. 3. Execute primary transfer ATVC again. -> If the abnormality is found again, perform the remedy shown below. If abnormality is not found, continue use with careful attention. 4. Replace the Drum Unit of the corresponding station. 5. Replace the ITB Unit. 6. Replace the Primary Transfer High Voltage PCB. 7. Replace the DC Controller PCB.

Location Code	Alarm Code	Description	Details
30	0032	Error in secondary transfer ATVC (below the lower limit)	Remedy: 1. Check the contact point between the Secondary Transfer Unit and the Secondary Transfer Contact Unit. 2. Check the contact point between the Secondary Transfer Outer Roller and the Shaft Support. 3. Check the harness between the Secondary Transfer High Voltage PCB and the DC Controller PCB (open circuit, caught cable, connector disconnection). -> Replace the harness if it is faulty 4. Execute secondary transfer ATVC again. -> If the abnormality is found again, perform the remedy shown below. If abnormality is not found, continue use with careful attention. 5. Replace the Secondary Transfer Outer Roller. 6. Replace the Secondary Transfer High Voltage PCB. 7. Replace the DC Controller PCB.
30	0137	The value of data for correcting high voltage output value was not within the range.	Movement/symptom: Operation was performed with output control using the default table without correction of the high voltage output value.
31	0002	Power supply relay durability alarm	-
31	0008	HDD failure prediction alarm	Movement: A message "The hard disk needs to be replaced. (Call service rep.)" is displayed on the Control Panel. Cause: Error in the S.M.A.R.T. value of HDD It indicates a physical error of the HDD, which is expected to soon lead to a failure. *: S.M.A.R.T. (Self-Monitoring Analysis and Reporting Technology) = It is a self-diagnosis function built in the HDD, and monitors the occurrence rate of reading errors, reading/writing speed, total number of times of motor start-up/stop, total length of power-on time, etc. Continuously using the machine without taking any measures may lead to E602. Measures: Back up the data stored in the HDD, and restore the data after replacing the HDD.

Location Code	Alarm Code	Description	Details
31	0009	FLASH failure prediction alarm	Cause: Error in the S.M.A.R.T. value of FLASH memory It indicates a physical error of the FLASH memory, which is expected to soon lead to a failure. *: S.M.A.R.T. (Self-Monitoring Analysis and Reporting Technology) = It is a self-diagnosis function built in the FLASH memory, and monitors the occurrence rate of reading errors, reading/writing speed, total number of times of motor start-up/stop, total length of power-on time, etc. Continuously using the machine without taking any measures may lead to E614. Measures: Back up the data stored in the FLASH memory, and restore the data after replacing the FLASH memory.
31	000A	For R&D	-
34	0003	Auto registration adjustment	Timeout occurred due to unsuccess in reading 10 sets of auto registration pattern. Registration Patch Sensor failure, Registration Patch Sensor cleaning member covered the registration detection sensor, or no image drew on the ITB.
34	0024	The correction value (M) of the write start position in the vertical scanning direction exceeded the upper limit during color fine adjustment	-
34	0026	The correction value (M) of the write start position in the horizontal scanning direction exceeded the upper limit during color fine adjustment	-
34	0034	The correction value (C) of the write start position in the vertical scanning direction exceeded the upper limit during color fine adjustment	-
34	0036	The correction value (C) of the write start position in the horizontal scanning direction exceeded the upper limit during color fine adjustment	-
34	0044	The correction value (Bk) of the write start position in the vertical scanning direction exceeded the upper limit during color fine adjustment	-

Location Code	Alarm Code	Description	Details
34	0046	The correction value (Bk) of the write start position in the horizontal scanning direction exceeded the upper limit during color fine adjustment	-
34	0050	Laser Scanner EEPROM checksum alarm	An error in data in the EEPROM installed in the Laser Scanner PCB was detected. Detection condition/timing: When the DCON is started, data in the EEPROM of the Laser Scanner is retrieved. [Related parts] • YM Laser Driver PCB • Harness (FM1-D837) between the DC Controller PCB (UN04/J111) and the YM Laser Driver PCB (J202) Remedy: [Remedy] Check/replace the related parts. [Caution] After replacing the related parts, execute "Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch".
34	2201	As a result of wrong detection processing, data that can be used for correction in the vertical scanning direction was not found (M)	-
34	2211	As a result of wrong detection processing, data that can be used for correction in the horizontal scanning direction was not found (M)	-
34	2301	As a result of wrong detection processing, data that can be used for correction in the vertical scanning direction was not found (C)	-
34	2311	As a result of wrong detection processing, data that can be used for correction in the horizontal scanning direction was not found (C)	-
34	2401	As a result of wrong detection processing, data that can be used for correction in the vertical scanning direction was not found (Bk)	-

Location Code	Alarm Code	Description	Details
34	2411	As a result of wrong detection processing, data that can be used for correction in the horizontal scanning direction was not found (Bk)	-
35	0006	ITB replacement completion alarm	Pushed was a replacement completion button of ITB Unit Counter was cleared.
35	0013	Transfer Roller replacement completion alarm	Pushed was a replacement completion button of Transfer Roller Counter was cleared.
35	0070	Drum Unit (Y) replacement completion alarm	The replacement of the Drum Unit was detected.
35	0071	Drum Unit (M) replacement completion alarm	The replacement of the Drum Unit was detected.
35	0072	Drum Unit (C) replacement completion alarm	The replacement of the Drum Unit was detected.
35	0073	Drum Unit (Bk) replacement completion alarm	The replacement of the Drum Unit was detected.
35	0076	Fixing Assembly replacement completion alarm	Pushed was a replacement completion button of Fixing Assembly Counter was cleared.
35	0077	MP Pickup Roller replacement completion alarm	Pushed was a replacement completion button of MP Pickup Roller Counter was cleared.
35	0078	MP Separation Roller replacement completion alarm	Pushed was a replacement completion button of MP Separation Roller Counter was cleared.
35	0079	Cassette 1 Pickup Roller replacement completion alarm	The counter of the Cassette 1 Pickup Roller was cleared.
35	0080	Cassette 1 Feed Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 1 Feed Roller Counter was cleared.
35	0081	Cassette 1 Separation Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 1 Separation Roller Counter was cleared.
35	0082	Cassette 2 Pickup Roller replacement completion alarm	The counter of the Cassette 2 Pickup Roller was cleared.
35	0083	Cassette 2 Feed Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 2 Feed Roller Counter was cleared.
35	0084	Cassette 2 Separation Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 2 Separation Roller Counter was cleared.
35	0085	Cassette 3 Pickup Roller replacement completion alarm	The counter of the Cassette 3 Pickup Roller was cleared.

Location Code	Alarm Code	Description	Details
35	0086	Cassette 3 Feed Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 3 Feed Roller Counter was cleared.
35	0087	Cassette 3 Separation Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 3 Separation Roller Counter was cleared.
35	0088	Cassette 4 Pickup Roller replacement completion alarm	The counter of the Cassette 4 Pickup Roller was cleared.
35	0089	Cassette 4 Feed Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 4 Feed Roller Counter was cleared.
35	0090	Cassette 4 Separation Roller replacement completion alarm	Pushed was a replacement completion button of Cassette 4 Separation Roller Counter was cleared.
35	0091	ADF Pickup Roller replacement completion alarm	Pushed was a replacement completion button of ADF Pickup Roller Counter was cleared.
35	0092	ADF Separation Roller replacement completion alarm	The ADF Separation Roller replacement completion button was pressed. Or, the counter was cleared.
35	0093	MP Feed Roller replacement completion alarm	The counter of the MP Feed Roller was cleared.
37	0001	For R&D	-
37	0002	For R&D	-
37	0003	For R&D	-
37	0004	For R&D	-
37	0005	For R&D	-
37	0006	For R&D	-
37	0007	For R&D	-
37	1000	For R&D	-
37	2000	For R&D	-
38	0001	For R&D	-
38	0002	For R&D	-
40	0070	Drum Unit (Y) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of COPIER > COUNTER > LF > Y-DRM-LF has reached the value set in COPIER > OPTION > FNC-SW > D-DLV-CL.
40	0071	Drum Unit (M) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of COPIER > COUNTER > LF > M-DRM-LF has reached the value set in COPIER > OPTION > FNC-SW > D-DLV-CL.
40	0072	Drum Unit (C) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of COPIER > COUNTER > LF > C-DRM-LF has reached the value set in COPIER > OPTION > FNC-SW > D-DLV-CL.

Location Code	Alarm Code	Description	Details
40	0073	Drum Unit (Bk) prior delivery alarm	An alarm for requesting a prior delivery is sent to UGW as the value of COPIER > COUNTER > LF > K-DRM-LF has reached the value set in COPIER > OPTION > FNC-SW > D-DLV-BK.
50	0010	Original separation failure alarm	Movement: Nothing in particular. Cause: Condition unable to separate 1st sheet of original from the ADF occurs 3 times. Measures: Check rotation of the Pickup Motor -> Check the life of the Pickup Roller -> Check if paper lint is at the Pickup Slot.
61	0001	Finisher Staple alarm	Operation : User message is displayed on control panel of main unit. The staple operation is continued until a job is finished. Recovery method : Replenish with staples.
61	0002	Finisher Staple Free Stapling alarm	Cause: The staple free staple unit is broken. Operation : Operation stops as jam. After jam processing, the paper is delivered without stapling until a job is finished. Recovery method : Replace the Staple free staple unit. After performing the remedy work, go through the following to clear the alarm: SORTER>FUNCTION>EMSG-CLR.
62	0001	Saddle Staple alarm	Operation : User message is displayed on control panel of main unit. The staple operation is continued until a job is finished. Recovery method : Replenish with staples.
70	0086	For R&D	-
73	0004	For R&D	-
73	0006	For R&D	-
73	0007	For R&D	-
73	0008	For R&D	-
73	0009	For R&D	-
73	0010	For R&D	-
73	0011	For R&D	-
73	0012	For R&D	-
73	0013	For R&D	-
73	0014	For R&D	-
73	0015	For R&D	-
73	0016	For R&D	-
73	0017	For R&D	-
73	0018	For R&D	-
73	0019	For R&D	-
73	0020	For R&D	-
73	0021	For R&D	-

Location Code	Alarm Code	Description	Details
73	0022	For R&D	-
73	0023	For R&D	-
73	0024	For R&D	-
73	0025	For R&D	-
73	0026	For R&D	-
76	0001	For R&D	-
76	0002	Insufficient work area	Work area of the font that is downloaded at Resource Download is insufficient. Delete the unnecessary font.
76	0003	For R&D	-
76	0004	For R&D	-
76	0005	For R&D	-
76	0006	For R&D	-
76	0007	For R&D	-
76	0008	For R&D	-
76	0009	For R&D	-
77	0001	For R&D	-
77	0002	For R&D	-
77	0003	For R&D	-
77	0005	For R&D	-
77	0006	System memory insufficient	[PCL5] Change the mode of the printer driver (Property > Quality > Advanced Settings... > Graphics Mode > Raster Mode).
78	0001	For R&D	-
78	0002	For R&D	-
78	0003	For R&D	-
78	0004	For R&D	-
78	0005	For R&D	-
79	0001	For R&D	-
79	0002	For R&D	-
79	0003	Memory insufficient	[PCL5] Change the mode of the printer driver (Property > Quality > Advanced Settings... > Graphics Mode > Raster Mode).
79	0004	Download overflow	After deleting the download resource, turn OFF and then ON the power.
80	0001	For R&D	-
80	0003	For R&D	-
80	0010	For R&D	-
80	0011	For R&D	-
80	0015	Invalid BDL data	Use the latest version of the printer driver for the model.
80	0016	For R&D	-
80	0018	For R&D	-
80	0019	For R&D	-

Location Code	Alarm Code	Description	Details
81	0001	Invalid data	Since there is a high possibility that format of the data is not supported, collect the data if possible.
81	0002	For R&D	-
81	0003	For R&D	-
81	0004	For R&D	-
81	0005	For R&D	-
83	0005	PDF memory insufficient	Reduce the size of the PDF file to be printed, or split the file into parts and print them again. In some cases, it can be printed properly by opening the file with the application software and using the printer driver.
83	0013	PDF font error	Change the acrobat settings
83	0015	PDF data decoding error	Check the password and the authentication settings.
83	0016	PDF print range error	Specify the print range again that can be printed
83	0017	For R&D	-
83	0020	Reception of ESCP unanalyzable data	Since PDL automatic judgment may be wrong, select the appropriate PDL in Settings/Registration > Function Settings > Printer > Printer Settings > Settings > Printer Operation Mode, and send the data.
83	0021	Reception of I5577 unanalyzable data	Since PDL automatic judgment may be wrong, select the appropriate PDL in Settings/Registration > Function Settings > Printer > Printer Settings > Settings > Printer Operation Mode, and send the data.
83	0022	Reception of HPGL unanalyzable data	Since PDL automatic judgment may be wrong, select the appropriate PDL in Settings/Registration > Function Settings > Printer > Printer Settings > Settings > Printer Operation Mode, and send the data.
83	0023	Reception of N201 unanalyzable data	Since PDL automatic judgment may be wrong, select the appropriate PDL in Settings/Registration > Function Settings > Printer > Printer Settings > Settings > Printer Operation Mode, and send the data.
84	0001	For R&D	-
84	0002	For R&D	-
84	0003	XPS print range error	There is no page that be can be processed within the specified print range. Specify the print range correctly.
84	0004	For R&D	-
84	0005	For R&D	-
84	0006	For R&D	-
84	0007	For R&D	-
84	0008	XPS non-support image error	Convert Jpeg XR in data into another format.
84	0009	For R&D	-



Service Mode

- Overview
- COPIER
- FEEDER
- SORTER
- BOARD

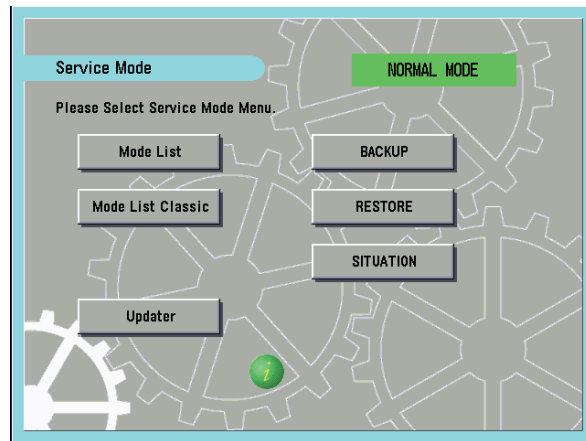
Overview

Entering Service Mode

Contact the sales company for the method to enter service mode

Service Mode Menu

TOP Screen



F-8-1

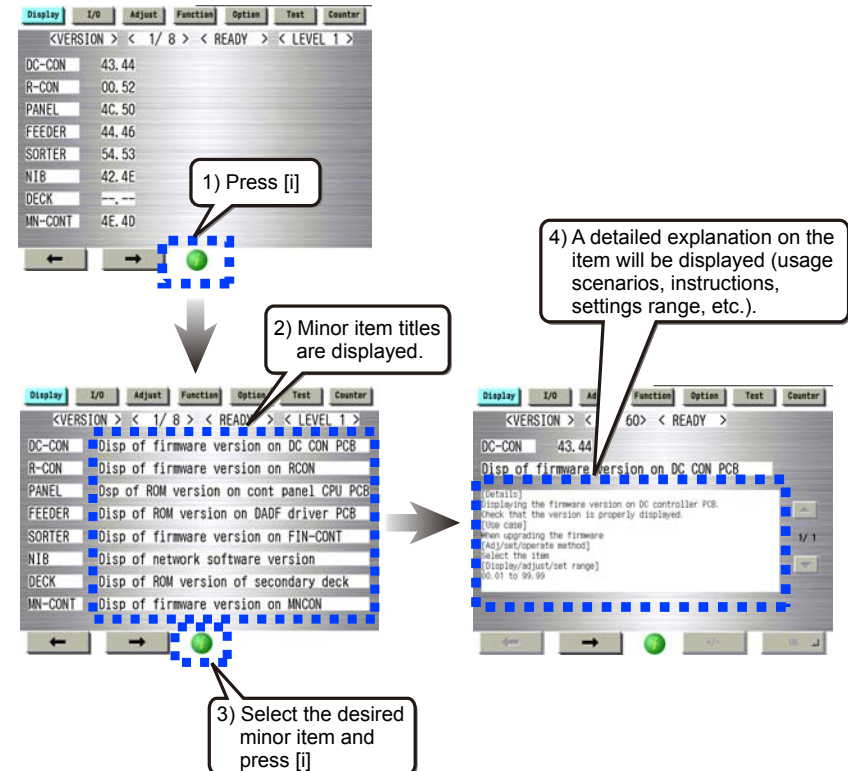
MODELIST	The service mode list (with explain on the "i" button) is displayed.
MODELIST CLASSIC	The old service mode list (without explanation on the "i" button) is displayed
SERVICE BROWSER	Service browser function (* The selection button is displayed only when the service browser has been enable from service mode.)
UPDATER	The function to upgrade the version using CDS
BACKUP	The function to backup the service mode setting values
RESTORE	The function to restore the service mode setting values
SITUATION	The function to search service mode in accordance with the purpose

T-8-1

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 press [i] (Information button) to display an explanatory text (hereafter, service mode contents) on the selected item.



Display Language Japanese / English / French / Italy / Germany / Spanish / Traditional Chinese / Korean / Simple Chinese

F-8-2

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

No.	DATE	TIME1	TIME2	CODE	DTL	L	P
09	0102	0304	050				
10	---	---	---				
11	0102	0304	050				
12	0102	0304	050				
13	0102	0304	050				
14	0102	0304	0506	E0748	4910	00	00
15	0102	0304	0506	E0804	0002	00	00
16	0102	0304	0506	E0804	0003	00	00

F-8-4

- ALARM CODE : COPIER> DISPLAY> ALARM-2 / ALARM-3

No.	DATE	TIME1	TIME2	CODE	DTL	CNTR
09	0308	1345	160			
10	0308	1345	160			
11	0308	1345	160			
12	0308	1345	160			
13	0308	1345	160			
14	0308	1345	1600	040046	0000	0
15	0308	1345	1600	040047	0000	0
16	0308	1345	1600	040048	0000	0

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	Transfer related
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, 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-8-2

Security features

To prevent unauthorized access to Service Mode, Password set is enabled.

Related service modes

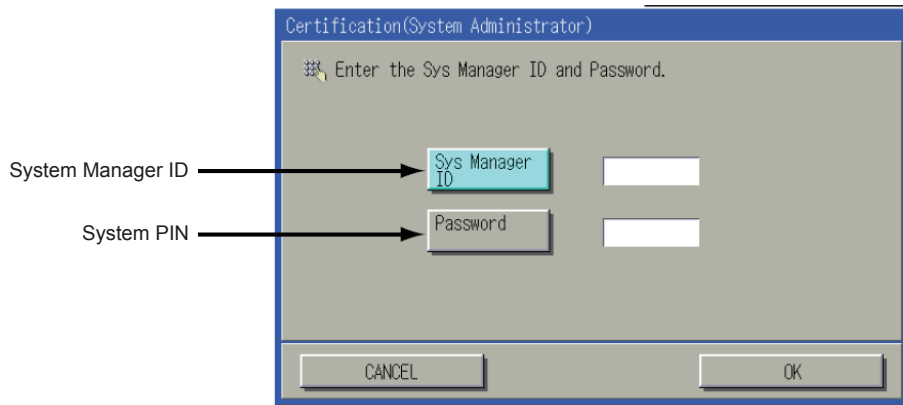
- COPIER> OPTION> FNC-SW> PSWD-SW (Level1)
Set password type for transition to service mode.
<Setting range>
0: No password (default)
1: Service engineer
2: System administrator and Service engineer.
- COPIER> OPTION> FNC-SW> SM-PSWD (Level2)
Password for service engineer for transition to service mode.
<Setting range>

To reinforce the security, change the password from a default.

***** (eight digit numeral) [default: 11111111]

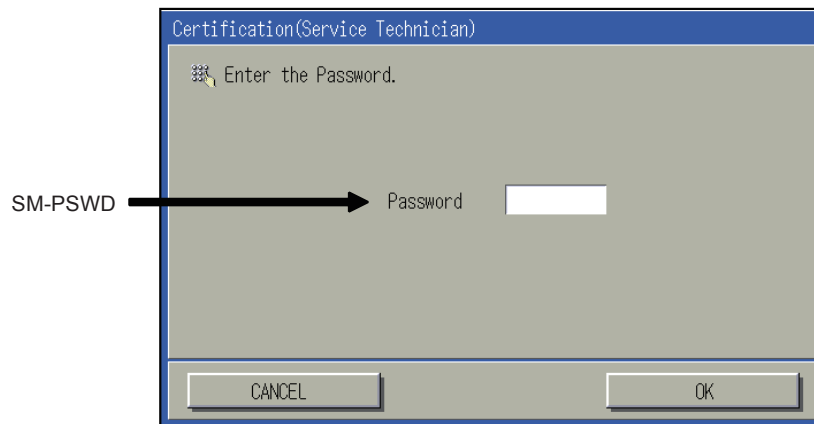
After the above setting, to enter Service Mode, enter password screen will appear.

- 1) Enter System Manager ID > enter System PIN > press OK button.
(System Manager ID and System PIN can be set up in [Settings/Registration > Management Settings > User Management > System Manager Information Settings].)



F-8-6

- 2) After entering the password for service technician (Service mode: COPIER > Option > FNC-SW > SM-PSWD), press OK button.



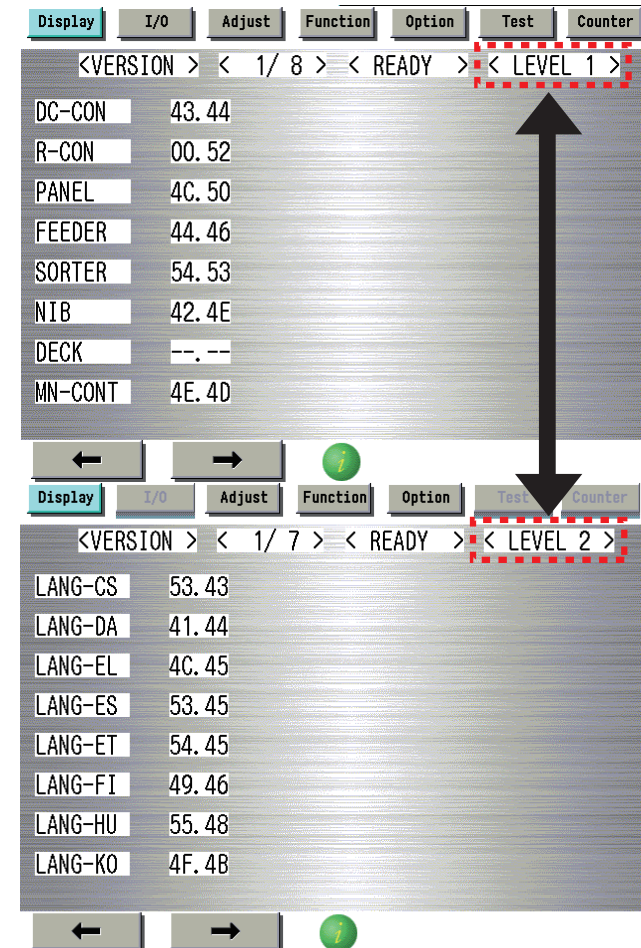
F-8-7

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

Back-up of service mode

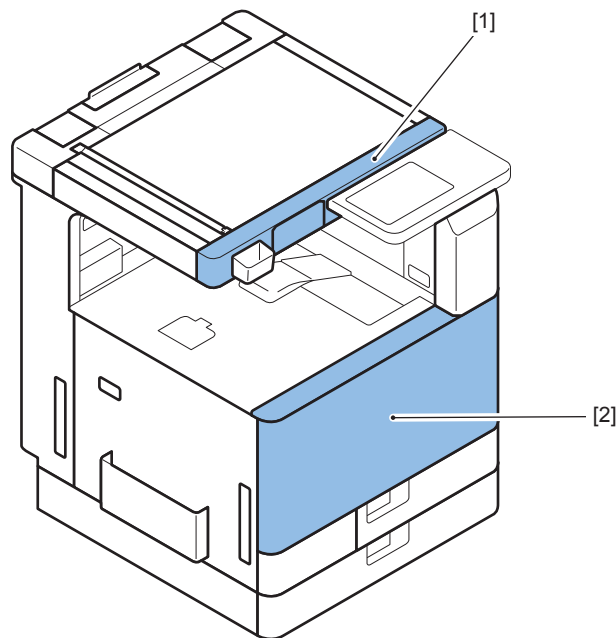
In factory setting, adjustments are made for each machine, and adjustment values are written in the service label.

When you replaced the CIS unit or 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.

Position to affix the service label

No.	Items	Position to affix
[1]	Reader setting values	Back side the Front Cover of Reader
[2]	D-CON setting values	Inside the Front Cover of the host machine

T-8-3



F-8-9

The data output of the service data print

Overview

- Data output of service print such as P-PRINT is supported.
- Service mode level 1 > COPIER > FUNCTION > MISC-P > RPT-FILE > [OK].
The created data file is saved in the HDD of the machine.
- The created (saved) data is deleted when it is moved to the SST or a USB memory device.
- Even if the machine has stopped operation due to a no-paper error, data can be moved to the SST or the USB memory device as long as the machine can enter download mode.

Service Prints and Data File Names That Support File Output

Service Mode	Content
P-PRINT	Output of service mode setting value
HIST-PRT	Output of jam and error history
USER-PRT	Output of UI menu list
D-PRINT	Output of service mode (DISPLAY)
ENV-PRT	Inside temp/hmdy & fix roller temp log
PJH-P-1	Detail info of print job history:100 job
PJH-P-2	Detail info of print job history:all job
KEY-HIST	Not used
USBH-PRT	Output of USB device information report
TNRB-PRT	Output of Toner Container ID report

T-8-4

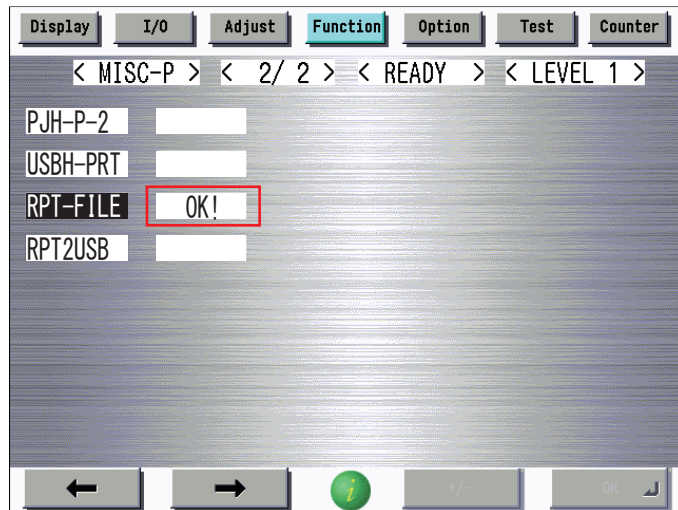
How to Move Service Print Files to a USB Memory Device

Preparation

- USB memory device
FAT32 format file system, with no password locks.

Overall flow

1. Selecting RPT-FILE
Select service mode > Copier > Function > MISC-P > RPT-FILE; and then press OK.
2. Generating report file
After the “ACTIVE” blinks for 3 to 4 minutes, generation of a report file is complete as “OK!” is displayed.



F-8-10

3. Connect the USB memory storage device to the USB port.
4. Select service mode > Copier > Function > MISC-P > RPT2USB; and then press OK.



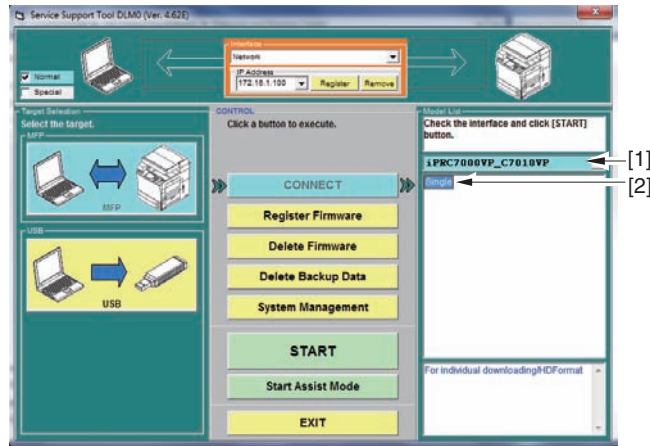
F-8-11

NOTE:

- If the downloaded file is opened as plain text, the paragraphs are misaligned, which makes it difficult to read the data.
- When the file is dragged to WordPad, an image similar to the image output on paper may be displayed in some cases.

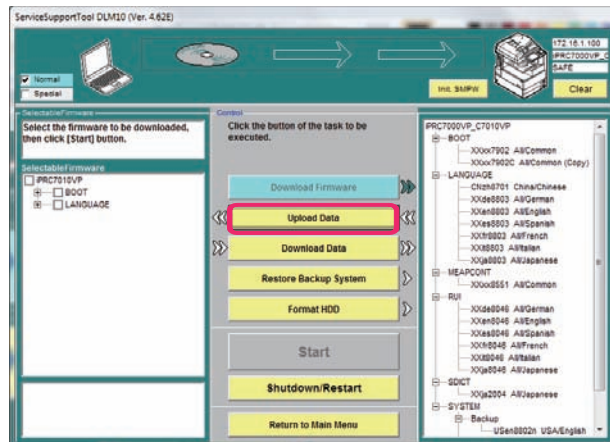
How to Move Service Print Files to a PC using the SST

1. Start up the SST.
2. Select the model [1] and the type of system software [2] ('Single'); then, check the network settings, and click [START].



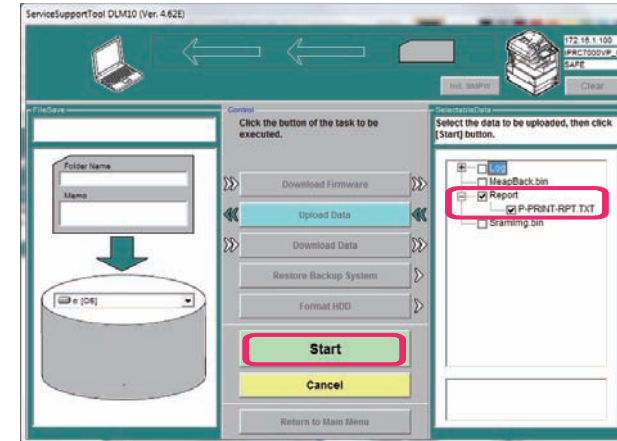
F-8-12

3. Click [Upload Data].



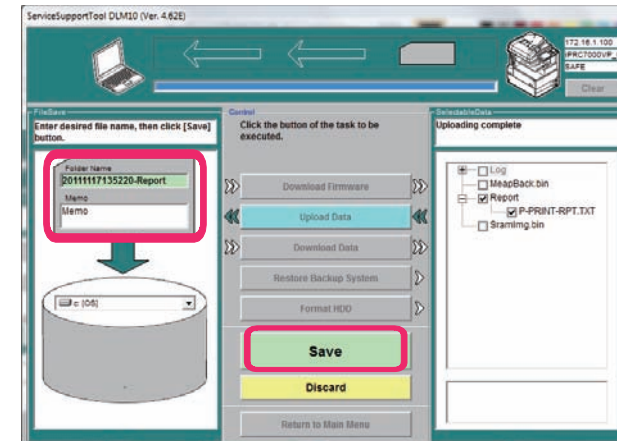
F-8-13

4. Select 'P-PRINT-RPT.txt', and click [Start].



F-8-14

5. Select the name of the Folder to store and, as necessary, a brief description; then, click [Save].



F-8-15

6. Click [OK].

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 RCON firmware version in the Main Controller firmware.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
PANEL		Dspl of Control Panel CPU PCB ROM ver
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
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
SDL-STCH		Dspl of Saddle Sttch Ctrllr 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
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
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

COPIER>DISPLAY>VERSION		
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
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

COPIER>DISPLAY>VERSION		
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
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
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

COPIER>DISPLAY>VERSION		
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
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
FAX1		Display of 1-line FAX PCB ROM version
Lv.1	Details	To display the ROM version of 1-line FAX PCB. Nothing is displayed if the PCB is not connected.
	Use case	When upgrading the firmware
	Display/adj/set range	ASCII character string (12 digits)
FAX2/3/4		Display of 2-line FAX PCB ROM version
Lv.1	Details	To display the ROM version of 2-line FAX PCB. “NULL” is displayed if the PCB is not connected.
	Use case	When checking the version
	Display/adj/set range	ASCII character string (12 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
TSP-JLK		Dspl of PCAM Option Board 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

COPIER>DISPLAY>VERSION		
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
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

COPIER>DISPLAY>VERSION		
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 of COPY appli Hungarian file ver
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 of COPY appli Norwegian file ver
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
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 of COPY appli Slovenian file ver
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

COPIER>DISPLAY>VERSION		
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 of COPY appli Bulgarian file ver
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
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

COPIER>DISPLAY>VERSION		
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
COPY-AR		Dspl of COPY appli Arabic file ver
Lv.2	Details	To display the Arabic language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
COPY-MS		Dspl of COPY appli Malay file ver
Lv.2	Details	To display the Malay language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
COPY-HI		Dspl of COPY appli Hindi file ver
Lv.2	Details	To display the Hindi language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
COPY-EU		Dspl of COPY appli Euskera file ver
Lv.2	Details	To display the Euskera language file version of COPY application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	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

COPIER>DISPLAY>VERSION		
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
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

COPIER>DISPLAY>VERSION		
SEND-HU		Dspl of SEND appli Hungarian file ver
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
SEND-NO		Dspl of SEND appli Norwegian file ver
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 of SEND appli Slovenian file ver
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

COPIER>DISPLAY>VERSION		
SEND-BU		Dspl of SEND appli Bulgarian file ver
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
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
SEND-AR		Dspl of SEND appli Arabic file ver
Lv.2	Details	To display the Arabic language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99

COPIER>DISPLAY>VERSION		
SEND-MS		Dspl of SEND appli Malay file ver
Lv.2	Details	To display the Malay language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
SEND-HI		Dspl of SEND appli Hindi file ver
Lv.2	Details	To display the Hindi language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
SEND-EU		Dspl of SEND appli Euskera file ver
Lv.2	Details	To display the Euskera language file version of SEND application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
INTRO-FR		Dspl useful feat 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 feat 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 of usful feat 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
INTRO-ES		Dspl useful feat 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 feat 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

COPIER>DISPLAY>VERSION		
INTRO-TW		Useful feat 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 of usful feat 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 feat 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 of usful feat 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 feat 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 feat 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 feat 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
INTRO-HU		Dspl usful feat 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 feat 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

COPIER>DISPLAY>VERSION		
INTRO-NO		Dspl usful feat 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 feat 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 feat 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 feat 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 feat 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 feat 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 feat 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
INTRO-BU		Dspl usful feat 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 feat 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

COPIER>DISPLAY>VERSION		
INTRO-RM		Dspl useful feat 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 feat 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 feat 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 feat 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 feat 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 feat 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
INTRO-AR		Dspl useful feat intro Arabic file ver
Lv.2	Details	To display the version of Arabic language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
INTRO-MS		Dspl useful feat intro Malay file ver
Lv.2	Details	To display the version of Malay language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99

COPIER>DISPLAY>VERSION		
INTRO-HI		Dspl useful feat intro Hindi file ver
Lv.2	Details	To display the version of Hindi language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
INTRO-EU		Dspl useful feat intro Euskera file ver
Lv.2	Details	To display the version of Euskera language file of Introduction to Useful Features application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
CSTMN-FR		Dspl of quick menu French file version
Lv.1	Details	To display the version of French language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-IT		Dspl of quick menu Italian file version
Lv.1	Details	To display the version of Italian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-DE		Dspl of quick menu German file version
Lv.1	Details	To display the version of German language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ES		Dspl of quick menu Spanish file version
Lv.1	Details	To display the version of Spanish language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ZH		Dspl quick menu Chinese file ver: smpl
Lv.2	Details	To display the version of simplified Chinese language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TW		Dspl of quick menu Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER>DISPLAY>VERSION		
CSTMN-KO		Dspl of quick menu Korean file version
Lv.2	Details	To display the version of Korean language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CS		Dspl of quick menu Czech file version
Lv.2	Details	To display the version of Czech language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-DA		Dspl of quick menu Danish file version
Lv.2	Details	To display the version of Danish language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-EL		Dspl of quick menu Greek file version
Lv.2	Details	To display the version of Greek language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ET		Dspl of quick menu Estonian file version
Lv.2	Details	To display the version of Estonian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-FI		Dspl of quick menu Finnish file version
Lv.2	Details	To display the version of Finnish language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-HU		Dspl of quick menu Hungarian file ver
Lv.2	Details	To display the version of Hungarian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-NL		Dspl of quick menu Dutch file version
Lv.2	Details	To display the version of Dutch language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-NO		Dspl of quick menu Norwegian file ver
Lv.2	Details	To display the version of Norwegian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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CSTMN-PL		Dspl of quick menu Polish file version
Lv.2	Details	To display the version of Polish language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-PT		Dspl of quick menu Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-RU		Dspl of quick menu Russian file version
Lv.2	Details	To display the version of Russian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-SL		Dspl of quick menu Slovenian file ver
Lv.2	Details	To display the version of Slovenian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-SV		Dspl of quick menu Swedish file version
Lv.2	Details	To display the version of Swedish language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-ID		Dspl of quick menu Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-BU		Dspl of quick menu Bulgarian file ver
Lv.2	Details	To display the version of Bulgarian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CR		Dspl of quick menu Croatian file version
Lv.2	Details	To display the version of Croatian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-RM		Dspl of quick menu Romanian file version
Lv.2	Details	To display the version of Romanian language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

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CSTMN-SK		Dspl of quick menu Slovak file version
Lv.2	Details	To display the version of Slovak language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TK		Dspl of quick menu Turkish file version
Lv.2	Details	To display the version of Turkish language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-CA		Dspl of quick menu Catalan file version
Lv.2	Details	To display the version of Catalan language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-TH		Dspl of quick menu Thai file version
Lv.2	Details	To display the version of Thai language file for Quick Menu application.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-VN		Dspl of quick menu Vietnamese file ver
Lv.2	Details	To display the version of Vietnamese language file for Quick Menu
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
CSTMN-AR		Dspl of quick menu Arabic file ver
Lv.2	Details	To display the version of Arabic language file for Quick Menu application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
CSTMN-MS		Dspl of quick menu Malay file ver
Lv.2	Details	To display the version of Malay language file for Quick Menu application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
CSTMN-HI		Dspl of quick menu Hindi file ver
Lv.2	Details	To display the version of Hindi language file for Quick Menu application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99

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CSTMN-EU		Dspl of quick menu Euskera file ver
Lv.2	Details	To display the version of Euskera language file for Quick Menu application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
ACSBT-FR		Dspl of accessibility French file ver
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 of accessibility German file ver
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 of accessibility Korean file ver
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 of accessibility Danish file ver
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 of accessibility Polish file ver
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
ACSBT-AR		Dspl accessibility Arabic file ver
Lv.2	Details	To display the version of Arabic language file for Accessibility application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
ACSBT-MS		Dspl accessibility Malay file ver
Lv.2	Details	To display the version of Malay language file for Accessibility application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
ACSBT-HI		Dspl accessibility Hindi file ver
Lv.2	Details	To display the version of Hindi language file for Accessibility application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
ACSBT-EU		Dspl accessibility Euskera file ver
Lv.2	Details	To display the version of Euskera language file for Accessibility application.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	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

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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
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

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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
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

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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
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

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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
	Supplement/memo	ERS: Error Recovery System
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
	Supplement/memo	ERS: Error Recovery System
LS-ROM-V		Display of Laser Scanner Unit EEPROM ver
Lv.2	Details	To display the EEPROM version written in EEPROM of Laser Scanner Unit.
	Use case	When checking the EEPROM version written in EEPROM of Laser Scanner Unit
	Display/adj/set range	0001 to 9999
LS-UNT-V		Display of Laser Scanner Unit version
Lv.2	Details	To display the version written in EEPROM of Laser Scanner Unit.
	Use case	When checking the version written in EEPROM of Laser Scanner Unit
	Display/adj/set range	0001 to 9999
LS-SRL		Display of Laser Scanner Unit serial No.
Lv.2	Details	To display the serial number written in EEPROM of Laser Scanner Unit.
	Use case	When checking the serial number written in EEPROM of Laser Scanner Unit
	Display/adj/set range	0000000001 to 9999999999
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

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LANG-TH		Display of Thai language file ver
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		Dspl of Vietnamese language file version
Lv.2	Details	Dspl of Vietnamese language file version
	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
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

COPIER>DISPLAY>VERSION		
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
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

COPIER>DISPLAY>VERSION		
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
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

COPIER>DISPLAY>VERSION		
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 of BOX appli Vietnamese file ver
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
SC-FR		Display of SC appli French file version
Lv.1	Details	To display the version of French language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-IT		Dspl of SC appli Italian file version
Lv.1	Details	To display the version of Italian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-DE		Display of SC appli German file version
Lv.1	Details	To display the version of German language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-ES		Dspl of SC appli Spanish file version
Lv.1	Details	To display the version of Spanish language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-ZH		Dspl of SC appli Chinese file ver:smpl
Lv.2	Details	To display the version of simplified Chinese language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER>DISPLAY>VERSION		
SC-TW		Dspl of SC appli Chinese file ver:trad
Lv.2	Details	To display the version of traditional Chinese language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-KO		Display of SC appli Korean file version
Lv.2	Details	To display the version of Korean language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-CS		Display of SC appli Czech file version
Lv.2	Details	To display the version of Czech language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-DA		Display of SC appli Danish file version
Lv.2	Details	To display the version of Danish language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-EL		Display of SC appli Greek file version
Lv.2	Details	To display the version of Greek language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-ET		Dspl of SC appli Estonian file version
Lv.2	Details	To display the version of Estonian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-FI		Dspl of SC appli Finnish file version
Lv.2	Details	To display the version of Finnish language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-HU		Dspl of SC appli Hungarian file version
Lv.2	Details	To display the version of Hungarian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-NL		Display of SC appli Dutch file version
Lv.2	Details	To display the version of Dutch language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER>DISPLAY>VERSION		
SC-NO		Dspl of SC appli Norwegian file version
Lv.2	Details	To display the version of Norwegian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-PL		Display of SC appli Polish file version
Lv.2	Details	To display the version of Polish language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-PT		Display of SC appli Portuguese file ver
Lv.2	Details	To display the version of Portuguese language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-RU		Dspl of SC appli Russian file version
Lv.2	Details	To display the version of Russian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-SL		Dspl of SC appli Slovenian file version
Lv.2	Details	To display the version of Slovenian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-SV		Dspl of SC appli Swedish file version
Lv.2	Details	To display the version of Swedish language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-ID		Display of SC appli Indonesian file ver
Lv.2	Details	To display the version of Indonesian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-BU		Dspl of SC appli Bulgarian file version
Lv.2	Details	To display the version of Bulgarian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-CR		Dspl of SC appli Croatian file version
Lv.2	Details	To display the version of Croatian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

COPIER>DISPLAY>VERSION		
SC-RM		Dspl of SC appli Romanian file version
Lv.2	Details	To display the version of Romanian language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-SK		Display of SC appli Slovak file version
Lv.2	Details	To display the version of Slovak language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-TK		Dspl of SC appli Turkish file version
Lv.2	Details	To display the version of Turkish language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-CA		Dspl of SC appli Catalan file version
Lv.2	Details	To display the version of Catalan language file for Self Copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-TH		Display of SC appli Thai file version
Lv.2	Details	To display the version of Thai language file for self-copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
SC-VN		Dspl of SC appli Vietnamese file version
Lv.2	Details	To display the version of Vietnamese language file for self-copy application (JAVA UI).
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99
BOX-AR		Dspl of BOX appli Arabic file ver
Lv.2	Details	To display the version of Arabic language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
BOX-MS		Dspl of BOX appli Malay file ver
Lv.2	Details	To display the version of Malay language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99

COPIER>DISPLAY>VERSION		
BOX-HI		Dspl of BOX appli Hindi file ver
Lv.2	Details	To display the version of Hindi language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
BOX-EU		Dspl of BOX appli Euskera file ver
Lv.2	Details	To display the version of Euskera language file for BOX application (JAVA UI).
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
LANG-AR		Dspl of Arabic language file ver
Lv.2	Details	To display the version of Arabic language file.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
LANG-MS		Dspl of Malay language file ver
Lv.2	Details	To display the version of Malay language file.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
LANG-HI		Dspl of Hindi language file ver
Lv.2	Details	To display the version of Hindi language file.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
LANG-EU		Dspl of Euskera language file ver
Lv.2	Details	To display the version of Euskera language file.
	Use case	When upgrading the firmware
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	00.01 to 99.99
BF-PASS		Display of BF-CONT firmware version
Lv.1	Details	To display the firmware version of Buffer Pass Unit Controller PCB.
	Use case	When upgrading the firmware
	Display/adj/set range	00.01 to 99.99

T-8-5

■ USER

COPIER>DISPLAY>USER		
SPDTYPE		Display of engine speed type
Lv.1	Details	To display the engine speed type of this machine.
	Use case	When checking the engine speed type
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	20 to 30
BRWS-ST5		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-ST5 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-ST5 is 1, turn OFF/ON the main power switch.
	Use case	When checking the usage status of service browser
	Caution	The value of BRWS-ST5 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	1 to 2 1: ON (Available) 2: OFF (Not available)
Related service mode		COPIER> FUCNTION> INSTALL> BRWS-ACT

T-8-6

■ ACC-ST5

COPIER>DISPLAY>ACC-ST5		
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 yet connected 1: Connected
SORTER		Connect state of Finisher-related option
Lv.1	Details	To display the connection state of Finisher-related options.
	Use case	When checking the connection of Finisher-related options
	Display/adj/set range	Left column (connection 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 (connection 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		[Not used]
CARD		Dspl of connection state of Card Reader
Lv.1	Details	To display the connection 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 has been inserted with the Card Reader connected. (Copy is not available.) 1: Card Reader has not yet been connected, or the card has been inserted with the Card Reader 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
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	1024 (Fixed)
	Unit	- -
COINROBO		Dspl of Coin Manager connection state
Lv.1	Details	To display the connection 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 yet connected 1: Connected

COPIER>DISPLAY>ACC-ST5		
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 yet connected 1: Ethernet PCB connected 2: Token Ring PCB connected 3: Ethernet PCB + Token Ring PCB connected
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
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
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
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	1024 (Fixed)
	Unit	- -

COPIER>DISPLAY>ACC-ST5		
MN-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 Main Controller PCB
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	1024 (Fixed)

T-8-7

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 detects the outside air.
	Use case	When checking the temperature outside the machine
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 60
	Unit	1 deg C
	Appropriate target value	Room temperature+/-5 deg C
HUM	Display of outside humidity	
Lv.1	Details	To display the humidity outside the machine. This is measured by the Environment Sensor that detects the outside air.
	Use case	When checking the humidity outside the machine
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 100
	Unit	1 %
	Appropriate target value	1 - 99
ABS-HUM	Display of outside moisture content	
Lv.1	Details	To display the absolute moisture content outside the machine. This is measured by the Environment Sensor that detects the outside air.
	Use case	When checking the moisture content outside the machine
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 100
	Unit	1 g/m3
	Appropriate target value	0 - 50
FIX-E	Dspl of Fixing Heater center temperature	
Lv.1	Details	To display the center temperature of the Fixing Heater detected by the Main Thermistor.
	Use case	When checking the temperature at the center of Fixing Heater
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 300
	Unit	1 deg C
	Appropriate target value	20 - 230
FIX-E2	Dspl Fixing Heater front edg temperature	
Lv.1	Details	To display the front edge temperature of the Fixing Heater detected by the Sub Thermistor 1.
	Use case	When checking the edge temperature of the Fixing Heater
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 300
	Unit	1 deg C
	Appropriate target value	20 - 250

COPIER>DISPLAY>ANALOG		
TEMP2	Display of estimated inside temperature	
Lv.1	Details	To display the temperature inside the machine (around the Developing Unit) estimated from the temperature in the Laser Scanner Unit.
	Use case	When checking the temperature inside the machine (around the Developing Unit)
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 100
	Unit	1 deg C
	Appropriate target value	Room temperature - Room temperature+15 deg C
HUM2	Display of estimated inside humidity	
Lv.1	Details	To display the estimated relative humidity inside the machine that is calculated from the estimated temperature inside the machine and moisture content outside the machine.
	Use case	When checking the humidity inside the machine
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 100
	Unit	1 %
	Appropriate target value	1 - 99
FIX-E3	Dspl Fixing Heater rear edge temperature	
Lv.1	Details	To display the rear edge temperature of the Fixing Heater detected by the Sub Thermistor 2.
	Use case	When checking the edge temperature of the Fixing Heater
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 300
	Unit	1 deg C
	Appropriate target value	20 - 250

T-8-8

HV-STS

COPIER>DISPLAY>HV-STS	
1ATVC-Y	Dspl Y-clr pmry trns ATVC base voltage
Lv.2	Details
	To display the base voltage Vb derived from primary transfer ATVC control (1/1 speed) for Y-color. As Vb is closer to 3500, the Primary Transfer Roller is closer to the end of life, so image failure (leopard pattern image or mottled image due to poor transfer) is likely to occur.
	Use case
	<ul style="list-style-type: none"> When estimating the life of Primary Transfer Roller When checking the results of control after execution of 1ATVC-EX
	Display/adj/set range
	0 to 3500
	Unit
	1 V
	Appropriate target value
	200 - 3000
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX
1ATVC-M	Dspl M-clr pmry trns ATVC base voltage
Lv.2	Details
	To display the base voltage Vb derived from primary transfer ATVC control (1/1 speed) for M-color. As Vb is closer to 3500, the Primary Transfer Roller is closer to the end of life, so image failure (leopard pattern image or mottled image due to poor transfer) is likely to occur.
	Use case
	<ul style="list-style-type: none"> When estimating the life of Primary Transfer Roller When checking the results of control after execution of 1ATVC-EX
	Display/adj/set range
	0 to 3500
	Unit
	1 V
	Appropriate target value
	200 - 3000
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX
1ATVC-C	Dspl C-clr pmry trns ATVC base voltage
Lv.2	Details
	To display the base voltage Vb derived from primary transfer ATVC control (1/1 speed) for C-color. As Vb is closer to 3500, the Primary Transfer Roller is closer to the end of life, so image failure (leopard pattern image or mottled image due to poor transfer) is likely to occur.
	Use case
	<ul style="list-style-type: none"> When estimating the life of Primary Transfer Roller When checking the results of control after execution of 1ATVC-EX
	Display/adj/set range
	0 to 3500
	Unit
	1 V
	Appropriate target value
	200 - 3000
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX

COPIER>DISPLAY>HV-STS	
1ATVC-K4	Dspl Bk-clr pmry trns ATVC base voltage
Lv.2	Details
	To display the base voltage Vb derived from primary transfer ATVC control (1/1 speed) for Bk-color. As Vb is closer to 3500, the Primary Transfer Roller is closer to the end of life, so image failure (leopard pattern image or mottled image due to poor transfer) is likely to occur.
	Use case
	<ul style="list-style-type: none"> When estimating the life of Primary Transfer Roller When checking the results of control after execution of 1ATVC-EX
	Display/adj/set range
	0 to 3500
	Unit
	1 V
	Appropriate target value
	200 - 3000
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX
2ATVC	Dspl secondary transfer ATVC tgt current
Lv.2	Details
	To display the decuple value of the target current value of secondary transfer ATVC control.
	Use case
	When identifying the cause at the occurrence of an image failure
	Display/adj/set range
	0 to 1500
	Unit
	0.1 uA

T-8-9

 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 Scanner Unit.
	Use case At scanned image failure
	Display/adj/set range 0 to FFFF
	Appropriate target value 512 - 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 Scanner Unit.
	Use case At scanned image failure
	Display/adj/set range 0 to FFFF
	Appropriate target value 512 - 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 Scanner Unit.
	Use case At scanned image failure
	Display/adj/set range 0 to FFFF
	Appropriate target value 512 - 2047
GAIN-OB Gain level of Img Sensor odd bit(B)	
Lv.2	Details To display the Blue gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit. Continuous display of upper limit is considered a failure of the Scanner Unit/Main Controller PCB. When the value is out of the target value range, image failure or E302 (shading error) may have occurred. Identify the cause according to the value.
	Use case <ul style="list-style-type: none"> • When replacing the Main Controller PCB • When replacing the Scanner Unit • At scanned image failure
	Display/adj/set range 0 to 143
	Appropriate target value 0 - 143

COPIER>DISPLAY>CCD	
GAIN-OG Gain level of Img Sensor odd bit(G)	
Lv.2	Details To display the Green gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit. Continuous display of upper limit is considered a failure of the Scanner Unit/Main Controller PCB. When the value is out of the target value range, image failure or E302 (shading error) may have occurred. Identify the cause according to the value.
	Use case <ul style="list-style-type: none"> • When replacing the Main Controller PCB • When replacing the Scanner Unit • At scanned image failure
	Display/adj/set range 0 to 143
	Appropriate target value 0 - 143
GAIN-OR Gain level of Img Sensor odd bit(R)	
Lv.2	Details To display the Red gain level adjustment value in odd-numbered bit on CMOS Sensor of Scanner Unit. Continuous display of upper limit is considered a failure of the Scanner Unit/Main Controller PCB. When the value is out of the target value range, image failure or E302 (shading error) may have occurred. Identify the cause according to the value.
	Use case <ul style="list-style-type: none"> • When replacing the Main Controller PCB • When replacing the Scanner Unit • At scanned image failure
	Display/adj/set range 0 to 143
	Appropriate target value 0 - 143
GAIN-EB Gain level of Img Sensor even bit(B)	
Lv.2	Details To display the Blue gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit. Continuous display of upper limit is considered a failure of the Scanner Unit/Main Controller PCB. When the value is out of the target value range, image failure or E302 (shading error) may have occurred. Identify the cause according to the value.
	Use case <ul style="list-style-type: none"> • When replacing the Main Controller PCB • When replacing the Scanner Unit • At scanned image failure
	Display/adj/set range 0 to 143
	Appropriate target value 0 - 143

COPIER>DISPLAY>CCD		
GAIN-EG		Gain level of Img Sensor even bit(G)
Lv.2	Details	To display the Green gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit. Continuous display of upper limit is considered a failure of the Scanner Unit/Main Controller PCB. When the value is out of the target value range, image failure or E302 (shading error) may have occurred. Identify the cause according to the value.
	Use case	<ul style="list-style-type: none"> When replacing the Main Controller PCB When replacing the Scanner Unit At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 - 143
GAIN-ER		Gain level of Img Sensor even bit(R)
Lv.2	Details	To display the Red gain level adjustment value in even-numbered bit on CMOS Sensor of Scanner Unit. Continuous display of upper limit is considered a failure of the Scanner Unit/Main Controller PCB. When the value is out of the target value range, image failure or E302 (shading error) may have occurred. Identify the cause according to the value.
	Use case	<ul style="list-style-type: none"> When replacing the Main Controller PCB When replacing the Scanner Unit At scanned image failure
	Display/adj/set range	0 to 143
	Appropriate target value	0 - 143
LAMP-CL		Scan Lamp intensity adj VL(color)
Lv.2	Details	To display the LED light intensity adjustment value of Scanner Unit in color scanning mode.
	Use case	When image failure occurs at front side scanning in color mode
	Display/adj/set range	33 to 163
	Appropriate target value	33 - 163
	Supplement/memo	LED cannot be replaced individually. Replace the Scanner Unit.
OFST-CL		Img Sensor offset value (color)
Lv.2	Details	To display the CMOS Sensor offset value at color scanning.
	Use case	When image failure occurs at scanning in color mode
	Display/adj/set range	1 to 95
	Appropriate target value	1 - 95

T-8-10

DPOT

COPIER>DISPLAY>DPOT	
2TR-PPR	For R&D
2TR-BASE	For R&D
1TR-DC-Y	For R&D
1TR-DC-M	For R&D
1TR-DC-C	For R&D
1TR-DC-K	For R&D
LPWR-Y	For R&D
LPWR-M	For R&D
LPWR-C	For R&D
LPWR-K	For R&D
PVCONT-Y	For R&D
PVCONT-M	For R&D
PVCONT-C	For R&D
PVCONT-K	For R&D

T-8-11

■ DENS

COPIER>DISPLAY>DENS		
DENS-Y		
Dspl Y-color toner density change ratio		
Lv.1	Details	To display the deviation of Y-color toner density from the target value in percentage (%). If the deviation is not acceptable, E020 occurs. 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 analyzing the cause of image failure (density failure, fogging) and occurrence of E020
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300
	Related service mode	COPIER> DISPLAY> DENS> SGNL-Y
DENS-M		
Dspl M-color toner density change ratio		
Lv.1	Details	To display the deviation of M-color toner density from the target value in percentage (%). If the deviation is not acceptable, E020 occurs. 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 analyzing the cause of image failure (density failure, fogging) and occurrence of E020
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300
	Related service mode	COPIER> DISPLAY> DENS> SGNL-M
DENS-C		
Dspl C-color toner density change ratio		
Lv.1	Details	To display the deviation of C-color toner density from the target value in percentage (%). If the deviation is not acceptable, E020 occurs. 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 analyzing the cause of image failure (density failure, fogging) and occurrence of E020
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300
	Related service mode	COPIER> DISPLAY> DENS> SGNL-C

COPIER>DISPLAY>DENS		
DENS-K		Dspl Bk-color toner density change ratio
Lv.1	Details	To display the deviation of Bk-color toner density from the target value in percentage (%). If the deviation is not acceptable, E020 occurs. 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 analyzing the cause of image failure (density failure, fogging) and occurrence of E020
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300
	Related service mode	COPIER> DISPLAY> DENS> SGNL-K
DENS-S-Y		Dspl ATR control Y-color patch density
Lv.2	Details	To display Y-color patch image density formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600
DENS-S-M		Dspl ATR control M-color patch density
Lv.2	Details	To display M-color patch image density formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600
DENS-S-C		Dspl ATR control C-color patch density
Lv.2	Details	To display C-color patch image density formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600
DENS-S-K		Dspl ATR control Bk-color patch density
Lv.2	Details	To display Bk-color patch image density formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600
D-Y-TRGT		Dspl Y-clr patch target dens: ATR ctrl
Lv.2	Details	To display the target density for Y-color patch image formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	150 - 500

COPIER>DISPLAY>DENS		
D-M-TRGT		Dspl M-clr patch target dens: ATR ctrl
Lv.2	Details	To display the target density for M-color patch image formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	150 - 500
D-C-TRGT		Dspl C-clr patch target dens: ATR ctrl
Lv.2	Details	To display the target density for C-color patch image formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	150 - 500
SGNL-Y		Display of Y-color toner density
Lv.1	Details	To display the measured value of Y-color toner 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 image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 255
	Appropriate target value	50 - 200
	Related service mode	COPIER> DISPLAY> DENS> DENS-Y
SGNL-M		Display of M-color toner density
Lv.1	Details	To display the measured value of M-color toner density. The density is measured with the ATR Sensor (M) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 255
	Appropriate target value	50 - 200
	Related service mode	COPIER> DISPLAY> DENS> DENS-M
SGNL-C		Display of C-color toner density
Lv.1	Details	To display the measured value of C-color toner density. The density is measured with the ATR Sensor (C) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 255
	Appropriate target value	50 - 200
	Related service mode	COPIER> DISPLAY> DENS> DENS-C

COPIER>DISPLAY>DENS		
SGNL-K		Display of Bk-color toner density
Lv.1	Details	To display the measured value of Bk-color toner density. The density is measured with the ATR Sensor (Bk) for each job. The value is updated upon print operation after power-on.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 255
	Appropriate target value	50 - 200
	Related service mode	COPIER> DISPLAY> DENS> DENS-K
DEV-DC-Y		Dspl of Y-color developing DC voltage
Lv.2	Details	To display the latest Y-color developing DC voltage Vdc.
	Use case	<ul style="list-style-type: none"> • When image failure occurs due to carrier adherence • When fogging occurs/is deteriorated
	Display/adj/set range	-1000 to 0
	Unit	1 V
	Appropriate target value	-490 - -600
DEV-DC-M		Dspl of M-color developing DC voltage
Lv.2	Details	To display the latest M-color developing DC voltage Vdc.
	Use case	<ul style="list-style-type: none"> • When image failure occurs due to carrier adherence • When fogging occurs/is deteriorated
	Display/adj/set range	-1000 to 0
	Unit	1 V
	Appropriate target value	-490 - -600
DEV-DC-C		Dspl of C-color developing DC voltage
Lv.2	Details	To display the latest C-color developing DC voltage Vdc.
	Use case	<ul style="list-style-type: none"> • When image failure occurs due to carrier adherence • When fogging occurs/is deteriorated
	Display/adj/set range	-1000 to 0
	Unit	1 V
	Appropriate target value	-490 - -600
DEV-DC-K		Dspl of Bk-color developing DC voltage
Lv.2	Details	To display the latest Bk-color developing DC voltage Vdc.
	Use case	<ul style="list-style-type: none"> • When image failure occurs due to carrier adherence • When fogging occurs/is deteriorated
	Display/adj/set range	-1000 to 0
	Unit	1 V
	Appropriate target value	-490 - -600
CHG-DC-Y		Dspl Y-color primary charge DC voltage
Lv.2	Details	To display the latest primary charging DC voltage of Y-color.
	Use case	When decrease in density/fogging occurs
	Display/adj/set range	-1600 to 0
	Unit	1 V
	Appropriate target value	-1400 - -1200

COPIER>DISPLAY>DENS		
CHG-DC-M	Dspl M-color primary charge DC voltage	
Lv.2	Details	To display the latest primary charging DC voltage of M-color.
	Use case	When decrease in density/fogging occurs
	Display/adj/set range	-1600 to 0
	Unit	1 V
	Appropriate target value	-1400 - -1200
CHG-DC-C	Dspl C-color primary charge DC voltage	
Lv.2	Details	To display the latest primary charging DC voltage of C-color.
	Use case	When decrease in density/fogging occurs
	Display/adj/set range	-1600 to 0
	Unit	1 V
	Appropriate target value	-1400 - -1200
CHG-DC-K	Dspl Bk-color primary charge DC voltage	
Lv.2	Details	To display the latest primary charging DC voltage of Bk-color.
	Use case	When decrease in density/fogging occurs
	Display/adj/set range	-1600 to 0
	Unit	1 V
	Appropriate target value	-1400 - -1200
D-K-TRGT	Dspl Bk-clr patch target dens: ATR ctrl	
Lv.2	Details	To display the target density for Bk-color patch image formed at ATR control.
	Use case	When analyzing the cause of image failure (fogging, carrier adherence, low density, etc.)
	Display/adj/set range	0 to 1023
	Appropriate target value	150 - 500
DENS-Y-H	Dspl Y-clr TD ratio diff log: ATR ctrl	
Lv.2	Details	To display the latest 8 logs in which deviations (%) of Y-color toner density (TD ratio) detected by the ATR Sensor at ATR control from the target value are shown. Sharp change in values may indicate ATR Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking the toner density in the Developing Unit at low density or fogging deterioration
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300

COPIER>DISPLAY>DENS		
DENS-M-H	Dspl M-clr TD ratio diff log: ATR ctrl	
Lv.2	Details	To display the latest 8 logs in which deviations (%) of M-color toner density (TD ratio) detected by the ATR Sensor at ATR control from the target value are shown. Sharp change in values may indicate ATR Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking the toner density in the Developing Unit at low density or fogging deterioration
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300
DENS-C-H	Dspl C-clr TD ratio diff log: ATR ctrl	
Lv.2	Details	To display the latest 8 logs in which deviations (%) of C-color toner density (TD ratio) detected by the ATR Sensor at ATR control from the target value are shown. Sharp change in values may indicate ATR Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking the toner density in the Developing Unit at low density or fogging deterioration
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300
DS-S-Y-H	Dspl of Y-color patch image density log	
Lv.2	Details	To display the latest 8 Y-color 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 the Registration Patch Sensor Unit (Rear), shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by the Registration Patch Sensor Unit (Rear).
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600
DS-S-M-H	Dspl of M-color patch image density log	
Lv.2	Details	To display the latest 8 M-color 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 the Registration Patch Sensor Unit (Rear), shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by the Registration Patch Sensor Unit (Rear).
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600

COPIER>DISPLAY>DENS		
DS-S-C-H		Dspl of C-color patch image density log
Lv.2	Details	To display the latest 8 C-color 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 the Registration Patch Sensor Unit (Front), shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by the Registration Patch Sensor Unit (Front).
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600
DS-S-K-H		Dspl of Bk-color patch image density log
Lv.2	Details	To display the latest 8 Bk-color 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 the Registration Patch Sensor Unit (Front), shutter or laser, whereas gradual change may indicate failure in toner supply system. This is particularly caused by the Registration Patch Sensor Unit (Front).
	Use case	When analyzing the cause of E020
	Display/adj/set range	0 to 1023
	Appropriate target value	100 - 600
SPL-LG-Y		Display of Y-color toner supply log
Lv.2	Details	To display the latest 8 Y-color 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 100
	Appropriate target value	0 - 10
SPL-LG-M		Display of M-color toner supply log
Lv.2	Details	To display the latest 8 M-color 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 100
	Appropriate target value	0 - 10
SPL-LG-C		Display of C-color toner supply log
Lv.2	Details	To display the latest 8 C-color 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 100
	Appropriate target value	0 - 10

COPIER>DISPLAY>DENS		
P-D-P-Y		Dspl rear side (Y/M) drk crnt (Pwave)
Lv.2	Details	To display the Y/M-color dark current (P-wave) detected by the Registration Patch Sensor Unit (Rear). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Rear).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 - 100
P-D-P-C		Dspl front side (C/Bk) drk crnt (Pwave)
Lv.2	Details	To display the C/Bk-color dark current (P-wave) detected by the Registration Patch Sensor Unit (Front). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Front).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 - 100
P-B-P-Y		Dspl ITB rear side base intnsty (Pwave)
Lv.2	Details	To display the ITB background light intensity (P-wave) detected by the Registration Patch Sensor Unit (Rear). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Rear).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	300 - 900
P-B-P-C		Dspl ITB front side base intnsty (Pwave)
Lv.2	Details	To display the ITB background light intensity (P-wave) detected by the Registration Patch Sensor Unit (Front). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Front).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	300 - 900
P-B-S-Y		Dspl ITB rear side base intnsty (Swave)
Lv.2	Details	To display the ITB background light intensity (S-wave) detected by the Registration Patch Sensor Unit (Rear). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Rear).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 - 300

COPIER>DISPLAY>DENS		
P-B-S-C	Dspl ITB front side base intnsty (Swave)	
Lv.2	Details	To display the ITB background light intensity (S-wave) detected by the Registration Patch Sensor Unit (Front). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Front).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 - 300
P-D-S-Y	Dspl rear side (Y/M) drk crmnt (Swave)	
Lv.2	Details	To display the Y/M-color dark current (S-wave) detected by the Registration Patch Sensor Unit (Rear). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Rear).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 - 100
P-D-S-C	Dspl front side (C/Bk) drk crmnt (Swave)	
Lv.2	Details	To display the C/Bk-color dark current (S-wave) detected by the Registration Patch Sensor Unit (Front). At low density or fogging deterioration, use this item to check whether there is a problem in the Registration Patch Sensor Unit (Front).
	Use case	At low density or fogging deterioration
	Display/adj/set range	0 to 1023
	Appropriate target value	10 - 100
DENS-K-H	Dspl Bk-clr TD ratio diff log: ATR ctrl	
Lv.2	Details	To display the latest 8 logs in which deviations (%) of Bk-color toner density (TD ratio) detected by the ATR Sensor at ATR control from the target value are shown. Sharp change in values may indicate ATR Sensor disconnection/failure, whereas gradual change in values may indicate failure in toner supply system.
	Use case	When checking the toner density in the Developing Unit at low density or fogging deterioration
	Display/adj/set range	-700 to 700
	Unit	0.01 %
	Appropriate target value	-300 - 300
SPL-LG-K	Display of Bk-color toner supply log	
Lv.2	Details	To display the latest 8 Bk-color 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 100
	Appropriate target value	0 - 10

COPIER>DISPLAY>DENS		
Y-LED-DA	Dspl rear side Patch Sensor intensity	
Lv.1	Details	To display the LED light intensity of the Registration Patch Sensor Unit (Rear). If the value is out of the appropriate range, clean the window of the Registration Patch Sensor Unit. If the problem is not solved, it is considered as a failure of the sensor.
	Use case	When an error related to the Patch Sensor occurs
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
	Appropriate target value	60 - 240
C-LED-DA	Dspl front side Patch Sensor intensity	
Lv.1	Details	To display the LED light intensity of the Registration Patch Sensor Unit (Front). If the value is out of the appropriate range, clean the window of the Registration Patch Sensor Unit. If the problem is not solved, it is considered as a failure of the sensor.
	Use case	When an error related to the Patch Sensor occurs
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	0 to 255
	Appropriate target value	60 - 240

T-8-12

MISC

COPIER>DISPLAY>MISC		
ENV-TR		
Dspl of environment: sec trns ATVC ctrl		
Lv.1	Details	To display the environment (moisture content) at the time of the latest secondary transfer ATVC control execution.
	Use case	When adjusting the paper allotted voltage in secondary transfer ATVC control
	Display/adj/set range	1 to 3 1: Low humidity, 2: Normal humidity, 3: High humidity
LPOWER-Y		
Display of Y-color laser light intensity		
Lv.2	Details	To display the Y-color laser light intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Display/adj/set range	00 to FF
	Appropriate target value	50 - FF
LPOWER-M		
Display of M-color laser light intensity		
Lv.2	Details	To display the M-color laser light intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Display/adj/set range	00 to FF
	Appropriate target value	50 - FF
LPOWER-C		
Display of C-color laser light intensity		
Lv.2	Details	To display the C-color laser light intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Display/adj/set range	00 to FF
	Appropriate target value	50 - FF
LPOWER-K		
Display of Bk-clr laser light intensity		
Lv.2	Details	To display the Bk-color laser light intensity in real-time.
	Use case	When analyzing the cause of the image density failure
	Display/adj/set range	00 to FF
	Appropriate target value	50 - FF
TNRB-IDY		
Display of Y-color Toner Container ID		
Lv.1	Details	To display the ID of Y-color Toner Container that is installed to the machine.
	Use case	When checking whether the barcode ID on the Toner Container is read correctly
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	12-digit decimal number
TNRB-IDM		
Display of M-color Toner Container ID		
Lv.1	Details	To display the ID of M-color Toner Container that is installed to the machine.
	Use case	When checking whether the barcode ID on the Toner Container is read correctly
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	12-digit decimal number

COPIER>DISPLAY>MISC		
TNRB-IDC		
Display of C-color Toner Container ID		
Lv.1	Details	To display the ID of C-color Toner Container that is installed to the machine.
	Use case	When checking whether the barcode ID on the Toner Container is read correctly
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	12-digit decimal number
TNRB-IDK		
Display of Bk-color Toner Container ID		
Lv.1	Details	To display the ID of Bk-color Toner Container that is installed to the machine.
	Use case	When checking whether the barcode ID on the Toner Container is read correctly
	Adj/set/operate method	N/A (Display only)
	Display/adj/set range	12-digit decimal number

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-color patch target value of screen A in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-A-M Dspl ARCDAT screen A M-color target VL	
Lv.2	Details	To display the M-color patch target value of screen A in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-A-C Dspl ARCDAT screen A C-color target VL	
Lv.2	Details	To display the C-color patch target value of screen A in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-A-K Dspl ARCDAT screen A Bk-color target VL	
Lv.2	Details	To display the Bk-color patch target value of screen A in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-B-Y Dspl ARCDAT screen B Y-color target VL	
Lv.2	Details	To display the Y-color patch target value of screen B in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700

COPIER>DISPLAY>HT-C		
TGT-B-M		Dspl ARCDAT screen B M-color target VL
Lv.2	Details	To display the M-color patch target value of screen B in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-B-C Dspl ARCDAT screen B C-color target VL	
Lv.2	Details	To display the C-color patch target value of screen B in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-B-K Dspl ARCDAT screen B Bk-color target VL	
Lv.2	Details	To display the Bk-color patch target value of screen B in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-C-Y Dspl ARCDAT screen C Y-color target VL	
Lv.2	Details	To display the Y-color patch target value of screen C in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
	TGT-C-M Dspl ARCDAT screen C M-color target VL	
Lv.2	Details	To display the M-color patch target value of screen C in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700

COPIER>DISPLAY>HT-C		
TGT-C-C		Dspl ARCDAT screen C C-color target VL
Lv.2	Details	To display the C-color patch target value of screen C in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
TGT-C-K		Dspl ARCDAT screen C Bk-color target VL
Lv.2	Details	To display the Bk-color patch target value of screen C in ARCDAT control. When hue variation occurs and the displayed value is not in the tolerable range, execute the auto gradation adjustment (reset the target value). Check the Patch Sensor if not corrected.
	Use case	When hue variation occurs
	Display/adj/set range	0 to 1023
	Appropriate target value	0 - 700
SUM-A-Y		For R&D
SUM-A-M		For R&D
SUM-A-C		For R&D
SUM-A-K		For R&D
SUM-B-Y		For R&D
SUM-B-M		For R&D
SUM-B-C		For R&D
SUM-B-K		For R&D
SUM-C-Y		For R&D
SUM-C-M		For R&D
SUM-C-C		For R&D
SUM-C-K		For R&D
SGNL-A-Y		For R&D
SGNL-A-M		For R&D
SGNL-A-C		For R&D
SGNL-A-K		For R&D
SGNL-B-Y		For R&D
SGNL-B-M		For R&D
SGNL-B-C		For R&D
SGNL-B-K		For R&D
SGNL-C-Y		For R&D
SGNL-C-M		For R&D
SGNL-C-K		For R&D
SGNL-C-C		For R&D
DLTA-A-Y		For R&D
DLTA-A-M		For R&D
DLTA-A-C		For R&D
DLTA-A-K		For R&D

COPIER>DISPLAY>HT-C	
DLTA-B-Y	For R&D
DLTA-B-M	For R&D
DLTA-B-C	For R&D
DLTA-B-K	For R&D
DLTA-C-Y	For R&D
DLTA-C-M	For R&D
DLTA-C-C	For R&D
DLTA-C-K	For R&D

T-8-14



DC-CON > P001 to P038

Address	bit	Name	Symbol	Remarks
P001	15	-	-	-
	14	-	-	-
	13	Fixing pressure release sensor	PS13	1: HP detected
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	Front Door Switch	SW26	0: CLOSE, 1: OPEN
	4	Right Door Open/Close Detection Switch	SW11	0: OPEN, 1: CLOSE
	3	Right Upper Door Open/Close Detection Switch	SW27	0: OPEN, 1: CLOSE
	2	Main Power Supply Switch	SW04	0: ON, 1: OFF
P002	1	-	-	-
	0	-	-	-
P003	15	-	-	-
	14	Cassette 1 Paper Sensor	PS05	0: Paper absence 1: Paper presence
	13	Cassette 1 Lifter Sensor	PS04	0: Paper surface detection
	12	Cassette 2 Paper Sensor	PS07	0: Paper absence 1: Paper presence
	11	Cassette 2 Lifter Sensor	PS06	0: Paper surface detection
	10	-	-	-
	9	Reverse Sensor	PS12	0: Paper absence 1: Paper presence
	8	Primary Transfer Roller Disengagement HP Sensor	PS33	1: HP detected
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Finisher Connection Detection		H: Not yet connected L: Connected
	1	-	-	-
0	Drum Cleaning Pre-exposure Detection		H: Not detected L: Detected	

Address	bit	Name	Symbol	Remarks
P004	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	Cassette 2 Paper Level Sensor B	PS20	0: Paper absence 1: Paper presence
	2	Cassette 2 Paper Level Sensor A	PS19	0: Paper absence 1: Paper presence
P005	1	Cassette 1 Paper Level Sensor B	PS18	0: Paper absence 1: Paper presence
	0	Cassette 1 Paper Level Sensor A	PS17	0: Paper absence 1: Paper presence
	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
11	-	-	-	
10	-	-	-	
9	-	-	-	
8	-	-	-	
7	Cassette 1 Vertical Path Sensor	PS08	0: Paper absence 1: Paper presence	
6	Cassette 2 Vertical Path Sensor	PS24	0: Paper absence 1: Paper presence	
5	Pre-Registration Sensor	PS22	0: Paper absence 1: Paper presence	
4	Arch sensor	PS11	0: Paper absence 1: Paper presence	
3	-	-	-	
2	Fixingt Delivery Sensor	PS10	0: Paper absence 1: Paper presence	
1	First Delivery Sensor	PS14	0: Paper absence 1: Paper presence	
0	Multi-purpose Tray HP Sensor	PS32	0: HP detected	

Address	bit	Name	Symbol	Remarks
P006	15	-	-	-
	14	-	-	-
	13	Finisher-U1 Connection Detection	-	0: Connected
	12	3 Way Unit Connection Detection	-	1: Connected
	11	Cassette Pedestal Connection Detection	-	1: Connected
	10	Multi-purpose Tray Paper Sensor	PS03	0: Paper absence 1: Paper presence
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Cassette 3 Vertical Path Sensor	PS101	0: Paper absence, 1: Paper presence
	3	Cassette 4 Vertical Path Sensor	PS106	0: Paper absence, 1: Paper presence
2	Second delivery / Reverse sensor	PS51	0: Paper absence, 1: Paper presence	
1	Third delivery sensor	PS52	0: Paper absence, 1: Paper presence	
0	-	-	-	
P007	0-15	-	-	-
P008	0-15	-	-	-
P009	0-15	-	-	-
P010	0-15	-	-	-
P011	0-15	-	-	-
P012	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	Waste toner container detection switch	SW01	0: None, 1: Detected
	6	-	-	-
	5	-	-	-
	4	Multi-purpose Tray Paper Length Sensor 2	PS31	0: Paper absence, 1: Paper presence
	3	Multi-purpose Tray Paper Length Sensor 1	PS30	0: Paper absence, 1: Paper presence
2	-	-	-	
1	-	-	-	
0	-	-	-	

Address	bit	Name	Symbol	Remarks
P013	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	Cassette 1 Size Switch_0	SW13	0: ON, 1: OFF
	7	Cassette 1 Size Switch_1	SW13	0: ON, 1: OFF
	6	Cassette 1 Size Switch_2	SW13	0: ON, 1: OFF
	5	Cassette 2 Size Switch A_0	SW15	0: ON, 1: OFF
	4	Cassette 2 Size Switch A_1	SW15	0: ON, 1: OFF
	3	Cassette 2 Size Switch A_2	SW15	0: ON, 1: OFF
2	Cassette 2 Size Switch B_0	SW16	0: ON, 1: OFF	
1	Cassette 2 Size Switch B_1	SW16	0: ON, 1: OFF	
0	Cassette 2 Size Switch B_2	SW16	0: ON, 1: OFF	
P014	0-15	-	-	-
P015	0-15	-	-	-
P016	0-15	-	-	-
P017	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	Bottle New/Old Sensor (Y)	UN39	0:Tag detect
	10	Bottle New/Old Sensor (M)	UN40	0:Tag detect
	9	Bottle New/Old Sensor (C)	UN41	0:Tag detect
	8	Bottle New/Old Sensor (Bk)	UN42	0:Tag detect
	7	-	-	-
	6	-	-	-
	5	-	-	-
4	-	-	-	
3	-	-	-	
2	-	-	-	
1	-	-	-	
0	-	-	-	
P018	0-15	-	-	-

Address	bit	Name	Symbol	Remarks
P019	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0		Front Fan	FM01
P020	0-15	-	-	-
P021	0-15	-	-	-
P022	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0		Second Delivery Paper Full Sensor	PS53

Address	bit	Name	Symbol	Remarks
P023	15	-	-	-
	14	Second Delivery Motor	M31	0: ON, 1: OFF
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	Reverse Motor	M30	0: ON, 1: OFF
	9	-	-	-
	8	-	-	-
	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P024	0-15	-	-	-
P025	0-15	-	-	-
P026	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	Duplex Merging Motor	M14	0: ON, 1: OFF
	8	Cassette 1,2 Feed / Multi-purpose Pickup Motor	M13	0: ON, 1: OFF
	7	Primary Transfer Roller Disengagement Motor	M08	0: ON, 1: OFF
	6	Duplex Reverse Motor	M11	0: ON, 1: OFF
	5	Registration Motor	M12	0: ON, 1: OFF
	4	Cassette 1,2 Pickup Motor	M07	0: ON, 1: OFF
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P027	0-15	-	-	-
P028	0-15	-	-	-

Address	bit	Name	Symbol	Remarks
P029	15	-	-	-
	14	-	-	-
	13	-	-	-
	12	-	-	-
	11	-	-	-
	10	-	-	-
	9	Duplex Merging Motor	M14	0: ON, 1: OFF
	8	Cassette 1,2 Feed / Multi-purpose Pickup Motor	M13	0: ON, 1: OFF
	7	Primary Transfer Roller Disengagement Motor	M08	0: ON, 1: OFF
	6	Duplex Reverse Motor	M11	0: ON, 1: OFF
	5	Cassette 4 Size Switch A_0	SW104	0: ON, 1: OFF
	4	Cassette 4 Size Switch A_1	SW104	0: ON, 1: OFF
	3	Cassette 4 Size Switch A_2	SW104	0: ON, 1: OFF
	2	Cassette 4 Size Switch B_0	SW105	0: ON, 1: OFF
	1	Cassette 4 Size Switch B_1	SW105	0: ON, 1: OFF
	0	Cassette 4 Size Switch B_2	SW105	0: ON, 1: OFF
P030	15	-	-	-
	14	-	-	-
	13	Cassette 3 Size Switch A_0	SW102	0: ON, 1: OFF
	12	Cassette 3 Size Switch A_1	SW102	0: ON, 1: OFF
	11	Cassette 3 Size Switch A_2	SW102	0: ON, 1: OFF
	10	Cassette 3 Size Switch B_0	SW103	0: ON, 1: OFF
	9	Cassette 3 Size Switch B_1	SW103	0: ON, 1: OFF
	8	Cassette 3 Size Switch B_2	SW103	0: ON, 1: OFF
	7	-	-	-
	6	Cassette Right Door Open/Close Detection Switch	SW101	0: OPEN, 1: CLOSE
	5	Cassette 3 Paper Sensor	PS102	0: Paper absence, 1: Paper presence
	4	Cassette 3 Lifter Sensor	PS104	0: Paper absence, 1: Paper presence
	3	-	-	-
	2	Cassette 4 Paper Sensor	PS103	0: Paper absence, 1: Paper presence
	1	Cassette 4 Lifter Sensor	PS105	0: Paper absence, 1: Paper presence
	0	-	-	-
P031	0-15	-	-	-
P032	0-15	-	-	-
P033	0-15	-	-	-
P034	0-15	-	-	-
P035	0-15	-	-	-
P036	0-15	-	-	-
P037	0-15	-	-	-
P038	0-15	-	-	-

T-8-15

■ R-CON > P001 to P003

Address	bit	Name	Symbol	Remarks	
P001	7	-	-	-	
	6	-	-	-	
	5	Copyboard Cover Open/Closed Sensor (rear)	PS_N2	0: OPEN, 1: CLOSE	
	4	Copyboard Cover Open/Closed Sensor (front)	PS_N1	0: OPEN, 1: CLOSE	
	3	Scanner Unit HP Sensor	PS_A1	1: HP	
	2	-	-	-	
	1	-	-	-	
	0	-	-	-	
	P002	0-7	-	-	-
	P003	7	-	-	-
6		-	-	-	
5		-	-	-	
4		-	-	-	
3		-	-	-	
2		Original Size Sensor(AB)	PS_R1	1: Paper presence	
1		Original Size Sensor(INCH)	PS_R2	1: Paper presence	
0	-	-	-		

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■ ADF (FEEDER>P001 to P005)

Address	bit	Name	Symbol	Remarks
P001	7	-	-	-
	6	-	-	-
	5	Read sensor	SR2	0: Paper absence 1: Paper presence
	4	Registration sensor	SR1	0: Paper absence 1: Paper presence
	3	Delivery reversal sensor	SR3	0: Paper absence 1: Paper presence
	2	Cover open/closed sensor	SR6	0: CLOSE, 1: OPEN
	1	Document set sensor	SR5	0: Paper absence 1: Paper presence
	0	-	-	-
P002	7	Document length sensor 2	SR8	0: Paper absence 1: Paper presence
	6	Document length sensor 1	SR7	0: Paper absence 1: Paper presence
	5	-	-	-
	4	Document width sensor 3	SR15	bit4-3-2 Range of original length 0-0-0 143.85 mm or less 0-0-1 236.45 - 263.5 mm 0-1-0 288.2 mm or more 0-1-1 263.5 - 288.2 mm 1-0-0 165.00 - 196.00 mm 1-0-1 196.00 - 212.95 mm 1-1-0 143.85 - 165.00 mm 1-1-1 212.95 - 236.45 mm
	3			
	2			
	1			
	0	-	-	-
P003	7	Different width sensor 4	SR12	0: Paper absence 1: Paper presence
	6	Different width sensor 3	SR11	0: Paper absence 1: Paper presence
	5	Different width sensor 2	SR10	0: Paper absence 1: Paper presence
	4	Different width sensor 1	SR9	0: Paper absence 1: Paper presence
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
P004	0-7	-	-	-
P005	0-7	-	-	-

T-8-17

■ SORTER(P001 to P056)

Address	bit	Name	Symbol	Remarks
P001	7	Tray 2 Paper Surface Sensor 2 (Finisher-U1)	PI120	0: Paper absence 1: Paper presence
		Stapler move HP Sensor (Inner Finisher-G1)	PS11	1: HP
	6	-	-	-
	5	Stack tray lower limit sensor	PS10	1: Lower limit
	4	-	-	-
	3	-	-	-
	2	Saddle Unit Connection Detection	-	0: Saddle presence
	1	-	-	-
	0	-	-	-
	P002	0-7	-	-
P003	0-7	-	-	-
P004	0-7	-	-	-
P005	7	-	-	-
	6	Front Cover Switch	MSW1	1: Open
	5	Stack tray paper height sensor	PS9	1: Paper presence
	4	Processing Tray Paper Sensor	PS6	1: Paper presence
	3	Paper fold HP sensor	PS8	1: HP
	2	Assist HP sensor	PS7	1: HP
	1	Rear alignment plate HP sensor	PS5	1: HP
0	Front alignment plate HP sensor	PS4	1: HP	
P006	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Stack tray HP sensor	PS14	1: HP
	1	-	-	-
0	-	-	-	
P007	7	Delivery sensor	PS1	1: Paper presence
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Tray 1 Safety Switch	MSW103	1: ON
	1	-	-	-
0	Front Cover Switch	MSW101	1: Open	

Address	bit	Name	Symbol	Remarks
P008	7	Tray 2 Shift Area Sensor 1	PCB5	0: ON
	6	Tray 2 Shift Area Sensor 3	PCB5	0: ON
	5	Tray 2 Shift Area Sensor 3	PCB5	0: ON
	4	Entrance sensor (Finisher-U1)	PI103	0: Paper presence
		Manual staple switch PCB (Inner Finisher-G1)	PCB3	1: Switch ON
	3	-	-	-
	2	Tray 1 Paper Sensor	PI111	0: Paper presence
	1	-	-	-
	0	Clinch motor drive detection sensor	PS13	1: Light shield
P009	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Tray 1 Shift Area Sensor 1	PCB4	0: ON
	3	Tray 1 Shift Area Sensor 2	PCB4	0: ON
	2	Tray 1 Shift Area Sensor 3	PCB4	0: ON
		Manual staple sensor	PS12	0: Paper presence
	1	Return belt HP sensor	PS3	1: HP
	0	Tray 2 Paper Sensor	PI112	0: Paper presence
	Paddle HP sensor	PS2	1: HP	
P010	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Clinch HP sensor	PS15	1: HP
	0	-	-	-
		-	-	-
P011	0-7	-	-	-
P012	7	Swing Guide Height Sensor	PI123	1: Open
	6	-	-	-
	5	-	-	-
	4	Rear End Assist Guide HP Sensor	PI109	0: HP
	3	-	-	-
	2	-	-	-
	1	-	-	-
	0	-	-	-
		-	-	-
P013	0-7	-	-	-
P014	0-7	-	-	-
P015	0-7	-	-	-
P016	0-7	-	-	-

Address	bit	Name	Symbol	Remarks	
P017	7	Tray 2 Paper Surface Sensor 1	PI115	1: Paper presence	
	6	Tray 1 Paper Surface Sensor	PI114	1: Paper presence	
	5	Shutter HP Sensor	PI113	0: Closed	
	4	Stapler Shift HP Sensor	PI110	1: HP	
	3	Stapler Alignment Interference Sensor	PI116	0: Interference	
	2	Staple Sensor	PI52	0: Needle presence	
	1	Staple Edging Sensor	PI51	0: Standby	
	0	stapler HP sensor	PI50	1: HP	
	P018	0-7	-	-	-
	P019	7	-	-	-
6		Feed Path Sensor	PI104	1: Paper presence	
5		Swing Guide Safety Switch	MSW102	1: ON	
4		Staple Safety Switch	MSW104	1: ON	
3		-	-	-	
2		-	-	-	
1		-	-	-	
0		-	-	-	
P020	7	Saddle Alignment Plate HP Sensor	PI5	0: HP	
	6	-	-	-	
	5	-	-	-	
	4	-	-	-	
	3	Saddle Staple Unit Connection Detection	-	0: Connected	
	2	Saddle Vertical Path Paper Sensor	PI17	1: Paper presence	
	1	-	-	-	
0	-	-	-		
P021	7	-	-	-	
	6	-	-	-	
	5	-	-	-	
	4	-	-	-	
	3	Stitcher HP Sensor (Rear)	SW5	1: HP	
	2	Stitcher HP Sensor (Front)	SW7	1: HP	
	1	Saddle Paper Pushing Plate Top Position Sensor	PI15	0: Top position	
0	Saddle Paper Pushing Plate HP Sensor	PI14	1: HP		
P022	0-7	-	-	-	
P023	0-7	-	-	-	
P024	7	-	-	-	
	6	-	-	-	
	5	-	-	-	
	4	-	-	-	
	3	-	-	-	
	2	Saddle Paper Folding HP Sensor	PI21	1: HP	
	1	-	-	-	
0	-	-	-		
P025	0-7	-	-	-	

Address	bit	Name	Symbol	Remarks
P026	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	-	-	-
	1	Staple Sensor (Rear)	SW4	1: Needle absence
	0	-	-	-
P027	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Saddle Paper Positioning Plate Paper Sensor	PI8	0: Paper presence
1	Saddle Paper Positioning Plate HP Sensor	PI7	0: HP	
0	Saddle Delivery Tray Paper Sensor	PI6	0: Paper presence	
P028	0-7	-	-	-
P029	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	-	-	-
	3	-	-	-
	2	Staple Sensor (Front)	SW6	1: Needle absence
	1	-	-	-
	0	-	-	-
P030	0-7	-	-	-
P031	7	Saddle Inlet Sensor	PI22	1: Paper presence
	6	Saddle Guide HP Sensor	PI13	1: HP
	5	Saddle Crescent Roller Phase Sensor	PI12	1: HP
	4	Saddle Delivery Sensor	PI11	0: Paper presence
	3	Saddle Inlet Cover Sensor	PI9	1: Open
	2	Saddle No.3 Paper Sensor	PI20	1: Paper presence
	1	Saddle No.2 Paper Sensor	PI19	1: Paper presence
	0	Saddle No.1 Paper Sensor	PI18	1: Paper presence
P032	0-7	-	-	-
P033	0-7	-	-	-
P034	0-7	-	-	-
P035	0-7	-	-	-
P036	0-7	-	-	-
P037	0-7	-	-	-
P038	0-7	-	-	-
P039	0-7	-	-	-
P040	0-7	-	-	-

Address	bit	Name	Symbol	Remarks
P041	7	-	-	-
	6	-	-	-
	5	-	-	-
	4	Buffer Pass Open/Closed Sensor	PI203	0: Open
	3	-	-	-
	2	-	-	-
1	Buffer Pass Outlet Sensor	PI202	0: Paper presence	
0	Buffer Pass Inlet Sensor	PI201	0: Paper presence	
P042	0-7	-	-	-
P043	0-7	-	-	-
P044	0-7	-	-	-
P045	0-7	-	-	-
P046	0-7	-	-	-
P047	0-7	-	-	-
P048	0-7	-	-	-
P049	0-7	-	-	-
P050	0-7	-	-	-
P051	0-7	-	-	-

T-8-18



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 Scanner Unit/clearing the RAM data of the Reader Unit, 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 0.1 mm.
Use case	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
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	0.1 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 Scanner Unit/clearing the RAM data of the Reader Unit, 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 reading position moves to the front side by 0.1 mm.
Use case	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
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	0.1 mm
Default value	0

COPIER>ADJUST>ADJ-XY	
ADJ-S	Adj of shading position: vert scan way
Lv.1 Details	To adjust the reading position in vertical scanning direction of the Standard White Plate when black line/white line appears. When replacing the Scanner Unit, execute RDSHDPOS and write the value of this item in the service label. When clearing the Reader-related RAM data, enter the value of service label. As the value is incremented by 1, the reading position moves to the trailing edge side by 0.1 mm. If the value is extreme, shading is performed outside of the Standard White Plate area so E302 occurs.
Use case	<ul style="list-style-type: none"> When black line/white line appear When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
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	-100 to 100
Unit	0.1 mm
Appropriate target value	0
Default value	0
Related service mode	COPIER> FUNCTION> INSTALL> RDSHDPOS
ADJ-Y-DF	Adj img pstn in DADF mode:horz scan
Lv.1 Details	To adjust the image reading start position in horizontal scanning direction at DADF reading. When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label. As the value is incremented by 1, the reading position moves to the rear side by 0.1 mm.
Use case	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
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	0.1 mm
Appropriate target value	0
Default value	0

COPIER>ADJUST>ADJ-XY	
STRD-POS	Adj read pstn in DADF mode
Lv.1 Details	To adjust the reading position at DADF reading. When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label.
Use case	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
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	-100 to 100
Unit	0.1 mm
Default value	0
Related service mode	COPIER> FUNCTION> INSTALL> STRD-POS
ADJ-X-MG	Image ratio in book mod: vert scan
Lv.1 Details	To make a fine adjustment of image magnification in vertical scanning direction at copyboard reading. When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label. As the value is incremented by 1, the image magnification changes by 0.1%. +: Enlarge -: Reduce
Use case	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
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	-5 to 5
Unit	0.1 %
Appropriate target value	0
Default value	0

T-8-19

■ CCD

COPIER>ADJUST>CCD	
W-PLT-X	White level data(X) entry of white plate
Lv.1 Details	When clearing the RAM data of the Reader Unit, enter the value of P-PRINT. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
Use case	<ul style="list-style-type: none"> When replacing the Copyboard Glass/Scanner Unit When clearing the RAM data of 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.
Caution	Output the service mode setting values by P-PRINT beforehand.
Display/adj/set range	1 to 9999
Default value	8271
Related service mode	COPIER> ADJUST> CCD> W-PLT-Y, W-PLT-Z COPIER> FUNCTION> MISC-P> P-PRINT
W-PLT-Y	White level data(Y) entry of white plate
Lv.1 Details	When clearing the RAM data of the Reader Unit, enter the value of P-PRINT. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
Use case	<ul style="list-style-type: none"> When replacing the Copyboard Glass/Scanner Unit When clearing the RAM data of 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.
Caution	Output the service mode setting values by P-PRINT beforehand.
Display/adj/set range	1 to 9999
Default value	8735
Related service mode	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Z COPIER> FUNCTION> MISC-P> P-PRINT
W-PLT-Z	White level data(Z) entry of white plate
Lv.1 Details	When clearing the RAM data of the Reader Unit, enter the value of P-PRINT. When replacing the Copyboard Glass, enter the value of barcode label which is affixed on the glass.
Use case	<ul style="list-style-type: none"> When replacing the Copyboard Glass/Scanner Unit When clearing the RAM data of 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.
Caution	Output the service mode setting values by P-PRINT beforehand.
Display/adj/set range	1 to 9999
Default value	9418
Related service mode	COPIER> ADJUST> CCD> W-PLT-X, W-PLT-Z COPIER> FUNCTION> MISC-P> P-PRINT

COPIER>ADJUST>CCD	
100-RG	RG clr displace correct: 100% book mode
Lv.1	Details
	To correct the color displacement between R and G lines in vertical scanning direction due to the Scanner Unit which occurs at 100% copyboard reading. When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label.
	Use case
	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
	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
	0.001 line
	Default value
	0
100-GB	GB clr displace correct: 100% book mode
Lv.1	Details
	To correct the color displacement between G and B lines in vertical scanning direction due to the Scanner Unit which occurs at 100% copyboard reading. When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label.
	Use case
	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
	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
	0.001 line
	Default value
	0
DFTAR-R	Entry of shading target value (R)
Lv.1	Details
	When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of P-PRINT. When replacing the Copyboard Glass/Scanner Unit, execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2.
	Use case
	<ul style="list-style-type: none"> When replacing the Copyboard Glass/Scanner Unit When clearing the RAM data of 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.
	Caution
	Output the service mode setting values by P-PRINT beforehand.
	Display/adj/set range
	1 to 2047
	Default value
	1156
	Related service mode
	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 COPIER> FUNCTION> MISC-P> P-PRINT

COPIER>ADJUST>CCD	
DFTAR-G	Entry of shading target value (G)
Lv.1	Details
	When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of P-PRINT. When replacing the Copyboard Glass/Scanner Unit, execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2.
	Use case
	<ul style="list-style-type: none"> When replacing the Copyboard Glass/Scanner Unit When clearing the RAM data of 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.
	Caution
	Output the service mode setting values by P-PRINT beforehand.
	Display/adj/set range
	1 to 2047
	Default value
	1136
	Related service mode
	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 COPIER> FUNCTION> MISC-P> P-PRINT
DFTAR-B	Entry of shading target value (B)
Lv.1	Details
	When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of P-PRINT. When replacing the Copyboard Glass/Scanner Unit, execute COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2.
	Use case
	<ul style="list-style-type: none"> When replacing the Copyboard Glass/Scanner Unit When clearing the RAM data of 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.
	Caution
	Output the service mode setting values by P-PRINT beforehand.
	Display/adj/set range
	1 to 2047
	Default value
	1126
	Related service mode
	COPIER> FUNCTION> CCD> DF-WLVL1, DF-WLVL2 COPIER> FUNCTION> MISC-P> P-PRINT

T-8-20

IMG-REG

COPIER>ADJUST>IMG-REG		
REG-H-Y		Ruf adj Y-clr wrt 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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1 pixel
	Default value	0
REG-H-C		Ruf adj C-clr wrt 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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1 pixel
	Default value	0
REG-H-K		Ruf adj Bk-clr wrt 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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1 pixel
	Default value	0
REG-HS-Y		Fine adj Y-clr wrt 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 or less.
	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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1/16 pixel
	Default value	0
REG-HS-C		Fine adj C-clr wrt start pstn:horz scan

COPIER>ADJUST>IMG-REG		
Lv.1	Details	To adjust the write start position of C-color image in the horizontal scanning direction in increments of 1 pixel or less.
	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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1/16 pixel
	Default value	0
REG-HS-K		Fine adj Bk-clr wrt 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 less than 1 pixel.
	Use case	When Bk-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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1/16 pixel
	Default value	0
REG-V-Y		Ruf adj Y-clr wrt 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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1 line
	Default value	0
REG-V-C		Ruf adj C-clr wrt 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	It is recommended to use this item from situation mode.
	Display/adj/set range	-128 to 127
	Unit	1 line
	Default value	0

COPIER>ADJUST>IMG-REG	
REG-V-K	Ruf adj Bk-clr wrt 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
	It is recommended to use this item from situation mode.
	Display/adj/set range
	-128 to 127
	Unit
	1 line
	Default value
	0
REG-H-M	Ruf adj M-clr wrt 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
	It is recommended to use this item from situation mode.
	Display/adj/set range
	-128 to 127
	Unit
	1 pixel
	Default value
	0
REG-V-M	Ruf adj M-clr wrt 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
	It is recommended to use this item from situation mode.
	Display/adj/set range
	-128 to 127
	Unit
	1 line
	Default value
	0
REG-HS-M	Fine adj M-clr wrt 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 less 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
	It is recommended to use this item from situation mode.
	Display/adj/set range
	-128 to 127
	Unit
	1/16 pixel
	Default value
	0

COPIER>ADJUST>IMG-REG	
MAG-H	Adj of stdrd magnifictn ratio: horz scan
Lv.1	Details
	To adjust the standard magnification ratio in the horizontal scanning direction by increasing/decreasing the number of pixels. As the value is changed by 1, the magnification ratio is changed by 0.1%. The adjustment result is reflected to all colors. All correction values registered in the media list are proportionally changed.
	Use case
	When adjusting the standard magnification ratio due to parts replacement or environmental change, etc.
	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
	0.1 %
	Default value
	0
MAG-V	Adj of stdrd magnifictn ratio: vert scan
Lv.1	Details
	To adjust the standard magnification ratio in the vertical scanning direction by changing the Polygon Motor speed. As the value is changed by 1, the magnification ratio is changed by 0.1%.
	Use case
	When adjusting the standard magnification ratio due to parts replacement or environmental change, etc.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Execute auto color displacement correction.
	Display/adj/set range
	-10 to 10
	Unit
	0.1 %
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch
DRM-SPD1	Adj of Y/M/C-color Photo-s Drum speed
Lv.1	Details
	To adjust the rotation speed of the Y/M/C-color Photosensitive Drum at image formation. Enter the setting value according to the identification mark of the ITB Unit.
	Use case
	• When replacing the ITB Unit • When clearing RAM data
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-5 to 5 -5: -0.25%, -4: -0.20%, -3: -0.15%, -2: -0.10%, -1: -0.05%, 0: 0.00%, +1: +0.05%, +2: +0.10%, +3: +0.15%, +4: +0.20%, +5: +0.25%
	Unit
	0.05 %
	Appropriate target value
	-2 - 2

COPIER>ADJUST>IMG-REG	
LS-H-YL	Adj Y-C copy ratio correction offset 1
Lv.1	<p>Details</p> <p>To adjust the offset of copy ratio correction between Y-color and C-color. Enter the value of a C-Y color set having the smallest degree of color displacement among the left image group of C-Y color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-H-YC/YR/ML/MC/MR/KL/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YC/YR/ML/MC/MR/KL/KC/KR</p>
LS-H-YC	Adj Y-C copy ratio correction offset 2
Lv.1	<p>Details</p> <p>To adjust the offset of copy ratio correction between Y-color and C-color. Enter the value of a C-Y color set having the smallest degree of color displacement among the left image group of C-Y color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-H-YL/YR/ML/MC/MR/KL/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YR/ML/MC/MR/KL/KC/KR</p>

COPIER>ADJUST>IMG-REG	
LS-H-YR	Adj Y-C copy ratio correction offset 3
Lv.1	<p>Details</p> <p>To adjust the offset of copy ratio correction between Y-color and C-color. Enter the value of a C-Y color set having the smallest degree of color displacement among the left image group of C-Y color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-H-YL/YC/ML/MC/MR/KL/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YC/ML/MC/MR/KL/KC/KR</p>
LS-H-ML	Adj M-C copy ratio correction offset 1
Lv.1	<p>Details</p> <p>To adjust the offset of copy ratio correction between M-color and C-color. Enter the value of a C-M color set having the smallest degree of color displacement among the left image group of C-M color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-H-YL/YC/YR/ML/MC/MR/KL/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YC/YR/ML/MC/MR/KL/KC/KR</p>

COPIER>ADJUST>IMG-REG	
LS-H-MC	Adj M-C copy ratio correction offset 2
Lv.1	Details
	To adjust the offset of copy ratio correction between M-color and C-color. Enter the value of a C-M color set having the smallest degree of color displacement among the left image group of C-M color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-H-YL/YC/YR/ML/MR/KL/KC/KR.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YC/YR/ML/MR/KL/KC/KR
LS-H-MR	Adj M-C copy ratio correction offset 3
Lv.1	Details
	To adjust the offset of copy ratio correction between M-color and C-color. Enter the value of a C-M color set having the smallest degree of color displacement among the left image group of C-M color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-H-YL/YC/YR/ML/MC/KL/KC/KR.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YC/YR/ML/MC/KL/KC/KR

COPIER>ADJUST>IMG-REG	
LS-H-KL	Adj Bk-C copy ratio correction offset 1
Lv.1	Details
	To adjust the offset of copy ratio correction between Bk-color and C-color. Enter the value of a C-Bk color set having the smallest degree of color displacement among the left image group of C-Bk color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-H-YL/YC/YR/ML/MC/MR/KC/KR.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YC/YR/ML/MC/MR/KC/KR
LS-H-KC	Adj Bk-C copy ratio correction offset 2
Lv.1	Details
	To adjust the offset of copy ratio correction between Bk-color and C-color. Enter the value of a C-Bk color set having the smallest degree of color displacement among the left image group of C-Bk color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-H-YL/YC/YR/ML/MC/MR/KL/KR.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YC/YR/ML/MC/MR/KL/KR

COPIER>ADJUST>IMG-REG	
LS-H-KR	Adj Bk-C copy ratio correction offset 3
Lv.1	Details
	To adjust the offset of copy ratio correction between Bk-color and C-color. Enter the value of a C-Bk color set having the smallest degree of color displacement among the left image group of C-Bk color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-H. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-H-YL/YC/YR/ML/MC/MR/KL/KC.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-H COPIER> ADJUST> IMG-REG> LS-H-YL/YC/YR/ML/MC/MR/KL/KC
LS-V-YL	Adj Y-C distortion correction offset 1
Lv.1	Details
	To adjust the offset of distortion correction between Y-color and C-color. Enter the value of a C-Y color set having the smallest degree of color displacement among the left image group of C-Y color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-V-YC/YR/ML/MC/MR/KL/KC/KR.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YC/YR/ML/MC/MR/KL/KC/KR

COPIER>ADJUST>IMG-REG	
LS-V-YC	Adj Y-C distortion correction offset 2
Lv.1	Details
	To adjust the offset of distortion correction between Y-color and C-color. Enter the value of a C-Y color set having the smallest degree of color displacement among the left image group of C-Y color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-V-YL/YR/ML/MC/MR/KL/KC/KR.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YR/ML/MC/MR/KL/KC/KR
LS-V-YR	Adj Y-C distortion correction offset 3
Lv.1	Details
	To adjust the offset of distortion correction between Y-color and C-color. Enter the value of a C-Y color set having the smallest degree of color displacement among the left image group of C-Y color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	When making the adjustment, be sure to also adjust the settings of LS-V-YL/YC/ML/MC/MR/KL/KC/KR.
	Display/adj/set range
	-4 to 4
	Default value
	0
	Related service mode
	COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YC/ML/MC/MR/KL/KC/KR

COPIER>ADJUST>IMG-REG	
LS-V-ML	Adj M-C distortion correction offset 1
Lv.1	<p>Details</p> <p>To adjust the offset of distortion correction between M-color and C-color. Enter the value of a C-M color set having the smallest degree of color displacement among the left image group of C-M color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-V-YL/YC/YR/MC/MR/KL/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YC/YR/MC/MR/KL/KC/KR</p>
LS-V-MC	Adj M-C distortion correction offset 2
Lv.1	<p>Details</p> <p>To adjust the offset of distortion correction between M-color and C-color. Enter the value of a C-M color set having the smallest degree of color displacement among the left image group of C-M color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-V-YL/YC/YR/ML/MR/KL/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YC/YR/ML/MR/KL/KC/KR</p>

COPIER>ADJUST>IMG-REG	
LS-V-MR	Adj M-C distortion correction offset 3
Lv.1	<p>Details</p> <p>To adjust the offset of distortion correction between M-color and C-color. Enter the value of a C-M color set having the smallest degree of color displacement among the left image group of C-M color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-V-YL/YC/YR/ML/MC/KL/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YC/YR/ML/MC/KL/KC/KR</p>
LS-V-KL	Adj Bk-C distortion correction offset 1
Lv.1	<p>Details</p> <p>To adjust the offset of distortion correction between Bk-color and C-color. Enter the value of a C-Bk color set having the smallest degree of color displacement among the left image group of C-Bk color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-V-YL/YC/YR/ML/MC/MR/KC/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YC/YR/ML/MC/MR/KC/KR</p>

COPIER>ADJUST>IMG-REG	
LS-V-KC	Adj Bk-C distortion correction offset 2
Lv.1	<p>Details</p> <p>To adjust the offset of distortion correction between Bk-color and C-color. Enter the value of a C-Bk color set having the smallest degree of color displacement among the left image group of C-Bk color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-V-YL/YC/YR/ML/MC/MR/KL/KR.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YC/YR/ML/MC/MR/KL/KR</p>
LS-V-KR	Adj Bk-C distortion correction offset 3
Lv.1	<p>Details</p> <p>To adjust the offset of distortion correction between Bk-color and C-color. Enter the value of a C-Bk color set having the smallest degree of color displacement among the left image group of C-Bk color printed on the corresponding PG. The setting is reflected at the next printing. For details, refer to the situation mode or "Adjustment" in Chapter 5 of the Service Manual.</p> <p>Use case</p> <p>When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)</p> <p>Adj/set/operate method</p> <p>1) Execute LS-INT-V. 2) Output the corresponding PG. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>When making the adjustment, be sure to also adjust the settings of LS-V-YL/YC/YR/ML/MC/MR/KL/KC.</p> <p>Display/adj/set range</p> <p>-4 to 4</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> TEST> PG> TYPE COPIER> FUNCTION> CLEAR> LS-INT-V COPIER> ADJUST> IMG-REG> LS-V-YL/YC/YR/ML/MC/MR/KL/KC</p>

COPIER>ADJUST>IMG-REG	
SLOP-Y	Adjustment of image squareness
Lv.2	<p>Details</p> <p>To adjust skew of image (squareness) in the vertical scanning direction by adjusting skew of Y-color laser in the vertical scanning direction digitally. By performing auto color displacement correction after this adjustment, adjustment is made for other colors in accordance with adjustment for Y-color.</p> <p>Use case</p> <p>When corners of an image are not square</p> <p>Adj/set/operate method</p> <p>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 color displacement correction.</p> <p>Caution</p> <p>Be sure to perform auto color displacement correction after adjustment. If the setting value is changed dramatically, be sure to perform auto color displacement correction twice.</p> <p>Display/adj/set range</p> <p>-200 to 200</p> <p>Unit</p> <p>1 um</p> <p>Appropriate target value</p> <p>0</p> <p>Default value</p> <p>0</p> <p>Related user mode</p> <p>Adjustment/Maintenance> Adjust Image Quality> Auto Correct Color Mismatch</p>

T-8-21

DENS

COPIER>ADJUST>DENS	
SGNL-Y	ATR patch Y-clr toner dens tgt VL entry
Lv.1	<p>Details</p> <p>To enter the Y-color toner density target value of ATR patch to be formed on the ITB. The Y-color toner density is detected by the Registration Patch Sensor Unit (Rear). The value is determined whenever the Developing Unit (Y) is initialized.</p> <p>Use case</p> <p>When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When INISET-Y is executed, the value is rewritten.</p> <p>Display/adj/set range</p> <p>0 to 1023</p> <p>Default value</p> <p>350 (It may vary by initialization of the Developing Unit when clearing RAM data.)</p> <p>Related service mode</p> <p>COPIER> FUNCTION> INSTALL> INISET-Y</p>
SGNL-M	ATR patch M-clr toner dens tgt VL entry
Lv.1	<p>Details</p> <p>To enter the M-color toner density target value of ATR patch to be formed on the ITB. The M-color toner density is detected by the Registration Patch Sensor Unit (Rear). The value is determined whenever the Developing Unit (M) is initialized.</p> <p>Use case</p> <p>When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When INISET-M is executed, the value is rewritten.</p> <p>Display/adj/set range</p> <p>0 to 1023</p> <p>Default value</p> <p>350 (It may vary by initialization of the Developing Unit when clearing RAM data.)</p> <p>Related service mode</p> <p>COPIER> FUNCTION> INSTALL> INISET-M</p>
SGNL-C	ATR patch C-clr toner dens tgt VL entry
Lv.1	<p>Details</p> <p>To enter the C-color toner density target value of ATR patch to be formed on the ITB. The C-color toner density is detected by the Registration Patch Sensor Unit (Front). The value is determined whenever the Developing Unit (C) is initialized.</p> <p>Use case</p> <p>When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When INISET-C is executed, the value is rewritten.</p> <p>Display/adj/set range</p> <p>0 to 1023</p> <p>Default value</p> <p>350 (It may vary by initialization of the Developing Unit when clearing RAM data.)</p> <p>Related service mode</p> <p>COPIER> FUNCTION> INSTALL> INISET-C</p>

COPIER>ADJUST>DENS	
REF-Y	Y-color toner density target VL entry
Lv.1	<p>Details</p> <p>To enter the target value of the ATR Sensor (Y) of ATR control after replacement of the DC Controller PCB/clearing of RAM data.</p> <p>Use case</p> <p>When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 255</p> <p>Default value</p> <p>120 (It may vary by initialization of the Developing Unit when clearing RAM data.)</p> <p>Related service mode</p> <p>COPIER> FUNCTION> INSTALL> INISET-Y/4</p>
REF-M	M-color toner density target VL entry
Lv.1	<p>Details</p> <p>To enter the target value of the ATR Sensor (M) of ATR control after replacement of the DC Controller PCB/clearing of RAM data.</p> <p>Use case</p> <p>When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 255</p> <p>Default value</p> <p>120 (It may vary by initialization of the Developing Unit when clearing RAM data.)</p> <p>Related service mode</p> <p>COPIER> FUNCTION> INSTALL> INISET-M/4</p>
REF-C	C-color toner density target VL entry
Lv.1	<p>Details</p> <p>To enter the target value of the ATR Sensor (C) of ATR control after replacement of the DC Controller PCB/clearing of RAM data.</p> <p>Use case</p> <p>When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 255</p> <p>Default value</p> <p>120 (It may vary by initialization of the Developing Unit when clearing RAM data.)</p> <p>Related service mode</p> <p>COPIER> FUNCTION> INSTALL> INISET-C/4</p>

COPIER>ADJUST>DENS	
SGNL-K	ATR patch Bk-clr toner dens tgt VL entry
Lv.1	Details
	To enter the Bk-color toner density target value of ATR patch to be formed on the ITB. The Bk-color toner density is detected by the Registration Patch Sensor Unit (Front). The value is determined whenever the Developing Unit (Bk) is initialized.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When INISET-K is executed, the value is rewritten.
	Display/adj/set range
	0 to 1023
	Default value
	350 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISET-K
HLMT-PTY	Adj Y-clr toner dens tgt VL upper limit
Lv.2	Details
	To adjust the upper limit of the toner density target value of the Toner Density Sensor (Y). As the value is incremented by 1, the upper limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of LLMT-PTY.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> LLMT-PTY

COPIER>ADJUST>DENS	
HLMT-PTM	Adj M-clr toner dens tgt VL upper limit
Lv.2	Details
	To adjust the upper limit of the toner density target value of the Toner Density Sensor (M). As the value is incremented by 1, the upper limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of LLMT-PTM.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> LLMT-PTM
HLMT-PTC	Adj C-clr toner dens tgt VL upper limit
Lv.2	Details
	To adjust the upper limit of the toner density target value of the Toner Density Sensor (C). As the value is incremented by 1, the upper limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of LLMT-PTC.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> LLMT-PTC

COPIER>ADJUST>DENS	
LLMT-PTY	Adj Y-clr toner dens tgt VL lower limit
Lv.2	Details
	To adjust the lower limit of the toner density target value of the Toner Density Sensor (Y). As the value is incremented by 1, the lower limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of HLMT-PTY.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> HLMT-PTY
LLMT-PTM	Adj M-clr toner dens tgt VL lower limit
Lv.2	Details
	To adjust the lower limit of the toner density target value of the Toner Density Sensor (M). As the value is incremented by 1, the lower limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of HLMT-PTM.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> HLMT-PTM

COPIER>ADJUST>DENS	
LLMT-PTC	Adj C-clr toner dens tgt VL lower limit
Lv.2	Details
	To adjust the lower limit of the toner density target value of the Toner Density Sensor (C). As the value is incremented by 1, the lower limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of HLMT-PTC.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> HLMT-PTC
T-SPLY-Y	For R&D
T-SPLY-M	For R&D
T-SPLY-C	For R&D
T-SPLY-K	For R&D
DMAX-Y	Adj D-max ctrl Y-color dens target VL
Lv.2	Details
	An image failure may occur because the density target value of D-max control becomes out of the setting table due to environment change. Adjust the offset of the Y-color density target value of D-max control.
	Use case
	When an image failure occurs due to environment change
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range
	-128 to 128
	Default value
	0
DMAX-M	Adj D-max ctrl M-color dens target VL
Lv.2	Details
	An image failure may occur because the density target value of D-max control becomes out of the setting table due to environment change. Adjust the offset of the M-color density target value of D-max control.
	Use case
	When an image failure occurs due to environment change
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range
	-128 to 128
	Default value
	0

COPIER>ADJUST>DENS		
DMAX-C		Adj D-max ctrl C-color dens target VL
Lv.2	Details	An image failure may occur because the density target value of D-max control becomes out of the setting table due to environment change. Adjust the offset of the C-color density target value of D-max control.
	Use case	When an image failure occurs due to environment change
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-128 to 128
	Default value	0
P-TG-Y		Adj of Y-color ATR patch dens target VL
Lv.2	Details	To adjust the offset of the Y-color ATR patch density target value. When the target value determined upon initialization of the Developing Unit is changed, the TD ratio is also changed. Decrease the value when density increase occurs, and increase the value when fogging occurs.
	Use case	When an image failure (density failure, fogging, carrier adherence, etc.) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 3) Execute auto gradation adjustment (full adjustment).
	Caution	Execute the auto gradation adjustment first to increase the density. If the target value is changed, fogging may get worse.
	Display/adj/set range	-10 to 10
	Unit	10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>DENS		
P-TG-M		Adj of M-color ATR patch dens target VL
Lv.2	Details	To adjust the offset of the M-color ATR patch density target value. When the target value determined upon initialization of the Developing Unit is changed, the TD ratio is also changed. Decrease the value when density increase occurs, and increase the value when fogging occurs.
	Use case	When an image failure (density failure, fogging, carrier adherence, etc.) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 3) Execute auto gradation adjustment (full adjustment).
	Caution	Execute the auto gradation adjustment first to increase the density. If the target value is changed, fogging may get worse.
	Display/adj/set range	-10 to 10
	Unit	10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
P-TG-C		Adj of C-color ATR patch dens target VL
Lv.2	Details	To adjust the offset of the C-color ATR patch density target value. When the target value determined upon initialization of the Developing Unit is changed, the TD ratio is also changed. Decrease the value when density increase occurs, and increase the value when fogging occurs.
	Use case	When an image failure (density failure, fogging, carrier adherence, etc.) occurs
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 3) Execute auto gradation adjustment (full adjustment).
	Caution	Execute the auto gradation adjustment first to increase the density. If the target value is changed, fogging may get worse.
	Display/adj/set range	-10 to 10
	Unit	10
	Default value	0
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>DENS	
P-TG-K	Adj of Bk-color ATR patch dens target VL
Lv.2	Details
	To adjust the offset of the Bk-color ATR patch density target value. When the target value determined upon initialization of the Developing Unit is changed, the TD ratio is also changed. Decrease the value when density increase occurs, and increase the value when fogging occurs.
	Use case
	When an image failure (density failure, fogging, carrier adherence, etc.) occurs
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Make 50 prints of approx. 10% image ratio (e.g. COPIER> TEST> PG> TYPE: 16) 4 times. 3) Execute auto gradation adjustment (full adjustment).
	Caution
	Execute the auto gradation adjustment first to increase the density. If the target value is changed, fogging may get worse.
	Display/adj/set range
	-10 to 10
	Unit
	10
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
DMAX-K	Adj D-max ctrl Bk-color dens target VL
Lv.2	Details
	An image failure may occur because the density target value of D-max control becomes out of the setting table due to environment change. Adjust the offset of the Bk-color density target value of D-max control.
	Use case
	When an image failure occurs due to environment change
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-128 to 128
	Default value
	0
HLMT-PTK	Adj Bk-clr toner dens tgt VL upper limit
Lv.2	Details
	To adjust the upper limit of the toner density target value of the Toner Density Sensor (Bk). As the value is incremented by 1, the upper limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of LLMT-PTK.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> LLMT-PTK

COPIER>ADJUST>DENS	
LLMT-PTK	Adj Bk-clr toner dens tgt VL lower limit
Lv.2	Details
	To adjust the lower limit of the toner density target value of the Toner Density Sensor (Bk). As the value is incremented by 1, the lower limit is increased by 0.5%. Increase the value when a density failure/coarseness occurs, and decrease the value when fogging/scattering occurs. In principle, the value should be the same as that of HLMT-PTK.
	Use case
	When an image failure (density failure, coarseness, fogging, carrier adherence, scattering, etc.) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	Take necessary action in accordance with the instructions from the Quality Support Division.
	Display/adj/set range
	-4 to 4
	Unit
	0.5 %
	Default value
	0
	Related service mode
	COPIER> ADJUST> DENS> HLMT-PTK
REF-K	Bk-color toner density target VL entry
Lv.2	Details
	To enter the target value of the ATR Sensor (Bk) of ATR control after replacement of the DC Controller PCB/clearing of RAM data.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 255
	Default value
	120 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISET-K/4
CONT-Y	ATR Sensor (Y) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of the ATR Sensor (Y). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	The value changes if the Developing Unit is initialized (INISET-Y/4).
	Display/adj/set range
	0 to 255
	Default value
	120 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISET-Y/4

COPIER>ADJUST>DENS	
CONT-M	ATR Sensor (M) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of the ATR Sensor (M). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	The value changes if the Developing Unit is initialized (INISSET-M/4).
	Display/adj/set range
	0 to 255
	Default value
	120 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-M/4
CONT-C	ATR Sensor (C) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of the ATR Sensor (C). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	The value changes if the Developing Unit is initialized (INISSET-C/4).
	Display/adj/set range
	0 to 255
	Default value
	120 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-C/4
CONT-K	ATR Sensor (Bk) control voltage entry
Lv.1	Details
	To enter the density detection control voltage of the ATR Sensor (Bk). When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after clearing of the data
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	The value changes if the Developing Unit is initialized (INISSET-K/4).
	Display/adj/set range
	0 to 255
	Default value
	120 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-K/4

COPIER>ADJUST>DENS	
D-Y-LVL	Entry of ATR patch Y-clr correction VL
Lv.1	Details
	To enter the Y-color correction value of ATR patch. The value is determined whenever the Developing Unit (Y) is initialized. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When INISSET-Y is executed, the value is rewritten.
	Display/adj/set range
	-50 to 50
	Default value
	0 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-Y
D-M-LVL	Entry of ATR patch M-clr correction VL
Lv.1	Details
	To enter the M-color correction value of ATR patch. The value is determined whenever the Developing Unit (M) is initialized. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When INISSET-M is executed, the value is rewritten.
	Display/adj/set range
	-50 to 50
	Default value
	0 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-M
D-C-LVL	Entry of ATR patch C-clr correction VL
Lv.1	Details
	To enter the C-color correction value of ATR patch. The value is determined whenever the Developing Unit (C) is initialized. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When INISSET-C is executed, the value is rewritten.
	Display/adj/set range
	-50 to 50
	Default value
	0 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISSET-C

COPIER>ADJUST>DENS	
D-K-LVL	Entry of ATR patch Bk-clr correction VL
Lv.1	Details
	To enter the Bk-color correction value of ATR patch. The value is determined whenever the Developing Unit (Bk) is initialized. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
	Use case
	When checking the value before replacement of the DC Controller PCB/clearing of RAM data and then re-entering the value after the processing is done
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When INISET-K is executed, the value is rewritten.
	Display/adj/set range
	-50 to 50
	Default value
	0 (It may vary by initialization of the Developing Unit when clearing RAM data.)
	Related service mode
	COPIER> FUNCTION> INSTALL> INISET-K
PALPHA-F	Adj Rgst Patch Sensr (Front) alpha value
Lv.1	Details
	To adjust the correction coefficient alpha value of the Registration Patch Sensor Unit (Front). The value multiplied by 10000 is displayed on the screen.
	Use case
	<ul style="list-style-type: none"> When the Patch Sensor fails to read the density When replacing the Patch Sensor When replacing the DC Controller PCB/clearing RAM data (When backup/restoration cannot be performed)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When the Patch Sensor is replaced, execute auto gradation adjustment (full adjustment/quick adjustment).
	Display/adj/set range
	1 to 3000
	Appropriate target value
	1200
PALPHA-R	Adj Rgst Patch Sensr (Rear) alpha value
Lv.1	Details
	To adjust the correction coefficient alpha value of the Registration Patch Sensor Unit (Rear). The value multiplied by 10000 is displayed on the screen.
	Use case
	<ul style="list-style-type: none"> When the Patch Sensor fails to read the density When replacing the Patch Sensor When replacing the DC Controller PCB/clearing RAM data (When backup/restoration cannot be performed)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When the Patch Sensor is replaced, execute auto gradation adjustment (full adjustment/quick adjustment).
	Display/adj/set range
	1 to 3000
	Appropriate target value
	1200

T-8-22

■ 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
	<ul style="list-style-type: none"> When reducing the margin upon user's request When increasing 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
	Unit
	1 pixel
	Default value
	94
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
	<ul style="list-style-type: none"> When reducing the margin upon user's request When increasing 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
	Unit
	1 pixel
	Default value
	59
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
	<ul style="list-style-type: none"> When reducing the margin upon user's request When increasing 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
	Unit
	1 pixel
	Default value
	59

COPIER>ADJUST>BLANK	
BLANK-B	Adj end edge margin: excpt thin, rcycl 2
Lv.1	Details
	To adjust the trailing edge margin of paper other than thin paper/ recycled paper 2. 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
	<ul style="list-style-type: none"> When reducing the margin upon user's request When increasing 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
	Unit
	1 pixel
	Appropriate target value
	60
	Default value
	59
	Related service mode
	COPIER> ADJUST> BLANK> BLANK-B2
	Supplement/memo
	Adjust the trailing edge margin of thin paper/recycled paper 2 with BLANK-B2.
BLANK-B2	Adj of trailing edge margin:thin/rcycl 2
Lv.2	Details
	To adjust the margin on the trailing edge of thin paper/recycled paper 2. As the value is incremented by 1, the margin is increased toward the center of the paper by 1 pixel (0.0423 mm). Increase the value when blur at leading edge/wrinkles occur with thin paper/recycled paper 2. A value to which the setting value of BLANK-B is added is applied as the margin.
	Use case
	<ul style="list-style-type: none"> When increasing the margin of thin paper/recycled paper 2 upon user's request When blur at leading edge/wrinkles occur with thin paper/recycled paper 2 When increasing the margin for transfer separation/fixing separation
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Be sure to set a value where the setting value of BLANK-B is deducted from the target value.
	Display/adj/set range
	0 to 1000
	Unit
	1 pixel
	Default value
	JP:0, USA:0, EUR:35, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related service mode
	COPIER> ADJUST> BLANK> BLANK-B
	Supplement/memo
	Blur at leading edge: A phenomenon that the image leading edge on the 2nd side is blurred at 2-sided print. It is likely to occur on image with high density. Contact of curled portion of paper leading edge with the Fixing Film causes the phenomenon. When the degree of curl is increased, it is accompanied with wrinkles. Adjust the trailing edge margin of paper other than thin paper/ recycled paper 2 with BLANK-B.

T-8-23

■ V-CONT

COPIER>ADJUST>V-CONT	
VCONT-Y	Adj of Y-color contrast potential
Lv.2	Details
	To adjust the contrast potential for Y-color. As the value is changed by 1, the contrast potential is changed by 5 V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Roller or a transfer failure occurs. In principle, adjustment of the density should be made by auto gradation adjustment (full adjustment). However, if the error still occurs, use this item as a temporary measure.
	Use case
	When density failure occurs even when auto gradation adjustment (full adjustment) is executed
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	<ul style="list-style-type: none"> Do not use this when the machine is operating correctly. The density is returned to the default when auto gradation adjustment (full adjustment) is executed. The density is returned to the default when image density adjustment is executed during printing.
	Display/adj/set range
	-20 to 20
	Unit
	5 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-M/C/K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>V-CONT	
VCONT-M	Adj of M-color contrast potential
Lv.2	Details
	To adjust the contrast potential for M-color. As the value is changed by 1, the contrast potential is changed by 5 V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Roller or a transfer failure occurs. In principle, adjustment of the density should be made by auto gradation adjustment (full adjustment). However, if the error still occurs, use this item as a temporary measure.
	Use case
	When density failure occurs even when auto gradation adjustment (full adjustment) is executed
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	<ul style="list-style-type: none"> Do not use this when the machine is operating correctly. The density is returned to the default when auto gradation adjustment (full adjustment) is executed. The density is returned to the default when image density adjustment is executed during printing.
	Display/adj/set range
	-20 to 20
	Unit
	5 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y/C/K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>V-CONT	
VCONT-C	Adj of C-color contrast potential
Lv.2	Details
	To adjust the contrast potential for C-color. As the value is changed by 1, the contrast potential is changed by 5 V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Roller or a transfer failure occurs. In principle, adjustment of the density should be made by auto gradation adjustment (full adjustment). However, if the error still occurs, use this item as a temporary measure.
	Use case
	When density failure occurs even when auto gradation adjustment (full adjustment) is executed
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	<ul style="list-style-type: none"> Do not use this when the machine is operating correctly. The density is returned to the default when auto gradation adjustment (full adjustment) is executed. The density is returned to the default when image density adjustment is executed during printing.
	Display/adj/set range
	-20 to 20
	Unit
	5 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VCONT-Y/M/K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>V-CONT		
VCONT-K	Adj of Bk-color contrast potential	
Lv.2	Details	To adjust the contrast potential for Bk-color. As the value is changed by 1, the contrast potential is changed by 5 V. +: Image becomes darker. -: Image becomes lighter. When the value is too large, paper winds around the Fixing Roller or a transfer failure occurs. In principle, adjustment of the density should be made by auto gradation adjustment (full adjustment). However, if the error still occurs, use this item as a temporary measure.
	Use case	When density failure occurs even when auto gradation adjustment (full adjustment) is executed
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	<ul style="list-style-type: none"> Do not use this when the machine is operating correctly. The density is returned to the default when auto gradation adjustment (full adjustment) is executed. The density is returned to the default when image density adjustment is executed during printing.
	Display/adj/set range	-20 to 20
	Unit	5 V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VCONT-Y/M/C
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
VBACK-Y	Adj Y-color fog removal potential:1/1SPD	
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for Y-color at 1/1 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/1 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	10 V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-M/C/K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>V-CONT		
VBACK-M	Adj M-color fog removal potential:1/1SPD	
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for M-color at 1/1 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/1 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	10 V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-Y/C/K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
VBACK-C	Adj C-color fog removal potential:1/1SPD	
Lv.2	Details	To adjust the offset of the fogging removal potential Vback for C-color at 1/1 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/1 speed
	Adj/set/operate method	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution	Do not use this when the machine is operating correctly.
	Display/adj/set range	-5 to 5
	Unit	10 V
	Default value	0
	Related service mode	COPIER> ADJUST> V-CONT> VBACK-Y/M/K
	Related user mode	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>V-CONT	
VBACK-K	Adj Bk-clr fog removal potential:1/1SPD
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for Bk-color at 1/1 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case
	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/1 speed
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-5 to 5
	Unit
	10 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK-Y/M/C
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
VBACK2-Y	Adj Y-color fog removal potential:1/2SPD
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for Y-color at 1/2 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case
	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/2 speed
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-5 to 5
	Unit
	10 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK2-M/C/K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>V-CONT	
VBACK2-M	Adj M-color fog removal potential:1/2SPD
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for M-color at 1/2 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case
	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/2 speed
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-5 to 5
	Unit
	10 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK2-Y/C/K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust
VBACK2-C	Adj C-color fog removal potential:1/2SPD
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for C-color at 1/2 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case
	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/2 speed
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-5 to 5
	Unit
	10 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK2-Y/M/K
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

COPIER>ADJUST>V-CONT	
VBACK2-K	Adj Bk-clr fog removal potential:1/2SPD
Lv.2	Details
	To adjust the offset of the fogging removal potential Vback for Bk-color at 1/2 speed. As the value is changed by 1, the fogging removal potential is changed by 10 V. +: Fogging is alleviated, but white/black spots are increased. -: White/black spots are alleviated, but fogging is increased.
	Use case
	When an image failure (fogging, white/black spots due to carrier adherence) occurs at 1/2 speed
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	-5 to 5
	Unit
	10 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> V-CONT> VBACK2-Y/M/C
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Full Adjust

T-8-24

■ 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 Adjust Gradation (Full Adjust). When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
	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-M	M density adj at test print reading
Lv.1	Details
	To adjust the offset of M color test print reading signal at Auto Adjust Gradation (Full Adjust). When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
	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 Adjust Gradation (Full Adjust). When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
	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 Adjust Gradation (Full Adjust). When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label. As the greater value is set, the image after adjustment gets darker.
	Use case
	<ul style="list-style-type: none"> When replacing the Scanner Unit When clearing the RAM data of the Reader Unit
	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-8-25

COLOR

COPIER>ADJUST>COLOR	
ADJ-Y	Adjustment of color balance for Y-color
Lv.1	Details
	To adjust the default value of the color balance for Y-color when the density of Y-color varies between devices. 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 reduce density difference between devices)
	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-M	Adjustment of color balance for M-color
Lv.1	Details
	To adjust the default value of the color balance for M-color when the density of M-color varies between devices. 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 reduce density difference between devices)
	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	Adjustment of color balance for C-color
Lv.1	Details
	To adjust the default value of the color balance for C-color when the density of C-color varies between devices. 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 reduce density difference between devices)
	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-K	Adjustment of color balance for Bk-color
Lv.1	Details
	To adjust the default value of the color balance for Bk-color when the density of Bk-color varies between devices. 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 reduce density difference between devices)
	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	
OFST-Y	Adj Y-clr brit area dens&color balance
Lv.1	Details
	To adjust the bright area density and color balance of Y-color. As the value is larger, the image gets darker. Decrease 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. Decrease the value when removal of the background is not performed correctly and a fogging-like image appears.
	Use case
	<ul style="list-style-type: none"> 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-M	Adj M-clr brit area dens&color balance
Lv.1	Details
	To adjust the bright area density and color balance of M-color. As the value is larger, the image gets darker. Decrease 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. Decrease the value when removal of the background is not performed correctly and a fogging-like image appears.
	Use case
	<ul style="list-style-type: none"> 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 C-clr brit area dens&color balance
Lv.1	Details
	To adjust the bright area density and color balance of C-color. As the value is larger, the image gets darker. Decrease 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. Decrease the value when removal of the background is not performed correctly and a fogging-like image appears.
	Use case
	<ul style="list-style-type: none"> 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-clr brit area dens&color balance
Lv.1	Details
	To adjust the bright area density and color balance of Bk-color. As the value is larger, the image gets darker. Decrease 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. Decrease the value when removal of the background is not performed correctly and a fogging-like image appears.
	Use case
	<ul style="list-style-type: none"> 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	Adj Y-color low dens area color balance
Lv.2	Details
	To adjust the color balance of the low density area of Y-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
LD-OFS-M	Adj M-color low dens area color balance
Lv.2	Details
	To adjust the color balance of the low density area of M-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance

COPIER>ADJUST>COLOR	
LD-OFS-C	Adj C-color low dens area color balance
Lv.2	Details
	To adjust the color balance of the low density area of C-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
LD-OFS-K	Adj Bk-color low dens area color balance
Lv.2	Details
	To adjust the color balance of the low density area of Bk-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
MD-OFS-Y	Adj Y-color mid dens area color balance
Lv.2	Details
	To adjust the color balance of the medium density area of Y-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance

COPIER>ADJUST>COLOR	
MD-OFS-M	Adj M-color mid dens area color balance
Lv.2	Details
	To adjust the color balance of the medium density area of M-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
MD-OFS-C	Adj C-color mid dens area color balance
Lv.2	Details
	To adjust the color balance of the medium density area of C-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
MD-OFS-K	Adj Bk-color mid dens area color balance
Lv.2	Details
	To adjust the color balance of the medium density area of Bk-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance

COPIER>ADJUST>COLOR	
HD-OFS-Y	Adj Y-color hi dens area color balance
Lv.2	Details
	To adjust the color balance of the high density area of Y-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
HD-OFS-M	Adj M-color hi dens area color balance
Lv.2	Details
	To adjust the color balance of the high density area of M-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
HD-OFS-C	Adj C-color hi dens area color balance
Lv.2	Details
	To adjust the color balance of the high density area of C-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance

COPIER>ADJUST>COLOR	
HD-OFS-K	Adj Bk-color hi dens area color balance
Lv.2	Details
	To adjust the color balance of the high density area of Bk-color. As the value is larger, the image gets darker. This setting is linked with Settings/Registration> Adjustment/Maintenance> Adjust Image Quality> Color Balance.
	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.
	Display/adj/set range
	-8 to 8
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Color Balance
PL-OFS-Y	Adj Y-clr low dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the low density area of Y-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PL-OFS-M	Adj M-clr low dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the low density area of M-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PL-OFS-C	Adj C-clr low dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the low density area of C-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0

COPIER>ADJUST>COLOR	
PL-OFS-K	Adj Bk-clr low dens area clr balance:PDL
Lv.2	Details
	To adjust the color balance of the low density area of Bk-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PM-OFS-Y	Adj Y-clr mid dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the medium density area of Y-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PM-OFS-M	Adj M-clr mid dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the medium density area of M-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PM-OFS-C	Adj C-clr mid dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the medium density area of C-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0

COPIER>ADJUST>COLOR	
PM-OFS-K	Adj Bk-clr mid dens area clr balance:PDL
Lv.2	Details
	To adjust the color balance of the medium density area of Bk-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PH-OFS-Y	Adj Y-clr hi dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the high density area of Y-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PH-OFS-M	Adj M-clr hi dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the high density area of M-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0
PH-OFS-C	Adj C-clr hi dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the high density area of C-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0

COPIER>ADJUST>COLOR	
PH-OFS-K	Adj Bk-clr hi dens area clr balance: PDL
Lv.2	Details
	To adjust the color balance of the high density area of Bk-color 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.
	Display/adj/set range
	-8 to 8
	Default value
	0

T-8-26

■ HV-TR

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/feed side that are set in TR-ENV1, TR-PPR1 and TR-DUP1. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL1 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m ²), 2: Plain paper 2 (76 to 90 g/m ²)/ Colored paper (64 to 82 g/m ²), 3: Plain paper 3 (91 to 105 g/m ²), 4: Recycled paper 1 (64 to 75 g/m ²), 5: Recycled paper 2 (76 to 90 g/m ²), 6: Recycled paper 3 (91 to 105 g/m ²), 7: Thin paper (52 to 63 g/m ²), 8: Heavy paper 1 (106 to 128 g/m ²), 9: Heavy paper 2 (129 to 163 g/m ²), 10: Heavy paper 3 (164 to 220 g/m ²), 11: Heavy paper 4 (221 to 256 g/m ²), 12: 1-sided coated paper 1 (106 to 128 g/m ²), 13: 1-sided coated paper 2 (129 to 163 g/m ²), 14: 1-sided coated paper 3 (164 to 220 g/m ²), 15: 2-sided coated paper 1 (106 to 128 g/m ²), 16: 2-sided coated paper 2 (129 to 163 g/m ²), 17: 2-sided coated paper 3 (164 to 220 g/m ²), 18: Tracing paper (64 to 99 g/m ²), 19: Transparency (121 to 220 g/m ²), 20: Envelope (75 to 105 g/m ²), 21: Postcard (164 to 220 g/m ²), 22: Label (118 to 185 g/m ²), 23: Pre-punched paper (64 to 75 g/m ²), 24: Bond paper (83 to 99 g/m ²), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV1, TR-DUP1, TR-VL1, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

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/feed side that are set in TR-ENV2, TR-PPR2 and TR-DUP2. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL2 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV2, TR-DUP2, TR-VL2, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

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/feed side that are set in TR-ENV3, TR-PPR3 and TR-DUP3. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL3 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV3, TR-DUP3, TR-VL3, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

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/feed side that are set in TR-ENV4, TR-PPR4 and TR-DUP4. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL4 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV4, TR-DUP4, TR-VL4, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

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/feed side that are set in TR-ENV5, TR-PPR5 and TR-DUP5. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL5 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV5, TR-DUP5, TR-VL5, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

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/feed side that are set in TR-ENV6, TR-PPR6 and TR-DUP6. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL6 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV6, TR-DUP6, TR-VL6, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

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/feed side that are set in TR-ENV7, TR-PPR7 and TR-DUP7. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL7 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV7, TR-DUP7, TR-VL7, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

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/feed side that are set in TR-ENV8, TR-PPR8 and TR-DUP8. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL8 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m ²), 2: Plain paper 2 (76 to 90 g/m ²)/ Colored paper (64 to 82 g/m ²), 3: Plain paper 3 (91 to 105 g/m ²), 4: Recycled paper 1 (64 to 75 g/m ²), 5: Recycled paper 2 (76 to 90 g/m ²), 6: Recycled paper 3 (91 to 105 g/m ²), 7: Thin paper (52 to 63 g/m ²), 8: Heavy paper 1 (106 to 128 g/m ²), 9: Heavy paper 2 (129 to 163 g/m ²), 10: Heavy paper 3 (164 to 220 g/m ²), 11: Heavy paper 4 (221 to 256 g/m ²), 12: 1-sided coated paper 1 (106 to 128 g/m ²), 13: 1-sided coated paper 2 (129 to 163 g/m ²), 14: 1-sided coated paper 3 (164 to 220 g/m ²), 15: 2-sided coated paper 1 (106 to 128 g/m ²), 16: 2-sided coated paper 2 (129 to 163 g/m ²), 17: 2-sided coated paper 3 (164 to 220 g/m ²), 18: Tracing paper (64 to 99 g/m ²), 19: Transparency (121 to 220 g/m ²), 20: Envelope (75 to 105 g/m ²), 21: Postcard (164 to 220 g/m ²), 22: Label (118 to 185 g/m ²), 23: Pre-punched paper (64 to 75 g/m ²), 24: Bond paper (83 to 99 g/m ²), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV8, TR-DUP8, TR-VL8, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV1	Sec trns indiv setting environment:set 1
Lv.2	Details
	To set the environment (absolute moisture content) for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV1, TR-PPR1 and TR-DUP1. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL1 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m ³ or less) 2: Normal humidity (6.12 to 15.68 g/m ³) 3: High humidity (15.69 g/m ³ or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR1, TR-DUP1, TR-VL1, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV2	Sec trns indiv setting environment:set 2
Lv.2	Details
	To set the environment (absolute moisture content) for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV2, TR-PPR2 and TR-DUP2. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL2 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m ³ or less) 2: Normal humidity (6.12 to 15.68 g/m ³) 3: High humidity (15.69 g/m ³ or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR2, TR-DUP2, TR-VL2, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV3	Sec trns indiv setting environment:set 3
Lv.2	Details
	To set the environment (absolute moisture content) for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV3, TR-PPR3 and TR-DUP3. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL3 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR3, TR-DUP3, TR-VL3, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV4	Sec trns indiv setting environment:set 4
Lv.2	Details
	To set the environment (absolute moisture content) for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV4, TR-PPR4 and TR-DUP4. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL4 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR4, TR-DUP4, TR-VL4, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV5	Sec trns indiv setting environment:set 5
Lv.2	Details
	To set the environment (absolute moisture content) for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV5, TR-PPR5 and TR-DUP5. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL5 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR5, TR-DUP5, TR-VL5, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV6	Sec trns indiv setting environment:set 6
Lv.2	Details
	To set the environment (absolute moisture content) for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV6, TR-PPR6 and TR-DUP6. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL6 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR6, TR-DUP6, TR-VL6, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV7	Sec trns indiv setting environment:set 7
Lv.2	Details
	To set the environment (absolute moisture content) for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV7, TR-PPR7 and TR-DUP7. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL7 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR7, TR-DUP7, TR-VL7, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV8	Sec trns indiv setting environment:set 8
Lv.2	Details
	To set the environment (absolute moisture content) for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV8, TR-PPR8 and TR-DUP8. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL8 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR8, TR-DUP8, TR-VL8, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP1	Sec trn indiv set clr mod/fd side: set 1
Lv.2	Details
	To set the color mode and feed side for setting 1. Setting 1 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV1, TR-PPR1 and TR-DUP1. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL1 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV1, TR-PPR1, TR-VL1, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP2	Sec trn indiv set clr mod/fd side: set 2
Lv.2	Details
	To set the color mode and feed side for setting 2. Setting 2 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV2, TR-PPR2 and TR-DUP2. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL2 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV2, TR-PPR2, TR-VL2, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP3	Sec trn indiv set clr mod/fd side: set 3
Lv.2	Details
	To set the color mode and feed side for setting 3. Setting 3 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV3, TR-PPR3 and TR-DUP3. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL3 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV3, TR-PPR3, TR-VL3, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP4	Sec trn indiv set clr mod/fd side: set 4
Lv.2	Details
	To set the color mode and feed side for setting 4. Setting 4 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV4, TR-PPR4 and TR-DUP4. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL4 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV4, TR-PPR4, TR-VL4, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP5	Sec trn indiv set clr mod/fd side: set 5
Lv.2	Details
	To set the color mode and feed side for setting 5. Setting 5 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV5, TR-PPR5 and TR-DUP5. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL5 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV5, TR-PPR5, TR-VL5, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP6	Sec trn indiv set clr mod/fd side: set 6
Lv.2	Details
	To set the color mode and feed side for setting 6. Setting 6 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV6, TR-PPR6 and TR-DUP6. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL6 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV6, TR-PPR6, TR-VL6, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP7	Sec trn indiv set clr mod/fd side: set 7
Lv.2	Details
	To set the color mode and feed side for setting 7. Setting 7 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV7, TR-PPR7 and TR-DUP7. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL7 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV7, TR-PPR7, TR-VL7, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP8	Sec trn indiv set clr mod/fd side: set 8
Lv.2	<p>Details</p> <p>To set the color mode and feed side for setting 8. Setting 8 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV8, TR-PPR8 and TR-DUP8. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL8 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.</p> <p>Use case</p> <p>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, etc.)</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided</p> <p>Unit</p> <p>-</p> <p>Default value</p> <p>11</p> <p>Related service mode</p> <p>COPIER> ADJUST> HV-TR> TR-ENV8, TR-PPR8, TR-VL8, 2TR-OFF</p> <p>Supplement/memo</p> <p>Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.</p>
1TR-TGY	Adj Y pry trns ATVC tgt crnt:1/1 speed
Lv.2	<p>Details</p> <p>To adjust the target current for Y-color upon primary transfer ATVC control at 1/1 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 94 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.</p> <p>Use case</p> <p>When an image failure due to the primary transfer occurs</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute 1ATVC-EX.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>1 uA</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> FUNCTION> MISC-P> 1ATVC-EX</p>

COPIER>ADJUST>HV-TR	
1TR-TGM	Adj M pry trns ATVC tgt crnt:1/1 speed
Lv.2	<p>Details</p> <p>To adjust the target current for M-color upon primary transfer ATVC control at 1/1 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 94 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.</p> <p>Use case</p> <p>When an image failure due to the primary transfer occurs</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute 1ATVC-EX.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>1 uA</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> FUNCTION> MISC-P> 1ATVC-EX</p>
1TR-TGC	Adj C pry trns ATVC tgt crnt:1/1 speed
Lv.2	<p>Details</p> <p>To adjust the target current for C-color upon primary transfer ATVC control at 1/1 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 94 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.</p> <p>Use case</p> <p>When an image failure due to the primary transfer occurs</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute 1ATVC-EX.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>1 uA</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> FUNCTION> MISC-P> 1ATVC-EX</p>
1TR-TGK1	Adj Bk pry trns ATVC tgt crnt:1/1 speed
Lv.2	<p>Details</p> <p>To adjust the target current for Bk-color upon primary transfer ATVC control at 1/1 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 94 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.</p> <p>Use case</p> <p>When an image failure due to the primary transfer occurs</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute 1ATVC-EX.</p> <p>Display/adj/set range</p> <p>-50 to 50</p> <p>Unit</p> <p>1 uA</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> FUNCTION> MISC-P> 1ATVC-EX</p>

COPIER>ADJUST>HV-TR	
2TR-OFF	Uniform adj sec trn ATVC ppr allot voltg
Lv.1	Details
	To uniformly adjust paper allotted voltage in secondary transfer ATVC control regardless of paper type, 1st/2nd side or environment. When transfer failure occurs on an image, increase/decrease the value in the -30 to 30 (-900 to 900 V) range in increments of 10 (300 V). When white dots occur on an image, increase/decrease the value in the -100 to -10 (-3000 to -300 V) range in increments of 10 (300 V). When the value is decreased too much, transfer failure occurs.
	Use case
	When similar image failures occur regardless of the conditions
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If TR-VL1 to VL16 are set, each paper allotted voltage is the value to which the setting value is added.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV1 - ENV16, TR-PPR1 - PPR16, TR-DUP1 - DUP16, TR-VL1 - VL16
1TR-TGY2	Adj Y pry trns ATVC tgt crnt:1/2 speed
Lv.2	Details
	To adjust the target current for Y-color upon primary transfer ATVC control at 1/2 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 95 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.
	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) Execute 1ATVC-EX.
	Display/adj/set range
	-50 to 50
	Unit
	0.5 uA
	Default value
	0
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX

COPIER>ADJUST>HV-TR	
1TR-TGM2	Adj M pry trns ATVC tgt crnt:1/2 speed
Lv.2	Details
	To adjust the target current for M-color upon primary transfer ATVC control at 1/2 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 95 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.
	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) Execute 1ATVC-EX.
	Display/adj/set range
	-50 to 50
	Unit
	0.5 uA
	Default value
	0
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX
1TR-TGC2	Adj C pry trns ATVC tgt crnt:1/2 speed
Lv.2	Details
	To adjust the target current for C-color upon primary transfer ATVC control at 1/2 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 95 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.
	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) Execute 1ATVC-EX.
	Display/adj/set range
	-50 to 50
	Unit
	0.5 uA
	Default value
	0
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX
T2TR-LNG	Adj of lead edge weak bias apply length
Lv.2	Details
	To adjust the length (distance from the leading edge of paper) to apply leading edge weak bias. Increase the value when white spots occur in a broad area of the leading edge of paper.
	Use case
	When an image failure (white spots at the leading edge) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	Use this item only when an image failure occurs.
	Display/adj/set range
	-100 to 100
	Unit
	0.1 mm
	Appropriate target value
	-40 - 40
	Default value
	0

COPIER>ADJUST>HV-TR	
B2TR-LNG	Adj of trail edge weak bias apply length
Lv.2	Details
	To adjust the length (distance from the trailing edge of paper) to apply trailing edge weak bias. Increase the value when white spots occur in a broad area of the trailing edge of paper.
	Use case
	When an image failure (white spots at the trailing edge) occurs
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	Use this item only when an image failure occurs.
	Display/adj/set range
	-100 to 100
	Unit
	0.1 mm
	Appropriate target value
	-40 - 40
	Default value
	0
1ATVCTMG	Adj pry trns ATVC ctrl exe intvl: 1/2SPD
Lv.2	Details
	To adjust the intervals (the number of sheets) to execute primary transfer ATVC control at 1/2 speed. Decrease the value if the condition of image failure occurrence caused by primary transfer is as follows: <ul style="list-style-type: none"> It does not occur at 1/1 speed, but occurs at 1/2 speed. It is alleviated by executing primary transfer ATVC control. It is temporarily alleviated when continuing output, but it occurs again. These indicate that primary transfer ATVC control is not executed at 1/2 speed. Image failure can be alleviated by increasing the frequency to execute primary transfer ATVC control, but productivity at 1/2 speed decreases.
	Use case
	When an image failure or blocky image at 50 mm intervals occurs at 1/2 speed
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	As the value is smaller, productivity at 1/2 speed decreases. As the value is increased, productivity is increased, but image failure may occur.
	Display/adj/set range
	100 to 2000
	Unit
	1 sheet
	Appropriate target value
	300 - 1500
	Default value
	1000

COPIER>ADJUST>HV-TR	
TR-PPR9	Sec trns indiv setting paper type: set 9
Lv.2	Details
	To set the paper type (paper weight) for setting 9. Setting 9 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV9, TR-PPR9 and TR-DUP9. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL9 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m ²), 2: Plain paper 2 (76 to 90 g/m ²)/ Colored paper (64 to 82 g/m ²), 3: Plain paper 3 (91 to 105 g/m ²), 4: Recycled paper 1 (64 to 75 g/m ²), 5: Recycled paper 2 (76 to 90 g/m ²), 6: Recycled paper 3 (91 to 105 g/m ²), 7: Thin paper (52 to 63 g/m ²), 8: Heavy paper 1 (106 to 128 g/m ²), 9: Heavy paper 2 (129 to 163 g/m ²), 10: Heavy paper 3 (164 to 220 g/m ²), 11: Heavy paper 4 (221 to 256 g/m ²), 12: 1-sided coated paper 1 (106 to 128 g/m ²), 13: 1-sided coated paper 2 (129 to 163 g/m ²), 14: 1-sided coated paper 3 (164 to 220 g/m ²), 15: 2-sided coated paper 1 (106 to 128 g/m ²), 16: 2-sided coated paper 2 (129 to 163 g/m ²), 17: 2-sided coated paper 3 (164 to 220 g/m ²), 18: Tracing paper (64 to 99 g/m ²), 19: Transparency (121 to 220 g/m ²), 20: Envelope (75 to 105 g/m ²), 21: Postcard (164 to 220 g/m ²), 22: Label (118 to 185 g/m ²), 23: Pre-punched paper (64 to 75 g/m ²), 24: Bond paper (83 to 99 g/m ²), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV9, TR-DUP9, TR-VL9, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-PPR10	Sec trn indiv setting paper type: set 10
Lv.2	Details
	To set the paper type (paper weight) for setting 10. Setting 10 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV10, TR-PPR10 and TR-DUP10. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL10 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV10, TR-DUP10, TR-VL10, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-PPR11	Sec trn indiv setting paper type: set 11
Lv.2	Details
	To set the paper type (paper weight) for setting 11. Setting 11 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV11, TR-PPR11 and TR-DUP11. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL11 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV11, TR-DUP11, TR-VL11, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-PPR12	Sec trn indiv setting paper type: set 12
Lv.2	Details
	To set the paper type (paper weight) for setting 12. Setting 12 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV12, TR-PPR12 and TR-DUP12. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL12 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV12, TR-DUP12, TR-VL12, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-PPR13	Sec trn indiv setting paper type: set 13
Lv.2	Details
	To set the paper type (paper weight) for setting 13. Setting 13 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV13, TR-PPR13 and TR-DUP13. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL13 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV13, TR-DUP13, TR-VL13, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-PPR14	Sec trn indiv setting paper type: set 14
Lv.2	Details
	To set the paper type (paper weight) for setting 14. Setting 14 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV14, TR-PPR14 and TR-DUP14. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL14 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV14, TR-DUP14, TR-VL14, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-PPR15	Sec trn indiv setting paper type: set 15
Lv.2	Details
	To set the paper type (paper weight) for setting 15. Setting 15 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV15, TR-PPR15 and TR-DUP15. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL15 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV15, TR-DUP15, TR-VL15, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-PPR16	Sec trn indiv setting paper type: set 16
Lv.2	Details
	To set the paper type (paper weight) for setting 16. Setting 16 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV16, TR-PPR16 and TR-DUP16. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL16 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 25 1: Plain paper 1 (64 to 75 g/m2), 2: Plain paper 2 (76 to 90 g/m2)/ Colored paper (64 to 82 g/m2), 3: Plain paper 3 (91 to 105 g/m2), 4: Recycled paper 1 (64 to 75 g/m2), 5: Recycled paper 2 (76 to 90 g/m2), 6: Recycled paper 3 (91 to 105 g/m2), 7: Thin paper (52 to 63 g/m2), 8: Heavy paper 1 (106 to 128 g/m2), 9: Heavy paper 2 (129 to 163 g/m2), 10: Heavy paper 3 (164 to 220 g/m2), 11: Heavy paper 4 (221 to 256 g/m2), 12: 1-sided coated paper 1 (106 to 128 g/m2), 13: 1-sided coated paper 2 (129 to 163 g/m2), 14: 1-sided coated paper 3 (164 to 220 g/m2), 15: 2-sided coated paper 1 (106 to 128 g/m2), 16: 2-sided coated paper 2 (129 to 163 g/m2), 17: 2-sided coated paper 3 (164 to 220 g/m2), 18: Tracing paper (64 to 99 g/m2), 19: Transparency (121 to 220 g/m2), 20: Envelope (75 to 105 g/m2), 21: Postcard (164 to 220 g/m2), 22: Label (118 to 185 g/m2), 23: Pre-punched paper (64 to 75 g/m2), 24: Bond paper (83 to 99 g/m2), 25: Not used
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV16, TR-DUP16, TR-VL16, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV9	Sec trns indiv setting environment:set 9
Lv.2	Details
	To set the environment (absolute moisture content) for setting 9. Setting 9 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV9, TR-PPR9 and TR-DUP9. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL9 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR9, TR-DUP9, TR-VL9, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV10	Sec trn indiv setting environment:set 10
Lv.2	Details
	To set the environment (absolute moisture content) for setting 10. Setting 10 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV10, TR-PPR10 and TR-DUP10. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL10 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR10, TR-DUP10, TR-VL10, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV11	Sec trn indiv setting environment:set 11
Lv.2	Details
	To set the environment (absolute moisture content) for setting 11. Setting 11 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV11, TR-PPR11 and TR-DUP11. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL11 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR11, TR-DUP11, TR-VL11, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV12	Sec trn indiv setting environment:set 12
Lv.2	Details
	To set the environment (absolute moisture content) for setting 12. Setting 12 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV12, TR-PPR12 and TR-DUP12. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL12 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR12, TR-DUP12, TR-VL12, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV13	Sec trn indiv setting environment:set 13
Lv.2	Details
	To set the environment (absolute moisture content) for setting 13. Setting 13 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV13, TR-PPR13 and TR-DUP13. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL13 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR13, TR-DUP13, TR-VL13, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV14	Sec trn indiv setting environment:set 14
Lv.2	Details
	To set the environment (absolute moisture content) for setting 14. Setting 14 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV14, TR-PPR14 and TR-DUP14. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL14 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR14, TR-DUP14, TR-VL14, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-ENV15	Sec trn indiv setting environment:set 15
Lv.2	Details
	To set the environment (absolute moisture content) for setting 15. Setting 15 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV15, TR-PPR15 and TR-DUP15. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL15 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR15, TR-DUP15, TR-VL15, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.
TR-ENV16	Sec trn indiv setting environment:set 16
Lv.2	Details
	To set the environment (absolute moisture content) for setting 16. Setting 16 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV16, TR-PPR16 and TR-DUP16. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL16 is applied at the time of secondary transfer.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	1 to 3 1: Low humidity (absolute moisture content: 6.11 g/m3 or less) 2: Normal humidity (6.12 to 15.68 g/m3) 3: High humidity (15.69 g/m3 or higher)
	Unit
	-
	Default value
	1
	Related service mode
	COPIER> ADJUST> HV-TR> TR-PPR16, TR-DUP16, TR-VL16, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP9	Sec trn indiv set clr mod/fd side: set 9
Lv.2	Details
	To set the color mode and feed side for setting 9. Setting 9 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV9, TR-PPR9 and TR-DUP9. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL9 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV9, TR-PPR9, TR-VL9, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP10	Sec trn indiv set clr mod/fd side:set 10
Lv.2	Details
	To set the color mode and feed side for setting 10. Setting 10 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV10, TR-PPR10 and TR-DUP10. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL10 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV10, TR-PPR10, TR-VL10, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP11	Sec trn indiv set clr mod/fd side:set 11
Lv.2	Details
	To set the color mode and feed side for setting 11. Setting 11 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV11, TR-PPR11 and TR-DUP11. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL11 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV11, TR-PPR11, TR-VL11, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP12	Sec trn indiv set clr mod/fd side:set 12
Lv.2	Details
	To set the color mode and feed side for setting 12. Setting 12 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV12, TR-PPR12 and TR-DUP12. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL12 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV12, TR-PPR12, TR-VL12, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP13	Sec trn indiv set clr mod/fd side:set 13
Lv.2	Details
	To set the color mode and feed side for setting 13. Setting 13 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV13, TR-PPR13 and TR-DUP13. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL13 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV13, TR-PPR13, TR-VL13, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP14	Sec trn indiv set clr mod/fd side:set 14
Lv.2	Details
	To set the color mode and feed side for setting 14. Setting 14 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV14, TR-PPR14 and TR-DUP14. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL14 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV14, TR-PPR14, TR-VL14, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP15	Sec trn indiv set clr mod/fd side:set 15
Lv.2	Details
	To set the color mode and feed side for setting 15. Setting 15 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV15, TR-PPR15 and TR-DUP15. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL15 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV15, TR-PPR15, TR-VL15, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-DUP16	Sec trn indiv set clr mod/fd side:set 16
Lv.2	Details
	To set the color mode and feed side for setting 16. Setting 16 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV16, TR-PPR16 and TR-DUP16. When this condition is satisfied, the paper allotted voltage adjusted in TR-VL16 is applied at the time of secondary transfer. The left digit of the setting value represents the color mode and the right digit represents the feed side.
	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, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	11 to 43 Left digit (color mode) 1: Color mode (entire paper) 2: Black mode (entire paper) 3: Color/black mode (leading edge of paper) 4: Color/black mode (trailing edge of paper) Right digit (feed side) 1: 1-sided 2: Auto 2-sided 3: Multi-purpose Tray 2-sided
	Unit
	-
	Default value
	11
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV16, TR-PPR16, TR-VL16, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL1	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/feed side that are set in TR-ENV1, TR-PPR1 and TR-DUP1. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV1, TR-PPR1, TR-DUP1, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL2	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/feed side that are set in TR-ENV2, TR-PPR2 and TR-DUP2. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV2, TR-PPR2, TR-DUP2, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL3	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/feed side that are set in TR-ENV3, TR-PPR3 and TR-DUP3. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV3, TR-PPR3, TR-DUP3, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL4	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/feed side that are set in TR-ENV4, TR-PPR4 and TR-DUP4. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV4, TR-PPR4, TR-DUP4, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL5	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/feed side that are set in TR-ENV5, TR-PPR5 and TR-DUP5. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV5, TR-PPR5, TR-DUP5, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL6	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/feed side that are set in TR-ENV6, TR-PPR6 and TR-DUP6. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV6, TR-PPR6, TR-DUP6, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL7	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/feed side that are set in TR-ENV7, TR-PPR7 and TR-DUP7. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV7, TR-PPR7, TR-DUP7, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL8	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/feed side that are set in TR-ENV8, TR-PPR8 and TR-DUP8. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV8, TR-PPR8, TR-DUP8, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL9	Sec trns indiv set ppr allot voltg:set 9
Lv.2	Details
	To adjust the paper allotted voltage of secondary transfer for setting 9. Setting 9 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV9, TR-PPR9 and TR-DUP9. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV9, TR-PPR9, TR-DUP9, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL10	Sec trn indiv set ppr allot voltg:set 10
Lv.2	Details
	<p>To adjust the paper allotted voltage of secondary transfer for setting 10.</p> <p>Setting 10 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV10, TR-PPR10 and TR-DUP10. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage.</p> <p>Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs.</p> <p>As the value is changed by 1, the voltage is changed by 30 V. +: Increase -: Decrease</p>
	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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV10, TR-PPR10, TR-DUP10, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL11	Sec trn indiv set ppr allot voltg:set 11
Lv.2	Details
	<p>To adjust the paper allotted voltage of secondary transfer for setting 11.</p> <p>Setting 11 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV11, TR-PPR11 and TR-DUP11. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage.</p> <p>Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs.</p> <p>As the value is changed by 1, the voltage is changed by 30 V. +: Increase -: Decrease</p>
	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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV11, TR-PPR11, TR-DUP11, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL12	Sec trn indiv set ppr allot voltg:set 12
Lv.2	Details
	To adjust the paper allotted voltage of secondary transfer for setting 12. Setting 12 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV12, TR-PPR12 and TR-DUP12. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV12, TR-PPR12, TR-DUP12, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL13	Sec trn indiv set ppr allot voltg:set 13
Lv.2	Details
	To adjust the paper allotted voltage of secondary transfer for setting 13. Setting 13 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV13, TR-PPR13 and TR-DUP13. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV13, TR-PPR13, TR-DUP13, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL14	Sec trn indiv set ppr allot voltg:set 14
Lv.2	Details
	To adjust the paper allotted voltage of secondary transfer for setting 14. Setting 14 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV14, TR-PPR14 and TR-DUP14. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV14, TR-PPR14, TR-DUP14, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL15	Sec trn indiv set ppr allot voltg:set 15
Lv.2	Details
	To adjust the paper allotted voltage of secondary transfer for setting 15. Setting 15 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV15, TR-PPR15 and TR-DUP15. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV15, TR-PPR15, TR-DUP15, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
TR-VL16	Sec trn indiv set ppr allot voltg:set 16
Lv.2	Details
	To adjust the paper allotted voltage of secondary transfer for setting 16. Setting 16 is the combination condition of environment, paper type (paper weight), color mode/feed side that are set in TR-ENV16, TR-PPR16 and TR-DUP16. When this condition is satisfied, the paper allotted voltage adjusted here is applied at the time of secondary transfer. If the setting of 2TR-OFF is made, the setting voltage is added to the paper allotted voltage. Increase the value when low-voltage mottled image or toner scattering on solid image occurs. Decrease the value when high-voltage mottled image or density loss due to excessive transfer occurs. As the value is changed by 1, the voltage is changed by 30 V. +: 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 at a time while checking the symptom.
	Display/adj/set range
	-128 to 127
	Unit
	30 V
	Appropriate target value
	-30 - 30
	Default value
	0
	Related service mode
	COPIER> ADJUST> HV-TR> TR-ENV16, TR-PPR16, TR-DUP16, 2TR-OFF
	Supplement/memo
	Up to 16 combination patterns can be set in TR-VL1 to 16 (setting 1 to 16). When there is more than one setting where all conditions (environment, paper type and color mode/feed side) are the same, the setting with a smaller setting number is applied.

COPIER>ADJUST>HV-TR	
1TR-TGK2	Adj Bk pry trns ATVC tgt crnt:1/2 speed
Lv.2	Details
	To adjust the target current for Bk-color upon primary transfer ATVC control at 1/2 speed. Increase the value when low-voltage mottled image occurs, and decrease the value when fogging occurs (especially in the 95 mm portion of the image leading edge). The setting is reflected at the next primary transfer ATVC control.
	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) Execute 1ATVC-EX.
	Display/adj/set range
	-50 to 50
	Unit
	0.5 uA
	Default value
	0
	Related service mode
	COPIER> FUNCTION> MISC-P> 1ATVC-EX

T-8-27

FEED-ADJ

COPIER>ADJUST>FEED-ADJ	
REGIST	Adj registration start timing: 1/1 speed
Lv.1 Details	To adjust the timing to turn ON the Registration Motor at 1/1 speed. As the value is changed by 1, the leading edge margin is changed by 0.1 mm. +: Leading edge margin becomes larger. (An image moves downward.) -: Leading edge margin becomes smaller. (An image moves upward.)
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	0.1 mm
Default value	0
ADJ-C1	Write start pstn in horz scan:Cassette 1
Lv.1 Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 1. (Paper width is 320 mm or smaller.) As the value is changed by 1, the left margin is changed 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	-50 to 50
Unit	0.1 mm
Default value	0
ADJ-C2	Write start pstn in horz scan:Cassette 2
Lv.1 Details	To adjust the image write start position in the horizontal scanning direction when feeding paper from the Cassette 2. (Paper width is 320 mm or smaller.) As the value is changed by 1, the left margin is changed 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	-50 to 50
Unit	0.1 mm
Default value	0

COPIER>ADJUST>FEED-ADJ	
ADJ-C3	Write start pstn in horz scan:Cassette 3
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 320 mm or smaller.) As the value is changed by 1, the left margin is changed 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	-50 to 50
Unit	0.1 mm
Default value	0
ADJ-C4	Write start pstn in horz scan:Cassette 4
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 320 mm or smaller.) As the value is changed by 1, the left margin is changed 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	-50 to 50
Unit	0.1 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 320 mm or smaller.) As the value is changed by 1, the left margin is changed 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	-50 to 50
Unit	0.1 mm
Default value	0

COPIER>ADJUST>FEED-ADJ	
ADJ-C1RE	Write start pstn in horz scan: Cst1,2nd
Lv.1	<p>Details</p> <p>To adjust the image write start position on the second side in the horizontal scanning direction when feeding paper from the Cassette 1. As the value is changed by 1, the left margin is changed 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.</p> <p>Use case When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range -55 to 55</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>
ADJ-C2RE	Write start pstn in horz scan: Cst2,2nd
Lv.1	<p>Details</p> <p>To adjust the image write start position on the second side in the horizontal scanning direction when feeding paper from the Cassette 2. As the value is changed by 1, the left margin is changed 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.</p> <p>Use case When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range -55 to 55</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>
ADJ-C3RE	Write start pstn in horz scan: Cst3,2nd
Lv.1	<p>Details</p> <p>To adjust the image write start position on the second side in the horizontal scanning direction when feeding paper from the Cassette 3. As the value is changed by 1, the left margin is changed 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.</p> <p>Use case When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range -55 to 55</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>

COPIER>ADJUST>FEED-ADJ	
ADJ-C4RE	Write start pstn in horz scan: Cst4,2nd
Lv.1	<p>Details</p> <p>To adjust the image write start position on the second side in the horizontal scanning direction when feeding paper from the Cassette 4. As the value is changed by 1, the left margin is changed 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.</p> <p>Use case When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range -55 to 55</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>
ADJ-MFRE	Write start pstn in horz scan:MP Tr, 2nd
Lv.1	<p>Details</p> <p>To adjust the image write start position on the second side in the horizontal scanning direction when feeding paper from the Multi-purpose Tray. As the value is changed by 1, the left margin is changed 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.</p> <p>Use case When replacing the DC Controller PCB/clearing RAM data</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range -55 to 55</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>
REG-THCK	Adj registration start timing: 1/2 speed
Lv.1	<p>Details</p> <p>To adjust the timing to turn ON the Registration Motor at 1/2 speed. As the value is changed by 1, the leading edge margin is changed by 0.1 mm. +: Leading edge margin becomes larger. (An image moves downward.) -: Leading edge margin becomes smaller. (An image moves upward.)</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range -50 to 50</p> <p>Unit 0.1 mm</p> <p>Default value 0</p>

COPIER>ADJUST>FEED-ADJ	
REG-DUP1	Adj register start timing: 1/1 SPD, 2nd
Lv.1	Details
	To adjust the timing to turn ON the Registration Motor when feeding 2nd side at 1/1 speed. As the value is changed by 1, the leading edge margin is changed by 0.1 mm. +: Leading edge margin becomes larger. (An image moves downward.) -: Leading edge margin becomes smaller. (An image moves upward.)
	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
	0.1 mm
	Default value
	0
REG-DUP2	Adj register start timing: 1/2 SPD, 2nd
Lv.1	Details
	To adjust the timing to turn ON the Registration Motor when feeding 2nd side at 1/2 speed. As the value is changed by 1, the leading edge margin is changed by 0.1 mm. +: Leading edge margin becomes larger. (An image moves downward.) -: Leading edge margin becomes smaller. (An image moves upward.)
	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
	0.1 mm
	Default value
	0
LP-FEED1	Adj pre-rgst arch amount: plain, Casstt
Lv.1	Details
	To adjust the arch amount before registration for paper belonging to a group of plain papers fed from a cassette. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case
	When an image on the 1st side of paper belonging to a group of plain papers fed from a cassette is skewed
	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
	0.1 mm
	Default value
	0
	Supplement/memo
	Group of plain papers: Plain paper 1/2/3, colored paper, recycled paper, pre-punched paper, tracing paper

COPIER>ADJUST>FEED-ADJ	
LP-FEED2	Adj pre-rgst arch amount: heavy, Casstt
Lv.1	Details
	To adjust the arch amount before registration for paper belonging to a group of heavy papers fed from a cassette. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case
	When an image on the 1st side of paper belonging to a group of heavy papers fed from a cassette is skewed
	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
	0.1 mm
	Default value
	0
	Supplement/memo
	Group of heavy papers: Heavy paper 1/2/3/4, coated paper 1/2/3, transparency, label, bond paper, envelope, postcard
LP-MULT1	Adj pre-rgst arch amount: plain, MP Tray
Lv.1	Details
	To adjust the arch amount before registration for paper belonging to a group of plain papers fed from the Multi-purpose Tray. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case
	When an image on the 1st side of paper belonging to a group of plain papers fed from the Multi-purpose Tray is skewed
	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
	0.1 mm
	Default value
	0
	Supplement/memo
	Group of plain papers: Plain paper 1/2/3, colored paper, recycled paper, pre-punched paper, tracing paper

COPIER>ADJUST>FEED-ADJ		
LP-MULT2		Adj pre-rgst arch amount: heavy, MP Tray
Lv.1	Details	To adjust the arch amount before registration for paper belonging to a group of heavy papers fed from the Multi-purpose Tray. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case	When an image on the 1st side of paper belonging to a group of heavy papers fed from the Multi-purpose Tray is skewed
	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	0.1 mm
	Default value	0
	Supplement/memo	Group of heavy papers: Heavy paper 1/2/3/4, coated paper 1/2/3, transparency, label, bond paper, envelope, postcard
	LP-DUP1	
Lv.1	Details	To adjust the arch amount before registration for paper belonging to a group of plain papers fed in 2-sided mode. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case	When an image on the 2nd side of paper belonging to a group of plain papers fed in 2-sided mode is skewed
	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	0.1 mm
	Default value	0
	Supplement/memo	Group of plain papers: Plain paper 1/2/3, colored paper, recycled paper, pre-punched paper, tracing paper

COPIER>ADJUST>FEED-ADJ		
LP-DUP2		Adj pre-rgst arch amount: heavy, 2-sided
Lv.1	Details	To adjust the arch amount before registration for paper belonging to a group of heavy papers fed in 2-sided mode. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case	When an image on the 2nd side of paper belonging to a group of heavy papers fed in 2-sided mode is skewed
	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	0.1 mm
	Default value	0
	Supplement/memo	Group of heavy papers: Heavy paper 1/2/3/4, coated paper 1/2/3, transparency, label, bond paper, envelope, postcard
	REG-SPD	
Lv.1	Details	To adjust the speed of the Registration Motor. As the value is changed by 1, the speed is changed by 0.2%. +: Increase -: Decrease As the value is reduced, blur image in the area of 60 to 70 mm from the trailing edge is alleviated.
	Use case	When blur image occurs in the area of 60 to 70 mm from the trailing edge
	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	0.2 %
	Default value	0
	LP-FEED3	
Lv.1	Details	To adjust the arch amount before registration for thin paper fed from a cassette. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case	When an image on the 1st side of thin paper fed from a cassette is skewed
	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	0.1 mm
	Default value	0

COPIER>ADJUST>FEED-ADJ		
LP-DUP3		Adj pre-rgst arch amount: thin, 2-sided
Lv.1	Details	To adjust the arch amount before registration for thin paper fed in 2-sided mode. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease
	Use case	When an image on the 2nd side of thin paper fed in 2-sided mode is skewed
	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	0.1 mm
	Default value	0
LP-MULT3		Adj pre-rgst arch amount: thin, MP Tray
Lv.1	Details	To adjust the arch amount before registration for thin paper fed from the Multi-purpose Tray. As the value is changed by 1, the arch amount is changed by 0.1 mm. +: Increase -: Decrease At first, change the value in increments of 10, and then make a fine adjustment.
	Use case	When an image on the 1st side of thin paper fed from the Multi-purpose Tray is skewed
	Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution	If the value is too large, paper wrinkles may occur.
	Display/adj/set range	-50 to 50
	Unit	0.1 mm
	Default value	0

T-8-28

■ CST-ADJ

COPIER>ADJUST>CST-ADJ		
MF-MAX		Adj of Multi-purpose Tray maximum width
Lv.1	Details	To adjust the maximum width of the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When registering a new value, execute COPIER> FUNCTION> CST> MF-MAX.
	Use case	<ul style="list-style-type: none"> When replacing the DC Controller PCB/clearing RAM data When registering a new value
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	<ul style="list-style-type: none"> After the setting value is changed, write the changed value in the service label. Be sure to adjust MF-MIN together with this item.
	Display/adj/set range	0 to 255
	Default value	According to the setting at shipment
	Related service mode	COPIER> FUNCTION> CST> MF-MAX COPIER> ADJUST> CST-ADJ> MF-MIN
MF-MIN		Adj of Multi-purpose Tray minimum width
Lv.1	Details	To adjust the minimum width of the Multi-purpose Tray. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label. When registering a new value, execute COPIER> FUNCTION> CST> MF-MIN.
	Use case	<ul style="list-style-type: none"> When replacing the DC Controller PCB/clearing RAM data When registering a new value
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	<ul style="list-style-type: none"> After the setting value is changed, write the changed value in the service label. Be sure to adjust MF-MAX together with this item.
	Display/adj/set range	0 to 255
	Default value	According to the setting at shipment
	Related service mode	COPIER> FUNCTION> CST> MF-MIN COPIER> ADJUST> CST-ADJ> MF-MAX

T-8-29

MISC

COPIER>ADJUST>MISC	
SEG-ADJ	Setting of criteria for text/photo
Lv.1	Details
	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.
	Use case
	When adjusting the classification level of text and photo in Text/Photo/Map 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
	-4 to 4
	Unit
	1
	Default value
	0
K-ADJ	Setting of criteria for black text
Lv.1	Details
	To set the judgment level of black characters at text processing. As the value is larger, the text tends to be detected 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
	Unit
	1
	Default value
	0
ACS-ADJ	Set criteria for B&W/color in ACS mode
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
	Unit
	1
	Default value
	0

COPIER>ADJUST>MISC	
ACS-EN	Setting of judgment area in ACS mode
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
	Unit
	1
	Default value
	1
ACS-CNT	Set judgment pixel count area in ACS mode
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
	Unit
	1
	Default value
	0
ACS-EN2	Set ACS mode judgment 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
	Unit
	-
	Default value
	1
ACS-CNT2	Set ACS judgment 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
	Unit
	-
	Default value
	0

COPIER>ADJUST>MISC	
SH-ADJ	Adjustment of sharpness
Lv.1	Details
	To adjust the sharpness of image at copyboard reading/stream reading that is set in Settings/Registration menu. 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.
	Use case
	When moire occurs frequently 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
	Unit
	-
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Sharpness

T-8-30

■ EXP-LED

COPIER>ADJUST>EXP-LED	
PR-EXP-Y	Adj Cln Pre-expo LED(Y) intnsty: 1/1SPD
Lv.2	Details
	To adjust the light intensity of the Cleaning Pre-exposure LED (Y) at 1/1 speed. To set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
	Use case
	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
	Display/adj/set range
	-100 to 100
	Unit
	1 %
	Default value
	0
PR-EXP-M	Adj Cln Pre-expo LED(M) intnsty: 1/1SPD
Lv.2	Details
	To adjust the light intensity of the Cleaning Pre-exposure LED (M) at 1/1 speed. To set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
	Use case
	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
	Display/adj/set range
	-100 to 100
	Unit
	1 %
	Default value
	0

COPIER>ADJUST>EXP-LED	
PR-EXP-C	Adj Cln Pre-expo LED(C) intnsty: 1/1SPD
Lv.2	Details
	To adjust the light intensity of the Cleaning Pre-exposure LED (C) at 1/1 speed. To set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
	Use case
	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
	Display/adj/set range
	-100 to 100
	Unit
	1 %
	Default value
	0
PR-EXP-K	Adj Cln Pre-expo LED(Bk) intnsty: 1/1SPD
Lv.2	Details
	To adjust the light intensity of the Cleaning Pre-exposure LED (Bk) at 1/1 speed. To set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
	Use case
	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
	Display/adj/set range
	-100 to 100
	Unit
	1 %
	Default value
	0

COPIER>ADJUST>EXP-LED	
PR-EXPY2	Adj Cln Pre-expo LED(Y) intnsty: 1/2SPD
Lv.2	Details
	To adjust the light intensity of the Cleaning Pre-exposure LED (Y) at 1/2 speed. Set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
	Use case
	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
	Display/adj/set range
	-100 to 100
	Unit
	1 %
	Default value
	0
PR-EXPM2	Adj Cln Pre-expo LED(M) intnsty: 1/2SPD
Lv.2	Details
	To adjust the light intensity of the Cleaning Pre-exposure LED (M) at 1/2 speed. Set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
	Use case
	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
	Display/adj/set range
	-100 to 100
	Unit
	1 %
	Default value
	0

COPIER>ADJUST>EXP-LED	
PR-EXPC2	Adj Cln Pre-expo LED(C) intnsty: 1/2SPD
Lv.2 Details	To adjust the light intensity of the Cleaning Pre-exposure LED (C) at 1/2 speed. Set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
Use case	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
Caution	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
Display/adj/set range	-100 to 100
Unit	1 %
Default value	0
PR-EXPK2	Adj Cln Pre-expo LED(Bk) intnsty: 1/2SPD
Lv.2 Details	To adjust the light intensity of the Cleaning Pre-exposure LED (Bk) at 1/2 speed. Set the proportion relative to the current value in percentage. Increase the value when drum ghost occurs, and decrease the value when horizontal lines appear due to charging.
Use case	<ul style="list-style-type: none"> When drum ghost occurs When horizontal lines appear due to charging
Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
Caution	When the value is increased, horizontal lines due to charging may appear earlier. When the value is decreased, drum ghost may occur.
Display/adj/set range	-100 to 100
Unit	1 %
Default value	0
INTEXP-Y	Adj Cln Pre-expo LED(Y) initial intnsty
Lv.2 Details	To adjust the initial light intensity of the Cleaning Pre-exposure LED (Y). When replacing the LED, enter the value written on the label included in the package of a new one. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
Use case	<ul style="list-style-type: none"> When replacing the Cleaning Pre-exposure LED When replacing the DC Controller PCB/clearing RAM data
Adj/set/operate method	Enter the setting value, and then press OK key.
Caution	Use this item only when replacing the Cleaning Pre-exposure LED or replacing the DC Controller PCB/clearing RAM data.
Display/adj/set range	0 to 100
Unit	1 %
Default value	0

COPIER>ADJUST>EXP-LED	
INTEXP-M	Adj Cln Pre-expo LED(M) initial intnsty
Lv.2 Details	To adjust the initial light intensity of the Cleaning Pre-exposure LED (M). When replacing the LED, enter the value written on the label included in the package of a new one. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
Use case	<ul style="list-style-type: none"> When replacing the Cleaning Pre-exposure LED When replacing the DC Controller PCB/clearing RAM data
Adj/set/operate method	Enter the setting value, and then press OK key.
Caution	Use this item only when replacing the Cleaning Pre-exposure LED or replacing the DC Controller PCB/clearing RAM data.
Display/adj/set range	0 to 100
Unit	1 %
Default value	0
INTEXP-C	Adj Cln Pre-expo LED(C) initial intnsty
Lv.2 Details	To adjust the initial light intensity of the Cleaning Pre-exposure LED (C). When replacing the LED, enter the value written on the label included in the package of a new one. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
Use case	<ul style="list-style-type: none"> When replacing the Cleaning Pre-exposure LED When replacing the DC Controller PCB/clearing RAM data
Adj/set/operate method	Enter the setting value, and then press OK key.
Caution	Use this item only when replacing the Cleaning Pre-exposure LED or replacing the DC Controller PCB/clearing RAM data.
Display/adj/set range	0 to 100
Unit	1 %
Default value	0
INTEXP-K	Adj Cln Pre-expo LED(Bk) initial intnsty
Lv.2 Details	To adjust the initial light intensity of the Cleaning Pre-exposure LED (Bk). When replacing the LED, enter the value written on the label included in the package of a new one. When replacing the DC Controller PCB/clearing RAM data, enter the value of service label.
Use case	<ul style="list-style-type: none"> When replacing the Cleaning Pre-exposure LED When replacing the DC Controller PCB/clearing RAM data
Adj/set/operate method	Enter the setting value, and then press OK key.
Caution	Use this item only when replacing the Cleaning Pre-exposure LED or replacing the DC Controller PCB/clearing RAM data.
Display/adj/set range	0 to 100
Unit	1 %
Default value	0

T-8-31

 FUNCTION

 INSTALL

COPIER>FUNCTION>INSTALL	
STIR-Y	
Stirring of Y-color developer	
Lv.1	Details
	To stir developer in the Y-color Developing Unit.
	Use case
	When fogging occurs on an image after the machine has not been used for a long time
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Required time
	150 sec
	Related service mode
	COPIER> FUNCTION> INSTALL> STIR-M/C/K/4
STIR-M	
Stirring of M-color developer	
Lv.1	Details
	To stir developer in the M-color Developing Unit.
	Use case
	When fogging occurs on an image after the machine has not been used for a long time
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Required time
	150 sec
	Related service mode
	COPIER> FUNCTION> INSTALL> STIR-Y/C/K/4
STIR-C	
Stirring of C-color developer	
Lv.1	Details
	To stir developer in the C-color Developing Unit.
	Use case
	When fogging occurs on an image after the machine has not been used for a long time
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Required time
	150 sec
	Related service mode
	COPIER> FUNCTION> INSTALL> STIR-Y/M/K/4
STIR-K	
Stirring of Bk-color developer	
Lv.1	Details
	To stir developer in the Bk-color Developing Unit.
	Use case
	When fogging occurs on an image after the machine has not been used for a long time
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Required time
	150 sec
	Related service mode
	COPIER> FUNCTION> INSTALL> STIR-Y/M/C/4
STIR-4	
Stirring of all colors of developers	
Lv.1	Details
	To stir developer in the Developing Units of 4 colors (Y/M/C/Bk).
	Use case
	When fogging occurs on an image after the machine has not been used for a long time
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Required time
	150 sec
	Related service mode
	COPIER> FUNCTION> INSTALL> STIR-Y/M/C/K

COPIER>FUNCTION>INSTALL	
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. Close the DADF until the operation automatically stops after the adjustment. 3) Write the value displayed by COPIER> ADJUST> ADJ-XY> STRD-POS in the service label.
	Caution
	- If the DADF is opened before the operation automatically stops, perform the operation again. - Write the adjusted value in the service label.
	Display/adj/set range
	At normal termination: OK, At abnormal termination: NG
	Required time
	10 sec
	Related service mode
	COPIER> ADJUST> ADJ-XY> STRD-POS
	Supplement/memo
	For the copyboard model, there is no need to adjust the reading position.
CARD	
Setting of card number	
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 PIN) is initialized.
	Display/adj/set range
	0 to 2001
	Default value
	0
	Related service mode
	COPIER> OPTION> FNC-SW> CARD-RNG

COPIER>FUNCTION>INSTALL		
INISSET-Y	Exe of Dev Unit (Y) initial install mod	
Lv.1	Details	To automatically execute operation necessary for initial installation of the Developing Unit (Y). 1. Idle rotation of the Developing Unit (including automatic take-up of the developer sealing) 2. Dark current correction of the Registration Patch Sensor and light intensity adjustment 3. Initialization of the Toner Density Sensor (Y) 4. Primary transfer ATVC control 5. Initialization of the Registration Patch Sensor 6. Cleaning of the Secondary Transfer Outer Roller 7. Reset of the Developing Unit counter
	Use case	When replacing the Developing Unit (Y)
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	When installing the machine or replacing the Developing Unit of other color, do not use this item.
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	180 sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-M/C/K/4
INISSET-M	Exe of Dev Unit (M) initial install mod	
Lv.1	Details	To automatically execute operation necessary for initial installation of the Developing Unit (M). 1. Idle rotation of the Developing Unit (including automatic take-up of the developer sealing) 2. Dark current correction of the Registration Patch Sensor and light intensity adjustment 3. Initialization of the Toner Density Sensor (M) 4. Primary transfer ATVC control 5. Initialization of the Registration Patch Sensor 6. Cleaning of the Secondary Transfer Outer Roller 7. Reset of the Developing Unit counter
	Use case	When replacing the Developing Unit (M)
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	When installing the machine or replacing the Developing Unit of other color, do not use this item.
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	180 sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y/C/K/4

COPIER>FUNCTION>INSTALL		
INISSET-C	Exe of Dev Unit (C) initial install mod	
Lv.1	Details	To automatically execute operation necessary for initial installation of the Developing Unit (C). 1. Idle rotation of the Developing Unit (including automatic take-up of the developer sealing) 2. Dark current correction of the Registration Patch Sensor and light intensity adjustment 3. Initialization of the Toner Density Sensor (C) 4. Primary transfer ATVC control 5. Initialization of the Registration Patch Sensor 6. Cleaning of the Secondary Transfer Outer Roller 7. Reset of the Developing Unit counter
	Use case	When replacing the Developing Unit (C)
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	When installing the machine or replacing the Developing Unit of other color, do not use this item.
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	180 sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y/M/K/4
AINR-OFF	ON/OFF warm-up rotn deact: dor open/close	
Lv.1	Details	To set whether to disable the warm-up rotation when opening and closing the door. By selecting 1, printing can be executed without automatic adjustment at warm-up rotation when analyzing the cause of a problem.
	Use case	When printing and checking without automatic adjustment at warm-up rotation for analyzing the cause of a problem
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Be sure to return the setting value to 0 before the machine is used by the user.
	Display/adj/set range	0 to 1 0: OFF (warm-up rotation enabled), 1: ON (warm-up rotation disabled)
	Default value	0

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	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	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 COPIER> FUNCTION> CLEAR> ERDS-DAT
	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	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	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 COPIER> FUNCTION> CLEAR> ERDS-DAT
	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 COPIER> FUNCTION> CLEAR> ERDS-DAT
	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 dtl w/Sales Co's sver
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	N/A (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 COPIER> FUNCTION> CLEAR> ERDS-DAT
	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. 3) Turn OFF/ON the main power switch.
	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 COPIER> FUNCTION> CLEAR> ERDS-DAT
	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-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 non-Canon-made extension function of the Embedded-RDS is available.
	Use case	When the non-Canon-made extension function of the Embedded-RDS 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	000000000000
	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-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 non-Canon-made extension function of the Embedded-RDS 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)
	Unit	1 hour
	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

COPIER>FUNCTION>INSTALL		
INISSET-4		All colors Dev Units initial instal mode
Lv.1	Details	To automatically execute operation necessary for initial installation of the Developing Units for all colors. 1. Idle rotation of the Developing Unit (including automatic take-up of the developer sealing) 2. Dark current correction of the Registration Patch Sensor and light intensity adjustment 3. Initialization of the Toner Density Sensors for all colors 4. Primary transfer ATVC control 5. Initialization of the Registration Patch Sensor 6. Cleaning of the Secondary Transfer Outer Roller 7. Reset of the Developing Unit counter
	Use case	When replacing the Developing Units for all colors
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Use this item only when replacing Developing Units for 4 colors simultaneously.
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	180 sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y/M/C/K
INISSET-K		Exe of Dev Unit (Bk) initial install mod
Lv.1	Details	To automatically execute operation necessary for initial installation of the Developing Unit (Bk). 1. Idle rotation of the Developing Unit (including automatic take-up of the developer sealing) 2. Dark current correction of the Registration Patch Sensor and light intensity adjustment 3. Initialization of the Toner Density Sensor (Bk) 4. Primary transfer ATVC control 5. Initialization of the Registration Patch Sensor 6. Cleaning of the Secondary Transfer Outer Roller 7. Reset of the Developing Unit counter
	Use case	When replacing the Developing Unit (Bk)
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	When installing the machine or replacing the Developing Unit of other color, do not use this item.
	Display/adj/set range	During operation: xxx second (remaining time), At normal termination: OK, At abnormal termination: NG
	Required time	180 sec
	Related service mode	COPIER> FUNCTION> INSTALL> INISSET-Y/M/C/4

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 BRWS-ST5 (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 BRWS-ST5.
	Display/adj/set range
	At normal termination: OK, At abnormal termination: NG
	Related service mode
	COPIER> FUNCTION> INSTALL> COM-TEST COPIER> DISPLAY> USER> BRWS-ST5
CDS-CTL	Setting of country/area when CDS is used
Lv.1	Details
	To set country/area to enable CDS.
	Use case
	When enabling CDS
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	CA (Canada), LA (Latin America), HK (Hong Kong) and the country/area specified in COPIER> OPTION> FNC-SW> CONFIG.
	Default value
	It differs according to the location.
	Related service mode
	COPIER> OPTION> FNC-SW> CONFIG
	Supplement/memo
	CDS: Contents Delivery System
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!
RDSHDPOS	Automatic adjustment of shading position
Lv.1	Details
	To adjust the shading position automatically.
	Use case
	When replacing the Scanner Unit
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	At start of operation: START, During operation: ACTIVE, When operation finished normally: OK!
	Required time
	10 sec

COPIER>FUNCTION>INSTALL	
BIT-SVC	OFF/ON of Web service function of E-RDS
Lv.1	Details
	To set whether to use Web service function of Embedded-RDS. When 0 is set, authentication information cannot be obtained from Embedded-RDS.
	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

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■ 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/Scanner Unit - When clearing the RAM data of the Reader Unit
	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 operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> CCD> DF-WLVL2 COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-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/Scanner Unit - When clearing the RAM data of the Reader Unit
	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 operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> CCD> DF-WLVL1 COPIER> ADJUST> CCD> DFTAR-R, DFTAR-G, DFTAR-B
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. The MTF value is backed up in the Scanner Unit. Since it is peculiar to the Scanner Unit, there is no need to make an entry/a change.
	Use case
	- When replacing the Scanner Unit - When clearing the RAM data of the Reader Unit
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!

T-8-33

■ CST

COPIER>FUNCTION>CST	
MF-MAX	Reg MP Tray max width standard value
Lv.1	Details
	To register the standard value of the maximum width on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-MAX.
	Adj/set/operate method
	1) Align the guide of the Multi-purpose Tray with the maximum 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-MAX, and write it down on the service label.
	Display/adj/set range
	0 to 255
	Related service mode
	COPIER> ADJUST> CST-ADJ> MF-MAX COPIER> FUNCTION> CST> MF-MIN
MF-MIN	Reg MP Tray min width standard value
Lv.1	Details
	To register the standard value of the minimum width on the Multi-purpose Tray. Make a fine adjustment by COPIER> ADJUST> CST-ADJ> MF-MIN.
	Adj/set/operate method
	1) Align the guide of the Multi-purpose Tray with the minimum 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-MIN, and write it down on the service label.
	Display/adj/set range
	0 to 255
	Related service mode
	COPIER> ADJUST> CST-ADJ> MF-MIN COPIER> FUNCTION> CST> MF-MAX

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CLEANING

COPIER>FUNCTION>CLEANING		
2TR-CLN	Clean of Secondary Transfer Outer Roller	
Lv.1	Details	To execute bias cleaning to remove soil adhered on the Secondary Transfer Outer Roller.
	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 removal, etc.
	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> FUNCTION> CLEANING> TNR-COAT
	Related user mode	Adjustment/Maintenance> Maintenance> Clean Inside Main Unit
	Supplement/memo	Soil may be able to be removed by executing "Clean Inside Main Unit" or TNR-COAT (execution of toner application to the Secondary Transfer Roller) when the problem is not solved by repeatedly executing this item.
	TNR-COAT	Exe toner application to Sec Trns Roller
Lv.1	Details	To apply Y-color toner onto the surface of the Secondary Transfer Outer Roller when replacing the roller with a new one. Adhesion of substance leaking from the Secondary Transfer Outer Roller to the ITB can be prevented.
	Use case	When replacing the Secondary Transfer Outer Roller with a new one
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

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FIXING

COPIER>FUNCTION>FIXING		
NIP-CHK	Checking of fixing nip width	
Lv.1	Details	To check whether the fixing nip width is appropriate by printing. Criteria: Fixing nip width at 15 mm from each edge of paper and at the center of the paper must be within the range of 5.5 to 9.0 mm. Otherwise, a fixing failure may occur.
	Use case	- When replacing the fixing-related parts (Fixing Film Unit, Pressure Roller) - When a fixing failure occurs
	Adj/set/operate method	1) Set A4/LTR plain paper (76 to 90 g/m ²) on the Multi-purpose Tray. 2) Select "MPT", 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.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

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PANEL

COPIER>FUNCTION>PANEL		
LCD-CHK		
Checking of LCD Panel dot missing		
Lv.1	Details	To check whether there are any missing dots 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.
LED-CHK		
Checking 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.
	Related service mode	COPIER> FUNCTION> PANEL> LED-OFF
LED-OFF		
Termination of Control Panel LED check		
Lv.1	Details	To terminate the lighting 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.
	Related service mode	COPIER> FUNCTION> PANEL> LED-CHK
KEY-CHK		
Checking 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 on 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.

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PART-CHK

COPIER>FUNCTION>PART-CHK		
CL		
Specification of operation clutch		
Lv.1	Details	To specify the clutch to operate.
	Use case	When replacing the clutch/checking the operation
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	1 to 4 1: Developing Cylinder Clutch (Y) (CL01) 2: Developing Cylinder Clutch (M) (CL02) 3: Developing Cylinder Clutch (C) (CL03) 4: Developing Cylinder Clutch (Bk) (CL04)
	Default value	1
Related service mode	COPIER> FUNCTION> PART-CHK> CL-ON	
CL-ON		
Operation check of clutch		
Lv.1	Details	To start operation check of the clutch specified by CL. To repeat ON/OFF of the clutch 5 times at intervals of 3 seconds while the Developing Motor is being driven. The Cylinder Shaft of the Developing Unit rotates when the clutch is ON, and it stops when the clutch is OFF.
	Use case	When replacing the clutch/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!
	Required time	1 min
	Related service mode	COPIER> FUNCTION> PART-CHK> CL, MTR, MTR-ON
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 2 1: Front Fan (FM01) 2: Motor Cooling Fan (FM03)
	Default value	1
	Related service mode	COPIER> FUNCTION> PART-CHK> FAN-ON
Supplement/memo	It is not possible to make the Power Supply Cooling Fan (FM02) operate alone. Check the operation by checking whether it is driven when the paper is fed.	
FAN-ON		
Operation check of fan		
Lv.1	Details	To start operation check of the fan specified by FAN. The operation automatically stops after operation of 30 seconds.
	Use case	When replacing the fan/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!
	Required time	1 min
	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 setting value, and then press OK key.
	Display/adj/set range
	1 to 20
	1: Cassette 1, 2 Pickup Motor (M07) *1
	2: Cassette 1, 2 Feed/Multi-purpose Pickup Motor (M13) *2
	3: Registration Motor (M12)
	4: Duplex Reverse Motor (M11)
	5: Duplex Merging Motor (M14)
	6: Primary Transfer Roller Disengagement Motor (M08) *3
	7: Fixing Motor K52(M09) *4
	8: Bk Drum _ ITB Motor (M02), CL Drum Motor (M03) *5
	9: Developing Motor (M10)
	10: Reverse Motor (M30) *6
	11: Second Delivery Motor (M31) *6
	12: Bottle Motor (YM) (M04) *7
	13: Bottle Motor (CK) (M05) *7
	14: Waste Toner Feed Motor (M17) *8
	15: Cassette 1 Lifter Motor (M06) *1
	16: Cassette 3, 4 Pickup Motor (M101) *9
	17: Cassette 3, 4 Feed Motor (M103) *9
	18: Cassette 3, 4 Lifter Motor (M102) *9
	19: Cassette 1, 2 Feed/Multi-purpose Pickup Motor (M13) *10
	20: Polygon Motor (M01)
	*1: Pull out the Cassette 1 before operating the motor. While it is installed, paper may be picked up or the lifer may move up too much.
	*2: Remove papers from the Multi-Purpose Tray. If there are papers, they are picked up. Check that the Multi-purpose Tray Pickup Roller taps the Multi-Purpose Tray.
	*3: Do not make the motor operate too much because engagement/disengagement of the Primary Transfer Roller is repeated.
	*4: It operates only when the Fixing Unit is installed. The Fixing Heater is turned ON and it is driven at 1/1 speed.
	*5: The 2 motors operate simultaneously. Do not make them operate continuously. Otherwise, flipping of the ITB Cleaning Blade or noise may occur.
	*6: It operates only when the 3 Way Unit is installed.
	*7: The Developing Motor and the Developing Cylinder Clutch are also driven. Do not make the motors operate as much as possible because toner is supplied.
	*8: It operates only when the Waste Toner Container is installed.
	*9: It operates only when the Cassette Pedestal is connected. Pull out the Cassette 3 before operating the motor. While it is installed, paper may be picked up or the lifer may move up too much.
	*10: Reverse rotation
	Default value
	0
	Related service mode
	COPIER> FUNCTION> PART-CHK> MTR-ON

COPIER>FUNCTION>PART-CHK	
MTR-ON	Operation check of motor
Lv.1	Details
	To start operation check of the motor specified by MTR. In principle, it is driven for 30 seconds and is automatically stopped. Only the Bk Drum _ ITB Motor (M02), CL Drum Motor (M03), and Cassette 1,2 Feed / Multi-purpose Pickup Motor (M13) are driven for 10 seconds and are stopped.
	Use case
	When replacing the motor/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!
	Required time
	30 sec/10 sec
	Related service mode
	COPIER> FUNCTION> PART-CHK> MTR
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 2
	1: Registration Shutter Solenoid (SL02)
	2: Duplex Reverse Solenoid (SL06)
	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 2 sec" => "OFF for 5 sec" => "ON for 2 sec" => "OFF for 5 sec" => "ON for 2 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!
	Required time
	1 min
	Related service mode
	COPIER> FUNCTION> PART-CHK> SL

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CLEAR

COPIER>FUNCTION>CLEAR	
ERR	Clearing of error code
Lv.1	Details
	To clear error codes (E000, E001, E002, E003, E717, and 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.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
DC-CON	Clearing of DC Controller PCB RAM data
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.
	Related service mode
	COPIER> FUNCTION> MISC-P> P-PRINT
R-CON	RAM clear of Reader Unit
Lv.1	Details
	To clear the RAM data of the Reader Unit.
	Use case
	When clearing the RAM data of the Reader Unit
	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.
	Related service mode
	COPIER> FUNCTION> MISC-P> P-PRINT
JAM-HIST	Clearing of jam log
Lv.1	Details
	To clear the jam logs.
	Use case
	When clearing the jam logs
	Adj/set/operate method
	Select the item, and then press OK key.
	Related service mode
	COPIER> DISPLAY> JAM
ERR-HIST	Clearing of error log
Lv.1	Details
	To clear the error logs.
	Use case
	When clearing the error logs
	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> ERR
PWD-CLR	Clear of system administrator password
Lv.1	Details
	To clear the password of the system administrator set in Settings/Registration menu.
	Use case
	When clearing the password of the system administrator
	Adj/set/operate method
	Select the item, and then press OK key.

COPIER>FUNCTION>CLEAR	
ADRS-BK	Clearing 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.
	Related service mode
	COPIER> COUNTER
	Supplement/memo
	See COUNTER for the target counter.
CNT-DCON	Clear of DC Controller service counter
Lv.1	Details
	To clear the service counter 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.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
MMI	Clear Settings/Registration menu set VL
Lv.1	Details
	To clear the setting values in Settings/Registration menu. - Preferences (excluding Paper Type Management Settings) - Adjustment/Maintenance - Function Settings - Set Destination (excluding Address Lists) - Management Settings (excluding Department ID Management Information)
	Use case
	When clearing various setting values in Settings/Registration menu
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	The setting values are cleared after the main power switch is turned OFF/ON.

COPIER>FUNCTION>CLEAR		
MN-CON		Deletion of setting values
Lv.1	Details	To delete the setting values of address lists, forwarding settings, Settings/Registration and service mode. For details, refer to "Backup Data List" in the Service Manual.
	Use case	When initializing the setting values
	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	- Output the service mode setting values by P-PRINT before execution. After execution, enter necessary setting value. - RAM data is cleared after the main power switch is turned OFF/ON. - If this item 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 User Authentication once.
	Related service mode	COPIER> FUNCTION> MISC-P> P-PRINT
CARD		Clearing 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. The login screen is displayed immediately after start-up. To display the main menu at start-up, select "Display if function is selected" in "Login Screen Display Settings" in Settings/Registration menu.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode	COPIER> FUNCTION> INSTALL> CARD
	Related user mode	Management Settings> User Management> Authentication Management> Login Screen Display Settings
ALARM		Clearing of alarm log
Lv.1	Details	To clear the alarm logs (COPIER> DISPLAY> ALARM-2, ALARM-3).
	Use case	When clearing alarm logs
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	The alarm logs are cleared after the main power switch is turned OFF/ON.
	Related service mode	COPIER> DISPLAY> ALARM-2, ALARM-3

COPIER>FUNCTION>CLEAR		
CA-KEY		Init of key pair, certificate and CRL
Lv.2	Details	To delete the key pair, certificate and CRL collectively which are additionally registered by the user and return to the initial state.
	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 key pair, certificate and CRL which are additionally registered by the user remain in the HDD, which cause security concerns. - Do not execute this item carelessly because the key pair, certificate and CRL which are additionally registered are deleted when it is executed. If they are deleted mistakenly, they need to be again registered by the user. If there is no additional registration, the machine condition becomes equivalent to the one at the time of factory shipment. - If NG is displayed in 2), the key pair, certificate and CRL may not be deleted. In this case, surely execute the deletion by initializing the HDD, etc.
	Display/adj/set range	At normal state: OK, At failure occurrence: NG
	Supplement/memo	By turning OFF/ON the main power switch after execution of this item, the key pair, certificate and CRL registered by the user are initialized, and then those registered at the time of factory shipment are extracted from the archive data.
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 upgrading the Bootable in the E-RDS environment
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Usage of 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 state: OK, At failure occurrence: NG
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS, RGW-PORT, RGW-ADR, COM-LOG

COPIER>FUNCTION>CLEAR	
REG-CLR	Clear of image position correction value
Lv.2	Details
	To clear the correction value when the value which is adjusted by image position correction control is erratic value for some reason. When color displacement is not corrected by image position correction control, clear the correction value once. Then, either turn OFF/ON the power or execute the quick adjustment in Settings/Registration menu so that image position correction control is performed again.
	Use case
	When color displacement cannot be corrected although image position correction control is performed
	Adj/set/operate method
	Select the item, and then press OK key.
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Auto Adjust Gradation> Quick Adjust
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
	Adj/set/operate method
	Select the item, and then press OK key.
JV-CACHE	Clearing of MEAP application cache
Lv.1	Details
	To clear the MEAP cache area. MEAP applications bundled as standard are redeployed after clearing, but data will not be recovered. If you clear MEAP application which has been installed additionally, reinstall it manually. Data will not be recovered. For details, refer to the Service Manual.
	Use case
	When initializing the MEAP application
	Adj/set/operate method
	Select the item, and then press OK key.
	Caution
	If you clear MEAP application which has been installed additionally, be sure to reinstall it manually.
	Supplement/memo
	MEAP applications bundled as standard: system application, built-in login application MEAP applications installed additionally: non-Canon-made login application, general application, etc.

COPIER>FUNCTION>CLEAR	
LANG-CLR	Uninstallation of language files
Lv.2	Details
	To uninstall the language file (file other than JEFIGS/JECKTS files) installed in HDD. When installing a new language file while the maximum number of language files (8 files) have been already installed, an existing language file needs to be uninstalled. However, 6 language files (JEFIGS/JECKTS files) cannot be uninstalled. Up to 2 language files can be switched.
	Use case
	When deleting/switching a language file other than JEFIGS/JECKTS files
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Select the firmware in which the necessary languages are included by SST, and perform downloading.
	Caution
	A language file is not uninstalled unless the downloaded language files are installed by SST after the execution of this item. A language file which is not selected is deleted at installation by SST. (JEFIGS/JECKTS files will be kept.)
	Supplement/memo
	After the execution, language on the screen will be English, so switch the language.
FIN-MCON	Clearing of Finisher information
Lv.1	Details
	To clear the Finisher information which is stored in the Main Controller. After execution, set the Delivery Tray again in "Output Tray Settings" in Settings/Registration menu.
	Use case
	When switching to another type of Finisher in the field
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Related user mode
	Function Settings> Common> Paper Output Settings> Output Tray Settings
LS-INT-H	Initial laser copy ratio correct offset
Lv.2	Details
	To return the offset value of the laser copy ratio correction to 0 (initialization). Execute this item before performing copy ratio correction between Y/M/Bk and C.
	Use case
	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method
	Select the item, and then press OK key.
	Default value
	0
	Related service mode
	COPIER> ADJUST> IMG-REG> LS-H-YL/YC/YR/ML/MC/MR/KL/KC/KR

COPIER>FUNCTION>CLEAR		
LS-INT-V		Initial laser distortion correct offset
Lv.2	Details	To return the offset value of the laser distortion correction to 0 (initialization). Execute this item before performing distortion correction between Y/M/Bk and C.
	Use case	When color displacement occurs at the center of an image (especially at installation or at replacement of the Laser Scanner Unit)
	Adj/set/operate method	Select the item, and then press OK key.
	Default value	0
	Related service mode	COPIER> ADJUST> IMG-REG> LS-V-YL/YC/YR/ML/MC/MR/KL/KC/KR
JV-TYPE		[Not used]

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■ MISC-R

COPIER>FUNCTION>MISC-R		
SCANLAMP		Light-up check of LED
Lv.1	Details	To light up the Scanning Lamp for 3 seconds under the White Plate and the Copyboard Glass respectively.
	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!
	Required time	7 sec
RD-SHPOS		Moving to Scanner Unit fixing position
Lv.2	Details	To move the Scanner Unit to the position where it is fixed when moving. When moving the installed machine, the 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 installed machine
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Be sure to move the Scanner Unit to the fixing position and secure it in place with a screw when moving the Reader after installation. Otherwise, the Scanner Unit may get damage.
	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 values
Lv.1	Details	To output the service mode setting values.
	Use case	Before executing the CLEAR service mode, etc.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
HIST-PRT		Output of jam and error logs
Lv.1	Details	To output the jam log and error log.
	Use case	When outputting the jam/error log
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
TRS-DATA		Moving memory reception data to Inbox
Lv.2	Details	To move data received in memory to Fax/I-Fax Inbox> Memory RX Inbox.
	Use case	When moving the data received in memory to Inbox
	Adj/set/operate method	Select the item, and then press OK key.
	Related user mode	Fax/I-Fax Inbox> Memory RX Inbox
USER-PRT		Settings/Registration menu list output
Lv.1	Details	To output Settings/Registration menu list.
	Use case	When outputting Settings/Registration menu list.
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Supplement/memo	It takes approximately 3 seconds before output starts.
LBL-PRNT		Output of service label
Lv.1	Details	To output the service label.
	Use case	When outputting the service label
	Adj/set/operate method	1) Set A4/LTR paper in the Cassette 1. 2) Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
PRE-EXP		Lighting-up of Pre-exposure LED
Lv.1	Details	To light up the Pre-exposure LED (Y/M/C/Bk). Remove the Photosensitive Drum for visual check. Since the Pre-exposure LED is not lighted up while the Front Door is open, release the Interlock. It automatically stops after all LEDs light up.
	Use case	When checking that the Pre-exposure LEDs lights up
	Adj/set/operate method	1) Open the Front Door. 2) Remove the Photosensitive Drum. 3) Release the Interlock. 4) Select the item, and then press OK key.
	Caution	Be sure to remove the Photosensitive Drum; otherwise, drum memory may occur.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!

COPIER>FUNCTION>MISC-P		
D-PRINT		Output of service mode (DISPLAY)
Lv.1	Details	To output items displayed by DISPLAY in service mode. Items output by P-PRINT, LBL-PRNT and HIST-PRT, and ALARM are excluded.
	Use case	When checking items in DISPLAY
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
1ATVC-EX		Exe of primary transfer ATVC control
Lv.1	Details	To execute the primary transfer ATVC control. Execute this item for 1/1 speed and 1/2 speed in order.
	Use case	When reflecting the changed target current of primary transfer ATVC 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!
Related service mode		COPIER> ADJUST> HV-TR> 1TR-TGY/TGM/TGC/TGK COPIER> DISPLAY> HV-STS> 1ATVC-Y/M/C/K
ENV-PRT		Outpt inside temp&hmdy/Fix Rol temp log
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	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
PJH-P-1		Outpt print job log detail info:100 jobs
Lv.1	Details	To output the print job logs for the latest 100 jobs with detailed information. In the case of less than 100 jobs, the logs of all print jobs are output.
	Use case	When outputting the print job logs with detailed information
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Supplement/memo	Output the print job logs with detailed information which are not displayed/output in the job log screen under "System Monitor>Print>Log>Printer" and in the report of the print job log.
PJH-P-2		Outpt print job log detail info:all jobs
Lv.1	Details	To output the logs of all print jobs stored in the machine with detailed information (logs for 5000 jobs at a maximum). The difference between PJH-P-1 and this item is only the number of outputs.
	Use case	When outputting the print job logs with detailed information
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
	Supplement/memo	Output the print job logs with detailed information which are not displayed/output in the job log screen under "System Monitor>Print>Log>Printer" and in the report of the print job log.

COPIER>FUNCTION>MISC-P		
AT-IMG-X		Exe image position correction control
Lv.1	Details	To execute a series of image position correction control operation at parts replacement. The printer engine usually executes image position correction control at the specific timing according to the operation status and environment change.
	Use case	- When removing the Drum Unit - When releasing pressure from the 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!
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 outputting information of the USB device in the form of a report
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, When operation finished normally: OK!
RPT-FILE		Saving of service report as a file
Lv.1	Details	To save the report of various service modes in HDD as a file. If you store the saved file in a USB memory by RPT2USB, you can retrieve the file.
	Use case	When obtaining the service report as a file instead of printout
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	COPIER> FUNCTION> MISC-P> RPT2USB
RPT2USB		Write service report file to USB memory
Lv.1	Details	To store the report file of service mode saved in HDD by RPT-FILE to a USB memory.
	Use case	When storing the report file of service mode to a USB memory
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	COPIER> FUNCTION> MISC-P> RPT-FILE
TNRB-PRT		Output of Toner Container ID report
Lv.1	Details	To output the ID of the Toner Container in the form of a report.
	Use case	When checking the ID of the Toner Container
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	12-digit alphanumeric

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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 a USB memory.
	Use case	At upgrade
	Adj/set/operate method	1) Select the item, and then press OK key. 2) Perform downloading by SST or a USB memory.
	Caution	Do not turn OFF the power before HOLD is displayed.
	Display/adj/set range	When waiting for a command: STAND-BY/STNDBY, In communication: CONNECTED, Communication terminated: HOLD
	Supplement/memo	SST: Service Support Tool
CHK-TYPE		Spec 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 32 0: All partitions (only the areas where the operation can be executed) 1: PDL-related file storage area 2: Image data storage area 3: MEAP-related area 4: Not used 5 to 6: Image data storage area 7: General application temporary area (temporary file) 8: General application-related area 9: PDL spool data (temporary file) 10: SEND-related area 11: Update-related area 12: License-related area 13: System area 14: SWAP (temporary file/memory alternative area) 15 to 16: Not used 17: Debug log area 18 to 32: Not used * When 4, 12, 13, 15 or 16 is set, nothing is cleared even if HD-CLEAR is executed. * For 2, 5 and 6, HD-CLEAR/HD-CHECK is executed to all of the areas by selecting one of them. * By selecting 8, HD-CLEAR/HD-CHECK is also executed to 7, 9, 11 and 17.
Default value		0
Related service mode		COPIER> FUNCTION> SYSTEM> HD-CLEAR, HD-CHECK

COPIER>FUNCTION>SYSTEM	
HD-CHECK	File system check of specified partition
Lv.1	Details
	To execute system check of the partition specified by CHK-TYPE at the next startup.
	Use case
	When E602/E614 error (file corruption, etc.) occurs
	Adj/set/operate method
	Enter 1, and then press OK key.
	Caution
	Be sure to execute this item after CHK-TYPE.
	Display/adj/set range
	0 to 1 0: Not executed, 1: Executed at next startup
	Default value
	0
	Related service mode
	COPIER> FUNCTION> SYSTEM> CHK-TYPE
HD-CLEAR	Initialization of specified partition
Lv.1	Details
	To initialize the partition specified by CHK-TYPE at next startup.
	Use case
	When E602/E614 error (file corruption, etc.) occurs
	Adj/set/operate method
	Enter 1, and then press OK key.
	Caution
	Be sure to execute this item after CHK-TYPE.
	Display/adj/set range
	0 to 1 0: Not executed, 1: Executed at next startup
	Related service mode
	COPIER> FUNCTION> SYSTEM> CHK-TYPE
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
	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 the old setting data and the new data is deleted.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> SYSTEM> DSRAMRES
DSRAMRES	Restore of DC Controller PCB SRAM
Lv.2	Details
	To restore the setting data which has been backed up to SRAM of the DC Controller PCB.
	Use case
	When replacing the DC Controller PCB
	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 the old setting data and the new data is deleted.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> SYSTEM> DSRAMBUP

COPIER>FUNCTION>SYSTEM	
RSRAMBUP	Backup of Reader setting data
Lv.2	Details
	To back up setting data of the Reader in the Scanner Unit memory to the HDD.
	Use case
	When clearing setting data of the Reader at the time of troubleshooting
	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 the old setting data and the new data is deleted.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> SYSTEM> RSRAMRES
RSRAMRES	Restoration of Reader set data
Lv.2	Details
	To restore the setting data of the Reader which has been backed up in the HDD to the Scanner Unit memory.
	Use case
	When clearing setting data of the Reader at the time of troubleshooting
	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 the old setting data and the new data is deleted.
	Display/adj/set range
	During operation: ACTIVE, When operation finished normally: OK!
	Related service mode
	COPIER> FUNCTION> SYSTEM> RSRAMBUP
R-REBOOT	Reboot of host machine: remote
Lv.1	Details
	To reboot the host machine by remote control (using VNC).
	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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■ DBG-LOG

COPIER>FUNCTION>DBG-LOG	
LOG2USB	Storage of debug log to USB memory
Lv.2	<p>Details</p> <p>To store a set of debug logs to the USB memory at the error occurrence. A type of log to be collected is set in LOG-TRIG. If there is a debug log which has been automatically saved, it is archived at this time. Required time differs according to the device conditions and volume of log data.</p> <p>Use case</p> <p>When analyzing the cause of a problem</p> <p>Adj/set/operate method</p> <p>1) Install the USB memory. 2) Select the item, and then press OK key.</p> <p>Caution</p> <p>- Wait until the machine recognizes the USB memory (approx. 10 sec.). - During the data transfer ("ACTIVE" display), do not turn OFF the power/remove the USB memory/use the screen for operations.</p> <p>Display/adj/set range</p> <p>During operation: ACTIVE, At normal termination: OK!, At abnormal termination: NG</p> <p>Related service mode</p> <p>COPIER> FUNCTION> DBG-LOG> LOG-TRIG</p>
LOG2SRVR	For R&D
LOG-TRIG	Setting of debug log save conditions
Lv.2	<p>Details</p> <p>To set the conditions (timing, types, etc.) to automatically save the debug logs (stored as an archive file). The conditions written in the file are set by reading the operation setting file of the setting value from the Main Controller. When setting a new condition is necessary, read the operation setting file provided by R&D from the USB memory.</p> <p>Use case</p> <p>- When changing the conditions for automatic save of debug logs - When setting a new condition</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 99999</p> <p>Related service mode</p> <p>COPIER> FUNCTION> DBG-LOG> LOG2USB, LOG2SRVR</p>
HIT-STS	Display of debug log state
Lv.2	<p>Details</p> <p>To display whether archive file of the debug log which is matched with the conditions set in LOG-TRIG exists or not.</p> <p>Use case</p> <p>When checking the debug log automatically saved</p> <p>Adj/set/operate method</p> <p>Select the item, and then press OK key.</p> <p>Display/adj/set range</p> <p>When an automatically stored log exists: OK, When no automatically stored log exists: --</p> <p>Related service mode</p> <p>COPIER> FUNCTION> DBG-LOG> LOG-TRIG</p>
SYSLOG	For R&D

COPIER>FUNCTION>DBG-LOG	
DEFAULT	Reset of debug log setting
Lv.2	<p>Details</p> <p>To clear all debug log settings, log files, etc. and return to the state before debug log collection operation.</p> <p>Use case</p> <p>- When returning the device in which analyzing the cause of a problem was completed - When resetting the debug log settings</p> <p>Adj/set/operate method</p> <p>Select the item, and then press OK key.</p>
LOG-DEL	Clearing of debug logs
Lv.2	<p>Details</p> <p>To delete the debug log file. The debug log setting is not reset.</p> <p>Use case</p> <p>When clearing the debug log</p> <p>Adj/set/operate method</p> <p>Select the item, and then press OK key.</p>
HIT-STS2	For R&D

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COPIER > OPTION > FNC-SW		
MODEL-SZ		Fix magnifictn dsp&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 (original consists of mixed media (AB/Inch configuration)) - When using Chinese paper (8K/16K 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 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	It differs according to the location.
	Related service mode	COPIER> OPTION> FNC-SW> MODELSZ2, KSIZE-SW
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
DH-SW		For R&D
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/A configuration machine.
	Use case	- When replacing the Scanner Unit - When clearing the RAM data of 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: AB configuration, 1: Inch configuration
	Default value	0

COPIER > OPTION > FNC-SW		
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, AR: Argentina 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)
	Default value	It differs according to the location.
	Related service mode	COPIER> OPTION> FNC-SW> MODEL-SZ
W/SCNR		For R&D
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 12 0: LEGAL-R, 1: FOOLSCAP-R/FOLIO-R, 2: OFICIO-R, 3: Not used, 4: Australian FOOLSCAP-R, 5: Ecuador OFICIO-R, 6: Bolivia OFICIO-R, 7: Argentine OFICIO-R, 8: Not used, 9: Government LEGAL-R, 10: Mexico OFICIO-R, 11: F4A, 12: India LEGAL-R
	Default value	0

COPIER > OPTION > FNC-SW	
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-LTRR	Special paper size set in DADF mode:LTRR
Lv.2	Details
	To set the size of special paper (LTR-R 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 2 0: LETTER-R, 1: OFICIO-R, 2: Ecuador OFICIO-R
	Default value
	0
ORG-LDR	Special paper size set in DADF mode: LDR
Lv.2	Details
	To set the size of special paper (LDR 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 1 0: LEDGER-R, 1: Argentine LETTER
	Default value
	0
INTROT-2	Set auto adj exe interval: last rotation
Lv.1	Details
	To set the interval (the number of sheets) to execute automatic adjustment at last rotation. As the value is changed by 1, the interval (the number of sheets) is changed 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 2000
	Unit
	1 sheet
	Default value
	1000

COPIER > OPTION > FNC-SW	
DMAX-SW	ON/OFF of D-max control
Lv.2	Details
	To set ON/OFF of D-max control.
	Use case
	- When the density variation is not within the requested range at continuous output of a large volume of papers - When keeping the productivity even though there are some density variations
	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
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
	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
	It differs according to the location.
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: Factory default 1: [Settings/Registration] - Pressing [4] and [9] at the same time - [Settings/Registration]
	Default value
	0

COPIER > OPTION > FNC-SW	
FXWRNLVL	Set Fix Film life display threshold VL
Lv.2	Details
	To set the threshold value to display the life of Fixing Film. This item is used to prevent the occurrence of fixing failure caused by the continuous use of the Fixing Film beyond its life. When FXMSG-SW is 1, this setting is enabled. The counter for life judgment is stored in the DC Controller. The counter value cannot be changed and checked.
	Use case
	When continuing to use the Fixing Unit beyond the life of the Fixing Film
	Adj/set/operate method
	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: Warning is hidden. 1: Warning is displayed when the counter for life judgment reaches the specified value. (Driving time) 2: Warning is displayed when the counter for life judgment reaches the specified value. (Number of sheets) 3: Warning is displayed when the counter for life judgment reaches the specified value. (Both driving time and number of sheets)
	Default value
	0
	Related service mode
	COPIER> OPTION> DSPLY-SW> FXMSG-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

COPIER > OPTION > FNC-SW	
PDF-RDCT	Set of PDF reduction at RX/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
SJB-UNW	Reserve upper limit of secured print job
Lv.2	Details
	To set the upper limit for the number of reserved jobs in secured 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 2 0: 50 jobs, 1: 90 jobs, 2: No limit
	Default value
	1
CARD-RNG	Setting of number of cards (departments)
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
ARCDT-SW	ON/OFF of ARCDAT control
Lv.1	Details
	To set whether to execute ARCDAT control. When 1 is set, ARCDAT control is not executed. If the value displayed in HT-C is erratic when hue variation occurs, set the value of this item to 1 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
	Enter the setting value, and then press OK key.
	Caution
	Be sure to set the value back to 0 when ARCDAT control is back to normal. When a job is submitted during D-half control at last rotation while the setting value is 1, "Waiting to print..." may be displayed.
	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> DH-SW

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
	Job after the completion of scanning operation cannot be canceled.
	Display/adj/set range
	0 to 2 0: Cancel only scan job in waiting state, 1: Cancel all scan jobs, 2: Not canceled
	Default value
	0
	Supplement/memo
	Scan job: A job after the scanning operation is completed.
MIBCOUNT	Set of charge counter MIB scope range
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
CNTR-SW	Init parts counter estimated life value
Lv.1	Details
	To return the estimated life value 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
PSWD-SW	Set password type to enter service mode
Lv.1	Details
	To set the type of password to enter when getting into service mode. There are two types of password: password for "service technician" and password for "system administrator + service technician". When "system administrator + service technician" is set, enter the password for system administrator at the user's site followed by password for service technician.
	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

COPIER > OPTION > FNC-SW	
SM-PSWD	Set of password 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 set 1 or 2 with 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 output the service mode report as 1-sided or 2-sided printing.
	Use case
	When making 1-sided report output
	Adj/set/operate method
	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
BRWS-FAV	Set to allow serv browser favorite reg
Lv.2	Details
	To set whether to allow registration of favorites in the browser for servicing. When 1 is set, favorites in the browser for servicing can be edited, and any URLs can be accessed.
	Use case
	When accessing to any URLs
	Adj/set/operate method
	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: Prohibited, 1: Allowed
	Default value
	0
STND-PNL	[Not used]
INVALPDL	Disabling of PDL license
Lv.1	Details
	To disable the registered PDL license. When 1 is set, PDL is disabled even if a PDL license has been registered. Make this setting to the machine 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: Enabled, 1: Disabled
	Default value
	0

COPIER > OPTION > FNC-SW	
IMGCNTPR	Setting of image quality mode
Lv.1	Details
	To set the image quality mode. When 0 is set, the image quality priority mode is enabled. When this mode is enabled, gray color is reproduced with process colors in all cases. When 1 is set, the counter priority mode is enabled. When 2 is set, the image quality priority (photo) mode is enabled. For photo, gray color is reproduced with process colors. For text and graphic, it is reproduced with single Bk-color.
	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 2 0: Priority on image quality, 1: Priority on counter, 2: Priority on image quality (photo)
	Default value
	1
CDS-FIRM	Set to allow firmware update by admin
Lv.1	Details
	To set whether to allow the user (administrator) to update firmware. When 1 is set, Updater can be activated from Settings/Registration menu.
	Use case
	When allowing the administrator to update the firmware
	Adj/set/operate method
	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: Prohibited, 1: Allowed
	Default value
	JP:0, USA:0, EUR:1, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related service mode
	COPIER> OPTION> FNC-SW> LCDSFLG
	Supplement/memo
	CDS: Contents Delivery System
CDS-MEAP	Set to allow MEAP installation by admin
Lv.1	Details
	To set whether to allow the user (administrator) to install MEAP applications and enable iR options from CDS. When 1 is set, Updater can be activated from Settings/Registration menu.
	Use case
	When prohibiting 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: Prohibited, 1: Allowed
	Default value
	1
	Supplement/memo
	CDS: Contents Delivery System

COPIER > OPTION > FNC-SW	
CDS-UGW	Set to allow firmware update from UGW
Lv.1	Details
	To set whether to allow firmware update from the UGW server. When 1 is set, Updater accepts the operation from the UGW server in cooperation with CDS.
	Use case
	When allowing firmware update 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: Prohibited, 1: Allowed
	Default value
	0
	Supplement/memo
	CDS: Contents Delivery System
LOCLFIRM	Set to allow firmware update by file
Lv.1	Details
	To set whether to allow the user (administrator) to update 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 firmware using a file
	Adj/set/operate method
	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: Prohibited, 1: Allowed
	Default value
	1
MC-FANSW	Setting of Controller Fan speed
Lv.1	Details
	To set full speed/half speed to the Controller Fan. When 1 is set, the heat exhaust efficiency is increased.
	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
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
	JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0

COPIER > OPTION > FNC-SW		
SDLMTWRN		ON/OFF cpcty warn dsp: E-mail/I-Fax TX
Lv.2	Details	To set whether to display the warning message when sending data that exceeds the upper limit of 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
AUTO-OUT		ON/OFF of jammed ppr auto ejctn function
Lv.1	Details	To set ON/OFF of jammed paper automatic ejection function. When 1 is set, jammed paper is not delivered to the ejection position, but it stays at the current position at jam occurrence.
	Use case	- When user does not need automatic ejection of jammed paper - When location of jammed paper is necessary to analyze the cause of a problem
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0
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.
	Caution	- Do not set this item while charge management (charging by Coin Manager, a device alone, etc.) is used. - During an ongoing job for which delivery setting (offset, stapling, etc.) is made, interruption operation is performed between sets.
	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 expected by the user. 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 expected by the user 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 perform periodical update linked with CDS. When 1 is set, setting of periodical update can be made in Settings/Registration menu/via remote UI. When 2 is set, setting of periodical update can be made on the Updater screen in service mode.
	Use case	When allowing the user/service technician to perform periodical update
	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 for Japanese models. It is not assumed that the user performs firmware update.
	Display/adj/set range	0 to 2 0: Prohibited periodical update 1: Display the periodical update setting screen in Settings/Registration menu/on remote UI 2: Display the periodical update setting screen on the Updater in service mode
	Default value	JP:0, USA:0, EUR:1, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related service mode	Updater
Related user mode	Management Settings> License/Other> Register/Update Software> Periodical Update	
Supplement/memo		CDS: Contents Delivery System

COPIER > OPTION > FNC-SW	
AMSOFFSW	OFF/ON of AMS mode
Lv.1 Details	Usually, AMS mode is enabled automatically when the following conditions are satisfied. - AMS license which is an iR option is installed. - AMS-supported Login application is activated. Set 1 when preferring to disable (OFF) the AMS mode. For North/Middle/South America and for Europe, the default is OFF. Use this item when preferring to enable (ON) the AMS mode.
Use case	- When disabling (OFF) the AMS mode - When enabling (ON) the AMS mode (for North/Middle/South America and for Europe)
Adj/set/operate method	1) Press Counter button, and check that "ACCESS MANAGEMENT SYSTEM" is displayed on the Device Configuration screen. 2) Enter 1, and then press OK key. 3) Turn OFF/ON the main power switch. 4) Check that the AMS mode is OFF (by pressing Counter button and check that "ACCESS MANAGEMENT SYSTEM" is not displayed on the Device Configuration screen).
Display/adj/set range	0 to 1 0: ON, 1: OFF
Default value	JP:0, USA:1, EUR:1, AU:0, CN:0, KR:0, TW:0, ASIA:0
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
Supplement/memo	Unified Authentication: A function which enables the functions of the machine and applications to be used after being authenticated once.

COPIER > OPTION > FNC-SW	
MIB-NVTA	RFC-compatible character strng: MIB write
Lv.1 Details	As default, MIB object which NVT-ASCII can be written exists in order to link with the value on the Control Panel. This violates RFC order, so a problem like garbled 2-byte characters may occur in the SNMP monitoring system, such as other vendor's MPS. Whether to allow writing of non-RFC-compatible character strings in MIB can be set using this item. When 1 is set, only the character strings which are strictly compatible with RFC are written. (Writing operation is executed from the SNMP manager.) It is not linked with the value on the Control Panel.
Use case	Upon user's request (to operate 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
SVC-RUI	Enabling of remote UI func for servicing
Lv.1 Details	To set whether to enable the remote UI function for servicing (not provided to end users). When 0 is set, the remote UI function is disabled. When setting the value other than 0, remote UI function is enabled, and the value becomes password to use the function.
Use case	When preferring to use the import function of background image file of main menu
Adj/set/operate method	Enter any value (other than 0), and then press OK key.
Display/adj/set range	0 to 65535
Default value	0
LCDSFLG	Setting of local CDS server usage
Lv.1 Details	To set whether to use the local CDS server. When 1 is set, the "Connected Server Settings" screen is displayed in Software Management Settings in Settings/Registration menu. When CDS-FIRM 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.
Display/adj/set range	0 to 1 0: Not used, 1: Used
Default value	0
Related service mode	COPIER> OPTION> FNC-SW> CDS-FIRM
Related user mode	Management Settings> License/Other> Register/Update Software> Software Management Settings> Connected Server Settings
Supplement/memo	iW EMC device firmware update plug-in is required to use local CDS.

COPIER > OPTION > FNC-SW	
SELF-CHK	ON/OFF high voltg error detect function
Lv.2	Details
	To set whether to detect high voltage error. When 1 is set, E199 occurs at detection of high voltage error.
	Use case
	- At study by R&D - When identifying the cause of a problem
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Use this mode only when specific instructions are given.
	Display/adj/set range
	0 to 15 0: OFF, 1: ON, 2 to 15: Not used
	Default value
	0
NO-LGOUT	ON/OFF of Logout button display
Lv.1	Details
	To set whether to display the [Logout] button. When 0 is set, [Logout] button is displayed on the screen, and logout with the ID key is enabled. When 1 is set, [Logout] button is not displayed, and logout with the ID key is disabled.
	Use case
	When hiding the Logout button for customization
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0
T-DLV-BK	Bk Tonr Cont prior dvry alarm notice tmg
Lv.1	Details
	To set the toner level as the timing to notify the prior delivery alarm for the Bk-color Toner Container.
	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, and then press OK key.
	Caution
	Since toner level is calculated based on the toner supply count, some errors may occur.
	Display/adj/set range
	0 to 40
	Unit
	1 %
	Default value
	It differs according to the location.
	Related service mode
	COPIER> OPTION> FNC-SW> T-DLV-CL
T-DLV-CL	YMC Tonr Cont prior dvry alm notice tmg
Lv.1	Details
	To set the toner level as the timing to notify the prior delivery alarm for the Y/M/C-color Toner Container.
	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, and then press OK key.
	Caution
	Since toner level is calculated based on the toner supply count, some errors may occur.
	Display/adj/set range
	0 to 40
	Unit
	1 %
	Default value
	It differs according to the location.
	Related service mode
	COPIER> OPTION> FNC-SW> T-DLV-BK

COPIER > OPTION > FNC-SW	
D-DLV-BK	Set Bk Drum prior dvry alarm notice tmg
Lv.1	Details
	To set the timing to notify the prior delivery alarm for the Drum Unit (Bk).
	Use case
	When changing the timing to notify the end of life according to the usage status
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Since the drum is integrated with the Developing Unit, some errors may occur depending on the usage conditions.
	Display/adj/set range
	50 to 200
	Unit
	1 %
	Default value
	100
	Related service mode
	COPIER> COUNTER> LF> K-DRM-LF
D-DLV-CL	Set YMC Drum prior dvry alarm notice tmg
Lv.1	Details
	To set the timing to notify the prior delivery alarm for the Drum Unit (Y/M/C).
	Use case
	When changing the timing to notify the end of life according to the usage status
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Since the drum is integrated with the Developing Unit, some errors may occur depending on the usage conditions.
	Display/adj/set range
	50 to 200
	Unit
	1 %
	Default value
	100
	Related service mode
	COPIER> COUNTER> LF> Y/M/C-DRM-LF
JM-ERR-D	Set of error display of 0Cxx jam (DCON)
Lv.2	Details
	To set whether to display 0Cxx jam as the error "E996-0Cxx". In the case of a jam, log cannot be obtained depending on the timing. By selecting 1 when the 0Cxx jam occurs, it is displayed as an error so that a log can be obtained. "xx" represents any of the following: A1/A2/A3/A4/A5/A7/A8/AE/AF/B3/B4/B8/F0/F3.
	Use case
	When obtaining a log at the occurrence of 0Cxx jam
	Adj/set/operate method
	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

COPIER > OPTION > FNC-SW	
JM-ERR-R	Set of error display of 0071 jam (RCON)
Lv.2	Details
	To set whether to display 0071 jam as the error "E996-0071". In the case of a jam, a log may not be able to be obtained depending on the timing. By selecting 1 when the 0071 jam occurs, it is displayed as an error so that a log can be obtained.
	Use case
	When obtaining a log at the occurrence of 0071 jam
	Adj/set/operate method
	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
ASLPMAX	Set auto sleep shift time maximum value
Lv.1	Details
	To set the maximum auto sleep shift time.
	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
SEND-SPD	ON/OFF of SEND operation speed-up
Lv.2	Details
	To set whether to speed up the SEND operation. When 1 is set, transmission speed of SEND/XBOX is increased because image conversion is performed during SEND and Scan.
	Use case
	When speeding up the SEND operation
	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 speed may be decreased due to occurrence of competing operation or failure with MEAP application may occur. In such case, be sure to return the value back to 0.
	Display/adj/set range
	0 to 1 0: ON, 1: OFF
	Default value
	0

COPIER > OPTION > FNC-SW	
TNNEWQCK	Set new Toner Cntner chck seq afr rplce
Lv.2	Details
	To set whether to execute the new Toner Container check sequence after replacement. In case of processing a large job immediately after replacement of the Toner Container when 0 is set, downtime due to the new Toner Container check sequence occurs during the processing. When 1 is set, control to print the specified number of sheets is turned OFF and the new Toner Container check sequence is executed immediately after the replacement.
	Use case
	When downtime occurs due to the new Toner Container check sequence during the processing of a large job
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> IMG-DEV> TNNEWCNT
2TR-TBLS	Set sec transfer bias correction table
Lv.1	Details
	To set the secondary transfer bias correction table according to the paper to be used. Since physical properties of paper are different for each location, use the table according to the paper to be used.
	Use case
	When using paper for a location other than the intended one
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 2 0: For Japan, 1: For locations other than Japan and USA, 2: For USA
	Default value
	JP:0, USA:2, EUR:1, AU:1, CN:1, KR:1, TW:1, ASIA:1

COPIER > OPTION > FNC-SW	
VER-CHNG	Setting of firmware update operation
Lv.2 Details	<p>To set how to update firmware of PCB/option which has been installed/replaced by comparing the version of it with the version stored in the Flash PCB of the Main Controller.</p> <p>If combination of firmware versions of PCB/option stored in the Main Controller and the version in PCB/option after installation/replacement is not appropriate (operation with the combination of firmware versions has not yet been checked), failure where analysis is difficult may occur.</p> <p>It is possible to check the firmware versions at the start of the machine, and automatically write the firmware stored in the Main Controller in PCB/option collectively as needed.</p> <p>When 0 is set, versions are not checked and firmware update is not performed. Therefore, it is necessary to manually update the versions using a USB memory/SST.</p> <p>When 1 is set, firmware is updated if the version in PCB/option is old. However, it is not updated if the version is new or old and new versions are mixed.</p> <p>When 2 is set, a compatible firmware (the version where operation has been checked) is written from the Main Controller regardless of whether the version in PCB/option is old or new.</p>
Use case	When installing/replacing PCB/option having firmware
Adj/set/operate method	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: Keep the current firmware version. 1: Update the firmware if the version in PCB/option is older than that stored in the Main controller. If the version is new or old and new versions are mixed, firmware is not updated. 2: Update the firmware regardless of whether the version is old or new if the version in PCB/option differs from that stored in the Main Controller.
Default value	1
Supplement/memo	<p>When updating the firmware, the main menu is displayed on the Control Panel at startup and then a message prompting to update firmware is displayed.</p> <p>By pressing [Update], the machine reboots immediately and firmware is updated.</p> <p>By pressing [Skip], it returns to the main menu. The message is displayed again at next startup.</p>

COPIER > OPTION > FNC-SW	
CST-MDL	Set number of cassettes of the machine
Lv.2 Details	To set whether to configure the machine as 1-cassette machine. When 1 is set, only the Cassette 2 can be used.
Use case	- When configuring the number of cassettes for the 1-cassette model for China as 1-cassette - When executing MN-CON - When replacing the HDD
Adj/set/operate method	1) Turn OFF the main power switch. 2) Remove the Cassette 1. 3) Turn ON the main power switch. 4) Enter 1, and then press OK key. 5) Turn OFF/ON the main power switch.
Caution	Do not use this mode for models other than the 1-cassette model for China.
Display/adj/set range	0 to 1 0: 2-cassette configuration (normal), 1: 1-cassette configuration (for China)
Default value	0
Related service mode	COPIER> FUNCTION> CLEAR> MN-CON
Supplement/memo	Procedure to configure the machine as 2-cassette machine 1) Turn OFF the main power switch. 2) Install the Cassette 1. 3) Turn ON the main power switch. 4) Enter 0, and then press OK key. 5) Turn OFF/ON the main power switch.
INTR-TML	Set ini rtn time: extra-long size ppr fd
Lv.2 Details	To set the offset of initial rotation time when feeding extra-long size paper. When the result is a negative value, the time becomes "0 second". Increase the value when a fixing failure occurs on the edge, and decrease the value when prioritizing productivity.
Use case	- When a fixing failure occurs on the edge while feeding extra-long size paper - When reducing downtime
Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
Caution	As the value is larger, FCOT becomes longer. If the value is too small, a fixing failure may occur on the edge.
Display/adj/set range	-2 to 2 -2: -15 seconds, -1: -10 seconds, 0: 0 second, 1: +5 seconds, 2: +10 seconds
Default value	0

COPIER > OPTION > FNC-SW	
PREXP-SW	Set Clean Pre-exposure LED light condtn
Lv.2	Details
	To set the condition to light up the Cleaning Pre-exposure LED. When drum ghost occurs, set 1. If it is not alleviated, set 2.
	Use case
	When drum ghost occurs
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When 1 or 2 is set, horizontal lines due to charging may appear earlier.
	Display/adj/set range
	0 to 3 0: Light up according to image information 1: Light up regardless of image information 2: Light up regardless of image information and light intensity is increased 3: For R&D use
	Default value
	0
	Related service mode
	COPIER> ADJUST> EXP-LED> PR-EXP-Y/M/C/K, PR-EXPY2, PR-EXPM2, PR-EXPC2, PR-EXPK2

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■ DSPLY-SW

COPIER > OPTION > DSPLY-SW	
UI-COPY	ON/OFF of copy screen display
Lv.2	Details
	To set whether to display 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: OFF, 1: ON
	Default value
	1
UI-BOX	ON/OFF of Inbox screen display
Lv.2	Details
	To set whether to display the Inbox function. The setting value1 and 2 of this item are linked with the values (ON and OFF) of Store Location Display Settings> Main Box in Settings/Registration menu respectively. The setting is reflected after turning OFF/ON the power.
	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: OFF (No Inbox function. Storing is not available even with PDL to Inbox.) 1: ON (Inbox function is active.) 2: ON (Storing is available with PDL to Inbox although no display on the Control Panel/remote UI.)
	Default value
	1
	Related user mode
	Preferences> Display Settings> Store Location Display Settings> Mail Box
UI-SEND	ON/OFF of Send screen display
Lv.2	Details
	To set whether to display 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: OFF, 1: ON
	Default value
	1
UI-FAX	ON/OFF of fax screen display
Lv.2	Details
	To set whether to display 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: OFF, 1: ON
	Default value
	1

COPIER > OPTION > DSPLY-SW	
T-LW-LVL	Set toner level warning mssg dsply timing
Lv.2	<p>Details</p> <p>To set the threshold value for the toner level in the Toner Bottle. When the toner level becomes below the threshold while TNR-WARN is 0, a warning message "Toner is low. Replacement not yet needed." is displayed on the Control Panel. As the value is incremented by 1, the threshold is increased by 1%. As the value is larger, the timing to display the message becomes earlier.</p> <p>Use case</p> <p>- Upon user's request - At the timing that the service technician visits to the customer, etc.</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Caution</p> <p>If you set a value smaller than the default value, absence of toner may be displayed before the toner level warning message.</p> <p>Display/adj/set range</p> <p>5 to 100</p> <p>Unit</p> <p>1 %</p> <p>Default value</p> <p>It differs according to the location.</p> <p>Related service mode</p> <p>COPIER> OPTION> DSPLY-SW> TNR-WARN</p>
NWERR-SW	OFF/ON of network-related error display
Lv.2	<p>Details</p> <p>To set OFF/ON of network-related error message display. When setting 0 while the machine is not connected to network, the network-related error message "Check the network connection." is not displayed.</p> <p>Use case</p> <p>When using the machine only as a copy machine</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>1 (Normal model)/0 (Self-operated copy model)</p>
FXMSG-SW	ON/OFF Fixing Unit replacement message
Lv.2	<p>Details</p> <p>To set whether to display the message prompting to replace the Fixing Unit on the Control Panel when the counter for life judgment reaches the specified value. When the setting values of FXMSG-SW and FXWRNLVL are 1, the Fixing Unit life detection is performed. When the Fixing Unit reaches its life, the Fixing Unit replacement message "Prepare new fixing roller. Call service representative." is displayed.</p> <p>Use case</p> <p>When detecting the life of Fixing Unit</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>1</p> <p>Related service mode</p> <p>COPIER> OPTION> FNC-SW> FXWRNLVL</p>

COPIER > OPTION > DSPLY-SW	
UI-PRINT	Set of secured print-related UI display
Lv.2	<p>Details</p> <p>To set whether to display UI related to secured print.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 2 0: Hide all UIs related to secured print 1: Display all UIs related to secured print 2: Hide Secured Print button in the main menu and the simple authentication settings in Settings/Registration menu</p> <p>Default value</p> <p>1</p>
UI-RSCAN	ON/OFF of remote scan screen display
Lv.2	<p>Details</p> <p>To set whether to display the remote scan screen on the Control Panel.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>1</p>
UI-WEB	ON/OFF of Web browser screen display
Lv.2	<p>Details</p> <p>To set whether to display the Web browser screen.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>1</p>
TNR-WARN	ON/OFF of toner warning display
Lv.1	<p>Details</p> <p>To set whether to display the toner level warning.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 1 0: ON, 1: OFF</p> <p>Default value</p> <p>JP:0, USA:1, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0, LTN:1</p> <p>Related service mode</p> <p>COPIER> OPTION> DSPLY-SW> T-LW-LVL</p>

COPIER > OPTION > DSPLY-SW	
HPFL-DSP	Set hvy,prntr 1200dpi dedicated mod dsp
Lv.1	Details
	To set whether to display heavy paper and printer 1200 dpi dedicated mode on Auto Adjust Gradation screen at the time of full adjustment.
	Use case
	When executing full adjustment with heavy paper and printer 1200 dpi dedicated 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 3 0: Hide 1: Display plain paper/heavy paper 2: Display standard/printer 1200 dpi dedicated mode 3: Display standard (plain paper)/standard (heavy paper)/printer 1200 dpi dedicated mode
	Default value
	0
RMT-CNSL	Allow console application connection
Lv.1	Details
	To set whether to allow connection from a console application (RemoteConsole). When 1 is set, logs of MEAP application can be collected via the console application activated on a PC.
	Use case
	When collecting logs of MEAP application
	Adj/set/operate method
	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 whether to display 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
	JP:1, USA:1, EUR:0, AU:1, CN:1, KR:1, TW:1, ASIA:1
UI-MEM	ON/OFF of memory media screen display
Lv.2	Details
	To set whether to display the memory media screen 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
	1
UI-NAVI	[Not used]

COPIER > OPTION > DSPLY-SW	
ITB-DSP	ON/OFF ITB on init scrn after prts rplce
Lv.1	Details
	To set whether to display "ITB" on the initialization screen after replacing parts in Settings/Registration menu. When allowing the user to replace the ITB, set 1.
	Use case
	When allowing the user to replace the ITB
	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
	Adjustment/Maintenance> Maintenance> Initialize After Replacing Parts> ITB
UI-CUSTM	ON/OFF of Quick Menu screen display
Lv.2	Details
	To set whether to display the Quick Menu screen on the Control Panel.
	Use case
	When not displaying the Quick 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
CLN-SEL	Set condensation prev:Clean Condensation
Lv.1	Details
	To set the effect of the condensation cleaning for condensation prevention. When 0 is set, "Clean Condensation" is not displayed in Settings/Registration menu. When 1 to 3 is set, "Clean Condensation" is displayed and the level of the effect of condensation cleaning can be set. As the value is larger, the effect is increased because the condensation cleaning is executed more frequently, but cleaning time are increased. In the case of installation in a low temperature and high humidity environment (in winter), ask for the user's opinion and configure the setting.
	Use case
	When condensation occurs in a low temperature and high humidity environment
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 3 0: OFF 1: ON (small effect, short cleaning time) 2: ON (moderate effect, medium cleaning time) 3: ON (large effect, long cleaning time)
	Default value
	0

COPIER > OPTION > DSPLY-SW		
USER-DSP		Set of SSO-H login user name display
Lv.1	Details	To set whether to display the name of the user who logs in using MEAP authentication (SSO-H) on the upper left area of the Control Panel 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 2 0: Hide, 1: Display "display name", 2: Display "user name"
	Default value	0
	Supplement/memo	MEAP authentication (SSO-H): local authentication and server authentication using the Single Sign On-Hybrid MEAP application.
SDTM-DSP		ON/OFF of auto shutdown shift time dspl
Lv.1	Details	To set whether to display "Auto Shutdown Time" in Settings/Registration menu.
	Use case	When switching to display or hide auto shutdown shift time
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	Be sure to set 0 for the model with fax. If 1 is set, fax reception cannot be performed normally.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	JP:0, USA:0, EUR:1, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Preferences> Timer/Energy Settings> Auto Shutdown Time, Auto Shutdown Weekly Timer
WT-WARN		ON/OFF Waste Toner Cntner prep warn dspl
Lv.1	Details	To set whether to display the Waste Toner Container preparation warning message on the status area of the Control Panel. The display timing can be set by EXT-TBOX.
	Use case	When there is no need to notify the Waste Toner Container preparation warning to 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: OFF, 1: ON
	Default value	1
	Related service mode	COPIER> OPTION> CUSTUM> EXT-TBOX
DF-DSP		ON/OFF of DADF Roll counter initial scrn
Lv.1	Details	To set whether to display the DADF Roller on the counter initialization screen in Settings/Registration menu.
	Use case	When the user does not replace the parts
	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

COPIER > OPTION > DSPLY-SW		
2TR-DSP		ON/OFF of Sec Trn Out Rol cntr init scrn
Lv.1	Details	To set whether to display the Secondary Transfer Outer Roller on the counter initialization screen in Settings/Registration menu.
	Use case	When the user replaces the parts
	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
COM10-DL		ON/OFF of DL/COM10 landscape display
Lv.2	Details	To set whether to display landscape direction for DL/COM10 (envelope) on the Select Paper screen of the Cassette 1.
	Use case	Upon user's request (to change the feed direction to landscape due to setting of a small number of envelopes on the Multi-purpose Tray and low productivity with portrait feeding)
	Adj/set/operate method	1) Set DL/COM10 on the Cassette 1 (landscape direction). 2) Enter the setting value, and then press OK key.
	Caution	Be sure to get approval from the user by telling that jam may occur to improve productivity.
	Display/adj/set range	0 to 1 0: OFF (display only portrait feeding), 1: ON
	Default value	0
LOCAL-SZ		ON/OFF area-spec stdrd size ppr set scrn
Lv.1	Details	To set whether to display the area-specific standard size paper on the paper settings screen in Settings/Registration menu. When 1 is set, paper type (FOOLSCAP, OFFICIO, etc.) can be set on the paper settings screen for each paper source (except the Cassette 1).
	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: OFF, 1: ON
	Default value	It differs according to the location.
	Related user mode	Preferences> Paper Settings> Paper Settings
	Supplement/memo	- Display order of paper name on the paper settings screen differs according on the location. - The area-specific standard size paper cannot be set for both the Cassette 1 and 2 for the 1-cassette model for China.

T-8-45

IMG-FIX

COPIER > OPTION > IMG-FIX	
FX-S-TMP	Set ITOP control temp: plain 1, colored
Lv.1 Details	To set the offset of ITOP control temperature for plain paper 1 (64 to 75 g/m ²) and colored paper at 1/1 speed. As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	When uneven gloss occurs on the leading edge (74 mm) of plain paper 1 and colored paper
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0
TMP-TBL2	Set fixing control temp: heavy paper 1
Lv.1 Details	To set the offset of fixing control temperature for heavy paper 1 (106 to 128 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on heavy paper 1
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and 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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
TMP-TBL3	Set fixing control temp: heavy paper 2
Lv.1 Details	To set the offset of fixing control temperature for heavy paper 2 (129 to 163 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on heavy paper 2
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and 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	5 deg C
Default value	0
TMP-TBL4	Set fixing control temp: heavy paper 3
Lv.1 Details	To set the offset of fixing control temperature for heavy paper 3 (164 to 220 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on heavy paper 3
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and 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	5 deg C
Default value	0
TMP-TBL5	Set fixing control temperature: thin ppr
Lv.1 Details	To set the offset of fixing control temperature for thin paper (52 to 63 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on thin paper
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and 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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
TMP-TBL6	Set fixing control temperature: envelope
Lv.1	Details
	To set the offset of fixing control temperature for envelope. As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When a fixing failure/fixing offset occurs on envelope
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and 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
	5 deg C
	Default value
	0
FXS-TMP2	Set ITOP control temp: heavy paper 1
Lv.1	Details
	To set the offset of ITOP control temperature for heavy paper 1 (106 to 128 g/m2). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss occurs on the leading edge (74 mm) of heavy paper 1
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
FXS-TMP3	Set ITOP control temp: heavy paper 2
Lv.1	Details
	To set the offset of ITOP control temperature for heavy paper 2 (129 to 163 g/m2). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss occurs on the leading edge (74 mm) of heavy paper 2
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0
FXS-TMP4	Set ITOP control temp: heavy paper 3
Lv.1	Details
	To set the offset of ITOP control temperature for heavy paper 3 (164 to 220 g/m2). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss occurs on the leading edge (74 mm) of heavy paper 3
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
FXS-TMP5	Set ITOP control temperature: thin paper
Lv.1 Details	To set the offset of ITOP control temperature for thin paper. As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	When uneven gloss occurs on the leading edge (74 mm) of thin paper
Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0
FXS-TMP6	Set ITOP control temperature: envelope
Lv.1 Details	To set the offset of ITOP control temperature for envelope. As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	When uneven gloss occurs on the leading edge (74 mm) of envelope
Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
FXST2-N2	Set ITOP wait time:below 10 deg C,1/1SPD
Lv.1 Details	To set initial rotation time at 1/1 speed when a temperature is lower than 10 deg C. Increase the value when a fixing failure occurs.
Use case	When fixing failure occurs in an environment where a temperature is lower than 10 deg C
Adj/set/operate method	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
Unit	1 sec
Default value	0
Supplement/memo	When all the following conditions are satisfied, it becomes 1/1 speed. - Paper type: Thin paper, plain paper 1/2/3, colored paper, recycled paper 1/2/3, tracing paper, or pre-punched paper - Resolution: 600 dpi - Paper width: Less than 300.0 mm
FXST2-UH	Set ITOP wait time:below 10 deg C,1/2SPD
Lv.1 Details	To set initial rotation time at 1/2 speed when a temperature is lower than 10 deg C. Increase the value when a fixing failure occurs.
Use case	When fixing failure occurs in an environment where a temperature is lower than 10 deg C
Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
Display/adj/set range	0 to 30
Unit	1 sec
Default value	0
Supplement/memo	In any of the following cases, it becomes 1/2 speed. - Paper type: Heavy paper 1/2/3/4, 1-sided coated paper 1/2/3, 2-sided coated paper 1/2/3, transparency, label, bond paper, postcard/4 on 1 postcard, or envelope - Resolution: 1200 dpi - Paper width: 300.0 mm or more
FLYING	ON/OFF of flying start temperature ctrl
Lv.2 Details	To set whether to execute flying start temperature control. When 1 is set, flying start temperature control is not performed. Selecting 1 has an advantage over selecting 0 in terms of the life of the Fixing Unit. However, selecting 1 does not always extend the life.
Use case	When preferring to extend the life of the Fixing Unit
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, FCOT becomes longer.
Display/adj/set range	0 to 1 0: ON, 1: OFF
Default value	0

COPIER > OPTION > IMG-FIX	
TMP-TBL7	Set fix ctrl temp:plain 2,tracing,punch
Lv.1	<p>Details</p> <p>To set the offset of fixing control temperature for plain paper 2 (76 to 90 g/m²), tracing paper and pre-punched paper. As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.</p> <p>Use case</p> <p>When a fixing failure/fixing offset occurs on plain paper 2, tracing paper and pre-punched paper</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range</p> <p>-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C</p> <p>Unit</p> <p>5 deg C</p> <p>Default value</p> <p>0</p>
TMP-TBL8	Set fixing control temp: transparency
Lv.1	<p>Details</p> <p>To set the offset of fixing control temperature for transparency. As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.</p> <p>Use case</p> <p>When a fixing failure/fixing offset occurs on transparency</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range</p> <p>-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C</p> <p>Unit</p> <p>5 deg C</p> <p>Default value</p> <p>0</p>
TMP-TBL9	Set fixing control temp: coated paper 1
Lv.1	<p>Details</p> <p>To set the offset of fixing control temperature for coated paper 1 (106 to 128 g/m²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.</p> <p>Use case</p> <p>When a fixing failure/fixing offset occurs on coated paper 1</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range</p> <p>-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C</p> <p>Unit</p> <p>5 deg C</p> <p>Default value</p> <p>0</p>

COPIER > OPTION > IMG-FIX	
TMP-TB10	Set fixing control temp: coated paper 2
Lv.1	<p>Details</p> <p>To set the offset of fixing control temperature for coated paper 2 (129 to 163 g/m²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.</p> <p>Use case</p> <p>When a fixing failure/fixing offset occurs on coated paper 2</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Display/adj/set range</p> <p>-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C</p> <p>Unit</p> <p>5 deg C</p> <p>Default value</p> <p>0</p>
FXS-TMP7	Set ITOP control temp: plain paper 2
Lv.1	<p>Details</p> <p>To set the offset of ITOP control temperature for plain paper 2 (76 to 90 g/m²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.</p> <p>Use case</p> <p>When uneven gloss occurs on the leading edge (74 mm) of plain paper 2</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by -/+ key) and press OK key.</p> <p>Caution</p> <p>If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)</p> <p>Display/adj/set range</p> <p>-2 to 2 -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C</p> <p>Unit</p> <p>5 deg C</p> <p>Default value</p> <p>0</p>

COPIER > OPTION > IMG-FIX	
FXS-TMP8	Set ITOP control temp: transparency
Lv.1 Details	To set the offset of ITOP control temperature for transparency. As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	When uneven gloss occurs on the leading edge (74 mm) of transparency
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0
FXS-TM10	Set ITOP control temp: coated paper 2
Lv.1 Details	To set the offset of ITOP control temperature for coated paper 2 (129 to 163 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	When uneven gloss occurs on the leading edge (74 mm) of coated paper 2
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
FIXMIXBD	Setting of media mixed mode
Lv.1 Details	To set whether image quality or productivity is to be prioritized when media are mixed. As the value is increased, image quality is improved, but productivity is decreased. When the value is decreased, productivity is increased, but uneven gloss may occur.
Use case	- When a fixing failure occurs while media are mixed - Upon user's request (to improve productivity when media are mixed)
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Display/adj/set range	-2 to 2
Unit	5
Default value	0
FXS-TMP9	Set ITOP control temp: coated paper 1
Lv.1 Details	To set the offset of ITOP control temperature for coated paper 1 (106 to 128 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	When uneven gloss occurs on the leading edge (74 mm) of coated paper 1
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
THIN-LP	Set of fixing arch control: thin paper
Lv.2	Details
	To set the arch amount between the secondary transfer and fixing when feeding thin paper (52 to 63 g/m ²) at 1/1 speed. Increase the value when an image failure (crawled marks/wrinkles) occurs.
	Use case
	When an image failure (crawled marks/wrinkles) occurs with thin paper
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-2 to 2 -2: 0 mm, -1: 15 mm, 0: 35 mm, 1: 60 mm, 2: 85 mm
	Default value
	0
	Supplement/memo
	Image failure (crawled marks): A symptom that image is blurred in the feeding direction and it occurs when a deflected paper comes closer to the Fixing Film. If a paper is deflected enough to be bent, an image failure (wrinkles) occurs.
PRE-FXRL	ON/OFF of Pressure Roller soil prev mode
Lv.2	Details
	To set whether to execute Pressure Roller soiling prevention mode when feeding calcium carbonate paper. When 1 is set, the paper intervals become wider and temperature of the Pressure Roller is increased. As a result, soiling on the Pressure Roller can be reduced, but productivity is decreased.
	Use case
	Upon user's request (to prevent soiling on the Pressure Roller)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Be sure to get approval from the user in advance by telling that productivity decreases.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
FX-WNKL	Set of thin paper wrinkle alleviation
Lv.2	Details
	To set the thin paper wrinkle alleviation mode. If the edge temperature of the Fixing Pressure Roller is lower than the center temperature, feeding speed at the center of a paper becomes faster than the speed at the edge so wrinkles occur on thin paper. When 1 is set, the edge temperature is increased by idle rotation so wrinkles are alleviated. If it is not alleviated, set 2. As the value is larger, first copy time becomes longer.
	Use case
	When wrinkles occur on thin paper
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When 1 or 2 is set, first copy time becomes longer.
	Display/adj/set range
	0 to 2 0: OFF, 1: Weak, 2: Strong
	Default value
	0

COPIER > OPTION > IMG-FIX	
TMP-TB12	Set fixing control temp: plain paper 3
Lv.1	Details
	To set the offset of fixing control temperature for plain paper 3 (91 to 105 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When a fixing failure/fixing offset occurs on plain paper 3
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	Be sure to change the value a little at a time. Otherwise, offset/image failure occurs when setting an extreme value.
	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
	5 deg C
	Default value
	0
TMP-TB13	Set fixing control temp:recycled paper 2
Lv.1	Details
	To set the offset of fixing control temperature for recycled paper 2 (76 to 90 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When a fixing failure/fixing offset occurs on recycled paper 2
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution
	Be sure to change the value a little at a time. Otherwise, offset/image failure occurs when setting an extreme value.
	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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
TMP-TB11	Set fixing control temp:recycled paper 1
Lv.1 Details	To set the offset of fixing control temperature for recycled paper 1 (64 to 75 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on recycled paper 1
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	Be sure to change the value a little at a time. Otherwise, offset/image failure occurs when setting an extreme value.
Display/adj/set range	-3 to 2 -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
Unit	5 deg C
Default value	0
FXS-TM11	Set ITOP control temp: recycled paper 1
Lv.1 Details	To set the offset of ITOP control temperature for recycled paper 1 (64 to 75 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	- When a fixing failure occurs on the leading edge of paper - When uneven gloss occurs on the leading edge (74 mm)
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
Display/adj/set range	-3 to 2 -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: +5 deg C, 2: +10 deg C
Unit	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
PLN-LP	Set fix arch ctrl: pln,color,rcycl,punch
Lv.2 Details	To set the arch amount between the secondary transfer and fixing when feeding plain paper 1/2/3, colored paper, recycled paper 1/2/3 and pre-punched paper at 1/1 speed. Increase the value when an image failure (crawled marks/wrinkles) occurs.
Use case	When an image failure (crawled marks/wrinkles) occurs with plain paper, colored paper, recycled paper and pre-punched paper
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Display/adj/set range	-2 to 2 -2: 0 mm, -1: 15 mm, 0: 35 mm, 1: 60 mm, 2: 85 mm
Default value	0
TRC-LP	Set fixing arch control: tracing paper
Lv.2 Details	To set the arch amount between the secondary transfer and fixing when feeding tracing paper at 1/1 speed. Increase the value when an image failure (crawled marks/wrinkles) occurs.
Use case	When an image failure (crawled marks/wrinkles) occurs with tracing paper
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Display/adj/set range	-2 to 2 -2: 0 mm, -1: 15 mm, 0: 35 mm, 1: 60 mm, 2: 85 mm
Default value	0
FXS-TM12	Set ITOP control temp: plain paper 3
Lv.1 Details	To set the offset of ITOP control temperature for plain paper 3 (91 to 105 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	- When a fixing failure occurs on the leading edge of paper - When uneven gloss occurs on the leading edge (74 mm)
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
FXS-TM13	Set ITOP control temp: recycled paper 2
Lv.1 Details	To set the offset of ITOP control temperature for recycled paper 2 (76 to 90 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	- When a fixing failure occurs on the leading edge of paper - When uneven gloss occurs on the leading edge (74 mm)
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0
FXS-TM14	Set ITOP control temp: recycled paper 3
Lv.1 Details	To set the offset of ITOP control temperature for recycled paper 3 (91 to 105 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	- When a fixing failure occurs on the leading edge of paper - When uneven gloss occurs on the leading edge (74 mm)
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
TMP-TB17	Set fixing control temp: recycled paper 3
Lv.1 Details	To set the offset of fixing control temperature for recycled paper3 (91 to 105 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on recycled paper 3
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	Be sure to change the value a little at a time. Otherwise, offset/image failure occurs when setting an extreme value.
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	5 deg C
Default value	0
FXS-TM15	Set ITOP control temp: coated paper 3
Lv.1 Details	To set the offset of ITOP control temperature for coated paper 3 (164 to 220 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
Use case	When uneven gloss/a fixing failure occurs on the leading edge (74 mm) of coated paper 3
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
FXS-TM16	Set ITOP control temp: heavy paper 4
Lv.1	Details
	To set the offset of ITOP control temperature for heavy paper 4 (221 to 256 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss/a fixing failure occurs on the leading edge (74 mm) of heavy paper 4
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0
FXS-TM17	Set ITOP control temp: extra-long pln
Lv.1	Details
	To set the offset of ITOP control temperature for extra-long plain paper 1/2/3, recycled paper 1/2/3, thin paper, colored paper, tracing paper, pre-punched paper and bond paper (width: 300 to 320 mm). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss/a fixing failure occurs on the leading edge (74 mm) of extra-long plain paper 1/2/3, recycled paper 1/2/3, thin paper, colored paper, tracing paper, pre-punched paper and bond paper
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
FXS-TM18	Set ITOP control temp: extra-long hvy 1
Lv.1	Details
	To set the offset of ITOP control temperature for extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label (width: 300 to 305 mm). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss/a fixing failure occurs on the leading edge (74 mm) of extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0
	Related service mode
	COPIER> OPTION> IMG-FIX> FXS-TM19
FXS-TM19	Set ITOP control temp: extra-long hvy 2
Lv.1	Details
	To set the offset of ITOP control temperature for extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label (width: 305.1 to 320 mm). As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss/a fixing failure occurs on the leading edge (74 mm) of extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0
	Related service mode
	COPIER> OPTION> IMG-FIX> FXS-TM18

COPIER > OPTION > IMG-FIX	
TMP-TB18	Set fixing control temp: coated paper 3
Lv.1 Details	To set the offset of fixing control temperature for coated paper 3 (164 to 220 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on coated paper 3
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, fixing offset may occur. If the value is too small, a fixing failure may occur.
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	5 deg C
Default value	0
TMP-TB19	Set fixing control temp: heavy paper 4
Lv.1 Details	To set the offset of fixing control temperature for heavy paper 4 (221 to 256 g/m ²). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on heavy paper 4
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, fixing offset may occur. If the value is too small, a fixing failure may occur.
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	5 deg C
Default value	0

COPIER > OPTION > IMG-FIX	
TMP-TB20	Set fixing control temp: extra-long pln
Lv.1 Details	To set the offset of fixing control temperature for extra-long plain paper 1/2/3, recycled paper 1/2/3, thin paper, colored paper, tracing paper, pre-punched paper and bond paper (width: 300 to 320 mm). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on extra-long plain paper 1/2/3, recycled paper 1/2/3, thin paper, colored paper, tracing paper, pre-punched paper and bond paper
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, fixing offset may occur. If the value is too small, a fixing failure may occur.
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	5 deg C
Default value	0
TMP-TB21	Set fixing control temp:extra-long hvy 1
Lv.1 Details	To set the offset of fixing control temperature for extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label (width: 300 to 305 mm). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
Use case	When a fixing failure/fixing offset occurs on extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label
Adj/set/operate method	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
Caution	If the value is too large, fixing offset may occur. If the value is too small, a fixing failure may occur.
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	5 deg C
Default value	0
Related service mode	COPIER> OPTION> IMG-FIX> TMP-TB22

COPIER > OPTION > IMG-FIX	
TMP-TB22	Set fixing control temp:extra-long hvy 2
Lv.1	Details
	To set the offset of fixing control temperature for extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label (width: 305.1 to 320 mm). As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When a fixing failure/fixing offset occurs on extra-long heavy paper 1/2/3/4, coated paper 1/2/3 and label
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If the value is too large, fixing offset may occur. If the value is too small, a fixing failure may occur.
	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
	5 deg C
	Default value
	0
	Related service mode
	COPIER> OPTION> IMG-FIX> TMP-TB21
FXS-TM20	Set ITOP control temp: plain, 1/2 SPD
Lv.1	Details
	To set the offset of ITOP control temperature for plain paper 1/2/3, recycled paper 1/2/3, thin paper, colored paper, tracing paper, pre-punched paper and bond paper at 1/2 speed. As the value is changed by 1, the control temperature is changed by 5 deg C. Decrease the value when uneven gloss occurs, and increase the value when a fixing failure occurs on the leading edge of paper.
	Use case
	When uneven gloss occurs on the leading edge (76 mm) of plain paper, etc. at 1/2 speed
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	If the value is too large, uneven gloss may occur. If the value is too small, a fixing failure may occur on the leading edge of paper. (Toner does not peel off.)
	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
	5 deg C
	Default value
	0

COPIER > OPTION > IMG-FIX	
TMP-TB23	Set fixing control temp: plain, 1/2 SPD
Lv.1	Details
	To set the offset of fixing control temperature for plain paper 1/2/3, recycled paper 1/2/3, thin paper, colored paper, tracing paper, pre-punched paper and bond paper at 1/2 speed. As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When a fixing failure/fixing offset occurs on plain paper, etc. at 1/2 speed
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and 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
	5 deg C
	Default value
	0

T-8-46

IMG-DEV

COPIER > OPTION > IMG-DEV	
DRM-IDL	Set first idle rotation time in HH Env
Lv.1	Details
	To set the idle rotation time to be performed at the beginning of a workday in an HH (high temperature and high humidity) environment.
	Use case
	When coarseness occurs on the image at the beginning of a workday
	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, startup takes time.
	Display/adj/set range
	0 to 2 0: OFF, 1: ON (HH environment only), 2: ON (all environments)
	Default value
	0
AUTO-DH	Set Dmax/Dhalf ctrl exe cndtn: wrmup rtn
Lv.1	Details
	To set the condition to additionally execute D-max/D-half control at warm-up rotation after the machine is not used for 8 hours or more. When 0 is set, additional execution of D-max/D-half control is not performed. When 1 is set, additional execution is performed only in an HH (high temperature and high humidity) environment. When 2 is set, additional execution is performed regardless of environment. When 3 is set, warm-up rotation is executed regardless of how long the machine is not used and D-max/D-half control is additionally executed regardless of environment.
	Use case
	When uneven density at intervals of the Primary Charging Roller or Secondary Transfer Outer Roller circumference or density variation occurs on approx. 10 images printed immediately after the machine is not used for 8 hours or more
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When D-max/D-half control is executed at warm-up rotation, it takes longer time for startup than usual.
	Display/adj/set range
	0 to 3 0: Not executed additionally 1: Executed additionally in an HH environment (after the machine is not used for 8 hours) 2: Executed additionally in all environments (after the machine is not used for 8 hours) 3: Executed additionally in all environments (not depending on how long the machine is not used)
	Default value
	1
	Supplement/memo
	Warm-up rotation is executed automatically at power-on and recovery from sleep mode when the machine is not used for 8 hours or more regardless of environment.

COPIER > OPTION > IMG-DEV	
PCHINT-V	Adj ATR control patch detection interval
Lv.2	Details
	To adjust the total video counter value as the intervals to execute patch detection by ATR control. Decrease the value when hue variation is large. Increase the value to reduce downtime.
	Use case
	- When hue variation is large - When reducing downtime
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-2 to 2 -2: -2000%, -1: -1000%, 0: 0%, 1: 1000%, 2: 2000%
	Default value
	0
DELV-THY	Set image ratio for Y-color toner eject
Lv.2	Details
	To set the threshold value of average image ratio of Y-color, that is the condition to perform the low duty toner ejection sequence. As the value is increased, coarseness is alleviated, but productivity is decreased and toner consumption is increased. As the value is decreased, productivity and toner consumption are improved, but coarseness gets worse.
	Use case
	While printing low duty images (images with low image ratio), - When graininess (coarseness) or decrease in density occurs - When low productivity or high toner consumption is pointed out by the user
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-2 to 4 -2: -1.0%, -1: -0.5%, 0: 0.0%, 1: 0.5%, 2: 1.0%, 3: 1.5%, 4: 2.0%
	Unit
	- %
	Default value
	0
DELV-THC	Set image ratio for C-color toner eject
Lv.2	Details
	To set the threshold value of average image ratio of C-color, that is the condition to perform the low duty toner ejection sequence. As the value is increased, coarseness is alleviated, but productivity is decreased and toner consumption is increased. As the value is decreased, productivity and toner consumption are improved, but coarseness gets worse.
	Use case
	While printing low duty (low image ratio) images, - When graininess (coarseness) or decrease in density occurs - When low productivity or high toner consumption is pointed out by the user
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-2 to 4 -2: -1.0%, -1: -0.5%, 0: 0.0%, 1: 0.5%, 2: 1.0%, 3: 1.5%, 4: 2.0%
	Unit
	- %
	Default value
	0

COPIER > OPTION > IMG-DEV	
DELV-THM	Set image ratio for M-color toner eject
Lv.2	Details
	To set the threshold value of average image ratio of M-color, that is the condition to perform the low duty toner ejection sequence. As the value is increased, coarseness is alleviated, but productivity is decreased and toner consumption is increased. As the value is decreased, productivity and toner consumption are improved, but coarseness gets worse.
	Use case
	While printing low duty (low image ratio) images, - When graininess (coarseness) or decrease in density occurs - When low productivity or high toner consumption is pointed out by the user
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-2 to 4 -2: -1.0%, -1: -0.5%, 0: 0.0%, 1: 0.5%, 2: 1.0%, 3: 1.5%, 4: 2.0%
	Unit
	- %
	Default value
	0
DELV-THK	Set image ratio for Bk-color toner eject
Lv.2	Details
	To set the threshold value of average image ratio of Bk-color, that is the condition to perform the low duty toner ejection sequence. As the value is increased, coarseness is alleviated, but productivity is decreased and toner consumption is increased. As the value is decreased, productivity and toner consumption are improved, but coarseness gets worse.
	Use case
	While printing low duty (low image ratio) images, - When graininess (coarseness) or decrease in density occurs - When low productivity or high toner consumption is pointed out by the user
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-2 to 4 -2: -1.0%, -1: -0.5%, 0: 0.0%, 1: 0.5%, 2: 1.0%, 3: 1.5%, 4: 2.0%
	Unit
	- %
	Default value
	0

COPIER > OPTION > IMG-DEV	
ADJ-VPP	Adj of dev AC bias Vpp: 1/1 SPD
Lv.2	Details
	To adjust Vpp of the developing AC bias at 1/1 speed. When the value is decreased, ring marks or uneven density at intervals of cylinder circumference on a halftone image is alleviated. When the value is increased, white spots or uneven density at intervals of cylinder circumference on a solid image is alleviated.
	Use case
	When image failures (ring marks, white spots, uneven density at intervals of cylinder circumference) occur
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	When decreasing the value too much, density may be lowered.
	Display/adj/set range
	-4 to 0 -4: +/-0 V, -3: -100 V, -2: -200 V, -1: -300 V, 0: -400 V
	Default value
	0
ADJ-BLNK	Setting of thin line density improvement
Lv.2	Details
	To adjust the waveform of developing AC bias to improve thin line density. When thin line density is low, set 1 or 2. As the value is increased, the line gets darker, but white gap/white spots may occur.
	Use case
	- When thin line density is low - When it appears that thin line width is narrow
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	- Use this item when density is not improved by making adjustment with ADJ-VPP/VPPN. - If the value is too large, white gap/white spots may occur.
	Display/adj/set range
	0 to 2 0: Normal, 1: Thin line improvement mode 1, 2: Thin line improvement mode 2
	Default value
	0
	Related service mode
	COPIER> OPTION> IMG-DEV> ADJ-VPP, ADJ-VPPN
DMX-OF-Y	Adj of Y-color D-max target density
Lv.2	Details
	To adjust the target density of D-max control 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 is not appropriate even though auto gradation adjustment is executed
	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 (full adjustment).
	Display/adj/set range
	-3 to 3
	Default value
	0

COPIER > OPTION > IMG-DEV	
DMX-OF-M	Adj of M-color D-max target density
Lv.2	Details
	To adjust the target density of D-max control 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 is not appropriate even though auto gradation adjustment is executed
	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 (full adjustment).
	Display/adj/set range
	-3 to 3
	Default value
	0
DMX-OF-C	Adj of C-color D-max target density
Lv.2	Details
	To adjust the target density of D-max control 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 is not appropriate even though auto gradation adjustment is executed
	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 (full adjustment).
	Display/adj/set range
	-3 to 3
	Default value
	0
DMX-OF-K	Adj of Bk-color D-max target density
Lv.2	Details
	To adjust the target density of D-max control 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 is not appropriate even though auto gradation adjustment is executed
	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 (full adjustment).
	Display/adj/set range
	-3 to 3
	Default value
	0

COPIER > OPTION > IMG-DEV	
ADJ-VPPN	Adj of dev AC bias Vpp: 1/2 SPD
Lv.2	Details
	To adjust Vpp of the developing AC bias at 1/1 speed. When the value is decreased, ring marks or uneven density at intervals of cylinder circumference on a halftone image is alleviated. When the value is increased, white spots or uneven density at intervals of cylinder circumference on a solid image is alleviated.
	Use case
	When image failures (ring marks, white spots, uneven density at intervals of cylinder circumference) occur
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by -/+ key) and press OK key. 2) Execute auto gradation adjustment (full adjustment).
	Caution
	When decreasing the value too much, density may be lowered.
	Display/adj/set range
	-1 to 4 -1: -50 V, 0: +/-0 V, 1: +100 V, 2: +200 V, 3: +300 V, 4: +400 V
	Default value
	0
	Related service mode
	COPIER> OPTION> IMG-DEV> ADJ-VPP
TNNEWCNT	For R&D
TNENDCNT	For R&D
D-PTN	Set lead edge 47mm horizontal line prev
Lv.2	Details
	To set whether to form dot patterns on the Photosensitive Drum when horizontal lines appear in the area of 47 mm from the leading edge. When 2 is set, dot patterns are always formed before forming an image so that occurrence of horizontal lines can be prevented.
	Use case
	When horizontal lines appear in the area of 47 mm from the leading edge
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not use this when the machine is operating correctly.
	Display/adj/set range
	0 to 2 0: Not formed, 1: Formed depending on conditions, 2: Always formed
	Default value
	1

COPIER > OPTION > IMG-DEV	
DELV-DNS	ON/OFF of soiled paper edge prevention
Lv.2	Details
	Soiling on the guide rib caused by toner band formed at low duty toner ejection sequence may adhere on the paper edge. To set the length and density of toner band to alleviate soiled paper edge as needed. However, color type and length of toner band to be actually formed are determined according to the specified setting table. When 0 is set, short length of dark density toner band (210 mm/105 mm) is formed. When 1 is set, long length of light density toner band (370 mm/185 mm) is formed in any of the following cases: - Paper weight: 106 to 256 g/m2 - Size: SRA3 (320.0 mm x 450.0 mm)/A3+ 305.0 mm x 457.0 mm (12" x 18") - Paper type: Coated paper/label/transparency/postcard/envelope - Resolution: 1200 dpi When 2 is set, long length of light density toner band (370 mm/185 mm) is formed.
	Use case
	When soiled paper edge occurs
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Productivity is decreased at continuous feeding.
	Display/adj/set range
	0 to 2 0: OFF, 1: ON (only under the specific conditions), 2: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> IMG-DEV> DELV-THY/THM/THC/THK

T-8-47

■ 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 in the case of black lines. As the value is larger, the small dust is more likely detected. When 0 is set, dust detection is not performed.
	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	
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 in the case of black lines. As the value is larger, the small dust is more likely detected. When 0 is set, dust detection is not performed.
	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.

T-8-48

■ IMG-MCON

COPIER > OPTION > IMG-MCON	
PASCAL	Set of auto gradation adjustment data
Lv.1	Details
	To set the gradation adjustment data that is used at image formation. When 0 is set, the initial LUT is used. When 1 is set, the gradation adjustment data gamma LUT that is generated by auto gradation adjustment (full/quick adjustment) control is used.
	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, 1: Auto gradation adjustment data, 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, 2 screen types) in Photo Printout mode when making a copy. When moire occurs on a copy image, set 0 (suitable for character reproduction). When halftone dots are rough, set 2.
	Use case
	When moire occurs on a copy image or when halftone dots are rough
	Adj/set/operate method
	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	Set error diffusion process coefficient
Lv.2	Details
	To set coefficient to be used for error diffusion processing. Make the setting according to the level of granularity and dot stability.
	Use case
	At error diffusion processing
	Adj/set/operate method
	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 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 processing is performed by default: - Processing to prioritize text reproduction - Replacement of the processed black with single Bk-color Set 1 when moire occurs or jaggy is significant. Set 2 when not preferring to replace the processed black 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 the processed black with single Bk-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 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 photo
	Default value
	0

COPIER > OPTION > IMG-MCON	
TNR-DWN	Setting of toner deposit amount
Lv.2	Details
	To set the toner deposit amount on the gradation area and text area. By reducing the toner deposit amount when toner scatters or paper winds around the Fixing Belt in color mode, symptom can be alleviated, but hue may change.
	Use case
	- When a full color image is blurred due to toner scattering, etc. - When paper winds around the Fixing Belt
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	Hue may change depending on the setting.
	Display/adj/set range
	0 to 5 0: Gradation area 160%, Text area 150% (Thin paper/recycled paper 2) Gradation area 200%, Text area 180% (Others) 1: 160%, 150% 2: 140%, 130% 3: 200%, 180% 4: Gradation area 140%, Text area 130% (Thin paper/recycled paper 2) Gradation area 200%, Text area 180% (Others) 5: Gradation area 160%, Text area 150% (Thin paper/recycled paper 2/transparency) Gradation area 200%, Text area 180% (Others)
	Default value
	0
	Related user mode
	Adjustment/Maintenance> Adjust Image Quality> Adjust Toner Amount at Color Printing
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, 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
	0

COPIER > OPTION > IMG-MCON	
DH-MODE	Set ptch data at Dhalf except full adj
Lv.2	Details
	To set whether to use the high-density patch data that has been scanned by D-half control of full adjustment at the time of D-half control other than full adjustment.
	Use case
	At image adjustment
	Adj/set/operate method
	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
REDU-CNT	Set toner deposit amount limit 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 section and fixing section may occur or paper may wind around the Fixing Belt.
	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 section and fixing section may occur or paper may wind around the Fixing Belt.
	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 with trace & smooth 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 with trace & smooth 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.
	Display/adj/set range
	1 to 3 1: CS-680 (Except for USA and EU. Mainly for Japan) 2: Canon Multipurpose Paper (For USA) 3: Oce RED Label80 (For EU)
	Default value
	It 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 no smoothing effect is obtained even though High is set in the advanced smoothing UI. Set 0 if too much effect is obtained even though Low is set in the advanced smoothing UI.
	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 Smoothing Technology

COPIER > OPTION > IMG-MCON		
PSCL-TBL	Setting of Bk-color density increase	
Lv.1	Details	To set whether to increase the density of Bk-color only without changing the density of Y/M/C-color. When 1 is set, the parameters of auto gradation adjustment (full adjustment) are adjusted so that only the density of Bk-color is increased.
	Use case	Upon user's request (to increase the density of Bk-color)
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch. 3) Execute auto gradation adjustment (full adjustment).
	Display/adj/set range	0 to 1 0: Normal, 1: Only the density of Bk-color is high
	Unit	1
	Default value	0
	BGE-OFS	Fine adj at bckgd adj (bckgd removal)
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

T-8-49

■ IMG-SPD

COPIER > OPTION > IMG-SPD		
FX-D-TMP	Set small paper down sequence start temp	
Lv.1	Details	To set temperature to start the down sequence control to small size paper (length in width direction is less than that of A4R). When a negative value is entered, the temperature is decreased by 5 deg C from the initial setting temperature. When a positive value is entered, it is increased by 2 deg C (upper limit is 273 deg C).
	Use case	When alleviating fixing offset on the edge of paper and improving productivity
	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 -4: -20 deg C, -3: -15 deg C, -2: -10 deg C, -1: -5 deg C, 0: 0 deg C, 1: 2 deg C, 2: 4 deg C, 3: 6 deg C, 4: 8 deg C
	Default value	0
	FIX-ROT	Set idle rotn stop temp after s-ppr feed
Lv.1	Details	Temperature on the edges of the Fixing Film becomes higher than the temperature at the center when feeding large size paper after small size paper through the Fixing Unit. Idle rotation is executed until temperature is decreased to the specified value after feeding small size paper to prevent occurrence of fixing offset or wrinkles. To set the temperature that is the condition to stop idle rotation. As the value is larger, temperature is decreased. Image quality can be improved, but downtime is increased. When the value is decreased, downtime is decreased, but uneven gloss may occur.
	Use case	When alleviating fixing offset/uneven gloss on the paper edge or improving productivity
	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 -2: +10 deg C, -1: +5 deg C, 0: 0 deg C, 1: -5 deg C, 2: -10 deg C
	Unit	5 deg C
	Default value	0

COPIER > OPTION > IMG-SPD	
ARC-INT1	Set ARCDAT control 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, the control is executed at paper intervals by interrupting an ongoing job. Decrease the value when the density varies dramatically. As the value is smaller, density variation is decreased, but productivity is also decreased. Increase the value when preferring to minimize decrease in productivity due to interruption. As the value is larger, productivity is increased, but there is a difference in density before and after the interruption.
	Use case
	- When the density varies dramatically - When preferring to minimize decrease in productivity due to interruption
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	5 to 1000
	Unit
	1 sheet
	Default value
	100
	Related service mode
	COPIER> OPTION> IMG-SPD> ARC-INT2
ARC-INT2	Set ARCDAT ctrl exe intvl: last rotation
Lv.2	Details
	To set the number of sheets as the intervals to execute ARCDAT control at last rotation. ARCDAT control is not executed at paper interval while feeding the specified number of sheets from the start of a job. ARCDAT control which is supposed to be executed during feeding of the specified number of sheets is executed at last rotation of the previous job. As the value is increased, the number of interruptions during a job is reduced so productivity is increased.
	Use case
	When preferring to minimize decrease in productivity due to interruption
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Do not set a value larger than that of ARC-INT1.
	Display/adj/set range
	5 to 1000
	Unit
	1 sheet
	Default value
	70
	Related service mode
	COPIER> OPTION> IMG-SPD> ARC-INT1

T-8-50

■ CLEANING

COPIER > OPTION > CLEANING	
OHP-PTH	Set of ITB clean transp threshold value
Lv.2	Details
	To set the number of sheets as the intervals to execute ITB cleaning when feeding transparency. When a large number of transparencies is fed, surface active agent adheres to the ITB, and consequently the transfer efficiency is lowered, causing an image failure. Normally, a solid single Bk-color patch with 80 mm width is formed on the ITB, and surface active agent is removed together with the toner every time after feeding 10 sheets at paper interval and 5 sheets at last rotation. As the value is changed by 1, the number of sheets at paper interval and last rotation is changed by 1 sheet. When the value is decreased in the case of using transparency to which surface active agent is more likely to be adhered, image failure can be alleviated. When the value is increased, downtime and toner consumption can be reduced, but image failure may occur.
	Use case
	When an image failure occurs due to decrease in the transfer efficiency
	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
	1 sheet
	Default value
	0
ITB-CL-L	For R&D
ITB-CL-T	For R&D

T-8-51

ENV-SET

COPIER > OPTION > ENV-SET	
ENVP-INT	Temp&hmdy/Fix Film 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 Film. As the value is incremented by 1, the cycle is increased by 1 minute. Collected log can be displayed in 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
	Default value
	60
	Related service mode
	COPIER> DISPLAY> ENVRNT
AINR-TM	Set time not in use for drum idl rtn exe
Lv.2	Details
	To set the time the machine is not in use that is the condition to execute idle rotation of the drum. When the machine is not used for more than the specified time, idle rotation of the drum (60 seconds) is executed at warm-up rotation. Decrease the value when uneven density occurs at certain intervals on the image at the beginning of a workday after holidays (the beginning of week is assumed). When 0 is set, idle rotation of the drum is not executed.
	Use case
	When uneven density at intervals of the Primary Charging Roller or Secondary Transfer Outer Roller circumference occurs on the image printed at the beginning of a workday after holidays
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When idle rotation of the drum is executed, it takes long time for startup than usual.
	Display/adj/set range
	0 to 60 0: OFF, 1 to 7: Not used, 8: 8 hours, ..., 60: 60 hours
	Unit
	1 hour
	Default value
	0
INTRTMPL	Set initial rotn extsn condtn: low temp
Lv.2	Details
	To set temperature inside the machine and process speed that are the conditions to extend the initial rotation time at low temperature.
	Use case
	When black lines in vertical scanning direction appear at approx. 30 mm from the image leading edge
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	FCOT becomes approx. 1 second longer.
	Display/adj/set range
	0 to 2 0: 18 deg C or lower, 1/2 speed 1: 18 deg C or lower, 1/1 speed, 1/2 speed 2: Whole temperature range, 1/1 speed, 1/2 speed
	Default value
	0

COPIER > OPTION > ENV-SET	
INTRTMPH	Set initial rotn extsn condtn: high temp
Lv.2	Details
	To set temperature inside the machine and process speed that are the conditions to extend the initial rotation time at high temperature.
	Use case
	When uneven density/blur at intervals of drum circumference occurs
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	FCOT becomes approx. 4 seconds longer.
	Display/adj/set range
	0 to 2 0: 40 deg C or higher, 1: Whole temperature range, 2: Disabled
	Default value
	0
LES-CNDS	Set of condensation prevention mode
Lv.2	Details
	To set the mode to prevent condensation. When 1 or 2 is set, idle rotation of the Reverse Roller is performed even when paper is delivered to the First Delivery Tray in the case of 1-sided output. In the case of 2-sided output, operation differs depending on whether the 3 Way Unit is installed. When the 3 Way Unit is installed, paper is always delivered via the large path regardless of paper size. When the 3 Way Unit is not installed, idle rotation of the Fixing Unit is performed for the specified time before the start of a job.
	Use case
	- When condensation occurs - When white lines appear on the 2nd side with 2-sided continuous feeding
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	- Drive noise becomes approx. 0.6 to 1.4 dB louder due to idle rotation of the Reverse Roller. - When the 3 Way Unit is installed, productivity decreases. - When the 3 Way Unit is not installed, FCOT becomes longer.
	Display/adj/set range
	0 to 2 - When the 3 Way Unit is installed: 0: Normal, 1, 2: Pass through the large path at 2-sided feed - When the 3 Way Unit is not installed: 0: Normal, 1: 30 seconds, 2: 60 seconds
	Default value
	0

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FEED-SW

COPIER > OPTION > FEED-SW	
EVL-SPD	Setting of envelope feeding speed
Lv.1	<p>Details</p> <p>To set the feeding speed of envelope. By feeding an envelope 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 envelope may not be opened. When 1/1 speed is set, adhesion can be prevented, but fixing performance is decreased in a low humidity environment.</p> <p>Use case</p> <p>When a glue flap of envelope adheres</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When 1 is set in a low humidity environment, fixing performance is decreased.</p> <p>Display/adj/set range</p> <p>0 to 1 0: 1/2 speed, 1: 1/1 speed</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> OPTION> FEED-SW> EVLP-FS</p>
PINT-REG	Set img pstn crct exe frqcy: ppr intvl
Lv.2	<p>Details</p> <p>To set the frequency to execute image position correction control at paper interval. When 1 is set, frequency is increased. Compared with the default setting, the interval becomes shorter. In addition, the machine becomes sensitive to change in temperature and the control is executed even with B&W image. Color displacement is less likely to occur, but productivity is decreased.</p> <p>Use case</p> <p>When color displacement occurs frequently</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When 1 is set, productivity is decreased.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Default, 1: High frequency</p> <p>Unit</p> <p>-</p> <p>Default value</p> <p>0</p>
EVL-SPD	Setting of fixing speed: envelope
Lv.2	<p>Details</p> <p>To set fixing speed when feeding envelope. As the value is changed by 1, the fixing speed is changed by 0.1%. Decrease the value when fine line displacement occurs on trailing edge of envelope, and increase the value when wrinkles occur.</p> <p>Use case</p> <p>When fine line displacement or wrinkles occur on trailing edge while feeding envelope</p> <p>Adj/set/operate method</p> <p>Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Caution</p> <p>Be sure to change the value a little at a time. Otherwise, fine line displacement/wrinkles occur when setting an extreme value.</p> <p>Display/adj/set range</p> <p>-20 to 20</p> <p>Unit</p> <p>0.1 %</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> OPTION> FEED-SW> EVLP-SPD</p>

T-8-53

NETWORK

COPIER > OPTION > NETWORK	
RAW-DATA	Setting of received data print mode
Lv.2	<p>Details</p> <p>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.</p> <p>Use case</p> <p>When a problem with received image occurs</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Caution</p> <p>Be sure to set the value back to 0 after recovering from the problem.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Normal print operation, 1: Print with original data without image processing</p> <p>Default value</p> <p>0</p>
IFAX-LIM	No. of max print lines at IFAX reception
Lv.2	<p>Details</p> <p>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. When receiving an e-mail text without attached file while 0 is set, only the header/footer is printed in 1 sheet.</p> <p>Use case</p> <p>When preventing endless printing in the case of failure in reception</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 999 0: E-mail text not printed, 999: Unlimited</p> <p>Default value</p> <p>500</p>
SMTPTXPN	Setting of SMTP transmission port number
Lv.2	<p>Details</p> <p>To set SMTP transmission port number.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 65535</p> <p>Default value</p> <p>25</p>
SMTPRXPN	Setting of SMTP reception port number
Lv.2	<p>Details</p> <p>To set SMTP reception port number.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.</p> <p>Display/adj/set range</p> <p>0 to 65535</p> <p>Default value</p> <p>25</p>

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	Specify SEND destination port (FTP) No.
Lv.2	Details
	To specify destination 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	[Not used]
CMD-PORT	[Not used]
NS-CMD5	Limit CRAM-MD5 auth method: 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: 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.

COPIER > OPTION > NETWORK	
NS-NTLM	Limit NTLM auth method: 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.
NS-PLNWS	Limit plaintext auth: 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: SMTP auth, 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
	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.

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NS-LGN		Limit LOGIN authentication: 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.
MEAP-PN		Set of HTTP port No. 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 remote UI of the device 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
RMT-LGIN		For R&D
CHNG-STS		[Not used]
CHNG-CMD		[Not used]
MEAP-SSL		Setting of HTTPS port for 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	1 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.

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WUEV-SW		ON/OFF of sleep notification to appli
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: ON, 1: OFF
	Default value	0
	Related service mode	COPIER> OPTION> NETWORK> WUEV-INT, WUEV-POT, WUEV-RTR
WUEV-INT		Setting of sleep notification interval
Lv.2	Details	To set the interval of sleep notification. When WUEV-SW is 0, this setting is enabled.
	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	60 to 65535
	Unit	1 sec
	Default value	600
Related service mode	COPIER> OPTION> NETWORK> WUEV-SW	
WUEV-POT		Set port number for sleep notification
Lv.2	Details	To set port number of the PC to notify the sleep mode. When WUEV-SW is 0, this setting is enabled.
	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	11427
	Related service mode	COPIER> OPTION> NETWORK> WUEV-SW
WUEV-RTR		Setting of extent of sleep notification
Lv.2	Details	To set the number of available routers to the target for sleep notification. When WUEV-SW is 0, this setting is enabled.
	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 254
	Default value	3
	Related service mode	COPIER> OPTION> NETWORK> WUEV-SW

COPIER > OPTION > NETWORK	
WUEN-LIV	Set startup time after sleep notice
Lv.2	Details
	To set the time from startup from sleep mode via network without job assignment until the mode is shifted to the sleep mode again.
	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
	1 sec
	Default value
	15
IFX-CHIG	Set operation by IFAX rcv 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 e-mail text is less than the number of specified characters. When a sender sends e-mail text consisting of linefeed codes only, this machine outputs a blank paper. 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 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 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 e-mail text is not printed 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
	1 char
	Default value
	0
	Supplement/memo
	A 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 query priority protocol
Lv.1	Details
	To set priority of the protocol (IPv4/IPv6) 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. Giving priority on query by IPv4 can shorten the time.
	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

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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: Status 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
	1 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

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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 data.
	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 data 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, set 0 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: Used for communication with NetSpot Device Installer, etc. The network settings can be made remotely.
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
	1 sec
	Default value
	5
	Supplement/memo
	IKE: Internet Key Exchange
IPSDEBLV	For R&D

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SP-LINK	Setting of mode at 1W sleep
Lv.1	Details
	To set the condition to shift to sleep mode. When 0 is set, 10Base-T standby is executed; therefore standby power 1W can be realized. When 1 is set, the machine enters sleep mode after negotiation (same as conventional machines).
	Use case
	When shifting to sleep mode after negotiation (same as conventional machines)
	Adj/set/operate method
	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: 10Base-T standby, 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-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
ILOGMODE	Setting of IP block mode
Lv.1	Details
	To set all protocols or TCP/UDP/ICMP unicast as the target of IP block. 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

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ILOGKEEP	Set of time not recording IP block log
Lv.1	Details
	To set the period of time not recording log of access made from a same IP address which was blocked before. When access is made again from a same IP address which was blocked before, if it is within the certain period of time from the first log time, its log is not recorded. If access is frequently made from the same IP address, the log record of the UI might be filled with its logs. If a single log for a same IP address is enough, set a longer period of 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 allow transmission of broadcast packets and multicast packets. Transmission of broadcast packets and multicast packets is allowed without specifying an exception address. It is allowed within the device even if it is rejected in the default setting of the IPv4/v6 transmission filter. Set 1 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: Allowed, 1: Prohibited, 2 to 5: Not used
	Default value
	0
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 decreased. 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

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IPMTU	Setting of MTU size
Lv.1	Details
	To set MTU size of network packet. Use this mode when performing SEND communication between locations connected with Ethernet in a field environment where MTU black hole problem occurs.
	Use case
	- When preferring to reduce the MTU size - 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
	100 byte
	Default value
	10
	Supplement/memo
	MTU: The maximum size of data unit that can be transmitted with a single transfer (1 frame) over network. MTU black hole: A problem which occurs when ICMP packets are filtered by firewall, etc. (Since no message is sent to the sender, the sender does not notice that the packets are discarded and timeout occurs.)
DDNSINTV	Set of DDNS periodical update interval
Lv.1	Details
	In the conventional machines, DNS registration is executed only once at startup, so the registered contents are deleted in an environment where the DNS server settings are deleted at regular 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 regular 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, 2: 2 hours, ..., 47: 47 hours, 48: 48 hours
	Unit
	1 hour
	Default value
	24
	Supplement/memo
	DDNS (Dynamic Domain Name System): A system to dynamically register/manage the IP address and its host name which are assigned dynamically

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PRCLTYPE	Setting of dedicated protocol type
Lv.2	Details
	To set the type of dedicated protocol (CPCA protocol). When 1 is set, only the commands where security has been improved are accepted, whereas conventional commands are rejected.
	Use case
	Upon user's request (for customization) - Job assignment from Print/Scan/Fax driver at department management - AiRFAX transmission job assignment - Setting/changing of system administrator function from a remote utility such as iWEMC
	Adj/set/operate method
	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	With TYPE 1, compatibility with conventional drivers and iW products may be lost.
	Display/adj/set range
	0 to 1 0: TYPE 0 (Compatible in a conventional manner), 1: TYPE 1
	Default value
	0
	VLAN-SW
	ON/OFF VLAN participation packets send
Lv.2	Details
	To set whether to send packets for participating in dynamic VLAN at link-up.
	Use case
	When participating in dynamic VLAN
	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> 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. - At link-up: At startup, when LAN cable is connected, when recovering from deep sleep, when pressing the button to reflect the setting (dynamic update) - If IP address of the machine has not been set, an IP address is assigned after participating in VLAN.

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	VLAN-PKT
	No. of VLAN participation packet to send
Lv.2	Details
	To set the number of packets for participating in VLAN. Three sets of packets multiplied by the setting value are sent. When VLAN-SW is 1, this setting is enabled.
	Use case
	When participating in dynamic VLAN
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 10
	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. - If IP address of the machine has not been set, an IP address is assigned after participating in VLAN.
	FTPMODE
	Set of FTP print default operation mode
Lv.1	Details
	To set the default operation mode of FTP print. Switch the default operation mode between ASCII mode and BIN mode in accordance with user's environment.
	Use case
	When preferring to switch the default operation mode of FTP print according to the user's environment 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: ASCII mode, 1: BIN mode
	Default value
	0
	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 while [Use HTTP] is ON and [SSL Settings] is OFF in Settings/Registration menu, HTTP port is opened whereas HTTPS port is closed. When 2 is set while both [Use HTTP] and [SSL Settings] are ON in Settings/Registration menu, 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
	Related user mode
	Preferences> Network> TCP/IP Settings> Use HTTP Management Settings> License/Other> MEAP Settings> SSL Settings

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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: Secured mode (TLS_RSA_WITH_RC4_128_SHA and TLS_RSA_WITH_RC4_128_MD5 are not used)
	Default value
	0

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CUSTOM

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TEMP-TBL	Set fixing control temp:plain 1, colored
Lv.1	Details
	To set the offset of fixing control temperature for plain paper 1 (64 to 75 g/m ²) and colored paper. As the value is changed by 1, the control temperature is changed by 5 deg C. Increase the value when a fixing failure occurs, and decrease the value when fixing offset occurs.
	Use case
	When a fixing failure/fixing offset occurs on plain paper 1 and colored paper
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and 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
SC-L-CNT	Set large paper jdgmt reference at scan
Lv.1	Details
	To set the criteria for the scan counter to count which paper size whether B4 or LTR as 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
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: Prohibited, 1: Allowed
	Default value
	0
	Supplement/memo
	Address book maintenance tool: Tool provided from CMJ.

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DEV-SP1	Device special settings 1	
Lv.2	Details	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	Use this setting only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP2	Device special settings 2	
Lv.2	Details	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	Use this setting only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP3	Device special settings 3	
Lv.2	Details	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	Use this setting only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP4	Device special settings 4	
Lv.2	Details	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	Use this setting only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP5	Device special settings 5	
Lv.2	Details	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	Use this setting only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP6	Device special settings 6	
Lv.2	Details	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	Use this setting only when specific instructions are given.
	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 setting.
	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 setting only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
DEV-SP8	Device special settings 8	
Lv.2	Details	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	Use this setting only when specific instructions are given.
	Display/adj/set range	00000000 to 11111111
	Default value	00000000
EXT-TBOX	Set Wst Toner Cntner preparation warn tmg	
Lv.1	Details	To set the number of counts as the intervals to display the Waste Toner Container preparation warning message. As the value is changed by 1, the number of counts is changed by approx. 600 (calculated with 5% image ratio). +: Interval becomes longer. -: Interval becomes shorter. When the value is changed, display timing of the alarm code "11-0010" which is displayed at the same time is also changed. When WT-WARN is 1, this setting is enabled.
	Use case	When adjusting the Waste Toner Container preparation warning timing according to the usage of the user
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	- Depending on the color ratio or image ratio, the actual number of counts may not match with the specified number of counts. - Toner leak may occur when changing the value drastically.
	Display/adj/set range	0 to 9 0: Approx. - 3000 counts, 1: Approx. - 2400 counts, ..., 5: 0, ..., 8: Approx. +1800 counts, 9: Approx. +2400 counts
	Unit	600 counts
	Default value	5
	Related service mode	COPIER> OPTION> DSPLY-SW> WT-WARN
	Supplement/memo	With the default setting, the message is displayed after counting up approx. 3000 counts (calculated with 30% color ratio and 5% image ratio) from the point that the Waste Toner Sensor PCB (UN30) is ON.
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, and then press OK key.
	Display/adj/set range	0 to 1 0: ON, 1: OFF
	Default value	0

COPIER > OPTION > CUSTOM		
RDEV-SP1	RCON device special settings 1	
Lv.2	Details	To execute the device special setting.
	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.
	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
	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
	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
	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
	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

COPIER > OPTION > CUSTOM		
RDEV-SP6	RCON device special settings 6	
Lv.2	Details	To execute the device special setting.
	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.
	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
	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
	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-8-55

USER

COPIER>OPTION>USER	
COPY-LIM	
Setting of upper limit for copy	
Lv.1	Details
	To set the maximum number of copies.
	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
	Related user mode
	Preferences> Timer/Energy Settings> Auto Sleep Time
	Supplement/memo
	The time to shift to the sleep mode can be set in Settings/ Registration> 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
	It differs according to the location.

COPIER>OPTION>USER	
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
	It differs according to the location.
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
	It 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
	It 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. The setting is reflected to the order of date set in Date/Time Settings in Settings/Registration menu and the order on the 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/MYY, 2: MM/DD/YY
	Default value
	It 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
	Related service mode
	COPIER> OPTION> ACC> COIN
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. When 1 is set, B4 or larger size paper is counted as large size while paper smaller than B4 is counted 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 delivery suspension at Fin Tray full
Lv.2	Details
	To set whether to suspend delivery when it is detected that the Finisher Tray is full. When 1 is set, the detection of full stacking by the number of sets is ignored to continue output in the staple mode and the staple free stapling mode (only Fin-G1). When full stacking is detected by the height of the tray, the output is stopped.
	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: Detection of full stacking by the number of sets or detection of height, 1: Detection of height only
	Default value
	0
MF-LG-ST	ON/OFF of [Long Original] button dsp
Lv.2	Details
	To set whether to display [Long Original] button in the Control Panel menu. When 1 is set, the button is displayed in Copy> Options screen and the long length paper can be used.
	Use case
	Upon user's request (to use 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 to the Second Output Tray (excluding delivery from the Inner Finisher).
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
	Related user mode
	Copy> Options
CNT-DISP	ON/OFF of serial No. display
Lv.2	Details
	To set whether to display the serial number on the Counter Check screen.
	Use case
	When not displaying the 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: ON, 1: OFF
	Default value
	0
COPY-JOB	Set to allow 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: Allowed, 1: Prohibited
	Default value
	0

COPIER>OPTION>USER		
OP-SZ-DT		ON/OFF of orgnl size detect:Cpybrd open
Lv.2	Details	To set whether to automatically detect the original size while the Copyboard is opened. When 0 is set, original size is not automatically detected. Enter the size manually from the Control Panel. When 1 is set, the size is automatically detected.
	Use case	When preferring to perform original size detection while the Copyboard is opened
	Adj/set/operate method	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
P-CRG-LF		ON/OFF of Drum Unit life warning display
Lv.1	Details	To set whether to display a warning message when the Drum Unit reaches its life. When 1 is set, a warning message is displayed on the status line of the Control Panel seven days later that the value of Y/M/C/K-DRM-LF reached the setting value of D-DLV-CL/BK.
	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 service mode	COPIER> COUNTER> LF> Y/M/C/K-DRM-LF COPIER> OPTION> FNC-SW> D-DLV-BK/CL
	Supplement/memo	The timing to display the warning message can be adjusted by D-DLV-CL/BK.
CPRT-DSP		ON/OFF of [Print Charge Log] button dspl
Lv.1	Details	To set whether to display [Print Charge Log] button to print the charge logs on the charge log screen in Settings/Registration 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: OFF, 1: ON
	Default value	0
	Related user mode	Management Settings> Charge Management> Charge Log

COPIER>OPTION>USER		
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 a method equivalent to that 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. For details of each type, refer to the Service Manual.
	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: Type 1, 1: Type 2
	Default value	0
	Related service mode	COPIER> OPTION> FNC-SW> CONFIG
PRJOB-CP		ON/OFF of count TX at RX/report print
Lv.2	Details	To set whether to enable/disable a page-basis count pulse transmission to the charge management device at the time of RX 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: OFF, 1: ON
	Default value	0
	Supplement/memo	Charge management device: Coin Manager, Non-Canon-made control card

COPIER>OPTION>USER		
DFLT-CPY		Setting of color mode for copy
Lv.1	Details	To set the default color mode for copy operation. To reflect the change, it is necessary to initialize the default settings of copy function in one of the following two ways. - Settings/Registration> Function Settings> Copy> Change Default Settings > Initialize - Main Menu> Copy> Logo icon in upper right of the screen> Change Default Settings> Initialize
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Initialize the default settings of copy function.
	Caution	Be sure to initialize the default settings of copy function after change.
	Display/adj/set range	0 to 2 0: Based on Auto/ACS/Printer Driver settings, 1: Color mode, 2: Black mode
	Default value	JP:2, USA:0, EUR:2, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Function Settings> Copy> Change Default Settings> Initialize Function Settings> Copy> Select Color Settings for Copy> Use Auto (Color/Black & White)
DFLT-BOX		Setting of color mode for Mail Box scan
Lv.1	Details	To set the default color mode for Mail Box scan operation. To reflect the change, it is necessary to initialize the default settings of scan and store function in one of the following two ways. - Settings/Registration> Function Settings> Store/Access Files> Common Settings> Scan and Store Settings/Access Stored Files Settings> Change Default Settings> Initialize - Main Menu> Scan and Store> Mail Box> (Box number)> Scan> Logo icon in upper right of the screen> Change Default Settings> Initialize
	Use case	Upon user's request
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Initialize the default settings of scan and store function.
	Caution	Be sure to initialize the default settings of scan and store function after change.
	Display/adj/set range	0 to 2 0: Based on Auto/ACS settings, 1: Color mode, 2: Black mode
	Default value	0
	Related user mode	Function Settings> Store/Access Files> Common Settings> Scan and Store Settings/Access Stored Files Settings> Change Default Settings> Initialize

COPIER>OPTION>USER		
DOC-REM		ON/OFF of original removal message
Lv.1	Details	To set whether to display 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: OFF, 1: ON
	Default value	0
DPT-ID-7		Set password entry 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 1 is set, 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
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
FREG-SW		For R&D

COPIER>OPTION>USER	
IFAX-SZL	Setting of I-Fax send size limit
Lv.2	Details
	To set whether to restrict data size at the time of I-Fax transmission that does not go through the server. When 0 is set, 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 regardless of the setting.
	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
	Set the upper limit value for transmission data size in Settings/Registration menu.
IFAX-PGD	Set page split TX at IFax Simple mode TX
Lv.2	Details
	To set whether to perform 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 allowing 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: Prohibited, 1: Allowed
	Default value
	0
	Related user mode
	Function Settings> Send> E-Mail/I-Fax Settings> Maximum Data Size for Sending
	Supplement/memo
	Set the upper limit value for transmission data size in Settings/Registration menu.

COPIER>OPTION>USER	
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. Logs for cause analysis of MEAP failure can be obtained.
	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
AFN-PSWD	Setting of Set/Reg menu access limit
Lv.2	Details
	To set whether to restrict access to Settings/Registration menu. 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: Without restriction, 1: With restriction (password entry required)
	Default value
	0
PTJAM-RC	Setting of auto reprint 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 restart printing automatically, 1: Restart
	Default value
	1
PDL-NCSW	Set of card management for PDL print job
Lv.2	Details
	To set whether to make PDL print job be subject to card management by the Card Reader. When 1 is set, 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 of the card inserted to the Card Reader matches the department ID.
	Default value
	0

COPIER>OPTION>USER	
PS-MODE	Setting of compatible mode at PS usage
Lv.2	Details
	To set the image processing at PS print. Set 8 when line width differs depending on the drawing position although the same line width 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 65535 0 to 7: Spare 8: Strokeadjustment is enabled. 9 to 65535: Spare
	Default value
	0
CNCT-RLZ	ON/OFF 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. When 1 is set, mismatch in job order can be prevented 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. It enables to prevent job interruption from other PC by grouping jobs (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

COPIER>OPTION>USER	
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.
	Use case
	When supporting 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
JA-FUNC	Display of job archive function ON/OFF
Lv.2	Details
	To display ON/OFF of job archive function. Make the setting with the MEAP program which supports job archiving.
	Use case
	When using the job archive function
	Adj/set/operate method
	N/A (Display only)
	Caution
	Setting cannot be made with this item.
	Display/adj/set range
	0 to 1 0: OFF, 1: ON
	Default value
	0
JA-JOB	Display of job archive target job
Lv.2	Details
	To display the job type subject to job archive. When the job archive function is ON, archive operation is executed when executing the target job. Make the setting with the MEAP program which supports job archiving.
	Use case
	When using the job archive function
	Adj/set/operate method
	N/A (Display only)
	Caution
	Setting cannot be made with this item.
	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

COPIER>OPTION>USER	
JA-RESTR	Display of job archive restriction items
Lv.2	Details
	To display restriction items for job archive specification. When the job archive function is ON, follow the setting to execute operation to restrict specification. Make the setting with the MEAP program which supports job archiving.
	Use case
	When using the job archive function
	Adj/set/operate method
	N/A (Display only)
	Caution
	Setting cannot be made with this item.
	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
LDAP-SW	Set of search condition for LDAP server
Lv.1	Details
	To set the condition to search e-mail address, etc. from LDAP server.
	Use case
	When searching 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
	Related service mode
	COPIER> OPTION> USER> LDAP-DEF
	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. (Set Destination> Register LDAP Server)
FROM-OF	Hold/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

COPIER>OPTION>USER	
DOM-ADD	ON/OFF of e-mail destn domain auto add
Lv.2	Details
	To set whether to automatically add the specified domain to the sending address (To) entered at the time of e-mail transmission. If specifying "xxx.com" in "Domain Name" in Settings/Registration menu 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: OFF, 1: ON
	Default value
	0
	Related user mode
	Preferences> Network> TCP/IP Settings> DNS Settings> DNS Host/Domain Name Settings> Domain Name
FILE-OF	Set file transmission to entered address
Lv.1	Details
	To set whether to allow file transmission to a newly entered address. When 1 is set, file transmission is not available by entering the address because "File" is not displayed on the transmission screen. The addresses already registered in the Address Book can 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.
	Caution
	To restrict addresses for transmission, be sure to manually delete them because the addresses registered in the Address Book can be used.
	Display/adj/set range
	0 to 1 0: Allowed, 1: Prohibited
	Default value
	0
MAIL-OF	Setting of e-mail TX to entered address
Lv.1	Details
	To set whether to allow e-mail transmission to a newly entered address. When 1 is set, e-mail transmission is not available by entering the address because "E-mail" is not displayed on the transmission screen. The addresses already registered in the Address Book can 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.
	Caution
	To restrict addresses for transmission, be sure to manually delete them because the addresses registered in the Address Book can be used.
	Display/adj/set range
	0 to 1 0: Allowed, 1: Prohibited
	Default value
	0

COPIER>OPTION>USER		
IFAX-OF		Setting of I-Fax TX to entered address
Lv.1	Details	To set whether to allow I-Fax transmission to a newly entered address. When 1 is set, I-Fax transmission is not available by entering the address because "I-Fax" is not displayed on the transmission screen. The addresses already registered in the Address Book can 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.
	Caution	To restrict addresses for transmission, be sure to manually delete them because the addresses registered in the Address Book can be used.
	Display/adj/set range	0 to 1 0: Allowed, 1: Prohibited
	Default value	0
LDAP-DEF		Set of LDAP server ini search attribute
Lv.1	Details	To set initial condition for search attribute that is specified at the time of Details search from the LDAP 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 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
FREE-DSP		ON/OFF of charge disable screen
Lv.2	Details	To set whether to display the charge disable screen for switching between charge and no charge. When 1 is set, the charge disable screen is displayed and it becomes possible to switch to the mode in which all the services are available for free (store manager mode) by temporarily canceling the charging system.
	Use case	When enabling all the services to be provided for free by temporarily canceling 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: OFF, 1: ON
	Default value	0
	Supplement/memo	

COPIER>OPTION>USER		
TNRB-SW		Set of Toner Container counter display
Lv.2	Details	To set whether to display the Toner Container counter on the Counter Check screen.
	Use case	When showing the Toner Container counter to 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 3 0: Hide, 1: Display (Toner Container counter only), 2: Not used, 3: Display (Toner Container counters in the 70s and 180s)
	Default value	It differs according to the location.
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 user's 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
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. Make the setting with the MEAP program which supports job archiving.
	Use case	Upon user's request
	Adj/set/operate method	N/A (Display only)
	Caution	Setting cannot be made with this item.
	Display/adj/set range	0 to 1 0: Packet JPEG, 1: Raster JPEG
	Default value	0

COPIER>OPTION>USER		
HDCR-DSW		ON/OFF of HDD complete deletion display
Lv.1	Details	To set whether to display "Hard Disk Data Complete Deletion" in Settings/Registration menu. When 1 is set, unneeded data in the hard disk can be deleted completely on the HDD Data Complete Deletion 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	1
	Related user mode	Management Settings> Data Management> HDD Data Complete Deletion> Hard Disk Data Complete Deletion
BWCL-DSP		ON/OFF of color/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		[Not used]
SCALLCMP		[Not used]
USBH-DSP		ON/OFF of "Use USB Host" display
Lv.2	Details	To set whether to display "Use USB Host" in Settings/Registration menu. When 1 is set, whether to use USB host can be selected on USB Settings screen.
	Use case	When allowing the user administrator to select whether to use the USB host
	Adj/set/operate method	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> External Interface> USB Settings> Use USB Host

COPIER>OPTION>USER		
USBM-DSP		ON/OFF USB ex-mem device MEAP driver use
Lv.2	Details	To set whether to display "Use MEAP Driver for USB External Device" in Settings/Registration menu. When 0 is set, the item is not displayed so that the user administrator cannot change the setting.
	Use case	When not allowing the user administrator to select whether to use the MEAP driver
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When setting 0, be sure to make the setting after the specified setting is completed.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
	Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for USB Storage Device
USBI-DSP		ON/OFF USB input device MEAP driver use
Lv.2	Details	To set whether to display "Use MEAP Driver for USB Input Device" in Settings/Registration menu. When 0 is set, the item is not displayed so that the user administrator cannot change the setting.
	Use case	When not allowing the user administrator to select whether to use the MEAP driver
	Adj/set/operate method	1) Enter the setting value, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution	When setting 0, be sure to make the setting after the specified setting is completed.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	1
Related user mode	Preferences> External Interface> USB Settings> Use MEAP Driver for USB Input Device	
CTCHKDSP		ON/OFF of [Print List] displays
Lv.1	Details	To set whether to display [Print List] button on the Counter Check screen. By pressing the button, 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: OFF, 1: ON
	Default value	1
USBB-DSP		For R&D

COPIER>OPTION>USER		
USBR-DSP		ON/OFF USB infrared devc MEAP driver use
Lv.2	Details	To set whether to display "Use MEAP Driver for USB Infrared Device" in Settings/Registration menu. When 1 is set, whether to use MEAP driver can be selected on USB Settings screen.
	Use case	When allowing the user administrator to select whether to use the MEAP driver
	Adj/set/operate method	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> External Interface> USB Settings> Use MEAP Driver for USB Infrared Device
POL-SCAN		ON/OFF of Rights Management Server set
Lv.1	Details	To set whether to display "Rights Management Server Settings" in Settings/Registration menu. When 1 is set, the setting screen for connecting to Adobe LiveCycle Rights Management Server is displayed. Although the Rights Management is a standard feature, it is possible to hide it 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: OFF, 1: ON
	Default value	JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
	Related user mode	Function Settings> Common> Generate File> Rights Management Server Settings
JA-SBOX		Setting of linking with Advanced Box: SAM
Lv.2	Details	To set whether to allow linkage with Advanced Box when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-DFAX		Setting of direct fax transmission: SAM
Lv.2	Details	To set whether to allow the direct fax transmission when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0

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JA-REP		Setting of TX Report with image: SAM
Lv.2	Details	To set whether to allow the TX Report with image when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-FREP		Setting of Fax TX Report with image: SAM
Lv.2	Details	To set whether to allow the Fax TX Report with image when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-BOX		Setting of Inbox document operation: SAM
Lv.2	Details	To set whether to allow operating Inbox document when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-FORM		Setting of image composition: SAM
Lv.2	Details	To set whether to allow image composition when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-PREV		Setting of preview page deletion: SAM
Lv.2	Details	To set whether to allow deleting a page from the scan preview screen when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0

COPIER>OPTION>USER		
JA-PULL		Setting of network scan: SAM
Lv.2	Details	To set whether to allow network scan when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-PDLB		Set of printer driver multi box save: SAM
Lv.2	Details	To set whether to allow storing a document to multiple Inboxes from the printer driver simultaneously when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-JOBK		Setting of job merge allowance: SAM
Lv.2	Details	To set whether to allow merging jobs when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-JDF		Setting of JDF: SAM
Lv.2	Details	To set whether to allow the use of JDF when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
JA-RUI		Setting of Inbox document access: SAM
Lv.2	Details	To set whether to allow accessing to Inbox document from remote UI when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0

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JA-WEB		Setting of Inbox document upload: SAM
Lv.2	Details	To set whether to allow uploading of Inbox document with the Web browser when iW SAM is enabled.
	Use case	When canceling the operation restriction while iW SAM 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: Prohibited, 1: Allowed
	Default value	0
EXP-CRYP		ON/OFF confidential encrypt: add book exp
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 remote UI.
	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	In principle, be sure not to allow the user to execute export without encryption because of security concern. Be sure to get approval from the user in advance by telling that the security level decreases when 0 is set.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
Default value	1	
SMD-EXPT		ON/OFF remote UI service mode data dspl
Lv.1	Details	To set whether to display "service mode data" as the target data of export on remote UI. When 1 is set, the same service mode data can be registered in the case of installing more than a machine at the same time.
	Use case	When installing more than a 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: OFF, 1: ON
	Default value	0
SNDESTREN		Set of setting delete after scan and send
Lv.1	Details	To set whether to delete the transmission setting/address after transmission on 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 2 0: Deleted, 1: Retained only the transmission setting, 2: Retained the transmission setting and address
	Default value	JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0

COPIER>OPTION>USER	
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: Deleted, 1: Retained
	Default value
	JP:1, USA:0, EUR:0, AU:0, CN:0, KR:0, TW:0, ASIA:0
SJ-UNMSK	ON/OFF secured job masking cancellation
Lv.2	Details
	To set whether to mask other people's secured jobs. When 0 is set, operation of other people's secured jobs is not possible because they are masked. When COIN is set to 6 or 7 (charge mode: Type-C), set 1. Masking is canceled and other people's secured jobs can be operated. It is enabled at MEAP authentication.
	Use case
	When operating secured jobs in charge mode Type-C
	Adj/set/operate method
	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 (Masking enabled), 1: ON (Masking canceled)
	Default value
	0
	Related service mode
	COPIER> OPTION> ACC> COIN
SJ-CLMSK	ON/OFF secured job stop button display
Lv.2	Details
	To set whether to display the button to stop a secured job. When 0 is set, the stop button is displayed. When COIN is set to 6 or 7 (charge mode: Type-C), set 1. Since the stop button is not displayed, the secured job cannot be stopped.
	Use case
	When prohibiting to stop the secured job in charge mode Type-C
	Adj/set/operate method
	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 (Display), 1: ON (Hide)
	Default value
	0
	Related service mode
	COPIER> OPTION> ACC> COIN

COPIER>OPTION>USER	
PRTDP-SW	Set delivery side for 1-page job:2-sided
Lv.1	Details
	To set whether to deliver paper face-up or face-down when printing only 1 page although 2-sided print is set. When 0 is set, paper is delivered face-down like 1-sided job. (Paper does not pass through the Duplex Path.) When 1 is set, paper is delivered face-up via the Duplex Path. Paper feed distance becomes longer so productivity is decreased.
	Use case
	When changing the delivery side of 1-page print although 2-sided print is set
	Adj/set/operate method
	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: Face-down delivery, 1: Face-up delivery
	Default value
	0
PDFD-MSW	Set output paper size: direct print PDF
Lv.2	Details
	To set output paper size at direct print PDF. Usually, the region defined by MediaBox is output. However, in some cases, the region defined (trimmed) by CropBox is judged as output paper size depending on PDF file. Set 1 when output result differs from what is defined at direct print PDF.
	Use case
	When preferring to output a PDF file with paper which size is defined by CropBox while rectangle sizes defined by MediaBox and CropBox are different (e.g.: when preferring to output a PDF file with A4 size paper while A3 and A4 are defined by MediaBox and CropBox respectively, etc.)
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 1 0: MediaBox (Normal), 1: CropBox
	Default value
	0
SFT-OUT	Setting of offset priority delivery
Lv.2	Details
	To set whether to deliver a job where offset and collate/offset group is set to the delivery destination with offset function. When 1 is set, a job is delivered to the delivery destination with offset function even though a delivery destination without offset function is set in Settings/Registration menu.
	Use case
	When preferring to deliver a job to the delivery destination with offset 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: Based on Output Tray Settings, 1: Priority on job settings (deliver to a delivery destination where offset is possible)
	Default value
	0
	Related user mode
	Function Settings> Common> Paper Output Settings> Output Tray Settings

CST

COPIER>OPTION>CST		
CST1-P1 Setting of Cst1 paper size (A5R/STMTR)		
Lv.1	Details	To set the paper size (A5R/STMTR) used in the Cassette 1.
	Use case	When setting the paper size for the Cassette 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: 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
CST2-P1 Setting of Cst2 paper size (A5R/STMTR)		
Lv.1	Details	To set the paper size (A5R/STMTR) used in the Cassette 2.
	Use case	When setting the paper size for the Cassette 2
	Adj/set/operate method	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: 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> Paper Settings> A5R/STMTR Paper Selection
CST3-P1 Setting of Cst3 paper size (A5R/STMTR)		
Lv.1	Details	To set the paper size (A5R/STMTR) used in the 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.
	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> Paper Settings> A5R/STMTR Paper Selection
CST4-P1 Setting of Cst4 paper size (A5R/STMTR)		
Lv.1	Details	To set the paper size (A5R/STMTR) used in the 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.
	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> Paper Settings> A5R/STMTR Paper Selection

COPIER>OPTION>CST		
CST-K-SW		Set of EXEC/16K size support: Cassette 1
Lv.2	Details	To set whether to support EXEC or 16K size (K-size paper) by the Cassette 1. This setting is enabled only for the location where K-size paper can be selected in the Control Panel menu. For other locations, only EXEC can be set.
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When K-size paper cannot be selected in the Control Panel menu, only the setting value 0 can be set.
	Display/adj/set range	0 to 1 0: EXEC, 1: 16K
	Default value	0
	Supplement/memo	16K paper: 270 x 195 mm
C2-K-SW		Set of EXEC/16K size support: Cassette 2
Lv.2	Details	To set whether to support EXEC or 16K size (K-size paper) by the Cassette 2. This setting is enabled only for the location where K-size paper can be selected in the Control Panel menu. For other locations, only EXEC can be set.
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When K-size paper cannot be selected in the Control Panel menu, only the setting value 0 can be set.
	Display/adj/set range	0 to 1 0: EXEC, 1: 16K
	Default value	0
	Supplement/memo	16K paper: 270 x 195 mm
C3-K-SW		Set of EXEC/16K size support: Cassette 3
Lv.2	Details	To set whether to support EXEC or 16K size (K-size paper) by the Cassette 3. This setting is enabled only for the location where K-size paper can be selected in the Control Panel menu. For other locations, only EXEC can be set.
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When K-size paper cannot be selected in the Control Panel menu, only the setting value 0 can be set.
	Display/adj/set range	0 to 1 0: EXEC, 1: 16K
	Default value	0
	Supplement/memo	16K paper: 270 x 195 mm

COPIER>OPTION>CST		
C4-K-SW		Set of EXEC/16K size support: Cassette 4
Lv.2	Details	To set whether to support EXEC or 16K size (K-size paper) by the Cassette 4. This setting is enabled only for the location where K-size paper can be selected in the Control Panel menu. For other locations, only EXEC can be set.
	Use case	Upon user's request
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When K-size paper cannot be selected in the Control Panel menu, only the setting value 0 can be set.
	Display/adj/set range	0 to 1 0: EXEC, 1: 16K
	Default value	0
	Supplement/memo	16K paper: 270 x 195 mm

T-8-57

■ ACC

COPIER>OPTION>ACC		
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	<p>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.</p> <ul style="list-style-type: none"> - COPIER> OPTION> USER> CONTROL, AFN-PSWD=1 - COPIER> OPTION> NETWORK> DA-CNCT=1 - COPIER> OPTION> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX=0 - IE Settings> IE Function Priority=ON - Preferences> Network> TCP/IP Settings> IPv4 Settings> IP Address Range Settings> RX/Print Range: Allow IPv4 Address=ON - Preferences> Network> TCP/IP Settings> IPv6 Settings> IP Address Range Settings> RX/Print Range: Allow 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 <p>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.</p> <ul style="list-style-type: none"> - 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> DSPLY-SW> UI-BOX, UI-SEND, UI-FAX COPIER> OPTION> ACC> PDL-THR

COPIER>OPTION>ACC	
Related user mode	Function Settings> Send> E-Mail/Fax Settings> Communication Settings Preferences> Network> TCP/IP Settings> DNS Settings> FTP Print Settings, IPP Print Settings
Supplement/memo	Control card can be used with "No charge". DA: Digital Accessory
CARD-SW	Set screen dspl: Coin Manager connected
Lv.1 Details	To set coin or card that the user is prompted 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
OUT-TRAY	Presence/absence of Third Delivery Tray
Lv.1 Details	To set whether the Third Delivery Tray is installed or not. When it is installed, set 1.
Use case	When the Third Delivery Tray is installed
Adj/set/operate method	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
CC-SPSW	Setting of control card I/F support
Lv.2 Details	To set support level of control card (CCIV/CCV) interface. To keep processing performance of the printer engine, set 1. To correctly stop the output by the upper limit number of sheets, set 2.
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	When 1 is set, output cannot be correctly stopped by the upper limit number of sheets. When 2 is set, 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

COPIER>OPTION>ACC	
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
IN-TRAY	Presence/absence of Second Delivery Tray
Lv.1 Details	To set whether the Second Delivery Tray is installed or not. When it is installed, set 1.
Use case	When the Second Delivery Tray is installed
Adj/set/operate method	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
MIN-PRC	Set of Coin Manager minimum price
Lv.1 Details	To set the minimum amount to be handled with Coin Manager. When UNIT-PRC is 0, enter "10" to specify 10 Japanese yen as the minimum amount. When UNIT-PRC is 1 to 4 (Euro/Pound/Swiss Franc/Dollar), entry is in fractional unit. In the case of dollar, entry of "50" makes the minimum amount to be 50 cents (\$0.50). When COIN is 4, this setting is enabled.
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 9999
Default value	10
Related service mode	COPIER> OPTION> ACC> COIN, UNIT-PRC
Supplement/memo	When a value smaller than the minimum amount is entered in Settings/Registration menu as the charging amount, it causes an error.
MAX-PRC	Set of Coin Manager maximum price
Lv.1 Details	To set the maximum amount to be handled with Coin Manager. When COIN is 4, this setting is enabled.
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 9999
Default value	8800
Related service mode	COPIER> OPTION> ACC> COIN, UNIT-PRC
Supplement/memo	When a value larger than the maximum amount is entered in Settings/Registration menu as the charging amount, it causes an error.

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 Settings/Registration menu; however, adjust it manually as needed.
	Use case
	When the sensitivity of microphone is not improved by automatic 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 the printer engine, set 1. To correctly stop the output by the upper limit number of sheets, set 2.
	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
	When 1 is set, output cannot be correctly stopped by the upper limit number of sheets. When 2 is set, 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	ON/OFF PDL print: external charge mode
Lv.2	Details
	To set whether to execute normal PDL print when COIN is set to external charge mode 6/7.
	Use case
	When executing 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: OFF, 1: ON
	Default value
	0
	Related service mode
	COPIER> OPTION> ACC> COIN
CR-TYPE	[Not used]

COPIER>OPTION>ACC	
MEAP-SRL	Set to allow serial comctn from MEAP app
Lv.1	Details
	To set whether to allow serial communication of MEAP application. When 1 is set, serial communication of the machine is stopped and only the serial communication with MEAP application is available.
	Use case
	When performing serial communication from MEAP application
	Adj/set/operate method
	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: Prohibited, 1: Allowed
	Default value
	0

T-8-58

INT-FACE

COPIER>OPTION>INT-FACE	
NWCT-TM	Setting of network connection timeout
Lv.2	Details
	To set the time to keep network connection between the machine and the PC application (keep-alive setting). As the value is changed by 1, the time is changed by 1 minute.
	Use case
	When using PC application
	Adj/set/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
	1 min
	Default value
	5
	Supplement/memo
	Expected PC application: Network print application, E-mail function, cascade copy, MEAP network application, etc.

T-8-59

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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-SEND	Trns license key dspl of SEND function
Lv.2	Details
	To display transfer license key to use SEND function when the function is disabled 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
ST-ENPDF	Install state dspl:encrypted PDF TX func
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-ENPDF	Trns lcns key dspl:encrypted PDF TX func
Lv.2	Details
	To display transfer license key to use encrypted PDF transmission function when the function is disabled with license transfer. This item is enabled when the SEND function has been installed.
	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.
	Display/adj/set range
	24 digits

COPIER>OPTION>LCNS-TR	
ST-SPDF	Inst state dspl: searchable PDF TX func
Lv.2	Details
	To display installation state of searchable PDF transmission function when disabling the function with license transfer.
	Use case
	When checking whether searchable PDF transmission function 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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-SPDF	Trn lcns key dspl:searchable PDF TX func
Lv.2	Details
	To display transfer license key to use searchable PDF transmission function when the function is disabled with license transfer. This item is enabled when the SEND function has been installed.
	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.
	Display/adj/set range
	24 digits
ST-EXPDF	Install state display: PDF Expansion Kit
Lv.2	Details
	To display installation state of PDF Expansion Kit when disabling the function with license transfer.
	Use case
	When checking whether PDF Expansion Kit is 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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
	Supplement/memo
	PDF Expansion Kit: encrypted PDF + searchable PDF
TR-EXPDF	Trns license key dspl: PDF Expansion Kit
Lv.2	Details
	To display transfer license key to use PDF Expansion Kit when the function is disabled with license transfer. This item is enabled when the SEND function has been installed to the Japanese model.
	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.
	Display/adj/set range
	24 digits
	Supplement/memo
	PDF Expansion Kit: encrypted PDF + searchable PDF

COPIER>OPTION>LCNS-TR	
ST-PDFDR	Install state dspl:direct print PDF func
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-PDFDR	Trns lcns key dspl:direct print PDF func
Lv.2	Details
	To display transfer license key to use direct print PDF function when the function is disabled 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
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-SCR	Trns license key dspl: encry secure pnt
Lv.2	Details
	To display transfer license key to use encrypted secure print when the function is disabled with license transfer. This item is enabled when there is "3DES+USH-H" Board.
	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.
	Display/adj/set range
	24 digits

COPIER>OPTION>LCNS-TR	
ST-BRDIM	Install state dspl of BarDIMM function
Lv.2	Details
	To display installation state of BarDIMM when disabling the function with license transfer.
	Use case
	When checking whether BarDIMM 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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-BRDIM	Trns lcns key dspl of BarDIMM function
Lv.2	Details
	To display transfer license key to use BarDIMM when the function is disabled 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
ST-VNC	Install state dspl:remote operators 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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-VNC	Trns lcns key dspl:remote operators soft
Lv.2	Details
	To display transfer license key to use remote operators software when the function is disabled 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

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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-WEB	Trns license key dspl of Web Access Soft
Lv.2	Details
	To display transfer license key to use Web Access Software when the function is disabled 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
ST-HRPDF	Install state dspl: high compression 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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-HRPDF	Trns lcns key dspl: high compression PDF
Lv.2	Details
	To display transfer license key to use high compression PDF function when the function is disabled 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

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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-TRSND	Trns lcns key dspl: trial SEND function
Lv.2	Details
	To display transfer license key to use trial SEND function when the function is disabled 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
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-WTMRK	Trns license key dspl: secure watermark
Lv.2	Details
	To display transfer license key to use secure watermark function when the function is disabled 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

COPIER>OPTION>LCNS-TR		
ST-TSPDF		Inst state dspl: time stp PDF TX func,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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-TSPDF		Trn lcns key dspl: time stamp PDF TX, JP
Lv.2	Details	To display transfer license key to use time stamp PDF transmission function (JP only) when the function is disabled with license transfer. This item is enabled when the SEND function has been installed.
	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.
	Display/adj/set range	24 digits
ST-USPDF		Inst state dspl: dgtl user sign PDF TX
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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-USPDF		Trns lcns key dspl:dgtl user sign PDF TX
Lv.2	Details	To display transfer license key to use digital user signature PDF transmission function when the function is disabled with license transfer. This item is enabled when the SEND function has been installed.
	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.
	Display/adj/set range	24 digits

COPIER>OPTION>LCNS-TR		
ST-DVPDF		Install state dspl: device sign PDF TX
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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-DVPDF		Trns lcns key dspl: device sign PDF TX
Lv.2	Details	To display transfer license key to use device signature PDF transmission function when the function is disabled with license transfer. This item is enabled when the SEND function has been installed.
	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.
	Display/adj/set range	24 digits
ST-SCPDF		Install state dspl: trace&smooth PDF TX
Lv.2	Details	To display installation state of trace & smooth PDF transmission function when disabling the function with license transfer.
	Use case	When checking whether trace & smooth PDF transmission function 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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-SCPDF		Trns lcns key dspl: trace&smooth PDF TX
Lv.2	Details	To display transfer license key to use trace & smooth PDF transmission function when the function is disabled with license transfer. This item is enabled when the SEND function has been installed.
	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.
	Display/adj/set range	24 digits

COPIER>OPTION>LCNS-TR		
ST-AMS	Installation state display of AMS	
Lv.2	Details	To display installation state of AMS when disabling the function with license transfer.
	Use case	When checking whether AMS 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	When operation finished normally: OK!
	Default value	According to the setting at shipment
	Supplement/memo	AMS: Access Management System
TR-AMS	Transfer license key display of AMS	
Lv.2	Details	To display transfer license key to use AMS when the function is disabled 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
	Supplement/memo	AMS: Access Management System
ST-ERDS	Install state dspl: E-RDS 3rd pty extsn	
Lv.2	Details	To display installation state of E-RDS non-Canon-made extension function when disabling the function with license transfer.
	Use case	When checking whether E-RDS non-Canon-made extension 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	When operation finished normally: OK!
	Default value	According to the setting at shipment
	Supplement/memo	E-RDS non-Canon-made extension function: A function to send charge counter to the non-Canon-made charge server.
TR-ERDS	Trns lcns key dspl: E-RDS 3rd pty extsn	
Lv.2	Details	To display transfer license key to use E-RDS non-Canon-made extension function when the function is disabled 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	E-RDS non-Canon-made extension function: A function to send charge counter to the non-Canon-made charge server.

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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-PS	Transfer license key dspl of PS function	
Lv.2	Details	To display transfer license key to use PS function when the function is disabled 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
ST-PCL	Install state display 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	When operation finished normally: OK!
	Default value	0
TR-PCL	Transfer license key dspl: PCL function	
Lv.2	Details	To display transfer license key to use PCL function when the function is disabled 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

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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
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 the function is disabled 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
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-LIPS5	Transfer lcns key dspl: UFR II function
Lv.2	Details
	To display transfer license key to use UFR II function when the function is disabled 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

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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
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 the function is disabled 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
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-PSPCL	Transfer license key dspl of PS/PCL func
Lv.2	Details
	To display transfer license key to use PS/PCL function when the function is disabled 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

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	When operation finished normally: OK!
	Default value	According to the setting at shipment
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 the function is disabled 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
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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-PSLIP		Transfer license key dspl of PS function
Lv.2	Details	To display transfer license key to use PS function when the function is disabled 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

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	When operation finished normally: OK!
	Default value	According to the setting at shipment
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 the function is disabled 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
ST-LXUFR		Install state display 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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-LXUFR		Trns license key dspl of UFR II function
Lv.2	Details	To display transfer license key to use UFR II function when the function is disabled 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

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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
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 the function is disabled 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
ST-JBLK	Inst state dspl: Document Scan Lock func
Lv.2	Details
	To display installation state of Document Scan Lock function when disabling the function with license transfer.
	Use case
	When checking whether Document Scan Lock function 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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-JBLK	Trns lcns key dspl of Document Scan Lock
Lv.2	Details
	To display transfer license key to use Document Scan Lock function when the function is disabled 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

COPIER>OPTION>LCNS-TR	
ST-AFAX	Inst state dspl: remote fax client func
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-AFAX	Trns lcns key dspl of remote fax client
Lv.2	Details
	To display transfer license key to use remote fax client function when the function is disabled 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
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
	When operation finished normally: OK!
	Default value
	According to the setting at shipment
TR-REPDF	Trn lcns key dspl: reader extsn PDF func
Lv.2	Details
	To display transfer license key to use reader extensions PDF function when the function is disabled 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

COPIER>OPTION>LCNS-TR		
ST-OOXML	Inst state dspl: Office Open XML TX func	
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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-OOXML	Trns lcns key dspl: Office Open XML TX	
Lv.2	Details	To display transfer license key to use Office Open XML transmission function when the function is disabled 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
ST-XPS	Install state dspl:direct print XPS func	
Lv.2	Details	To display installation state of direct print XPS function when disabling the function with license transfer.
	Use case	When checking whether direct print XPS function 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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-XPS	Trns lcns key dspl of direct print XPS	
Lv.2	Details	To display transfer license key to use direct print XPS when the function is disabled 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

COPIER>OPTION>LCNS-TR		
ST-2600	Inst state dspl: IEEE2600.1 scrtly 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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-2600	Trn lcns key dspl: IEEE2600.1 scrtly func	
Lv.2	Details	To display transfer license key to use security function of IEEE2600.1 when the function is disabled 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
ST-OPFNT	Install state display of PCL Font Set	
Lv.2	Details	To display installation state of PCL Font Set when disabling the function with license transfer.
	Use case	When checking whether PCL Font Set is installed
	Adj/set/operate method	1) Select ST-OPFNT. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-OPFNT.
	Display/adj/set range	When operation finished normally: OK!
	Default value	0
	Related user mode	Function Settings> Printer> Output Report> PCL> Font List
	Supplement/memo	PCL Font Set can be installed only at installation by service technician or at pre-installation. When replacing the HDD, check that AndaleFont is displayed on the font list in Settings/Registration menu.

COPIER>OPTION>LCNS-TR		
TR-OPFNT	Transfer license key dspl: PCL Font Set	
Lv.2	Details	To display transfer license key to use PCL Font Set when the function is disabled with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-OPFNT. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-OPFNT.
	Display/adj/set range	24 digits
	Supplement/memo	PCL Font Set can be installed only at installation by service technician or at pre-installation. When replacing the HDD, check that AndaleFont is displayed by going through the following: Settings/Registration> Function Settings> Printer> Output Report> PCL> Font List.
ST-NCAPT	Install state display of NetCap function	
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	When operation finished normally: OK!
	Default value	According to the setting at shipment
TR-NCAPT	Transfer license key dspl of NetCap func	
Lv.2	Details	To display transfer license key to use network packet capture function when the function is disabled 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	24 digits
ST-U-RDS	Install state display of E-RDS function	
Lv.2	Details	To display installation state of Embedded-RDS function when disabling the function with license transfer.
	Use case	When checking whether Embedded-RDS function is installed
	Adj/set/operate method	1) Select ST-U-RDS. 2) Enter 0, and then press OK key. When installation has been completed, the transfer license key is displayed under TR-U-RDS.
	Display/adj/set range	When operation finished normally: OK!
	Default value	According to the setting at shipment
	Related service mode	COPIER> FUNCTION> INSTALL> E-RDS

COPIER>OPTION>LCNS-TR		
TR-U-RDS	Trns license key dspl of E-RDS function	
Lv.2	Details	To display transfer license key to use Embedded-RDS function when the function is disabled with license transfer.
	Use case	- When replacing the HDD - When replacing the device
	Adj/set/operate method	1) Select ST-U-RDS. 2) Enter 0, and then press OK key. The transfer license key is displayed under TR-U-RDS.
	Display/adj/set range	24 digits

T-8-60



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 set the value back 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: YMCKBk 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. The setting 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 14 0: Error diffusion 1: Low screen ruling (approx. 133 to 190 lines) 2: High screen ruling (approx. 200 to 268 lines) 3 to 4: Not used 5: Error diffusion (with trailing edge adjustment) 6: High screen ruling (with trailing edge adjustment) 7 to 8: Not used 9: 1/2 speed, low screen ruling (approx. 133 to 190 lines) 10: 1/2 speed, high screen ruling (approx. 200 to 268 lines) 11 to 13: Not used 14: 1/2 speed, high screen ruling (with trailing edge adjustment)

COPIER>TEST>PG	
THRU	Set image correct table use: 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
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
	Default value
	128
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
	Default value
	128
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
	Default value
	128
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
	Default value
	128
COLOR-Y	Setting of Y-color output at test print
Lv.1	Details
	To set whether to output Y-color at the time of test print. The setting is applied to all types. When setting COLOR-Y to 1 and COLOR-M/C/K 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
	Default value
	1
	Related service mode
	COPIER> TEST> PG> COLOR-M/C/K

COPIER>TEST>PG		
COLOR-M		Setting of M-color output at test print
Lv.1	Details	To set whether to output M-color at the time of test print. The setting is applied to all types. When setting COLOR-M to 1 and COLOR-Y/C/K 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
	Default value	1
	Related service mode	COPIER> TEST> PG> COLOR-Y/C/K
	COLOR-C	
Lv.1	Details	To set whether to output C-color at the time of test print. The setting is applied to all types. When setting COLOR-C to 1 and COLOR-Y/M/K 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
	Default value	1
	Related service mode	COPIER> TEST> PG> COLOR-Y/M/K
COLOR-K		Setting of Bk-color output at test print
Lv.1	Details	To set whether to output Bk-color at the time of test print. The setting is applied to all types. When setting COLOR-K to 1 and COLOR-Y/M/C 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
	Default value	1
	Related service mode	COPIER> TEST> PG> COLOR-Y/M/C
F/M-SW		Setting of PG full color/single color
Lv.1	Details	To set whether to output PG in full color or single color.
	Use case	When identifying the cause whether it's due to full color or single color
	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

COPIER>TEST>PG		
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
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	1 to 8 1: Cassette 1, 2: Cassette 2, 3: Cassette 3, 4: Cassette 4, 5: Multi-purpose Tray, 6 to 8: Not used
	Default value	1
2-SIDE		Set of 1-sided/2-sided print for PG
Lv.1	Details	To set whether to output the PG as 1-sided or 2-sided printing.
	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
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	1 sheet
	Default value	1

T-8-61

NETWORK

COPIER>TEST>NETWORK	
PING	Checking of network connection
Lv.1	To check connection between the machine and TCP/IP network.
Details	To check connection between the 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 the machine, and then turn ON the main power switch. 3) Inform the system administrator at user's site that installation of the 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 destination. 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 available because the signal is returned before NIC. - NIC: Network interface board - Local host address: IP address of the machine
IPV6-ADR	Setting of PING destination IPv6 address
Lv.1	To set the IPv6 address to send PING. When PING-IP6 is executed, PING is sent to the address.
Details	To set the IPv6 address to send PING. When PING-IP6 is executed, PING is sent to the address.
Use case	At network connection via IPv6
Adj/set/operate method	Enter the setting value, and then press OK key.
Caution	- Enter a consistent character string as an IPv6 address. - Enter an address within 39 characters including hexadecimal numbers (0 to 9, a to f) and a separator (:).
Related service mode	COPIER> TEST> NETWORK> PING-IP6

COPIER>TEST>NETWORK		
PING-IP6		PING transmission to IPv6 address
Lv.1	Details	To send PING to the IPv6 address specified by IPV6-ADR. Whether the machine is connected to the IPv6 network environment can be checked.
	Use case	At network connection via IPv6
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG
	Related service mode	COPIER> TEST> NETWORK> IPV6-ADR

T-8-62

■ NET-CAP

COPIER>TEST>NET-CAP	
CAPOFFON	For R&D
STT-STP	For R&D
CAPSTATE	For R&D
PONSTART	For R&D
OVERWRIT	For R&D
PAYLOAD	For R&D
FILE-CLR	For R&D
SIMPFILT	For R&D
ENCDATA	For R&D

T-8-63




COPIER>COUNTER>TOTAL		
SERVICE1		Service-purposed total counter 1
Lv.1	Details	To count up when the printout is delivered outside the machine. Large size: 1, Small size: 1
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999
SERVICE2		Service-purposed total counter 2
Lv.1	Details	To count up when the printout is delivered outside the machine. Large size: 2, Small size: 1
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999
COPY		Total copy counter
Lv.1	Details	To count up when the printout is delivered outside the machine. Large size: 1, Small size: 1
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999
PDL-PRT		PDL print counter
Lv.1	Details	To count up when the printout is delivered outside the machine according to the charge counter at PDL print. Large size: 1, Small size: 1
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999
FAX-PRT		FAX reception print counter
Lv.1	Details	To count up when the printout is delivered outside the machine according to the charge counter at FAX reception. Large size: 1, Small size: 1
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999
BOX-PRT		Inbox print counter
Lv.1	Details	To count up when the printout is delivered outside the machine according to the charge counter at Inbox print. Large size: 1, Small size: 1
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999
RPT-PRT		Report print counter
Lv.1	Details	To count up when the printout is delivered outside the machine according to the charge counter at report print. Large size: 1, Small size: 1
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999

COPIER>COUNTER>TOTAL		
2-SIDE		2-sided copy/print counter
Lv.1	Details	To count up when the 2-sided copy/printout is delivered outside the machine according to the charge counter at 2-sided copy/print. Large size: 1, Small size: 1
	Use case	When checking the counter
	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
	Use case	When checking the counter
	Display/adj/set range	0 to 99999999

T-8-64

PICK-UP

COPIER>COUNTER>PICKUP		
C1		Cassette 1 pickup total counter
Lv.1	Use case	When checking the pickup counter
	Display/adj/set range	0 to 99999999
	Unit	1 sheet
	Default value	0
C2		Cassette 2 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the pickup counter
	Display/adj/set range	0 to 99999999
	Unit	1 sheet
C3		Cassette 3 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the pickup counter
	Display/adj/set range	0 to 99999999
	Unit	1 sheet
	Default value	0
C4		Cassette 4 pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the pickup counter
	Display/adj/set range	0 to 99999999
	Unit	1 sheet
	Default value	0
MF		Multi-purpose Tray pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the pickup counter
	Display/adj/set range	0 to 99999999
	Unit	1 sheet
2-SIDE		2-sided pickup total counter
Lv.1	Details	Large size: 1, Small size: 1
	Use case	When checking the pickup counter
	Display/adj/set range	0 to 99999999
	Unit	1 sheet

T-8-65

FEEDER

COPIER>COUNTER>FEEDER		
FEED		DADF original pickup total counter
Lv.1	Details	To count up the number of originals picked up from the DADF.
	Use case	When checking the total counter of original pickup by DADF
	Display/adj/set range	0 to 99999999
	Unit	1 sheet
DFOP-CNT		DADF hinge open/close counter
Lv.1	Details	To count up the number of open/close of the DADF hinge.
	Use case	When checking the DADF hinge open/close counter
	Display/adj/set range	0 to 99999999
	Unit	1 time

T-8-66

■ JAM

COPIER>COUNTER>JAM	
TOTAL	Copier total jam counter
Lv.1	Details To count up the number of jam occurrences in the machine.
	Use case When checking the total jam counter of copier
	Display/adj/set range 0 to 99999999
	Unit 1 time
FEEDER	Feeder total jam counter
Lv.1	Details To count up the number of jam occurrences in the Feeder.
	Use case When checking the total number of jams in the Feeder
	Display/adj/set range 0 to 99999999
	Unit 1 time
SORTER	Finisher total jam counter
Lv.1	Details To count up the number of jam occurrences in the Finisher.
	Use case When checking the total jam counter of the finisher
	Display/adj/set range 0 to 99999999
	Unit 1 time
2-SIDE	Duplex Unit jam counter
Lv.1	Details To count up the number of jam occurrences in the Duplex Unit.
	Use case When checking the jam counter of the Duplex Unit
	Display/adj/set range 0 to 99999999
	Unit 1 time
MF	Multi-purpose Tray jam counter
Lv.1	Details To count up the number of jam occurrences in the Multi-purpose Tray.
	Use case When checking the jam counter of the Multi-purpose Tray
	Display/adj/set range 0 to 99999999
	Unit 1 time
C1	Cassette 1 pickup jam counter
Lv.1	Details To count up the number of jam occurrences in the Cassette 1.
	Use case When checking the jam counter of the Cassette 1
	Display/adj/set range 0 to 99999999
	Unit 1 time
C2	Cassette 2 pickup jam counter
Lv.1	Details To count up the number of jam occurrences in the Cassette 2.
	Use case When checking the jam counter of the Cassette 2
	Display/adj/set range 0 to 99999999
	Unit 1 time
C3	Cassette 3 pickup jam counter
Lv.1	Details To count up the number of jam occurrences in the Cassette 3.
	Use case When checking the jam counter of the Cassette 3
	Display/adj/set range 0 to 99999999
	Unit 1 time

COPIER>COUNTER>JAM	
C4	Cassette 4 pickup jam counter
Lv.1	Details To count up the number of jam occurrences in the Cassette 4.
	Use case When checking the jam counter of the Cassette 4
	Display/adj/set range 0 to 99999999
	Unit 1 time

T-8-67

MISC

COPIER>COUNTER>MISC		
T-SPLY-Y		
Y-color toner supply counter		
Lv.1	Details	To count up the number of Y-color toner supply blocks with each half turn of the Toner Container.
	Use case	When checking the usage status of toner
	Display/adj/set range	0 to 99999999
	Unit	1 block
	Default value	0
T-SPLY-M		
M-color toner supply counter		
Lv.1	Details	To count up the number of M-color toner supply blocks with each half turn of the Toner Container.
	Use case	When checking the usage status of toner
	Display/adj/set range	0 to 99999999
	Unit	1 block
	Default value	0
T-SPLY-C		
C-color toner supply counter		
Lv.1	Details	To count up the number of C-color toner supply blocks with each half turn of the Toner Container.
	Use case	When checking the usage status of toner
	Display/adj/set range	0 to 99999999
	Unit	1 block
	Default value	0
T-SPLY-K		
Bk-color toner supply counter		
Lv.1	Details	To count up the number of Bk-color toner supply blocks with each half turn of the Toner Container.
	Use case	When checking the usage status of toner
	Display/adj/set range	0 to 99999999
	Unit	1 block
	Default value	0
ALLPW-ON		
For R&D		
HDD-ON		
Number of hard disk start-up times		
Lv.1	Details	To count up when power of the hard disk is turned ON.
	Use case	When judging whether to shift the machine to power-saving state after using the printer or scanner for a job
	Display/adj/set range	0 to 99999999
ST-NDL		
Staple needle counter		
Lv.1	Details	To count the use of the staple needle.
	Unit	1 time
ENT-PTH		
Entrance paper path counter: Fin-U1		
Lv.1	Details	Number of sheets fed through the entrance paper path
	Use case	When checking the usage status of the product
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key.
	Display/adj/set range	0 to 99999999
	Unit	1 sheet
Default value	0	

COPIER>COUNTER>MISC		
TRAY-CHA		Tray change counter: Fin-U1
Lv.1	Details	Number of switch of the tray
	Use case	When checking the usage status of the product
	Adj/set/operate method	To clear the counter value: Select the item, and then press Clear key.
	Display/adj/set range	0 to 99999999
	Unit	1 time
Default value	0	
SDL-NDL		Saddle staple needle counter :Fin-U1
Lv.1	Details	To count the use of the saddle staple needle.
	Unit	1 time
SUC-A-Y		For R&D
SUC-A-M		For R&D
SUC-A-C		For R&D
SUC-A-K		For R&D
FIN-PTH		For R&D
FR-STPL		For R&D
MSTP-B		For R&D
MSTPL		For R&D
STPL-2P		For R&D
STPL-F		For R&D
STPL-R		For R&D

T-8-68

JOB

COPIER>COUNTER>JOB	
DVPAPLEN	For R&D
DVRUNLEN	For R&D

T-8-69

DRBL-1

COPIER>COUNTER>DRBL-1	
TR-UNIT	ITB Unit parts counter
Lv.1 Details	ITB Unit 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 value: 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	1 sheet
Default value	0
T-CLN-BD	ITB Cleaning Blade parts counter
Lv.1 Details	ITB Cleaning Blade 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 value: 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	1 sheet
Default value	0
TR-BLT	ITB parts counter
Lv.1 Details	ITB 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 value: 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	1 sheet
Default value	0

COPIER>COUNTER>DRBL-1	
2TR-ROLL	Sec Transfer Outer Roller parts counter
Lv.1 Details	Secondary Transfer Outer Roller 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 value: 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	1 sheet
Default value	0
PT-DRM	Drum Unit (Bk) parts counter
Lv.1 Details	Drum Unit (Bk) 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 value: 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	1 sheet
Default value	0
DV-UNT-C	Developing Unit (C) parts counter
Lv.1 Details	Developing Unit (C) 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 value: 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	1 sheet
Default value	0

COPIER>COUNTER>DRBL-1		
DV-UNT-Y	Developing Unit (Y) parts counter	
Lv.1	Details	Developing Unit (Y) 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 value: 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	1 sheet
	Default value	0
	DV-UNT-M	Developing Unit (M) parts counter
Lv.1	Details	Developing Unit (M) 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 value: 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	1 sheet
	Default value	0
	DV-UNT-K	Developing Unit (Bk) parts counter
Lv.1	Details	Developing Unit (Bk) 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 value: 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	1 sheet
	Default value	0

COPIER>COUNTER>DRBL-1		
C1-PU-RL	Cassette 1 Pickup Roller parts counter	
Lv.1	Details	Cassette 1 Pickup Roller 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 value: 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	1 sheet
	Default value	0
	C1-SP-RL	Cassette 1 Separation Roller parts cntr
Lv.1	Details	Cassette 1 Separation Roller 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 value: 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	1 sheet
	Default value	0
	C1-FD-RL	Cassette 1 Feed Roller parts counter
Lv.1	Details	Cassette 1 Feed Roller 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 value: 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	1 sheet
	Default value	0

COPIER>COUNTER>DRBL-1	
C2-PU-RL	Cassette 2 Pickup Roller parts counter
Lv.1	Details
	Cassette 2 Pickup Roller 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 value: 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
	1 sheet
	Default value
	0
C2-SP-RL	Cassette 2 Separation Roller parts cntr
Lv.1	Details
	Cassette 2 Separation Roller 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 value: 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
	1 sheet
	Default value
	0
C2-FD-RL	Cassette 2 Feed Roller parts counter
Lv.1	Details
	Cassette 2 Feed Roller 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 value: 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
	1 sheet
	Default value
	0

COPIER>COUNTER>DRBL-1	
M-PU-RL	Multi-purpose Tray Pickup Roll prts cntr
Lv.1	Details
	Multi-purpose Tray Pickup Roller 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 value: 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
	1 sheet
	Default value
	0
M-SP-RL	Multi-purpose Tray Sprtn Roll prts cntr
Lv.1	Details
	Multi-purpose Tray Separation Roller 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 value: 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
	1 sheet
	Default value
	0
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 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 value: 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
	1 sheet
	Default value
	0

COPIER>COUNTER>DRBL-1	
FX-LW-RL	Fixing Pressure Roller parts counter
Lv.1	Details
	Pressure Roller 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 value: 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
	1 sheet
	Default value
	0
FX-UNIT	Fixing Unit parts counter
Lv.1	Details
	Fixing Unit 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 value: 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
	1 sheet
	Default value
	0
FX-UP-FR	Fixing Film Unit parts counter
Lv.1	Details
	Fixing Film Unit 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 value: 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
	1 sheet
	Default value
	0

COPIER>COUNTER>DRBL-1	
FX-LW-BS	Fix Press Roll Shaft Support prts cntr
Lv.1	Details
	Fixing Pressure Roller Shaft Support 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 value: 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
	1 sheet
	Default value
	0
MN-DR-U	Main Drive Unit parts counter
Lv.1	Details
	Main Drive Unit 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 value: 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
	1 sheet
	Default value
	0
REG-DR-U	Registration Drive Unit parts counter
Lv.1	Details
	Registration Drive Unit 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 value: 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
	1 sheet
	Default value
	0

COPIER>COUNTER>DRBL-1	
WT-DR-U	Waste Toner Drive Unit parts counter
Lv.1	Details
	Waste Toner Drive Unit 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 value: 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
	1 sheet
	Default value
	0
WST-TNR	Waste Toner Container parts counter
Lv.1	Details
	Waste Toner Container 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 value: 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
	1 sheet
	Default value
	0
PT-DR-Y	Drum Unit (Y) parts counter
Lv.1	Details
	Drum Unit (Y) 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 value: 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
	1 sheet
	Default value
	0

COPIER>COUNTER>DRBL-1	
PT-DR-M	Drum Unit (M) parts counter
Lv.1	Details
	Drum Unit (M) 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 value: 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
	1 sheet
	Default value
	0
PT-DR-C	Drum Unit (C) parts counter
Lv.1	Details
	Drum Unit (C) 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 value: 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
	1 sheet
	Default value
	0
TR-ROLK	Primary Transfer Roller(Bk) prts counter
Lv.1	Details
	Primary Transfer Roller (Bk) Due to engagement/disengagement of the roller, the counter is advanced separately from Y, M, and C. 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 value: 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
	1 sheet
	Default value
	0
	Related service mode
	COPIER> COUNTER> DRBL-1> TR-ROLC

COPIER>COUNTER>DRBL-1	
TR-ROLC	Pmry Transfer Roll(Y,M,C) parts counter
Lv.1	Details
	Primary Transfer Roller (Y/M/C) Due to engagement/disengagement of the roller, the counter is advanced separately from Bk. 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 value: 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
	1 sheet
	Default value
	0
	Related service mode
	COPIER> COUNTER> DRBL-1> TR-ROLK
REG-RL	Registration Roller parts counter
Lv.1	Details
	Registration Roller 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 value: 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
R-DOOR	Right Door Unit parts counter
Lv.1	Details
	Right Door Unit 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 value: 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
	1 sheet
	Default value
	0

COPIER>COUNTER>DRBL-1	
VP-FD-RL	Cassette 1 Vertical Path Roll prts cntr
Lv.1	Details
	Cassette 1 Vertical Path Roller 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 value: 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
	1 sheet
	Default value
	0

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DRBL-2

COPIER>COUNTER>DRBL-2	
DF-PU-RL	Pickup Roller Unit parts counter: DADF
Lv.1	Details
	Pickup Roller Unit (DADF) 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 value: 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
	1 sheet
	Default value
	0
DF-SP-RL	Separation Roller parts counter: DADF
Lv.1	Details
	Separation Roller (DADF) 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 value: 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
	1 sheet
	Default value
	0
STAMP	Stamp parts counter: DADF
Lv.1	Details
	Stamp (DADF) 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 value: 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
	1 time
	Default value
	0

COPIER>COUNTER>DRBL-2	
DF-HNG-L	Left Hinge parts counter: DADF
Lv.1	Details
	Left Hinge (DADF) 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 value: 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
	1 time
	Default value
	0
	Supplement/memo
	The counter is advanced at each opening and closing.
C3-PU-RL	Cassette 3 Pickup Roller parts counter
Lv.1	Details
	Cassette 3 Pickup Roller 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 value: 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
	1 sheet
	Default value
	0
C3-SP-RL	Cassette 3 Separation Roller parts cntr
Lv.1	Details
	Cassette 3 Separation Roller 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 value: 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
	1 sheet
	Default value
	0

COPIER>COUNTER>DRBL-2		
C3-FD-RL		Cassette 3 Feed Roller parts counter
Lv.1	Details	Cassette 3 Feed Roller 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 value: 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	1 sheet
	Default value	0
	C4-PU-RL	
Lv.1	Details	Cassette 4 Pickup Roller 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 value: 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	1 sheet
	Default value	0
	C4-SP-RL	
Lv.1	Details	Cassette 4 Separation Roller 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 value: 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	1 sheet
	Default value	0

COPIER>COUNTER>DRBL-2		
C4-FD-RL		Cassette 4 Feed Roller parts counter
Lv.1	Details	Cassette 4 Feed Roller 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 value: 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	1 sheet
	Default value	0
	FIN-STPR	
Lv.1	Details	Staple 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	1 time
	Default value	0
SDL-STPL		Saddle Stitcher parts counter: Fin-U1
Lv.1	Details	Saddle Stitcher 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	1 time
	Default value	0

COPIER>COUNTER>DRBL-2	
FR-STPL	Staple free stapling counter: Fin-G1
Lv.1	Details
	Number of executions of staple free stapling (including at the time of paper dust removal) 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 value: 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
	1 time
	Default value
	0
	Related service mode
	SORTER> FUNCTION> FR-ST-RP

T-8-71

■ V-CNTR

COPIER>COUNTER>V-CNTR	
TOTAL	Video count total counter
Lv.1	Details
	To display the total of video count values (YELLOW + MAGENTA + CYAN + BLACK).
	Use case
	When checking the distribution of user's video count
	Adj/set/operate method
	N/A (Display only)
	Supplement/memo
	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 10% image ratio x 1 sheet".
YELLOW	Y-color video count counter
Lv.1	Details
	To display the number of sheets (small size: 1, large size: 1) as the distribution of Y-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case
	When checking the distribution of user's video count
	Adj/set/operate method
	N/A (Display only)
	Supplement/memo
	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 10% image ratio x 1 sheet".
MAGENTA	M-color video count counter
Lv.1	Details
	To display the number of sheets (small size: 1, large size: 1) as the distribution of M-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case
	When checking the distribution of user's video count
	Adj/set/operate method
	N/A (Display only)
	Supplement/memo
	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 10% image ratio x 1 sheet".
CYAN	C-color video count counter
Lv.1	Details
	To display the number of sheets (small size: 1, large size: 1) as the distribution of C-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case
	When checking the distribution of user's video count
	Adj/set/operate method
	N/A (Display only)
	Supplement/memo
	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 10% image ratio x 1 sheet".

COPIER>COUNTER>V-CNTR		
BLACK		Bk-color video count counter
Lv.1	Details	To display the number of sheets (small size: 1, large size: 1) as the distribution of Bk-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case	When checking the distribution of user's video count
	Adj/set/operate method	N/A (Display only)
	Supplement/memo	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 10% image ratio x 1 sheet".

T-8-72

■ V2-CNTR

COPIER>COUNTER>V2-CNTR		
TOTAL		Video count total counter
Lv.1	Details	To display the total of video count values (YELLOW + MAGENTA + CYAN + BLACK).
	Use case	When checking the distribution of user's video count
	Adj/set/operate method	N/A (Display only)
	Supplement/memo	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 5% image ratio x 2 sheets".
YELLOW		Y-color video count counter
Lv.1	Details	To display the number of sheets (small size: 1, large size: 2) as the distribution of Y-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case	When checking the distribution of user's video count
	Adj/set/operate method	N/A (Display only)
	Supplement/memo	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 5% image ratio x 2 sheets".
MAGENTA		M-color video count counter
Lv.1	Details	To display the number of sheets (small size: 1, large size: 2) as the distribution of M-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case	When checking the distribution of user's video count
	Adj/set/operate method	N/A (Display only)
	Supplement/memo	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 5% image ratio x 2 sheets".
CYAN		C-color video count counter
Lv.1	Details	To display the number of sheets (small size: 1, large size: 2) as the distribution of C-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case	When checking the distribution of user's video count
	Adj/set/operate method	N/A (Display only)
	Supplement/memo	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 5% image ratio x 2 sheets".

COPIER>COUNTER>V2-CNTR		
BLACK		Bk-color video count counter
Lv.1	Details	To display the number of sheets (small size: 1, large size: 2) as the distribution of Bk-color image ratio (LOW: less than 3%, MID: 3% or higher and less than 7%, HIGH: 7% or higher).
	Use case	When checking the distribution of user's video count
	Adj/set/operate method	N/A (Display only)
	Supplement/memo	Video count: The number of sheets for each image ratio classification (LOW/MID/HIGH) for each color on a A4 size conversion basis which is stored in the controller A sheet of large size paper with 5% image ratio is counted as "small size with 5% image ratio x 2 sheets".

T-8-73

■ 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 999
	Unit	1 %
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 999
	Unit	1 %
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 999
	Unit	1 %
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 999
	Unit	1 %

T-8-74

FEEDER

DISPLAY

FEEDER>DISPLAY		
FEEDSIZE		Dspl of original size detected by DADF
Lv.1	Details	To display the original size detected by DADF.
	Use case	When incorrect detection of original size occurs

T-8-75

ADJUST

FEEDER>ADJUST		
DOCST		Adj image leading edge margin: DADF mode
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 dislocated. Enter the value of service label when Scanner Unit is replaced/RAM data of Reader Unit is cleared. 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 Scanner Unit - When clearing the RAM data of the Reader Unit
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Caution	When setting an extreme value, the error E302 (shading error) may occur.
	Display/adj/set range	-50 to 50
	Unit	0.1 mm
	Default value	0
LA-SPEED		Fine adj img magnifctn: DADF, vert scan
Lv.1	Details	To adjust the image magnification 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.) When replacing the Scanner Unit/clearing the RAM data of the Reader Unit, enter the value of service label.
	Use case	- When installing DADF - When replacing the Scanner Unit - When clearing the RAM data of the Reader Unit
	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	0.1 %
	Appropriate target value	0
	Default value	0

T-8-76



FEEDER>FUNCTION	
MTR-CHK	Specifying 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 1 0: ADF Motor (M1), 1: Release Motor (M2)
	Related service mode FEEDER> FUNCTION> MTR-ON
FEED-CHK	Specifying 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
CL-CHK	Specifying DADF Operation Clutch
Lv.1	Details To specify the DADF Clutch to be operated. The Clutch is activated by CL-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: Pickup Clutch (CL1), 1: Registration Clutch (CL2)
	Related service mode FEEDER> FUNCTION> CL-ON
CL-ON	Operation check of DADF Clutch
Lv.1	Details To start operation check for the Clutch specified by CL-CHK.
	Use case At operation check
	Adj/set/operate method 1) Select the item, and then press OK key. The clutch operates for approximately 5 seconds and automatically stops. 2) Press OK key. The operation check is completed.
	Caution Press OK key again after execution. It stops automatically after approx. 5 sec; however, it does not finish unless OK key is pressed (STOP screen does not appear.)
	Related service mode FEEDER> FUNCTION> CL-CHK

FEEDER>FUNCTION	
SL-CHK	Specifying DADF Operation Solenoid
Lv.1	Details To specify the DADF solenoid to be 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 for 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).
	Related service mode FEEDER> FUNCTION> SL-CHK
MTR-ON	Operation check of DADF motor
Lv.1	Details To start operation check for 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).
	Related service mode FEEDER> FUNCTION> MTR-CHK
ROLL-CLN	Rotation of DADF Rollers
Lv.1	Details To rotate for cleaning the DADF Rollers. Clean the roller by putting the 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.

FEEDER>FUNCTION		
FEED-ON		Operation check of DADF individual feed
Lv.1	Details	To start operation check for the feed mode specified by FEED-CHK.
	Use case	At operation check
	Adj/set/operate method	Select the item, and then press OK key.
	Related service mode	FEEDER> FUNCTION> FEED-CHK

T-8-77

SORTER

 ADJUST

SORTER>ADJUST		
STP-F1		Adj front 1-stpl pstn: half size, Fin-U1
Lv.1	Details	To adjust the front 1-staple position on A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper. As the value is changed by 1, the staple position is moved by 0.49 mm. +: Toward rear -: Toward front
	Use case	When the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper front staple position is displaced
	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	0.49 mm
	Default value	0
STP-F2		Adj front 1-staple pstn: R size, Fin-U1
Lv.1	Details	To adjust the front 1-staple position on A4R/LGL/LTRR paper. As the value is changed by 1, the staple position is moved by 0.49 mm. +: Toward rear -: Toward front
	Use case	When the A4R/LGL/LTRR paper front staple position is displaced
	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	0.49 mm
	Default value	0
STP-R1		Adj rear 1-stpl pstn: half size, Fin-U1
Lv.1	Details	To adjust the rear 1-staple position on A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper. As the value is changed by 1, the staple position is moved by 0.49 mm. +: Toward rear -: Toward front
	Use case	When the A3/B4/A4/B5/LDR/LTR/EXEC/8K/16K paper rear staple position is displaced
	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	0.49 mm
	Default value	0

SORTER>ADJUST		
STP-R2		Adj rear 1-staple pstn: R size, Fin-U1
Lv.1	Details	To adjust the rear 1-staple position on A4R/LGL/LTRR paper. As the value is changed by 1, the staple position is moved by 0.49 mm. +: Toward rear -: Toward front
	Use case	When the A4R/LGL/LTRR paper rear staple position is displaced
	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	0.49 mm
	Default value	0
STP-2P		Adj 2-stapling position: Fin-G1
Lv.1	Details	To adjust the 2-staple position. As the value is changed by 1, the staples position moves by 0.1 mm. +: Toward rear -: Toward front
	Use case	When the staples position in front/rear direction is displaced in the 2-stapling mode
	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	0.1 mm
	Default value	0
SDL-STP		Adj of Saddle Stitcher stpl pstn: Fin-U1
Lv.1	Details	To adjust the staple position at the time of saddle stitching. As the value is changed by 1, the staple position is moved by 0.5 mm. +: Downward -: Upward
	Use case	When misalignment occurs at the staple position for saddle stitching
	Adj/set/operate method	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range	-3 to 3
	Unit	0.5 mm
SDL-ALG		Adj of Saddle align width: Fin-U1
Lv.1	Details	To adjust the move distance of the Alignment Plate for saddle stitching. When the value is increased by 1, the alignment position moves in the push-in direction by 0.5 mm.
	Use case	When misalignment occurs during the saddle stitching
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Display/adj/set range	0 to 1
	Unit	0.5 mm

SORTER>ADJUST	
ST-ALG1	Adj Processing Tray align pstn: Fin-U1
Lv.1	<p>Details To adjust the alignment position of the Stack Tray. As the value is incremented by 1, the travel length of the Alignment Plate is increased by 0.42 mm.</p> <p>Use case When misalignment occurs in the Processing Tray</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -10 to 10</p> <p>Unit 0.42 mm</p> <p>Default value 0</p>
SW-UP-RL	Adj of Swing Roller descent pstn: Fin-U1
Lv.1	<p>Details To adjust the Swing Roller down position. When the value is increased by 1, the descent position of Swing Roller moves downward by 0.2 mm.</p> <p>Use case When paper fails to be transported to the Processing Tray and misalignment occurs</p> <p>Adj/set/operate method Enter the setting value (switch negative/positive by +/- key) and press OK key.</p> <p>Display/adj/set range -17 to 33</p> <p>Unit 0.2 mm</p> <p>Default value 0</p>
PRCS-RET	Adj Process Tray return amount: Fin-U1
Lv.1	<p>Details To adjust the return amount of the paper on the Processing Tray. When the value is increased by 1, the return amount is decreased by 1.4 mm.</p> <p>Use case When the paper is bent in the Processing Tray</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range 0 to 5</p> <p>Unit 1.4 mm</p> <p>Default value 0</p> <p>Related service mode SORTER> OPTION> PRCS-SP3</p>
UP-CL	Setting of upward curl prev mode: Fin-U1
Lv.1	<p>Details To set ON/OFF of upward curl prevention mode. Set to 1 when a paper leaning occurs due to upward curl on the paper delivered to the Stack Tray. When 1 is set, downward curl prevention mode (DW-CL) is disabled.</p> <p>Use case When upward curl occurs on the paper delivered to the Stack Tray, and paper leaning due to the curl occurs</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range 0 to 1 0: OFF, 1: ON</p> <p>Default value 0</p> <p>Related service mode SORTER> ADJUST> DW-CL</p>

SORTER>ADJUST	
DW-CL	Setting downward curl prev mode: Fin-U1
Lv.1	<p>Details To set ON/OFF of downward curl prevention mode. Set to 1 when a stacking failure occurs due to downward curl on the paper delivered to the Stack Tray. When upward curl prevention mode (UP-CL) is ON, the setting is disabled.</p> <p>Use case When downward curl occurs on the paper delivered to the Stack Tray, and papers are not stacked accurately</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range 0 to 1 0: OFF, 1: ON</p> <p>Default value 0</p> <p>Related service mode SORTER> ADJUST> UP-CL</p>
THC-CL	Setting heavy ppr curl prev mode: Fin-U1
Lv.1	<p>Details To set ON/OFF of heavy paper curl prevention mode. Set 1 when upward curl occurs at the time of heavy paper delivery. When either following condition is satisfied, the fall amount of the Stack Tray at the time of stack delivery increases. In addition, the paper surface detection is performed at every sheet of paper, not at every 5 sheets of paper. - At the time of non-sort delivery on LDR size paper - At the time of sort or staple sort delivery except small size paper stack delivery less than seven sheets of paper</p> <p>Use case - When upward curl occurs on the heavy paper delivered. - When stack over detection is earlier than an assumption.</p> <p>Adj/set/operate method Enter the setting value, and then press OK key.</p> <p>Display/adj/set range 0 to 1 0: OFF, 1: ON</p> <p>Default value 0</p> <p>Supplement/memo This mode is enabled in any of the following cases: - When non-sort mode is selected for LDR paper - When staple mode is selected</p>

SORTER>ADJUST	
THC-PUSH	Setting heavy ppr out prev mode: Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of heavy paper push-out prevention mode. Set to 1 when a sheet of paper on the stack tray delivered in the previous job is pushed out by a sheet of heavy paper delivered in the following job. When 1 is set and all the following conditions are satisfied, the stack tray descends temporarily before a sheet of heavy paper is delivered on the processing tray: *</p> <ul style="list-style-type: none"> * Specified paper in the previous job is "plain paper". * The first-delivered paper in the following job is "heavy paper". * The length of the above-mentioned heavy paper is more than 216 mm. <p>The setting is disabled in non-collate mode.</p> <p>Use case</p> <p>When the already stacked paper is pushed out at the time of heavy paper delivery</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p>
OFST-STC	[Not used]
STP-P-CH	Set stpl stack displace prev mode:Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of staple stack displacement prevention mode. Set to 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.</p> <p>Use case</p> <p>When the paper on the top is misaligned in the staple delivery mode</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p>
TRY-NIS	Set tray switch noise reduct mode:Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of tray switching noise reduction mode. Set to 1 when the operation noise at the time of switching the Stack Tray is loud. When 1 is set, the Stack Tray shift operation becomes slow. When 1 is set, tray switching speed-up mode (TRY-SU) is disabled.</p> <p>Use case</p> <p>When the operation noise at the time of switching the Stack Tray is loud</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>SORTER> ADJUST> TRY-SU</p>

SORTER>ADJUST	
TRY-SU	Set tray switching speedup mode: Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of tray switching speed-up mode. Set to 1 when the time for switching the stack tray is long. When 1 is set, the stack tray shift speed becomes faster and the productivity improves. When tray switching noise reduction mode (TRY-NIS) is ON, the setting is disabled.</p> <p>Use case</p> <p>When the Stack Tray switching time is long</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>SORTER> ADJUST> TRY-NIS</p>
FIN-NIS	Set tray drive noise reduct mode: Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of tray drive noise reduction mode. Set to 1 when the finisher operation noise is loud. When 1 is set, the stack tray initial operation of finisher is minimized.</p> <p>Use case</p> <p>When the Finisher operation noise is loud</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>Do not use this at the normal service. (For individual measure)</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p>
1SHT-SHF	Set 1-sheet stack shift sort: Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of Offset and Collate for 1-sheet stack. Set 1 when enabling Offset and Collate for 1-sheet stack.</p> <p>Use case</p> <p>When Offset and Collate for 1-sheet stack is necessary</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p>
SDL-SWCH	Sddl stack capacity increase mode:Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of saddle stacking capacity increase mode. Set to 1 when increasing the number of sets to be stacked for saddle stitching. When 1 is set, the stacking capacity can be over the upper limit. When the saddle stack full alarm (SDL-ALM) is ON, the setting is disabled.</p> <p>Use case</p> <p>When increasing the stacking capacity for saddle stitching</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When increasing the number of sets to be stacked, the movement is not guaranteed.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>SORTER> ADJUST> SDL-ALM</p>

SORTER>ADJUST	
SDL-ALM	Set sddl stack full alarm mode: Fin-U1
Lv.1	Details
	To set ON/OFF of saddle stack full alarm. Set to 1 when disabling the stack full alarm for saddle stitching. When 1 is set, the saddle stack capacity increase mode (SDL-SWCH) is disabled.
	Use case
	When disabling the stack full alarm for saddle stitching
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	When 1 is set, the saddle delivery sensor stationary jam may occur because the paper stack on the saddle delivery tray block up the saddle delivery port.
	Display/adj/set range
	0 to 1 0: OFF (Alarm detection), 1: ON (Non Alarm detection)
	Default value
	0
	Related service mode
	SORTER> ADJUST> SDL-SWCH
INSTP-F1	Adj front 1-stapling position: Fin-G1
Lv.1	Details
	To adjust the front 1-staple position. As the value is changed by 1, the staple position moves by 0.1 mm. +: Toward rear -: Toward front
	Use case
	When the staple position in front/rear direction is displaced in the front 1-stapling mode
	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
	0.1 mm
	Default value
	0
INSTP-R1	Adj rear 1-stapling position: Fin-G1
Lv.1	Details
	To adjust the rear 1-staple position. As the value is changed by 1, the staple position moves by 0.1 mm. +: Toward rear -: Toward front
	Use case
	When the staple position in front/rear direction is displaced in the rear 1-stapling mode
	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
	0.1 mm
	Default value
	0
THN-STCL	[Not used]

SORTER>ADJUST	
FR-ST-PS	Adjust staple free pressure: Fin-G1
Lv.1	Details
	To adjust the staple pressure in the staple free stapling mode. As the value is changed by 1, the staple pressure changes by 1 mNm. +: Increased -: Decreased
	Use case
	Upon user's request
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Caution
	As the value is increased, the life of the Stapler is shortened.
	Display/adj/set range
	-15 to 15
	Unit
	1 mNm
	Default value
	0
FR-STP-X	Adj stpl free stpl pstn (Fd way): Fin-G1
Lv.1	Details
	To adjust the staple position for paper feed direction in the staple free stapling mode. As the value is changed by 1, the staple position moves by 0.1 mm. +: Leading edge direction -: Trailing edge direction
	Use case
	When the staple position in paper feed direction is displaced in the staple free stapling mode
	Adj/set/operate method
	Enter the setting value (switch negative/positive by -/+ key) and press OK key.
	Display/adj/set range
	-15 to 15
	Unit
	0.1 mm
	Default value
	0
	Supplement/memo
	Change the paper shift amount in the paper feed direction. The staple free stapler position is not changed.
FR-STP-Y	Adj stpl free stpl pstn (F/R way):Fin-G1
Lv.1	Details
	To adjust the staple position for front/rear direction in the staple free stapling mode. As the value is changed by 1, the staple position moves by 0.1 mm. +: Toward rear -: Toward front
	Use case
	When the staple position in front/rear direction is displaced in the staple free stapling mode
	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
	0.1 mm
	Default value
	0
	Supplement/memo
	Change the paper shift amount in the front/rear direction. The staple free stapler position is not changed.

SORTER>ADJUST	
RBLT-PRS	Adj return belt pressure: Fin-G1
Lv.1	Details
	To adjust the amount of pressure of the Return Belt. As the value is changed by 1, the Return Belt is moved up or down by 0.1 mm so the amount of pressure is increased or decreased. +: Increase -: Decrease
	Use case
	When the paper alignment position is displaced.
	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
	0.1 mm
	Default value
	0
MSTP-2P	Adj manual stapling position: Fin-G1
Lv.1	Details
	To adjust the staple position for front/rear direction in the manual stapling mode. As the value is changed by 1, the staple position moves by 0.1 mm. +: Toward rear -: Toward front
	Use case
	When the staple position in front/rear direction is displaced in the manual stapling mode
	Adj/set/operate method
	Enter the setting value (switch negative/positive by +/- key) and press OK key.
	Display/adj/set range
	-15 to 20
	Unit
	0.1 mm
	Default value
	0
INF-ALG1	Adj alignment position (A4): Fin-G1
Lv.1	Details
	To adjust the position of the Alignment Plate when aligning A4 paper. As the value is incremented by 1, distance between the Alignment Plates is narrowed by 0.1 mm.
	Use case
	When the paper alignment position is displaced.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. The Alignment Plate moves to the A4 paper width position. 2) Set A4 paper on the Processing Tray. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key. 4) Check the operation of the Alignment Plate. 5) Repeat steps 3 and 4 until the completion of adjustment. 6) Remove the paper on the Processing Tray.
	Display/adj/set range
	-50 to 50
	Unit
	0.1 mm
	Default value
	0
	Related service mode
	SORTER> ADJUST> INF-ALG2
	Supplement/memo
	The adjustment result is reflected in SORTER> ADJUST> INF-ALG2.

SORTER>ADJUST	
INF-ALG2	Adj alignment position (LTR): Fin-G1
Lv.1	Details
	To adjust the position of the Alignment Plate when aligning LTR paper. As the value is incremented by 1, distance between the Alignment Plates is narrowed by 0.1 mm.
	Use case
	When the paper alignment position is displaced.
	Adj/set/operate method
	1) Enter the setting value (switch negative/positive by +/- key) and press OK key. The Alignment Plate moves to the LTR paper width position. 2) Set LTR paper on the Processing Tray. 3) Enter the setting value (switch negative/positive by +/- key) and press OK key. 4) Check the operation of the Alignment Plate. 5) Repeat steps 3 and 4 until the completion of adjustment. 6) Remove the paper on the Processing Tray.
	Display/adj/set range
	-50 to 50
	Unit
	0.1 mm
	Default value
	0
	Related service mode
	SORTER>ADJUST>INF-ALG1
	Supplement/memo
	The adjustment result is reflected in SORTER> ADJUST> INF-AL1.
CENT-ALG	Adj center align standard pstn: Fin-G1
Lv.1	Details
	To adjust the standard position for the center alignment As the value is incremented by 1, the standard position for the center alignment moves by 0.1 mm. +: Toward rear -: Toward front
	Use case
	- When the standard position for the center alignment is misaligned - When the paper alignment position is displaced.
	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 to influence alignment operation and staple position. Adjust the alignment width with INF-ALG1/2.
	Display/adj/set range
	-10 to 10
	Unit
	0.1 mm
	Default value
	0
	Related service mode
	SORTER> ADJUST> INF-ALG1, INF-ALG2

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SORTER>FUNCTION	
FIN-BK-R	Finisher backup data HDD saving
Lv.1	Details
	The backup data is read from the finisher controller PCB and saved to HDD.
	Use case
	When replacing the Finisher Controller PCB
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Display/adj/set range
	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode
	SORTER> FUNCTION> FIN-BK-W
FIN-BK-W	Writing of Finisher backup data
Lv.1	Details
	The backup data saved in HDD is written to the finisher controller PCB.
	Use case
	When replacing the Finisher Controller PCB
	Adj/set/operate method
	1) Select the item, and then press OK key. 2) Turn OFF/ON the main power switch.
	Caution
	It will take about 10 seconds until "ACTIVE" is shown.
	Display/adj/set range
	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode
	SORTER> FUNCTION> FIN-BK-R
FIN-CON	FIN-Controller PCB RAM clear
Lv.1	Details
	To execute the RAM clear of Finisher Controller PCB to delete all the adjustment contents. (except the counter information)
	Use case
	When clearing RAM data of the Finisher 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 the necessary setting values. - RAM clear is executed after the main power is turned OFF/ON.
	Display/adj/set range
	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode
	COPIER> FUNCTION> MISC-P> P-PRINT

SORTER>FUNCTION	
MTR-CHK	Select motor to check operate
Lv.1	Details
	To specify the motor to operate.
	Use case
	- When checking whether there is any failure in the motor - When checking the operation of the replaced motor
	Adj/set/operate method
	Enter the value, and then press OK key.
	Caution
	When setting the staple motor (Fin-U1/G1) and the stitcher motor (front/rear) (Fin-U1), remove the staple cartridge. When the staple cartridge is installed, the motor is not driven.
	Display/adj/set range
	Fin-U1: 1 to 24 Fin-G1: 1 to 11 1: Inlet motor (Fin-U1)/Feed motor (Fin-G1) 2: Front aligning plate motor (Fin-U1)/Return belt motor (Fin-G1) 3: Rear aligning plate motor (Fin-U1)/Front alignment motor (Fin-G1) 4: Rear end assist motor (Fin-U1)/Rear alignment motor (Fin-G1) 5: Stapler shift motor (Fin-U1)/Assist motor (Fin-G1) 6: Staple motor (Fin-U1)/Stapler shift motor (Fin-G1) 7: Tray1 shift motor (Fin-U1)/Paddle motor (Paddle up/down) (Fin-G1) 8: Tray2 shift motor (Fin-U1)/Paddle motor (Paper retainer up/down) (Fin-G1) 9: Stack ejection motor (Fin-U1)/Stapler motor (Fin-G1) 10: Swing motor (Fin-U1)/Clinch motor (Fin-G1) 11: Shutter operation (Stack ejection motor and shutter clutch) (Fin-U1)/Tray shift motor (Fin-G1) 12: Stack ejection lower roller operation (Stack ejection motor and Stack ejection lower roller clutch) (Fin-U1) 13: Saddle feed motor (Fin-U1) 14: Saddle inlet motor (Fin-U1) 15: Saddle paper folding motor (Fin-U1) 16: Saddle guide motor (Fin-U1) 17: Saddle paper positioning plate motor (Fin-U1) 18: Saddle alignment motor (Fin-U1) 19: Stitcher motor (rear) (Fin-U1) 20: Stitcher motor (front) (Fin-U1) 21: Saddle paper pushing plate motor (Fin-U1) 22: Buffer pass feed motor (Fin-U1) 23: Buffer pass power supply cooling fan (Fin-U1) 24: Buffer pass cooling fan (Fin-U1)
	Default value
	1
	Related service mode
	SORTER> FUNCTION> MTR-ON
MTR-ON	Motor operation check
Lv.1	Details
	To start operation check of the motor specified by MTR-CHK. The motor operation is stopped automatically after 10 seconds.
	Use case
	- When checking whether there is any failure in the motor - When checking the operation of the replaced motor
	Adj/set/operate method
	Select the item, and then press OK key.
	Display/adj/set range
	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode
	SORTER> FUNCTION> MTR-CHK

SORTER>FUNCTION		
SL-CHK		Select solenoid to check operate: Fin-U1
Lv.1	Details	To specify the solenoid to operate.
	Use case	- When checking whether there is any failure in the solenoid - When checking the operation of the replaced solenoid
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	1 to 5 1: Buffer roller separation solenoid 2: Saddle inlet flapper solenoid 3: Saddle No.1 flapper solenoid 4: Saddle No.2 flapper solenoid 5: Saddle feed plate contact solenoid
	Default value	1
	Related service mode	SORTER> FUNCTION> SL-ON
SL-ON		Solenoid operation check: Fin-U1
Lv.1	Details	To start operation check of the solenoid specified by SL-CHK.
	Use case	- When checking whether there is any failure in the solenoid - When checking the operation of the replaced solenoid
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode	SORTER> FUNCTION> SL-CHK
CNT-FCON		Parts Counter clear: Finisher
Lv.1	Details	To clear the parts counter that the Finisher Controller PCB counts.
	Use case	When clearing the parts counter of the Finisher
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
FR-ST-RP		Ppr dust remov at stpl free stpl: Fin-G1
Lv.1	Details	To remove paper dust from the stapler, the stapler repeatedly executes the staple free stapling operation 30 times without paper. When this item is executed, performance of the staple free stapler is recovered.
	Use case	When performance of the staple free stapler is deteriorated
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Supplement/memo	The removed paper dust accumulates on the lower frame under the paper path, so it does not influence to the machine performance. The part counter value of the staple free stapling operation is counted.

SORTER>FUNCTION		
CL-CHK		Select clutch to check operate: Fin-U1
Lv.1	Details	To specify the clutch to operate.
	Use case	- When checking whether there is any failure in the clutch - When checking the operation of the replaced clutch
	Adj/set/operate method	Enter the value, and then press OK key.
	Display/adj/set range	1 to 2 1: Shutter clutch, 2: Stack ejection lower roller clutch
	Default value	1
	Related service mode	SORTER> FUNCTION> CL-ON
CL-ON		Clutch operation check: Fin-U1
Lv.1	Details	To start operation check of the clutch specified by CL-CHK.
	Use case	- When checking whether there is any failure in the clutch - When checking the operation of the replaced clutch
	Adj/set/operate method	Select the item, and then press OK key.
	Display/adj/set range	During operation: ACTIVE, At normal termination: OK, At abnormal termination: NG
	Related service mode	SORTER> FUNCTION> CL-CHK
EMSG-CLR		Clear Fin limited functions mssg: Fin-G1
Lv.1	Details	To clear the message related to staple free stapling that is displayed when functions of Finisher are limited. The staple free stapling alarm (61-0002) is released.
	Use case	When clearing the message related to limited functions mode that is displayed after troubleshooting of finisher is performed
	Adj/set/operate method	Select the item, and then press OK key.
	Caution	Only the messages related to staple free stapling can be cleared.
	Display/adj/set range	At normal termination: OK, At abnormal termination: NG

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SORTER>OPTION	
MD-SPRTN	Set restriction oprtn at Finisher error
Lv.1	Details
	To set whether to stop the machine when an error occurs at Finisher.
	Use case
	When preferring to run the machine although an error occurs at Finisher
	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
	Related user mode
	Settings/Registration> Management Settings> Device Management> Limited Functions Mode
	Supplement/memo
	The setting of the service mode links the setting of the user mode.
FIN-SP1	Finisher special setting 1
Lv.2	Details
	To execute the Finisher special settings 1.
	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 setting only when specific instructions are given.
	Display/adj/set range
	00000000 to 11111111
	Default value
	00000000
FIN-SP2	Finisher special setting 2
Lv.2	Details
	To execute the Finisher special settings 2.
	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 setting only when specific instructions are given.
	Display/adj/set range
	00000000 to 11111111
	Default value
	00000000
STCR-DWN	Set occasional misalign prev mode:Fin-U1
Lv.1	Details
	To set ON/OFF of occasional misalignment prevention mode. When 1 is set, the rise amount of roller at the staple sort delivery of thin/plain paper by the swing height detection control is decreased. (so the distance between the roller and paper shrinks.)
	Use case
	When misalignment in feed direction occurs occasionally at the staple sort delivery of thin/plain paper
	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

SORTER>OPTION	
PRCS-SP3	Set the feed speed to Proc Tray: Fin-U1
Lv.1	Details
	To set the feeding speed of the paper to the Processing Tray in the staple mode. As the value is increased by 1, the feeding speed is decelerated by 50 mm/sec.
	Use case
	When misalignment (buckling on the trailing edge) occurs in staple mode owing to returning the paper too much.
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Caution
	Adjust the return amount of the paper on the Processing Tray again with PRCS-RET as needed.
	Display/adj/set range
	0 to 8 0: 700 mm/s, 1: 650 mm/s, 2: 600 mm/s, 3: 550 mm/s, 4: 500 mm/s, 5: 450 mm/s, 6 to 8: 450 mm/s
	Unit
	50 mm/s
	Default value
	0
	Related service mode
	SORTER> ADJUST> PRCS-RET
NSRT-STC	Set stck improve at non-collate: Fin-U1
Lv.1	Details
	To set ON/OFF of stack improvement mode in non-collate mode. When 1 or 2 is set, paper stack is delivered via the Processing Tray even if it is in non-collate mode so the stacking condition can be improved.
	Use case
	When the stacking condition at non-collating is poor
	Adj/set/operate method
	Enter the setting value, and then press OK key.
	Display/adj/set range
	0 to 2 0: Not pass through the Processing Tray, 1: Pass through the Processing Tray at 2-sided print, 2: Pass through the Processing Tray
	Default value
	1
THN-TRSW	Set small width ppr delvry destn: Fin-U1
Lv.1	Details
	To set the delivery destination of paper which width direction is 139.6 mm or less. When 1 is set, the following paper which width direction is 139.6 mm or less is delivered to the tray of the host machine. - Thin (52 to 63g/m ²)/Plain 1 (64 to 75g/m ²)/Recycled 1 (64 to 75g/m ²)/Tracing (64 to 99g/m ²)/Pre-Punched (64 to 75g/m ²)
	Use case
	When the delivery stationary jam occurs at the time of delivering small width paper to the downstream connection equipment
	Adj/set/operate method
	Enter the setting value and press OK key.
	Caution
	When the stack paper of the host machine's tray is full, the paper is delivered to the downstream connection machine even if the setting is 1.
	Display/adj/set range
	0 to 1 0: Delivery destination specified in Control Panel menu, 1: Tray of the host machine
	Default value
	0

SORTER>OPTION	
SWGUP-SW	Swing Unit diseng oprtn:1st thin, Fin-U1
Lv.1	<p>Details</p> <p>To set whether the Swing Unit performs disengagement operation when feeding the 1st sheet of thin paper. By selecting 1, the Swing Unit is disengaged when the 1st sheet of thin paper with 210 mm or less in width and 297 mm or less in length is fed.</p> <p>Use case</p> <p>When corner bend or delivery failures occur on the 1st sheet of thin paper.</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When 1 is set, productivity decreases.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p>
MSTP-TMG	Setting of manual staple timing: Fin-G1
Lv.1	<p>Details</p> <p>To set the duration of time before executing automatic stapling at manual staple mode. As the value is changed by 1, the time is changed by 1 second. +: Timing is delayed -: Timing becomes earlier</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>1 to 5</p> <p>Unit</p> <p>1 sec</p> <p>Default value</p> <p>3</p> <p>Related user mode</p> <p>Adjustment/Maintenance> Adjust Action> Time Unit Stapling Starts in Stapler Mode</p> <p>Supplement/memo</p> <p>The setting of the service mode links the setting of the user mode.</p>
DWCL-BND	Set the lead edge bend prev mode: Fin-U1
Lv.1	<p>Details</p> <p>To set ON/OFF of leading edge corner bend prevention mode for downward curled paper. By selecting 1, the Alignment Plate is moved inward when a leading sheet of a job is fed while there is no paper on the Processing Tray. Paper is fed on the Alignment Plate so it can prevent corners of the leading edge of paper from interfering with the rib of the Processing Tray.</p> <p>Use case</p> <p>When corners of the leading edge of downward curled paper is bent</p> <p>Adj/set/operate method</p> <p>Enter the setting value and press OK key.</p> <p>Caution</p> <p>When 1 is set, the Alignment Plate moves at staple/offset and collate mode so productivity is decreased.</p> <p>Display/adj/set range</p> <p>0 to 1 0: OFF, 1: ON</p> <p>Default value</p> <p>0</p>

SORTER>OPTION	
FR-ST-PO	Set staple free staple position: Fin-G1
Lv.1	<p>Details</p> <p>To set the staple position of staple free stapling. When 1 is set, staple position becomes the center so paper is more likely to be come off. The staple position moves to the delivery direction for 4.0 mm and the alignment direction for 2.0 mm inside.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Corner-stapling (normal), 1: Center-stapling</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>SORTER> ADJUST >FR-STP-X, FR-STP-Y</p>
MSTP-WT	Set wait time after manual staple:Fin-G1
Lv.1	<p>Details</p> <p>To set the duration of time to keep manual staple mode enabled after execution of manual stapling. While manual stapling mode is enabled, other jobs are not accepted.</p> <p>Use case</p> <p>Upon user's request</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Display/adj/set range</p> <p>0 to 10</p> <p>Unit</p> <p>1 sec</p> <p>Default value</p> <p>0</p>
TRY-PSTN	Set tray pstn after job complete: Fin-G1
Lv.1	<p>Details</p> <p>To set the tray position after the completion of job. When 1 is set, the tray stops at the lower limit position. Visibility of the delivered papers is improved, but FCOT becomes longer.</p> <p>Use case</p> <p>Upon user's request (to improve visibility of the delivered papers)</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When 1 is set, FCOT becomes longer.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Normal (priority on productivity), 1: Lower limit position (priority on visibility)</p> <p>Default value</p> <p>0</p> <p>Related service mode</p> <p>COPIER> OPTION> USER> TRY-STP</p> <p>Supplement/memo</p> <p>When 1 in COPIER> OPTION> USER> TRY-STP is set, the tray of the inner finisher does not down after paper full detection.</p>
TRY-CRNT	Set Stack Tray drive current VL: Fin-U1
Lv.1	<p>Details</p> <p>To set the drive current value to lift the Stack Tray with a stack of papers which paper weight is less than the equivalent of 500 sheets of small size paper. When 1 is set, the current value increases, so the drive torque is increased.</p> <p>Use case</p> <p>When stacking thin and high density papers</p> <p>Adj/set/operate method</p> <p>Enter the setting value, and then press OK key.</p> <p>Caution</p> <p>When 1 is set, operating noise of the Stack Tray becomes louder.</p> <p>Display/adj/set range</p> <p>0 to 1 0: Weak (normal), 1: Strong</p> <p>Default value</p> <p>0</p>

SORTER>OPTION		
PADL-TM	Set ppr rtn time extsn: 2-sided, Fin-G1	
Lv.2	Details	To set whether to extend paper pull-back time at 2-sided print. When 1 is set, paper pull-back time becomes 550 msec longer in the case of 2-sided printing using plain paper 1 or larger size paper.
	Use case	When paper pull-back failure occurs at high-density full-color 2-sided printing
	Adj/set/operate method	Enter the setting value, and then press OK key.
	Caution	When 1 is set, productivity is decreased.
	Display/adj/set range	0 to 1 0: OFF, 1: ON
	Default value	0

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BOARD

OPTION

BOARD>OPTION		
MENU-1	ON/OFF printer setting menu level 1 dspl	
Lv.2	Details	To set whether to display 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: OFF, 1: ON
	Default value	0
MENU-2	ON/OFF printer setting menu level 2 dspl	
Lv.2	Details	To set whether to display 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: OFF, 1: ON
	Default value	0
MENU-3	ON/OFF printer setting menu level 3 dspl	
Lv.2	Details	To set whether to display 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: OFF, 1: ON
	Default value	0
MENU-4	ON/OFF printer setting menu level 4 dspl	
Lv.2	Details	To set whether to display 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: OFF, 1: ON
	Default value	0

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9

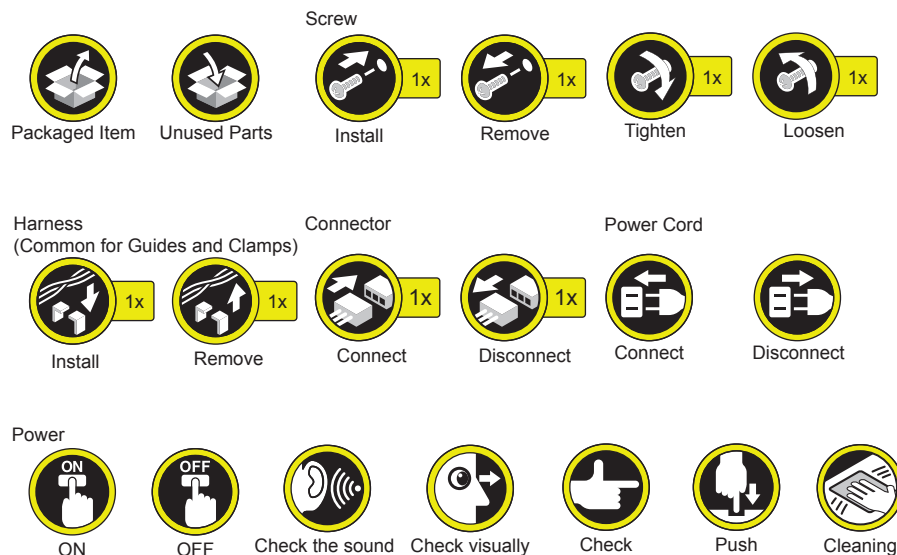
Installation

- How to Check this Installation Procedure
- Points to Note at Installation
- Checking before Installation
- Combination Table of Accessory Installation
- Unpacking
- Checking the Contents
- Installation Procedure
- When Relocating the Machine
- Platen Cover Type U
- Inner 2way Tray-J1
- Copy Tray-J2
- Copy Card Reader-F1/Copy Card Reader Attachment Kit-B4
- Utility Tray-A2
- Stamp Unit-B1
- Voice Operation Kit-C2
- USB Device Port-E4
- Voice Guidance Kit-F2 / Voice Guidance Connection Kit for iR-ADV C3300 series
- Document Scan Lock Kit-B1
- Serial Interface KIT-K2/ Copy Control Interface KIT-A1
- Combination of HDD Options

How to Check this Installation Procedure

Symbols in the Illustration

The frequently-performed operations are described with symbols in this procedure.



F-9-1

Points to Note at Installation

CAUTION:Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



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.

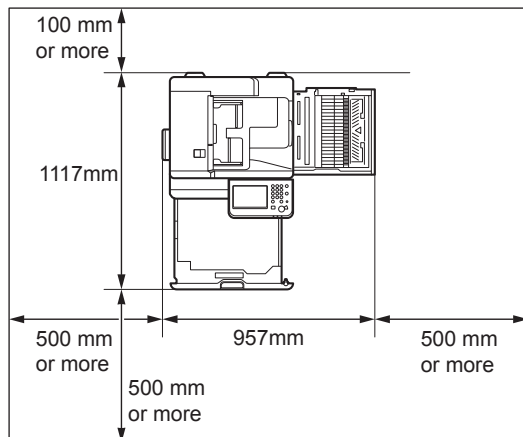
Checking the Installation Environment

- 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: 20.0 to 80.0%
- 2) The machine must not be installed near a source of fire or in an area subject to dust or ammonium gas. If the area is exposed to direct rays of the sun, provide curtains to the window.
- 3) Be sure to provide adequate ventilation of the room to keep the work environment comfortable. 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.

Checking the Installation Space

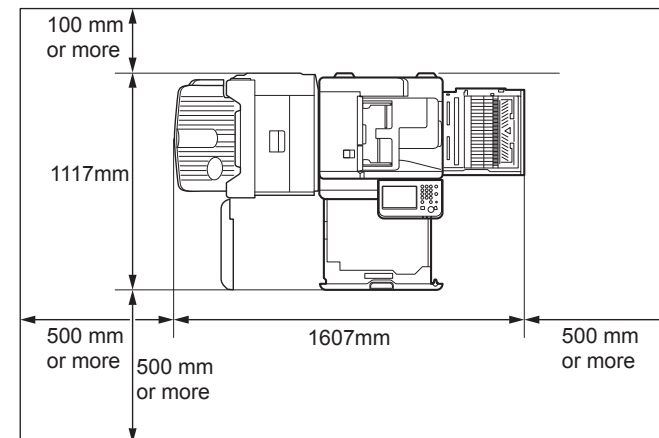
- 1) Be sure that the feet of this machine are properly set. In addition, be sure to keep the machine horizontal.
- 2) Be sure to keep 100 mm or more distance from the wall to make enough room for performing the operation.

- When option is not installed



F-9-3

- When the Booklet Finisher-U1 is installed



F-9-4

- 3) Install the machine in a well-ventilated location. In a location with a mixture of multiple host machines, be sure to install the machine where the air exhausted from other machines will not directly enter the machine. Also, do not install the host machine near an inlet for ventilating the room.

Points to Note before Installation

When installing the machine, be sure to note the following points.

- 1)When the machine is moved from a cold location to a warm location, condensation may occur resulting in water drops on the metal surfaces. Use of the host machine when there is condensation may result in image failure. After moving the machine from a cold location to a warm location, leave it unpacked for at least 2 hours or more to let it warm up to room temperature before installation.
- 2)The maximum weight of the machine is approx. 71 kg Be sure to perform the work in accordance with the standard to handle a heavy load in each country. In addition, be sure to keep the machine leveled when lifting it..

Combination Table of Accessory Installation

NOTE:

- The following table shows the combination of options installed of the host machine.
- Before installing the following options, refer to the table to check the combination of options.
- When using options and the Copy Card Reader together, install the Copy Card Reader first.
- To install the Copy Card Reader, the Copy Card Reader Attachment Kit is required.

	Copy Control Interface Kit	Serial Interface Kit	Utility Tray	Voice Operation Kit	Voice Guidance Kit	Copy Card Reader
Copy Card Reader	No	No	Yes	Yes	Yes	-
Voice Guidance Kit	Yes	Yes	No	No	-	Yes
Voice Operation Kit	Yes	Yes	No	-	No	Yes
Utility Tray	Yes	Yes	-	No	No	Yes
Serial Interface Kit	No	-	Yes	Yes	Yes	No
Copy Control Interface Kit	-	No	Yes	Yes	Yes	No

Yes: Installable No: Not installable

T-9-1

Unpacking

Host machine

NOTE:

When installing the Cassette Pedestal at the same time, be sure to make the Cassette Pedestal ready before mounting the host machine onto it.

NOTE:

When installing the host machine and the options at the same time, install the options first by following the procedure below for better workability.

1. Installing the Cassette Feeding Unit
2. Installing the host machine
3. Installing the DADF (if it is an option) (Refer to Installation Procedure for the DADF.)

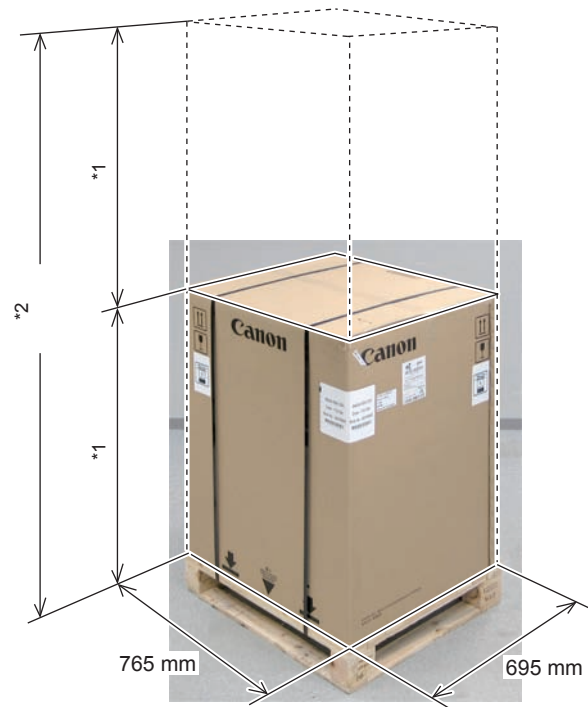
□
1) Unpack the host machine.

NOTE: Installation Space

- When unpacking in the room, the following space is required to remove the packaging box.
- The dimensions shown in the figure below are the minimum space required. Thus it is desirable to secure more space for the work than shown in the figure below.

Configuration of the host machine	Height of body *1	Height necessary for work *2
Reader	1060mm or more	2120mm or more
Reader + DADF	1115mm or more	2300mm or more
Reader + Platen Cover	1095mm or more	2190mm or more

T-9-2



F-9-5

□
2)

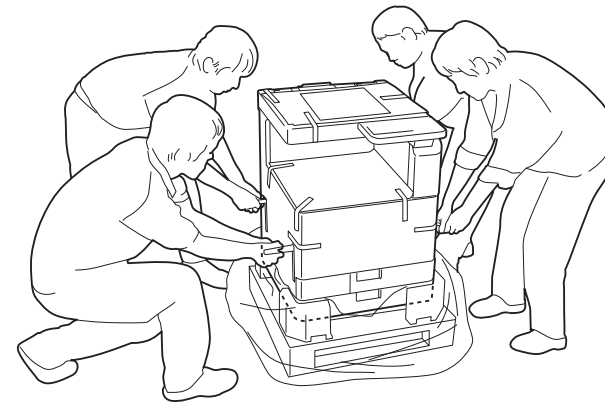


F-9-6

□
3) Holding the 4 handles, lift the host machine down from the pallet.

CAUTION:

- The maximum weight of the machine is approx. 71 kg Be sure to perform the work in accordance with the standard to handle a heavy load in each country.
- Be sure to keep the machine leveled when lifting it.



F-9-7

- 4) Remove the tapes from the exterior of the host machine.

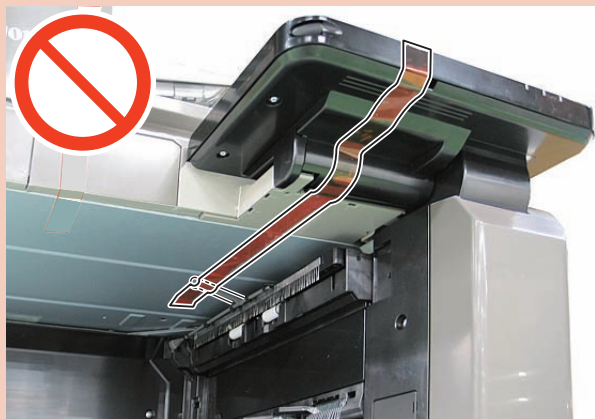
CAUTION:

- Be sure not to remove the Scanner System Fixation Screw before installation of the scanner. (Only if the reader is installed.)



F-9-8

- Be sure to remove the tapes on the Full Sensor in the following procedure ("Other Installations").



F-9-9

- 5) Open the DADF if the machine has the DADF, and remove the cushioning material from the copyboard section.
- 2 pieces of tape



F-9-10

- 6) Close the DADF if the machine has the DADF.

Checking the Contents

CAUTION:

The following parts contained in the package cannot be used in combination with these options.

[4] Reverse Trailing Edge Guide

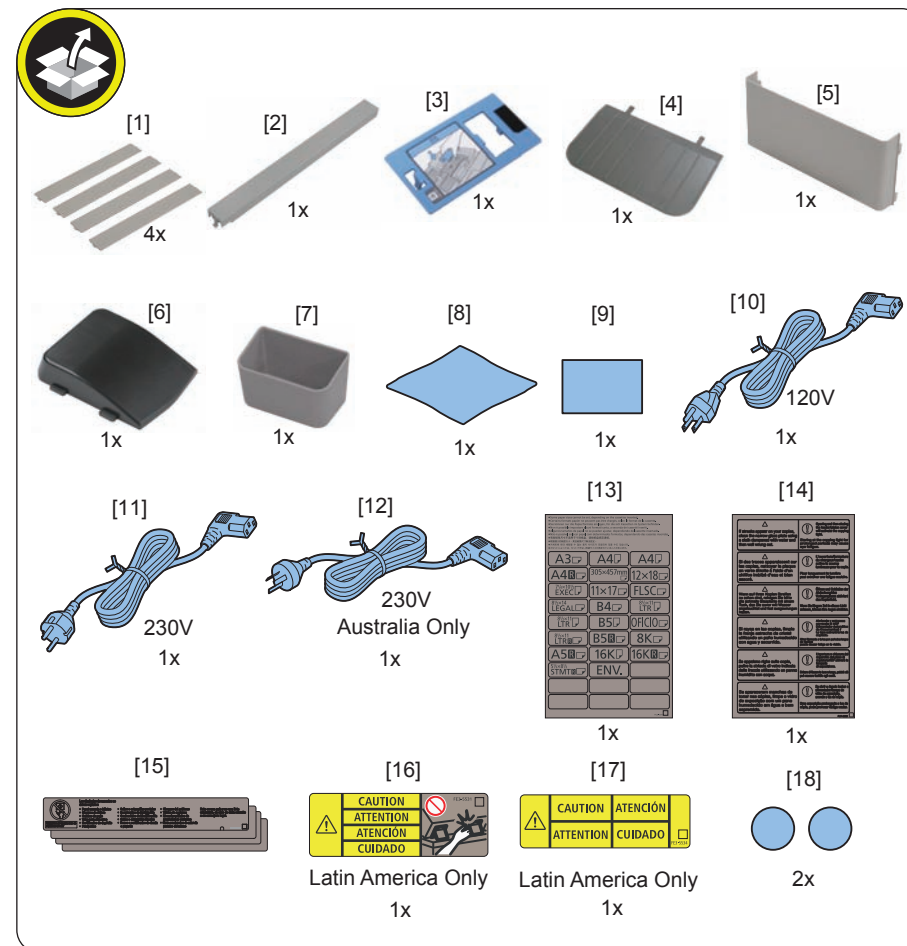
- Inner 2way Tray
- Inner Finisher
- Staple Finisher
- Booklet Finisher

[6] Tray Guide

- Inner Finisher
- Staple Finisher
- Booklet Finisher

NOTE:

The Touch Pen is attached to the Control Panel.



F-9-11

- [11], [12]: The connector has a different shape depending on locations. Use the 1 correct power cable to match the location / area of installation.
- [15]: The numbers of labels differ from location to location (USA and EUR: 4 Sheets, Other countries: 2 Sheets).

<Others>

Including guides

Installation Procedure

[Preparation] In the case of simultaneously installing the Cassette Feeding Unit

CAUTION:

The following procedure is for installing the host machine and the Cassette Feeding Unit at the same time.

- When installing them at the same time, be sure to make the Cassette Feeding Unit ready before mounting the host machine onto it.
- If the Cassette Feeding Unit is not installed at the same time, carry out the work from "Installing the Toner Container" in this manual.

Installation Outline Drawing

<Host Machine + Cassette Feeding Unit>



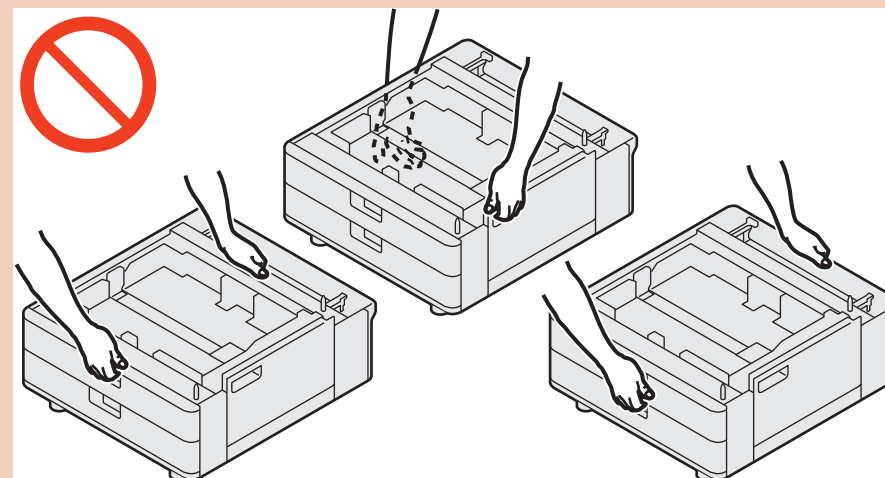
F-9-12

Unpacking

□
1)

⚠ CAUTION:

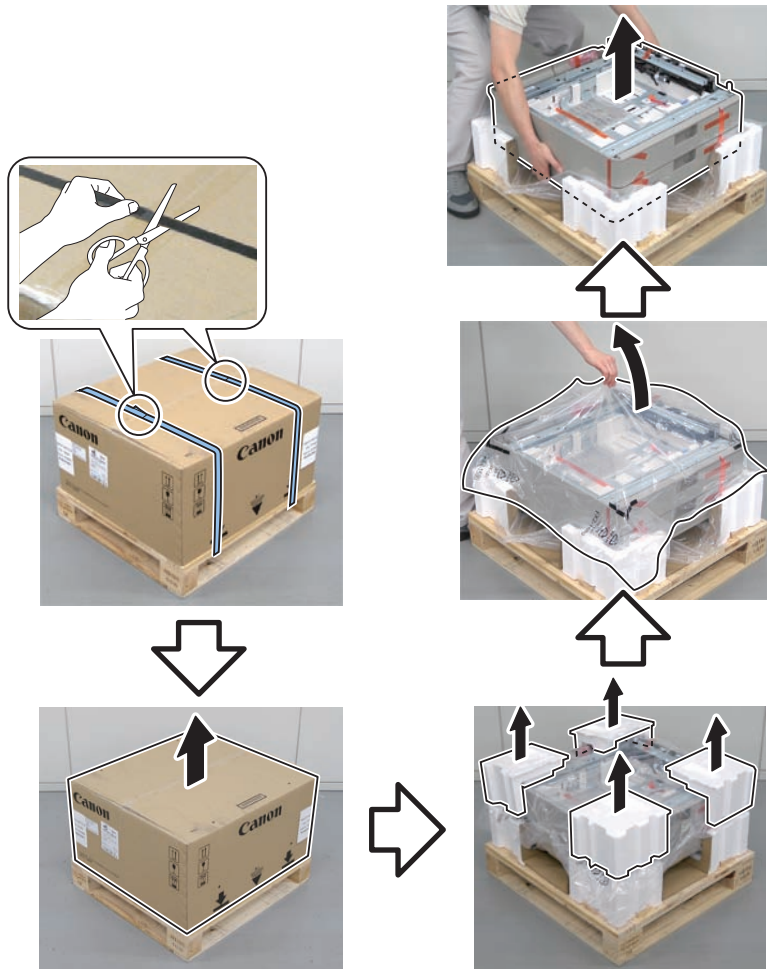
- Hold the left and right of the Cassette Feeding Unit when lifting it down.
- Do not hold the front and rear because the cassette may be damaged.



F-9-13

NOTE: When unpacking

- Remove the attached tapes and packaging materials.
- Although pictures or illustrations used for explanation may differ from the actual things, the procedure is the same.



F-9-14



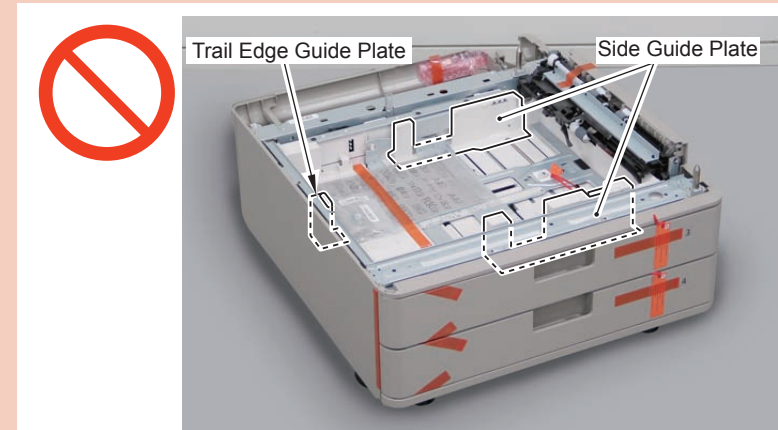
2) Perform steps 3 to 5 in each cassette.



3)

CAUTION:

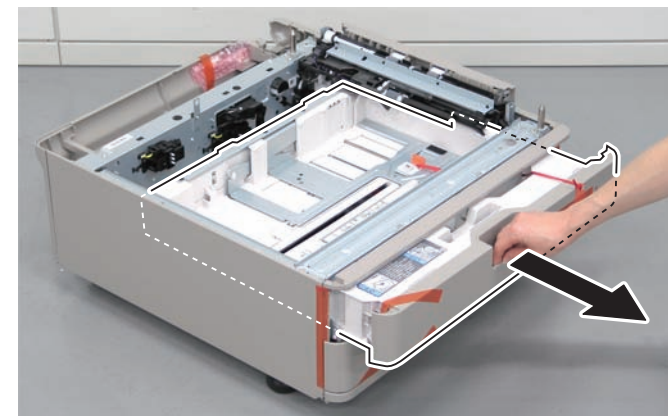
Do not operate the Trail Edge Guide Plate/Side Guide Plate without pulling out the cassette. Otherwise, it may be damaged.



F-9-15

NOTE:

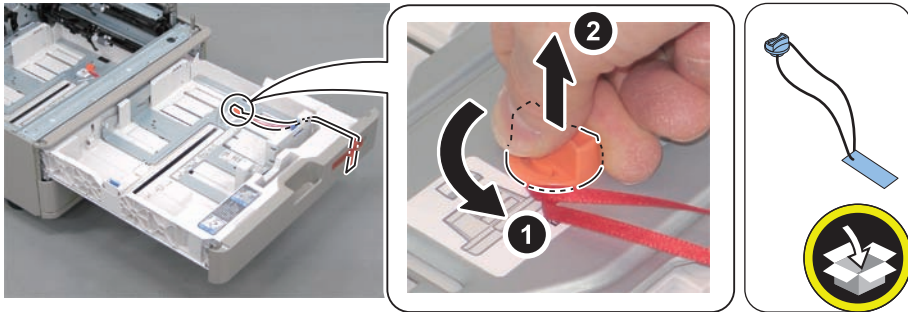
Remove tapes attached to the cassette, and remove the packaging materials.



F-9-16

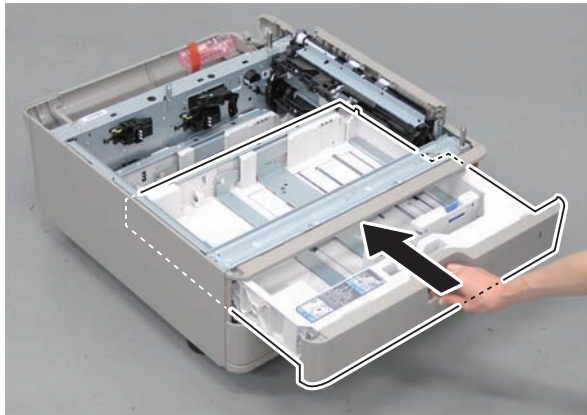
4)

NOTE:
Remove the Fixation Members from the Cassette 3 and Cassette 4.



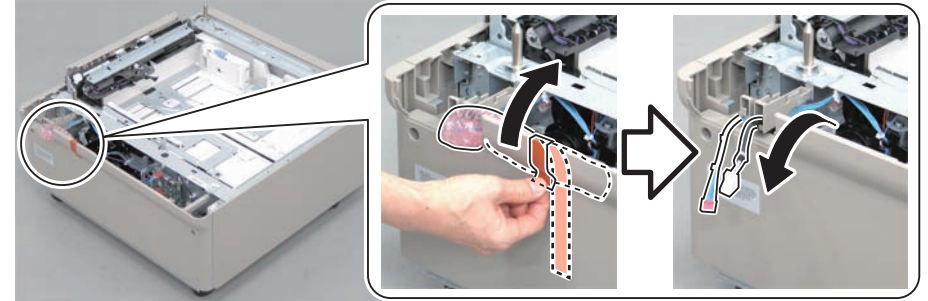
F-9-17

5)



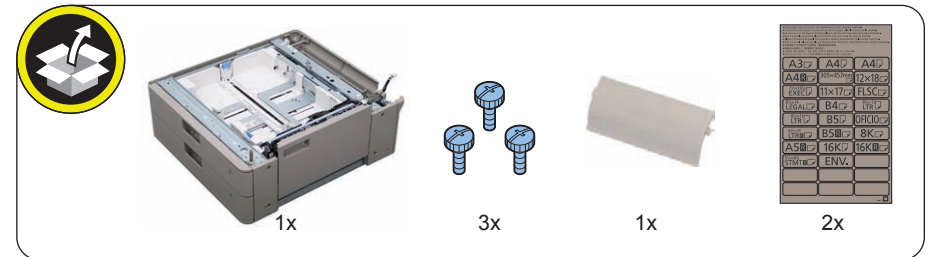
F-9-18

6)



F-9-19

■ Checking the Contents (Cassette Feeding Unit)



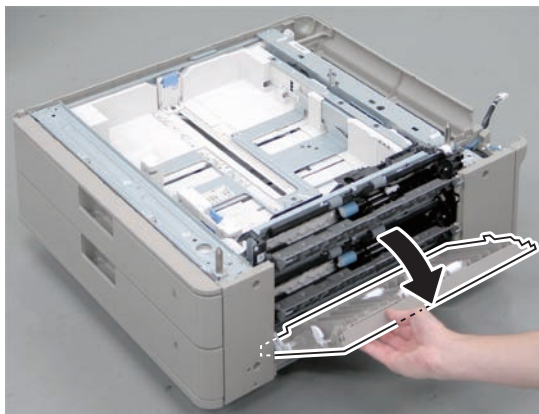
F-9-20

■ Installing the Cassette Feeding Unit

□
1)

CAUTION:

If mounting the host machine without opening the Right Cover (Lower), the cover may get damage.



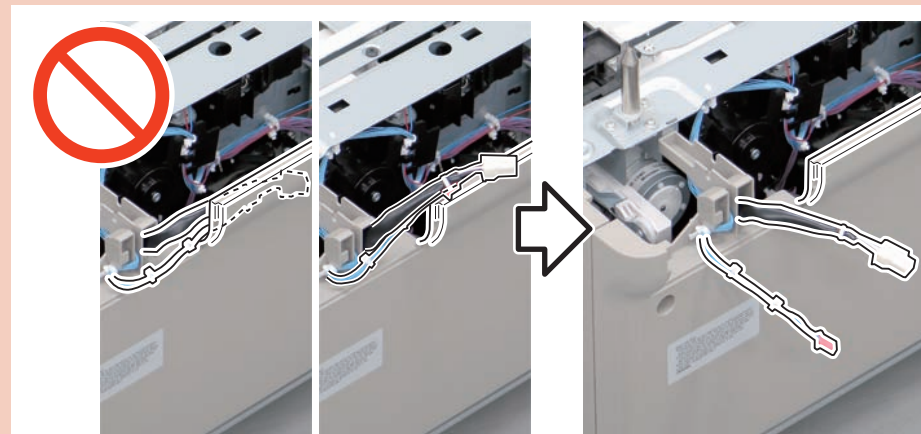
F-9-21

□

2) Holding the 4 handles, set it on to the pedestal by aligning the corners (right and left) at the front side of the host machine with the corners (right and left) of the front side of the equipment.

CAUTION:

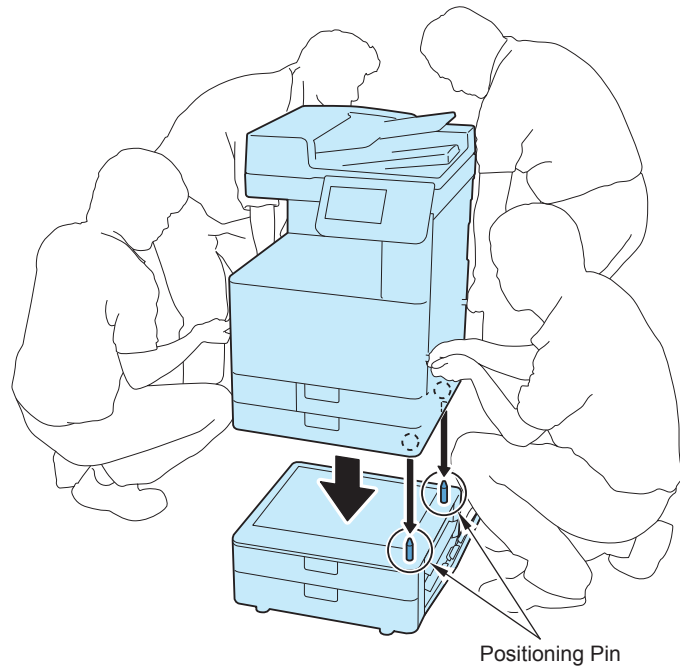
Do not mount the host machine with the cables inside the cover.



F-9-22

CAUTION:

- When mounting the host machine on the Cassette Feeding Unit, position the host machine parallel with the Cassette Feeding Unit and fit the 2 Positioning Pins on top of the Cassette Feeding Unit into the holes in the Base Plate of the host machine.
- The maximum weight of the host machine is approx. 71 kg. Be sure to perform the work in accordance with the standard to handle a heavy load in each country.
- Be sure to keep the machine leveled when lifting it.

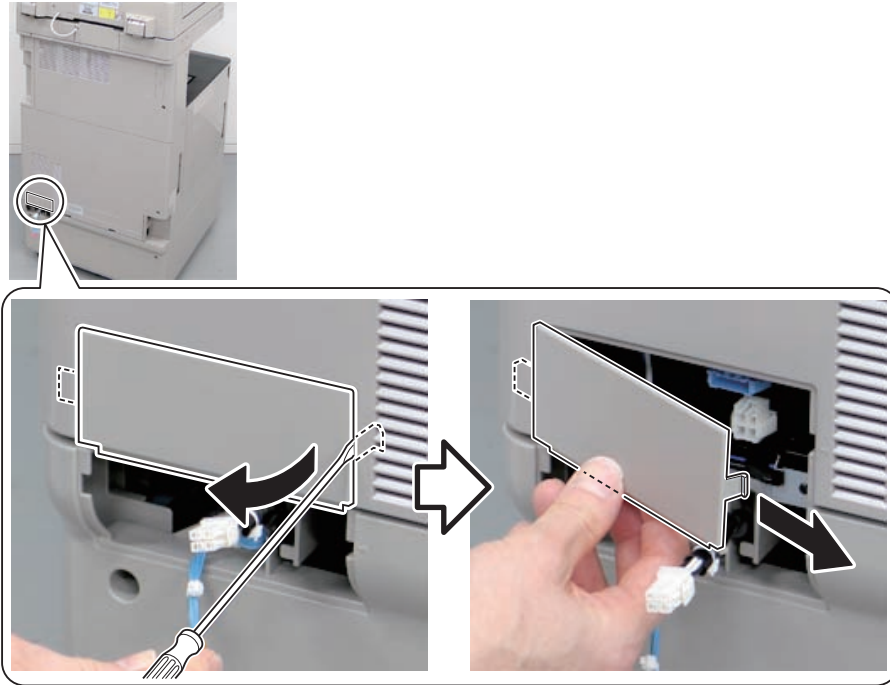


F-9-23

□
3)

F-9-24

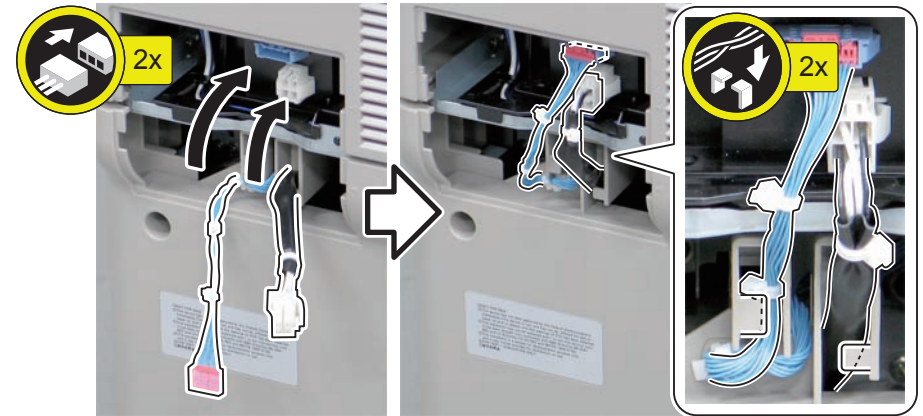
4)



F-9-25

NOTE:
The removed cover will be used in step 6.

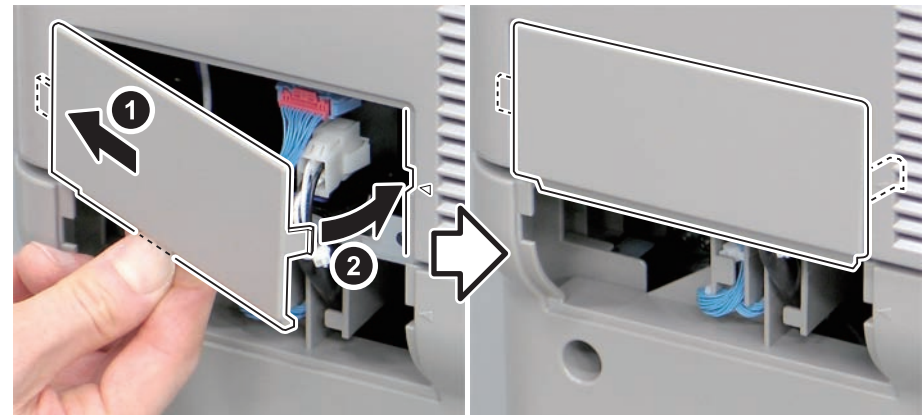
5)



F-9-26

6)

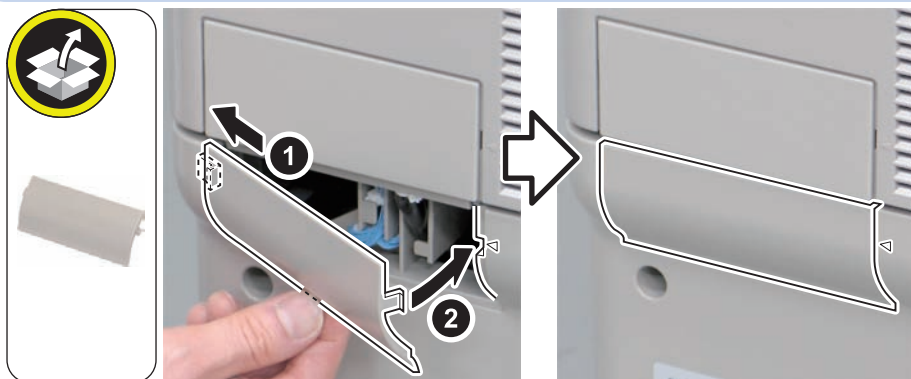
NOTE:
Use the cover removed in step 4.



F-9-27

7)

NOTE:
Use the cover included in the package of the Cassette Feeding Unit.



F-9-28

8)



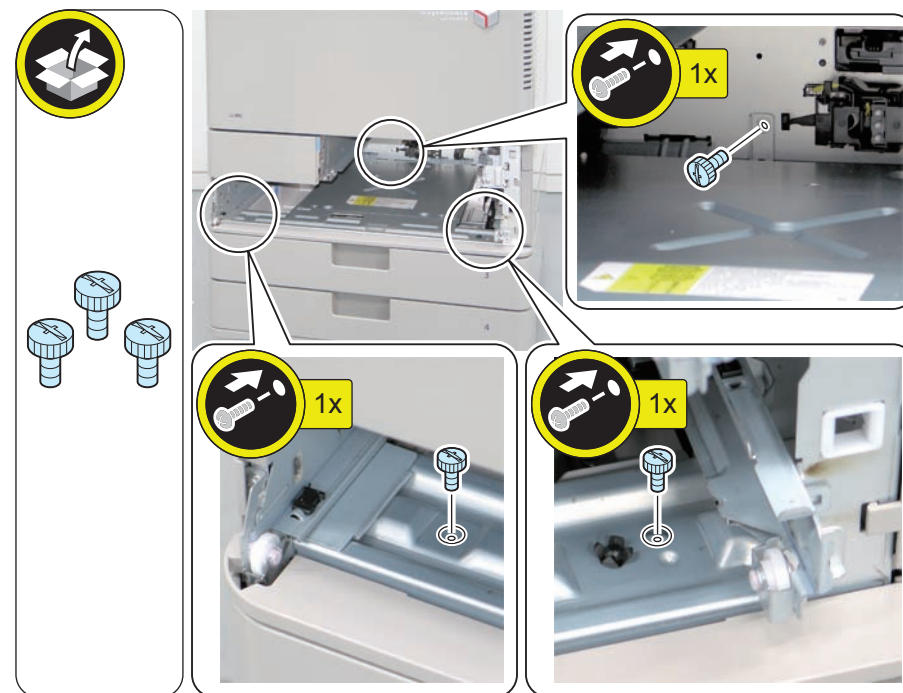
F-9-29

9)

NOTE:
Securely tighten the coin screws with a stubby screwdriver or a coin.

CAUTION:

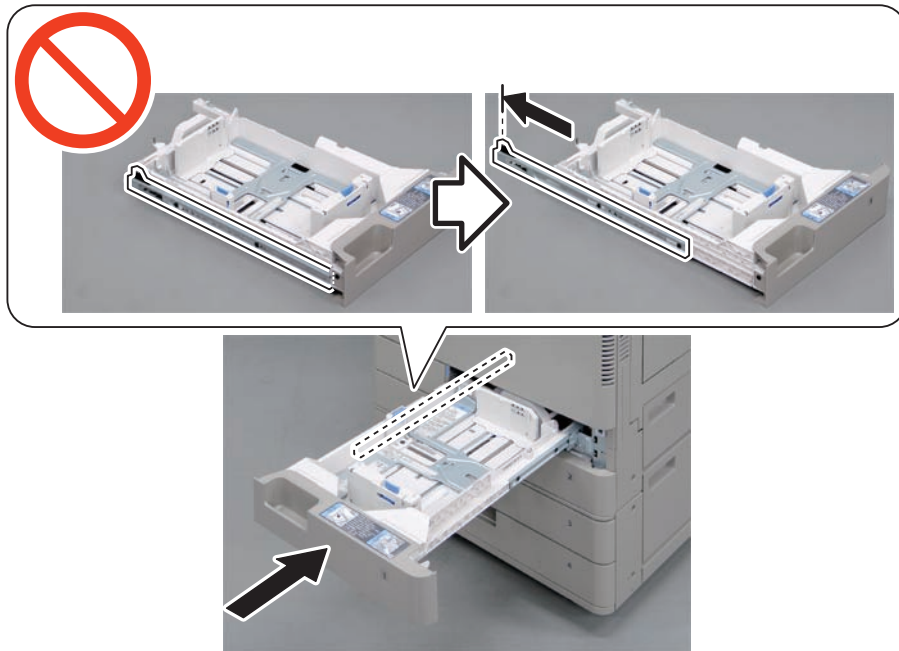
- When tightening the coin screws, pay attention to plates and parts around the screws.
- When tightening a screw on the rear side, be careful not to drop it.
- Be sure to check that the coin screws have been tightened securely.



F-9-30

□ 10)

NOTE:
Install the Cassette 1 with the rails extended.



F-9-31

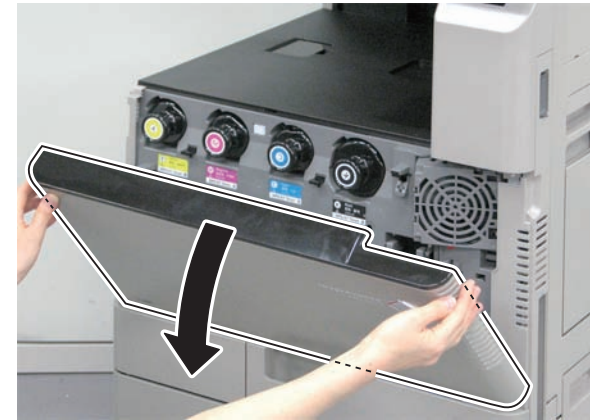


F-9-32

Installing the Toner Container (For China, and Korea)

NOTE:
In the following procedure, pictures of a host machine with the Cassette Feeding Unit are used, but the procedure is the same.

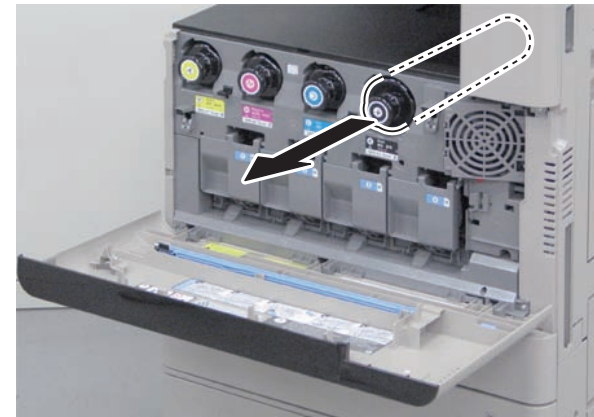
□ 1)



F-9-33

NOTE:
Repeat steps 2 to 4 for each color.

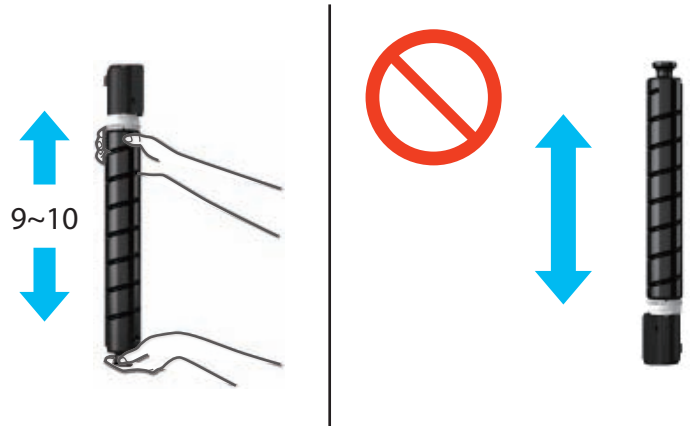
□ 2)



F-9-34

- 3) Hold the Toner Container (black) as shown in the figure and shake it approx. 10 times.

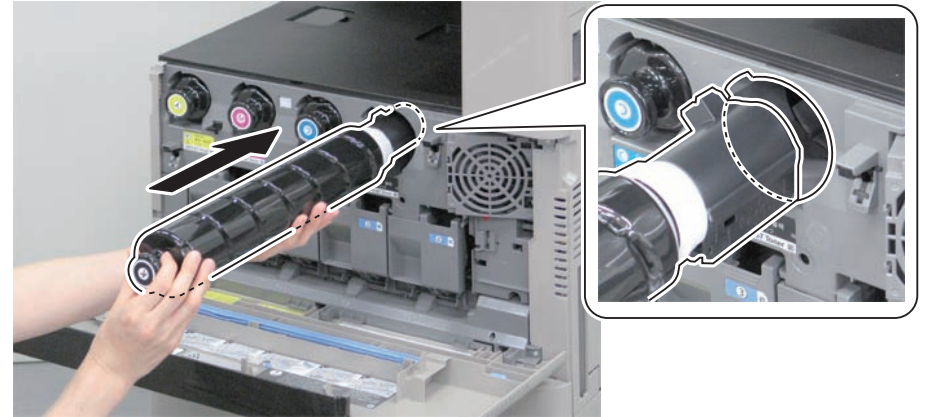
CAUTION:
Be sure to shake the Toner Container with its Toner Outlet (white part) up, or toner may not be properly supplied.



F-9-35

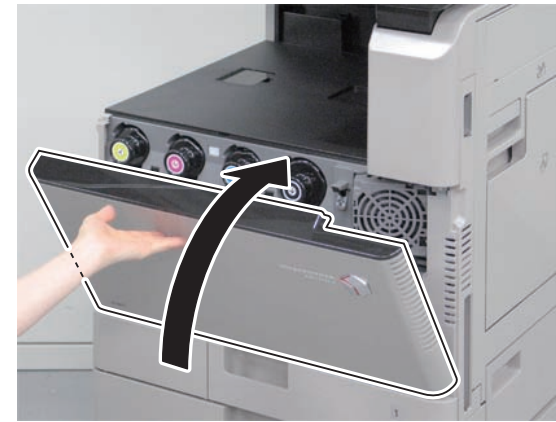
- 4) Insert the Toner Container (black) until it stops.

NOTE:
Be sure to insert the Toner Container horizontally with your hand supporting its bottom until approx. half of it is inserted.



F-9-36

- 5)



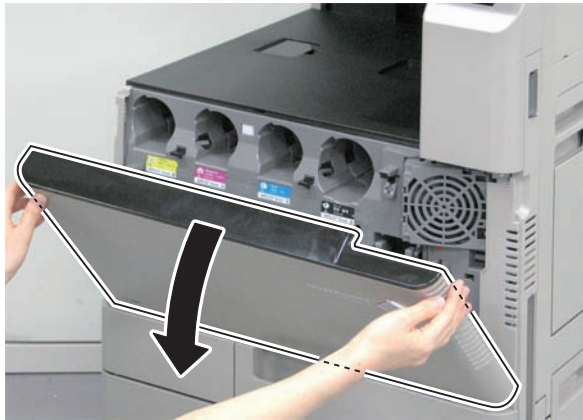
F-9-37

Installing the Toner Container (Countries other than China, and Korea)

NOTE:

In the following procedure, pictures of a host machine with the Cassette Feeding Unit are used, but the procedure is the same.

1)



F-9-38

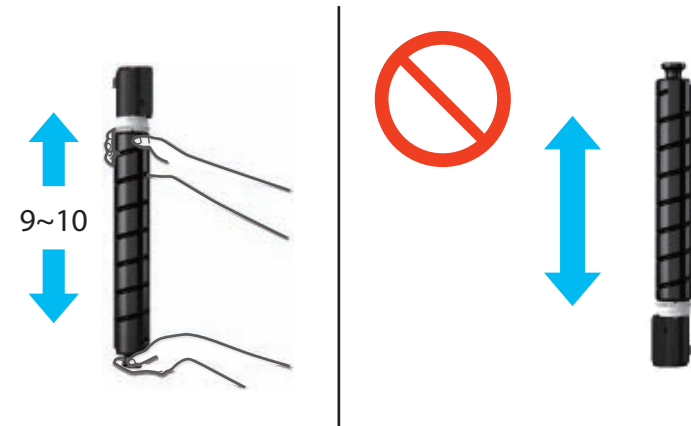
2) Repeat steps 3 to 5 for each color.

3) Unpack the Toner Container.

4) Hold the Toner Container as shown in the figure on the left and shake it up and down approx. 10 times.

CAUTION:

Be sure to shake the Toner Container with its Toner Outlet (white part) up, or toner may not be properly supplied.



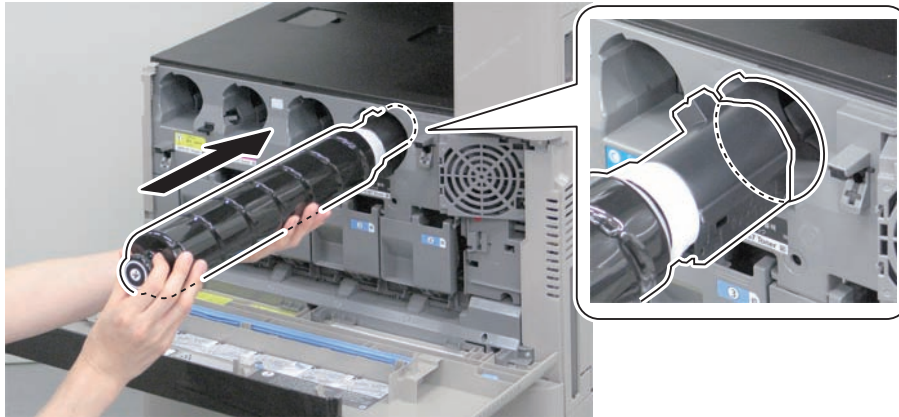
F-9-39



5) Align the Toner Container with the insertion opening and insert it horizontally until it stops.

NOTE:

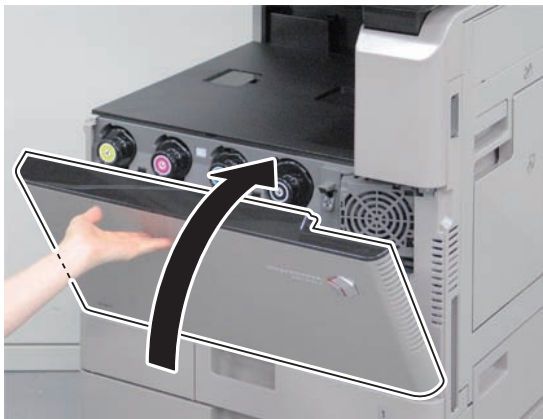
Be sure to insert the Toner Container horizontally with your hand supporting its bottom until approx. half of it is inserted.



F-9-40



6)



F-9-41

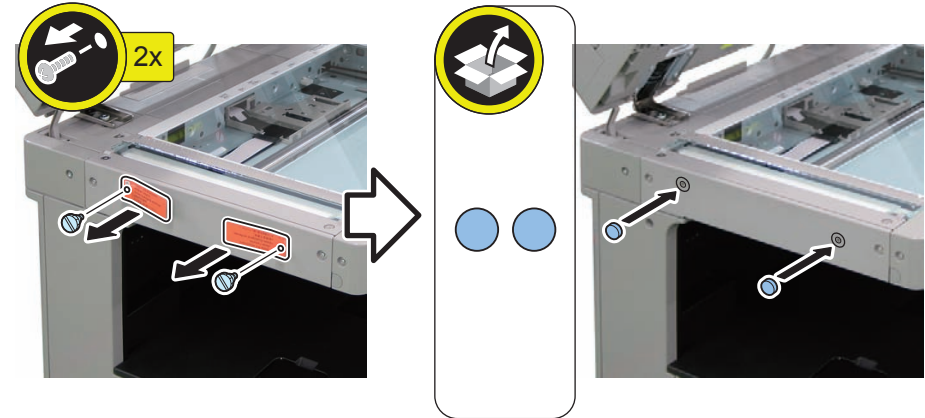
Installing the Scanner



1)

NOTE:

Be sure to keep the Scanner System Fixation Screws in a safe place for moving the machine.



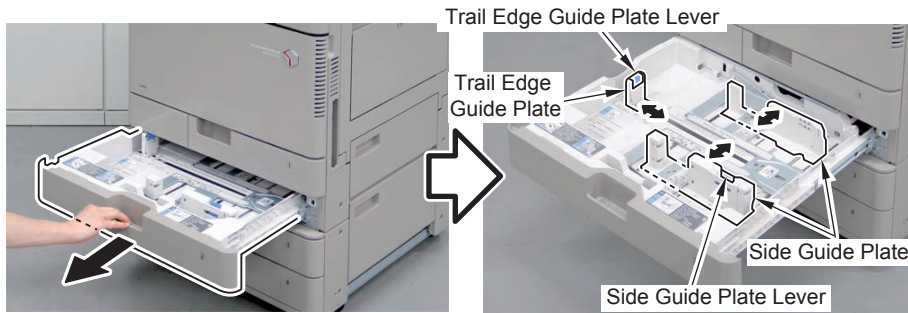
F-9-42

Setting the Cassette

1)

NOTE:

- Holding the Guide Plate Lever, adjust each Guide Plate to the specified size.
- Adjust the position of each Guide Plate according to the paper size.



F-9-43

2)

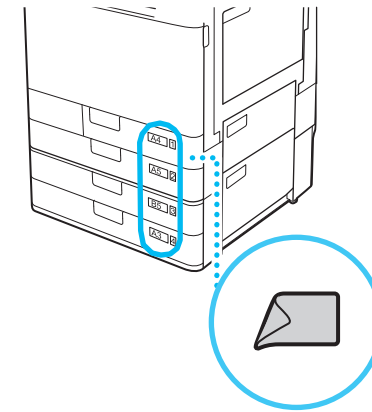
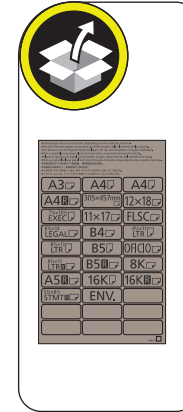


F-9-44

3)

NOTE:

Affix the Size Label to each cassette according to the size of paper being set.

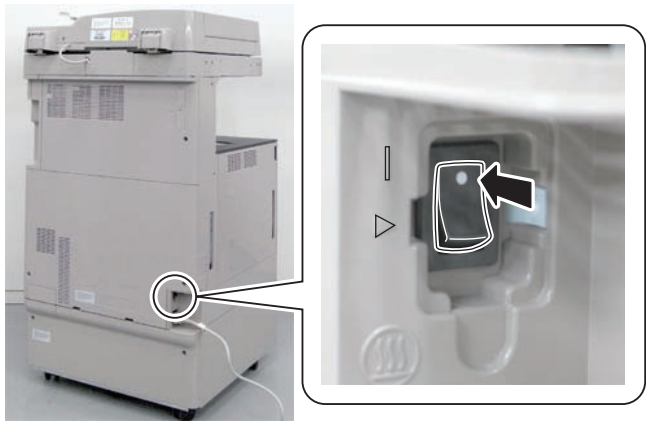


F-9-45

Setting the Dehumidification Switch (Excluding USA and Europe)

- 1) Turn ON the Dehumidification Switch.

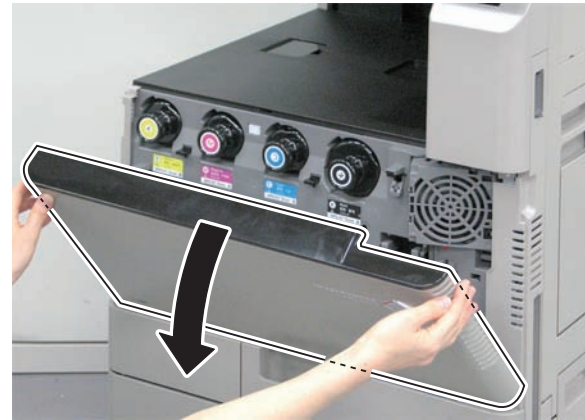
CAUTION:
If the installation environment is a high humidity environment, be sure to turn ON the Dehumidification Switch.



F-9-46

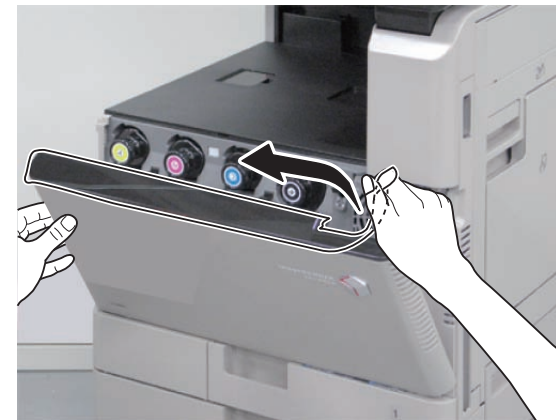
Turning ON the Power

- 1) Connect the power plug to the outlet.
- 2) Remove the Protection Sheet on the Control Panel.
- 3)



F-9-47

- 4)



F-9-48

□
5)



F-9-49

□
6) Turn ON the main power switch.

NOTE: How to Turn OFF the Main Power

- 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, then disconnect the power plug.

● Host Machine Settings (Starting the Setup Guide)

CAUTION:

- The Setup Guide screen appears when the power is turned ON for the first time after the machine is installed. Follow the instructions displayed on the Touch Panel Display to configure the settings of the host machine.
- It is not possible to exit Setup Guide halfway through.
- Setup Guide can be started again from [Settings/Registration] ([Settings/Registration] > [Management Settings] > [License/Other] > [Start Setup Guide]).
- What has been registered in Setup Guide can be changed from items in (Settings/Registration). When configuring settings using Setup Guide, excluding some of the setting items, it is possible to proceed to the next setting without entering the current setting. To configure skipped settings, configure the settings one by one after exiting Setup Guide. If the host machine is turned OFF during registration using Setup Guide, Setup Guide is automatically started by turning ON the power again. Once registration using Setup Guide has been completed, Setup Guide is not automatically started by turning ON the host machine.

CAUTION: Register the information of paper loaded during installation of the host machine.

Be sure to register the correct paper type. Especially in the case of special paper types such as heavy paper, registering a wrong paper type may result in image failure, and when the Fixing Assembly becomes soiled or paper wraparound occurs, repair by a service technician becomes necessary.

NOTE:

- Initialization of toner supply, initialization of the Developing Unit, initialization of the drum, and color displacement correction, etc. are automatically performed while Setup Guide is running.
- When all initializations have been completed, Setup Guide stops (approx.4 minutes).



When not executing Setup Guide, it can be canceled by pressing [Cancel] on the Touch Panel Display. When executing Setup Guide, follow the Setup Guide to specify the items in the order shown below:

1. <Switch Language/Keyboard>

Select the displayed language and keyboard layout.

2. <Paper Settings>

2-1) Select the paper source for which you want to specify the paper type, and press [Set].

2-2) Select the paper type, and press [OK].

2-3) If [Plain] is selected, the basis weight can be specify from [Plain Paper Weight Set].

2-4) If a button corresponding to the paper that has been set is not displayed, press [Detailed Settings] and make a selection on the detailed settings screen.

NOTE:

- If the corresponding paper type is not displayed on the simple settings screen, press [Detailed Settings] and make a selection on the detailed settings screen.
- If the type of loaded paper is not displayed on the detailed settings screen, you can register it.

3. <Authentication Login>

NOTE:

Pressing [Skip] proceeds to auto gradation adjustment instead of the setting of system administrator privilege.

Press [Log in], and enter a password.

CAUTION:

- Do not change Administrator here.
- Enter the initial value "7654321" in the password entry field.

4. <Use Optional Output Tray>

Set whether to use the optional output tray.

CAUTION:

Make sure the output tray that is set to On is attached to the device, or the output tray will not function correctly.

5. <Date/Time Settings>

Set the date and time.

CAUTION:

Perform the network settings according to the user's request.

6. <Use IP Address>

Specify IPv4 and/or IPv6, and each IP address.

7. <DNS Server Address Settings>

Configure the DNS Server Address Settings, the DNS Host/Domain Name Settings, and the DNS Dynamic Update Settings.

8. <Proxy Settings>

Specify the Proxy Settings.

9. <Country/Region> (FAX-TYPE settings)

Select Country/Region.

10. <Register Unit Telephone Number>

Set the phone number, the name the machine will appear as on the network, and the line type.

11. <Auto Adjust Gradation>

Select [Full Adjust].

12. <Output Report>

Select the Setting Value List , [Start Printing] > OK.

NOTE:

Be sure to keep the report which has been output.

13. <Setup Guide Done>

When Setup Guide is completed, the machine is automatically restarted.

14. Check the following values from the Setting Value List which has been output in step "12 < Output Report >", and write them down in the service label inside the Front Cover.

- CONT-Y
- CONT-M
- CONT-C
- CONT-K
- D-Y-LVL
- D-M-LVL
- D-C-LVL
- D-K-LVL

NOTE: Values to be written down

Check the values surrounded by the frame on the first sheet of the Setting Value List.

F-9-50

Informing the System Administrator That Installation Is Complete

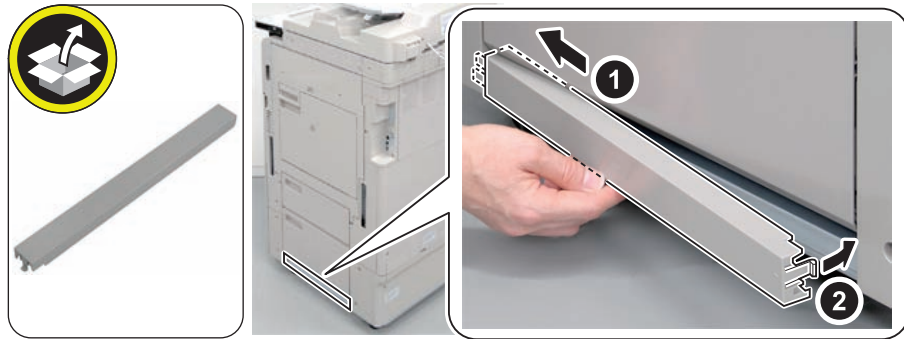
When the installation is completed, ask the system administrator to change the password. Also ask the system administrator to keep the changed password in a safe place to prevent leakage.

Other Installations

□
1)

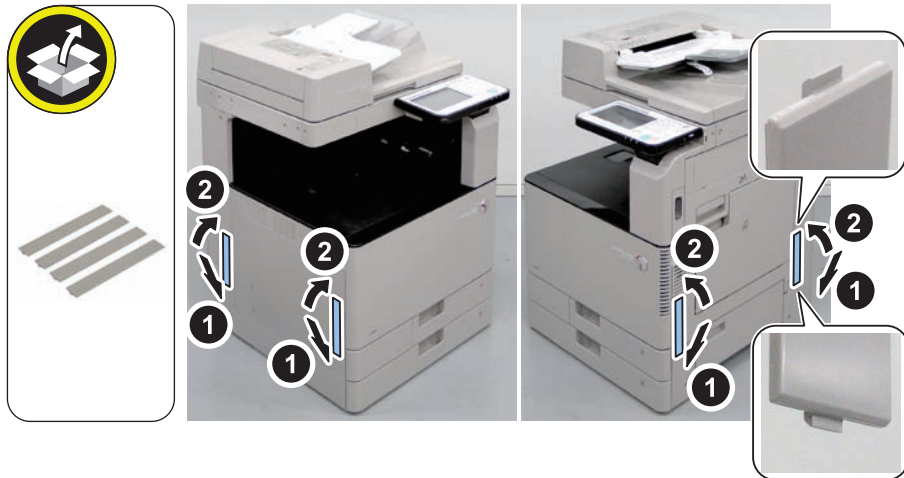
NOTE:

- When the 2-cassette Pedestal is installed, be sure to install the Right Cover (Lower) on the 2-cassette Pedestal side.
- In the case of not installing the 2-cassette Pedestal, install it to the host machine.



F-9-51

□
2)



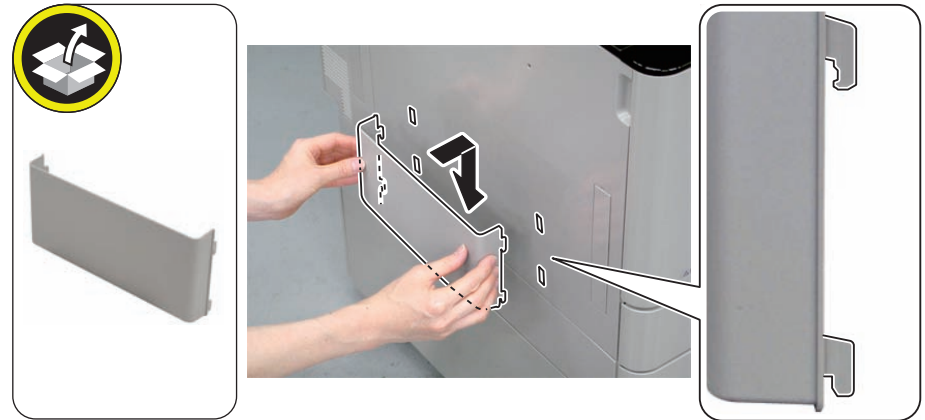
F-9-52

□
3)

CAUTION:

When installing simultaneously with one of the following options, install the Book Holder to the option.

- Booklet Finisher
- Staple Finisher



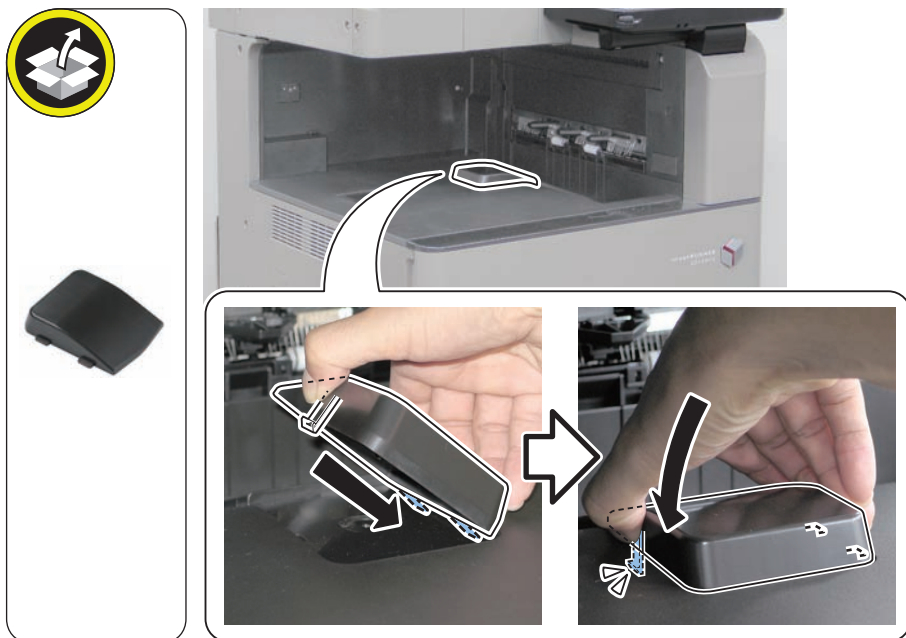
F-9-53

□
4)

CAUTION:

If the below options need to be installed at the same time, do not install at the location of the below image and instead, install at the location instructed in the Installation Procedure of each option.

- Inner Finisher
- Staple Finisher
- Booklet Finisher

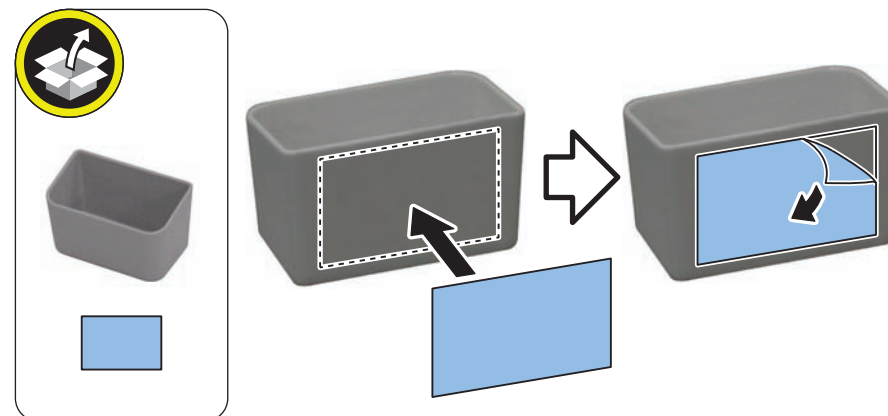


F-9-54

□
5)

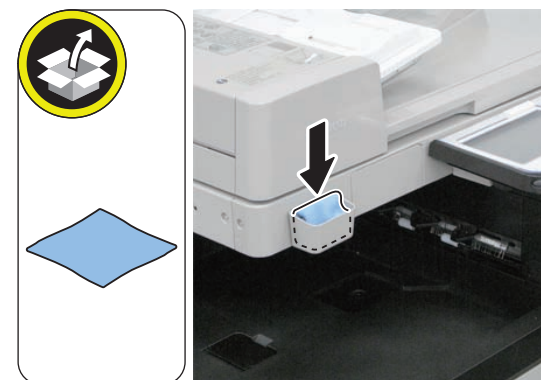
NOTE:

- Clean the position where the Glass Cleaning Sheet Storage Box is to be installed with lint-free paper moistened with alcohol.
- Be sure to install the Glass Cleaning Sheet Storage Box to a position after checking with the user where to install it.



F-9-55

□
6)

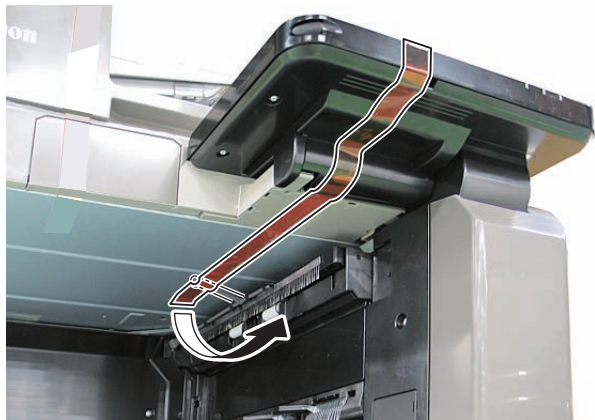


F-9-56

□
7)

CAUTION:

If the machine comes with a Full Sensor, remove the tape while paying attention not to damage the sensor.



F-9-57

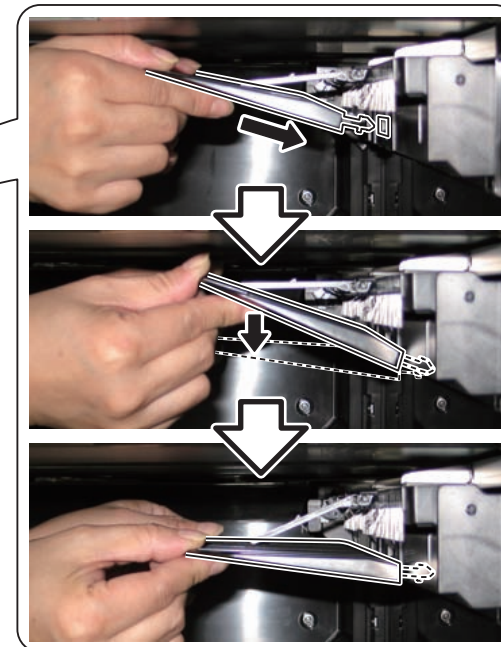
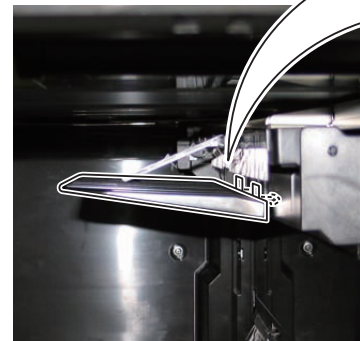
□

8) Install the Reverse Trailing Edge Guide.

CAUTION:

Do not install it if one of the following options is installed at the same time.

- Inner 2way Tray
- Inner Finisher
- Staple Finisher
- Booklet Finisher

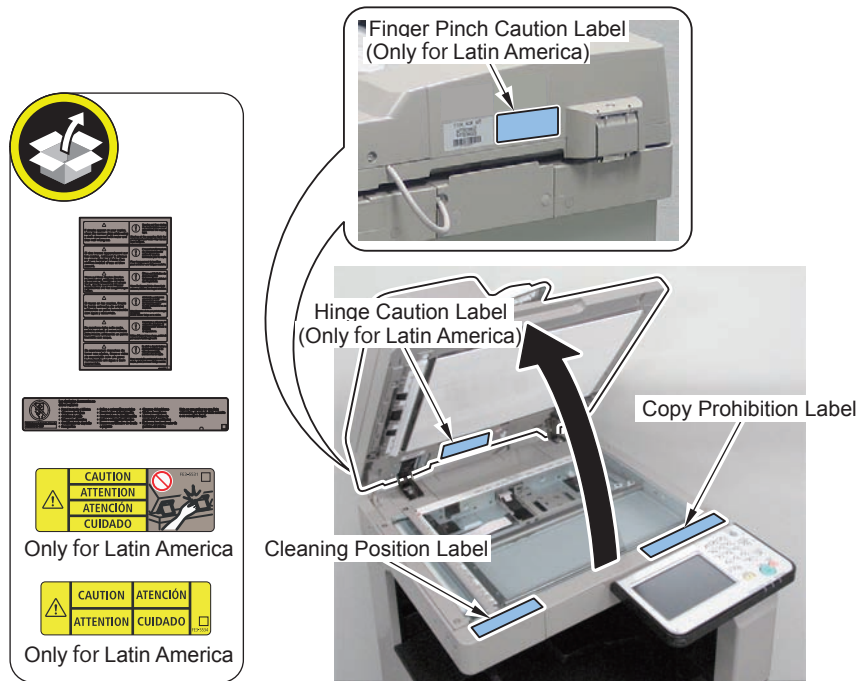


F-9-58

9) Open the DADF.

10) Affix the appropriate labels. If a label is already affixed, affix the appropriate label for the location over the existing one.

- Cleaning Position Label
- Copy Prohibition Label
- Finger Pinch Caution Label (Only for Latin America)
- Hinge Caution Label (Only for Latin America)



F-9-59

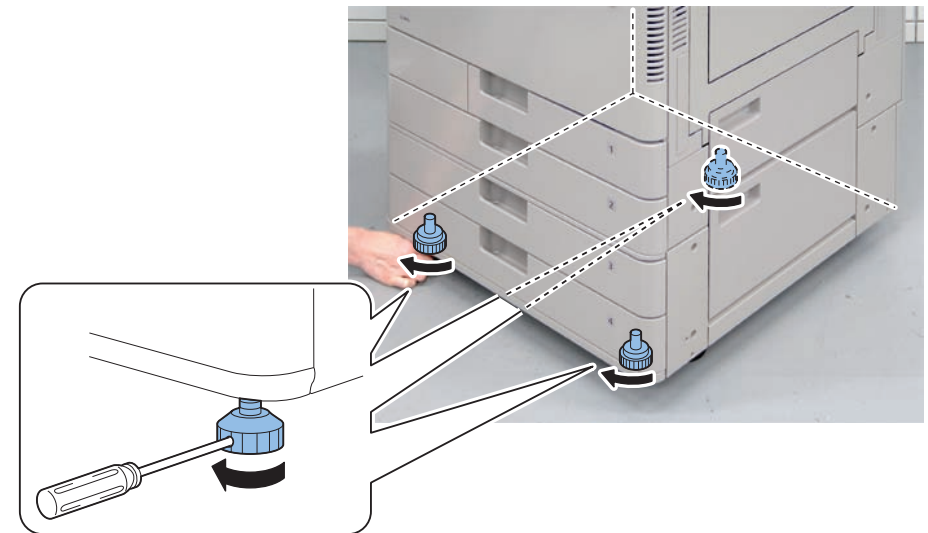
11) Close the DADF.

Securing the Host Machine

1)

NOTE:

- Move the main body to the installation position, and secure it in place by turning the 3 adjusters of the Cassette Pedestal with a screwdriver.
- Be sure to secure it in place to prevent overturning.
- Securing with the adjusters is not an earthquake countermeasure.



F-9-60

Installing the Envelope Attachment

CAUTION:

The Envelope Attachment is used exclusively with the Cassette 2.

NOTE:

Install/remove the Envelope Attachment only if requested by the customer.

Envelope Standards

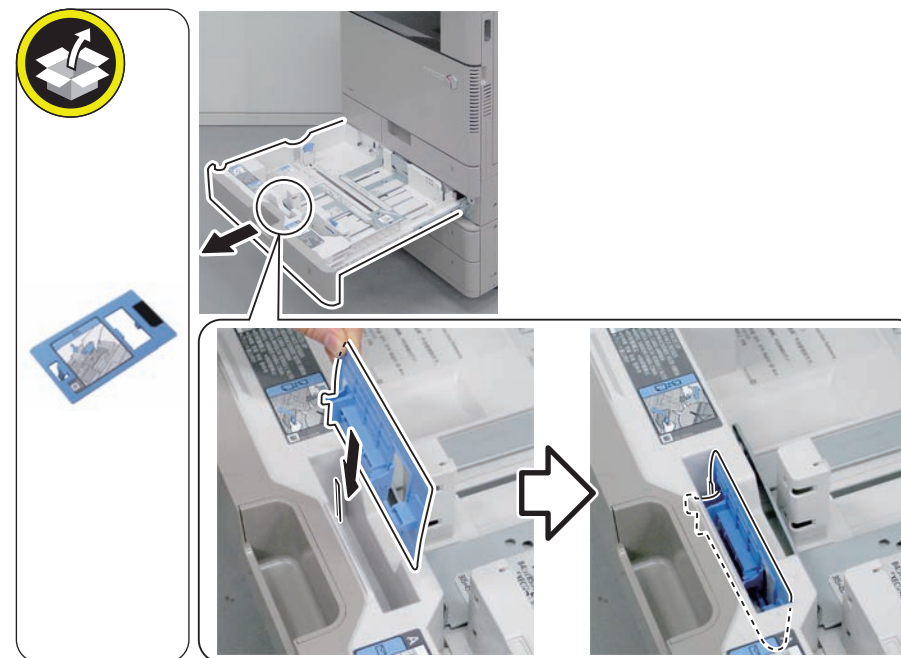
Type	(Short side (X)×Long Side (Y))
Monarch	3 7/8" x 7 1/2"(inch)/ 98.4 mm x 190.5 mm
No. 10 (COM10)	4 1/8" x 9 1/2"(inch)/ 104.7 mm x 241.3 mm
DL	4 3/8" x 8 5/8"(inch)/ 110 mm x 220 mm

T-9-3

When the Kit Is Not Used



1)



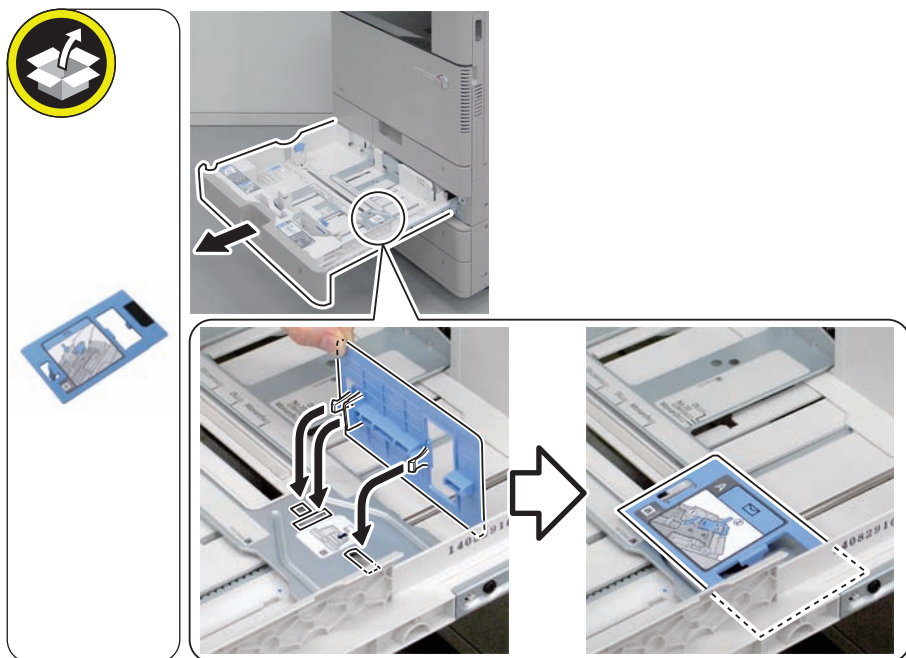
2) Close the Cassette 2.

F-9-61

● When the Kit Is Used



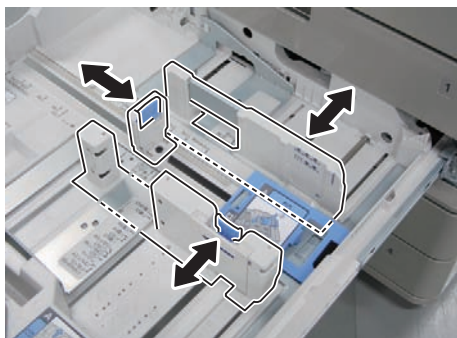
1)



F-9-62



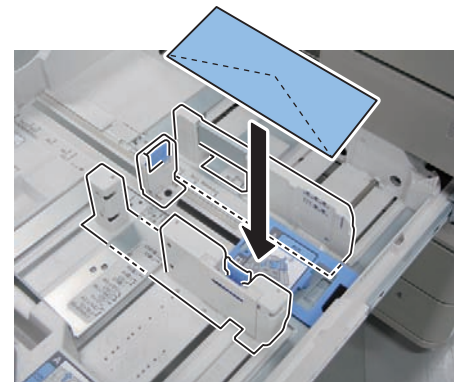
2) Hold the lever of each Guide Plate, and adjust the plate to the envelope size.



F-9-63



3) Load envelopes used by the user into the Cassette 2.



F-9-64



4) Close the Cassette 2.

● Settings after Installation



1) Select [Settings/Registration] > [Preferences] > [Paper Settings] > [Paper Settings] > [Cassette 2] > [Envelope]



2) Select the type of envelope to be used and then press [OK] to register it.

● Display/Operation Check



1) Check that "Envelope" is selected for Cassette 2 on the Control Panel's "Paper Settings" screen.



2) Check that the envelope is picked up.

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.

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: Administrator
- System administration password: 7654321

CAUTION:

To perform the network setting, the following Additional Functions items must be set "ON".

- [Additional Functions] > [Configuration] > [Network] > [Confirm Network Connection Set. Changes]
- [Additional Functions] > [Configuration] > [Network] > [TCP/IP Setting] > [IPv4 setting] > [Use IPv4]

- 4) Turn OFF and then ON the main power.

Operation Procedure Using Ping



- 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

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



- 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

Check with the loopback address.



- 1) Select Settings/Registration > Preferences > Network > TCP/IP Settings > IPv4 Settings > PING command, enter the IP address "127.0.0.1" with the numeric keypad, and then press "Start" key.
- 2) When "Response from the host." is displayed, network function of the Main Controller operates normally.
 - When "No response from the host." is displayed, the network function of the Main Controller is failed.
 - Replace the Main Controller with a properly operating one, and check the connection.

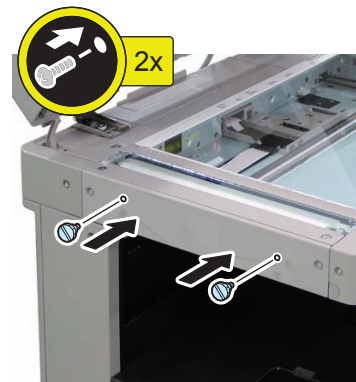
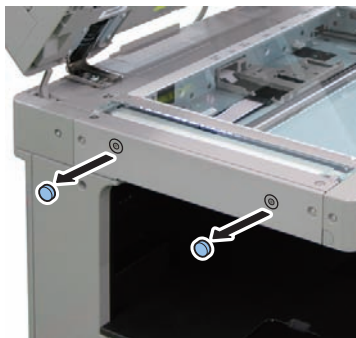
When Relocating the Machine

When relocating this machine by truck or by other means for some reasons after installing the machine, perform the following procedure.

CAUTION:

In case of relocating the machine while it is mounted on the Cassette Pedestal, be sure to check that the coin screw has been tightened securely before holding the grips of the machine to lift when, for example, passing over a difference in level of the floor. Holding the grips of the machine when lifting will result in separation of the machine from the Cassette Pedestal.

- 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.
- 3) Disconnect the power plug of the host machine.
- 4) If the Cassette Pedestal is installed, turn the 3 adjusters of the Cassette Pedestal with a screwdriver, etc. to lift them from the floor.
- 5) Secure the Scanner Unit with the Scanner System Fixation Screws that have been kept in a safe place since installation.



F-9-65

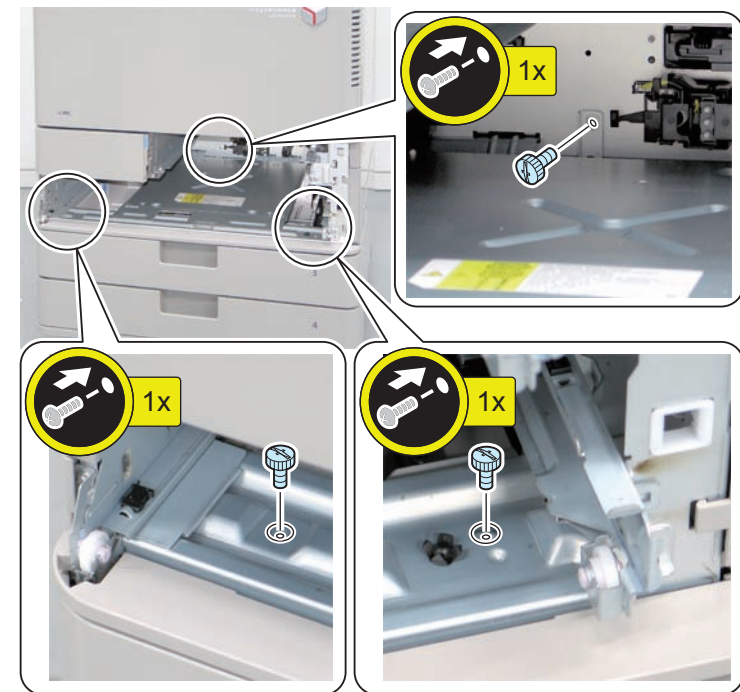
- 6) Put a sheet of paper on the Copyboard Glass.

- 7) After turning ON the power, make a copy.

- 8) Securely tighten the coin screws of the host machine and the 2-cassette Pedestal.

CAUTION:

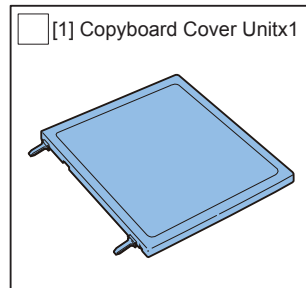
- When tightening the coin screws, pay attention to plates and parts around the screws.
- When tightening a screw on the rear side, be careful not to drop it.
- Be sure to check that the coin screws have been tightened securely.



F-9-66

Platen Cover Type U

Checking the Contents



F-9-67

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

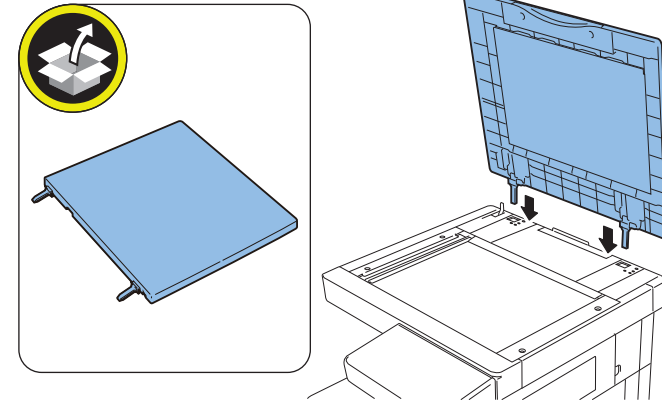


F-9-68

Installation Procedure



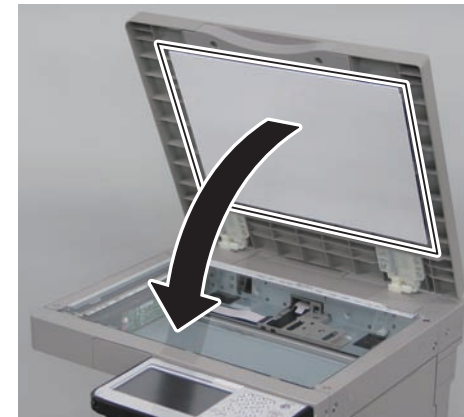
- 1) Install the Copyboard Cover Unit.



F-9-69

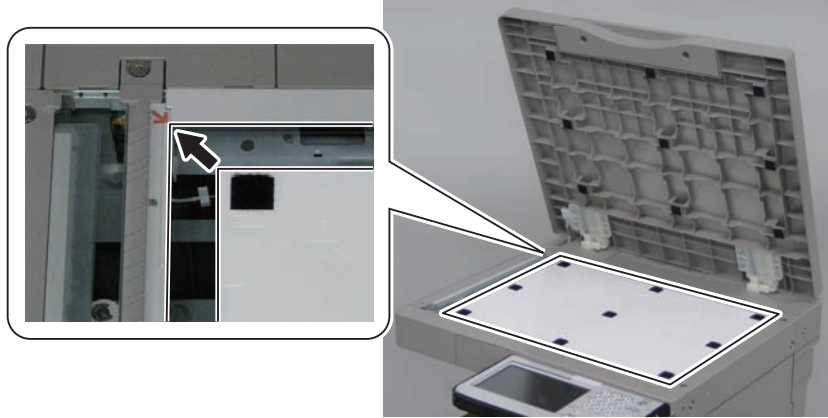


- 2) Remove the White Board.



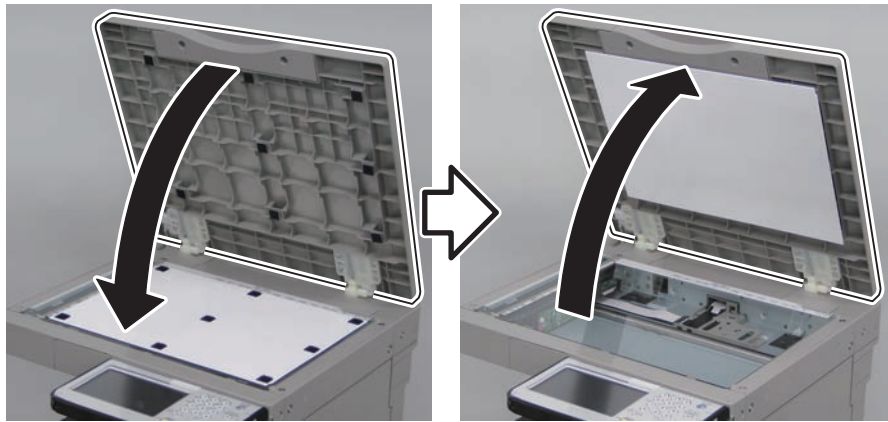
F-9-70

- 3) Place the White Board on the Copyboard Glass by aligning it with the Index Sheet.



F-9-71

- 4) Close the Copyboard Cover, and then open it again.

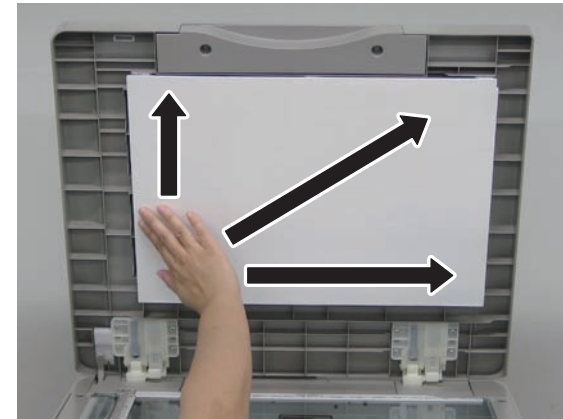


F-9-72

- 5) Press the White Board upward as shown in the figure below.

CAUTION:

If the White Board is pressed downward, it is placed on the Index Sheet, so be sure to press it upward.

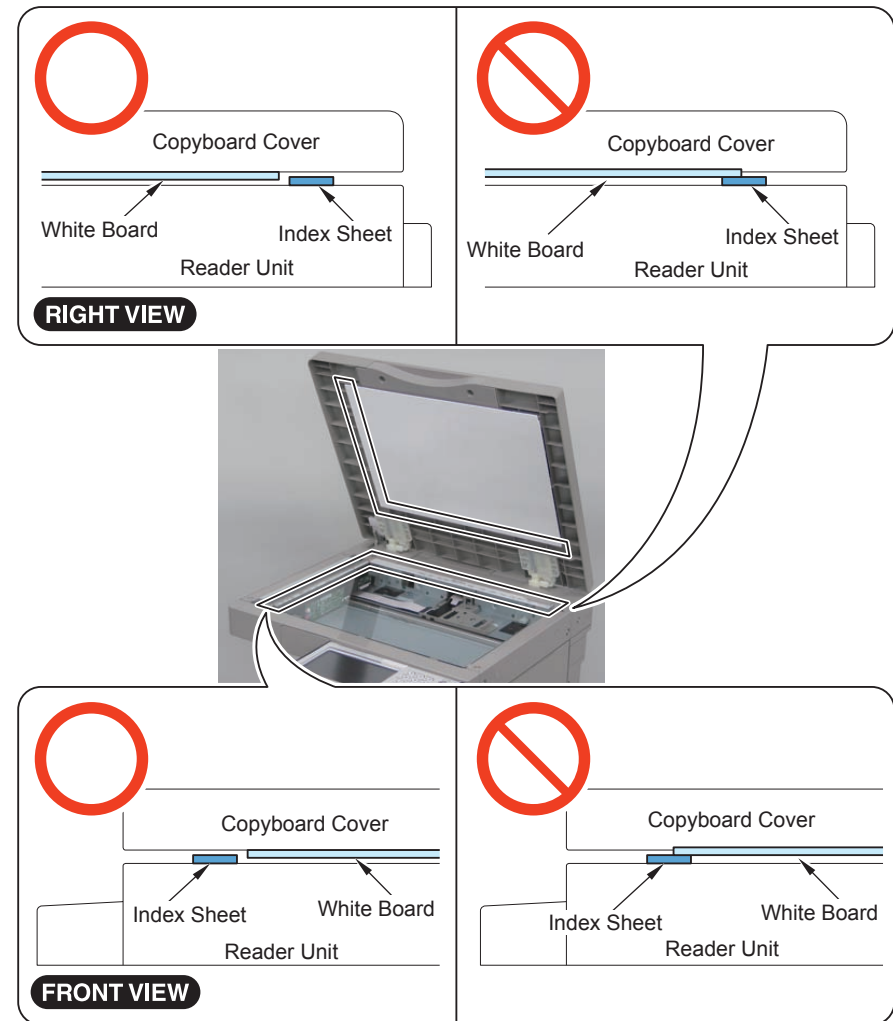


F-9-73

- 6) With the Copyboard Cover closed, check that the White Board is not placed on the Index Sheet as shown in the figures.

NOTE:
If the White Plate of the Copyboard Cover is placed on the index of the Reader Unit, perform steps 2 through 5 again.

CAUTION:
Be sure that there is no gap between the White Board and the Index Sheet. As a guide, it should be 0.3 mm or less.



F-9-74

- 7) Connect the power plug of the host machine to the power outlet.
8) Turn ON the main power switch.

Inner 2way Tray-J1

Points to Note at Installation

- Be sure to install this equipment after installing the 3 Way Unit.

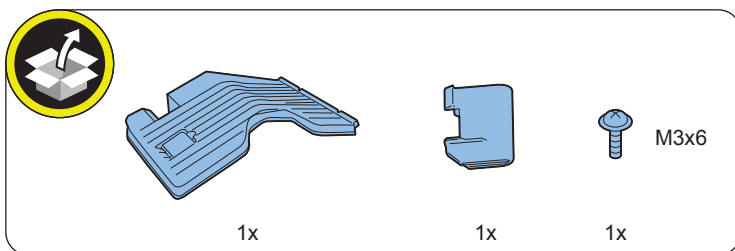
CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-75

Checking the contents



F-9-76

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF

- 1) Turn OFF the main power switch.
- 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



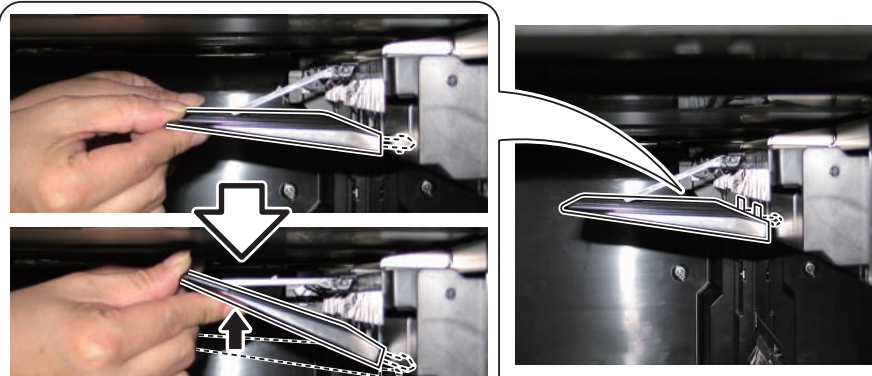
F-9-77

Installation procedure

NOTE:
When installing the 3 Way Unit simultaneously, skip step 1 .

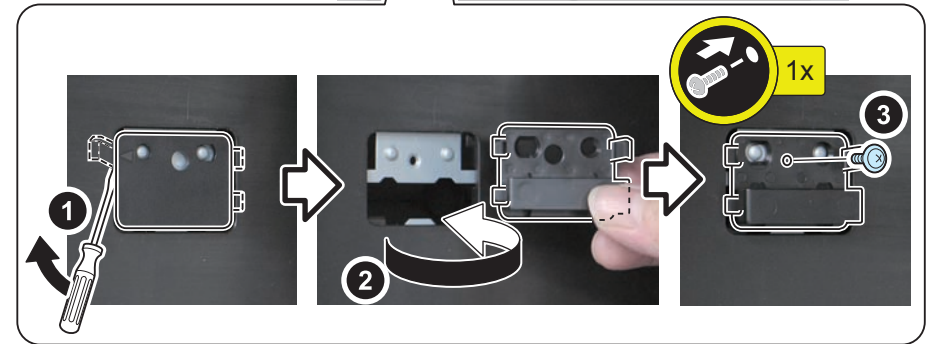
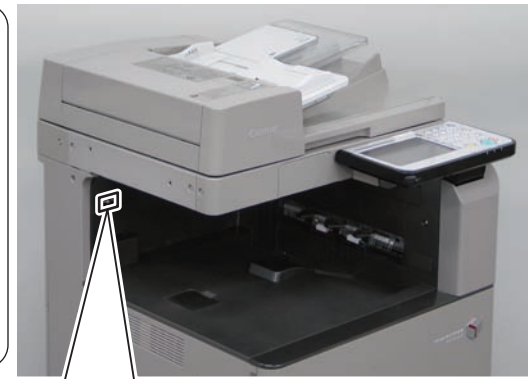
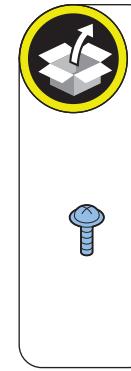
1)

CAUTION:
When the Full Detection Flag is attached, remove the Reverse Guide while paying attention to the Full Detection Flag.



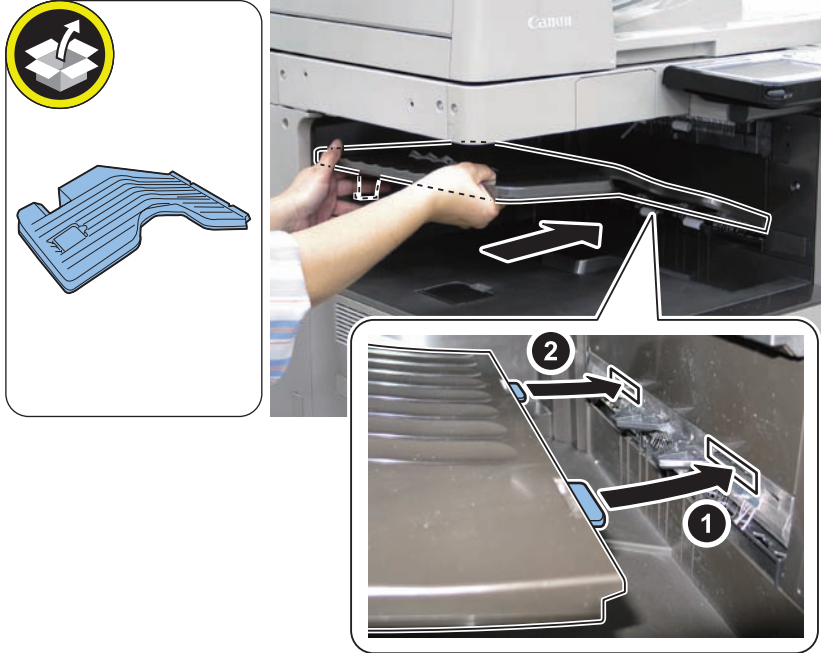
F-9-78

2)



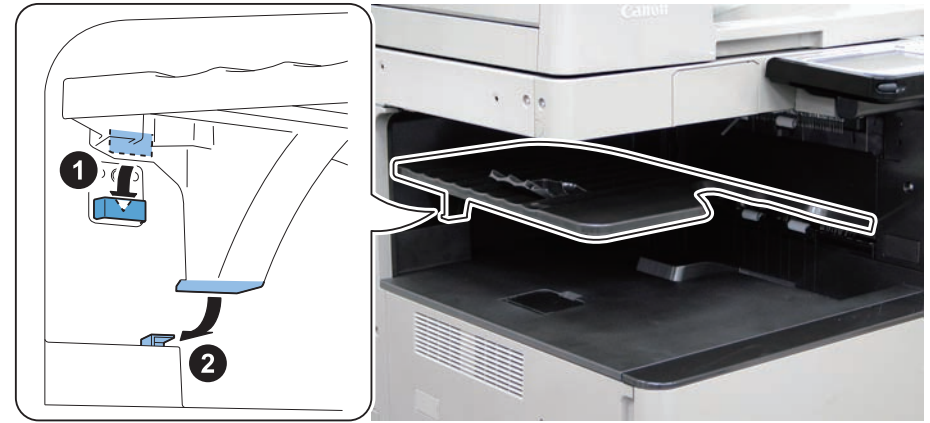
F-9-79

3)



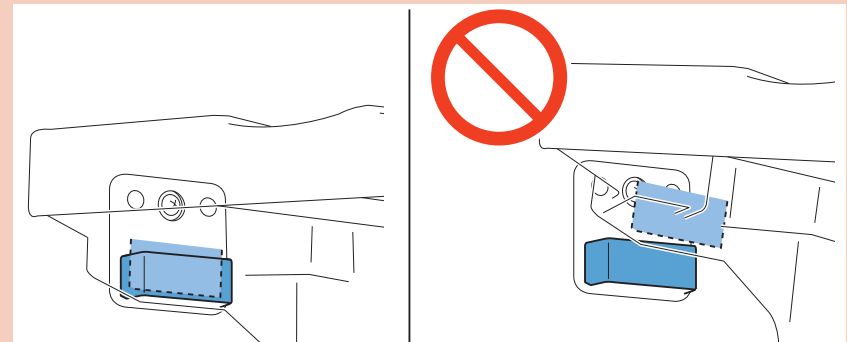
F-9-80

4)



F-9-81

CAUTION:
Be sure that the Inner 2-way Tray Support Member is installed properly.

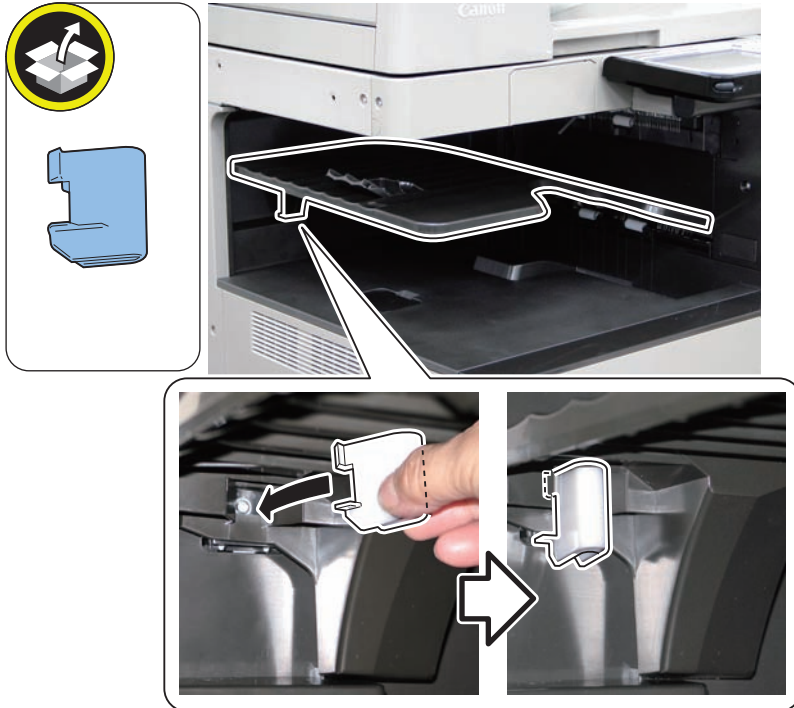


F-9-82

5)

CAUTION:

Be sure that the Support Member does not come off when the Inner 2-way Tray is lifted up.



F-9-83

- 6) Connect the power plug to the outlet.
7) Turn ON the main power switch of the host machine.

Checking after Installation

NOTE:

The setting of "ON/OFF of Use Optional Output Tray" can be made only when logged in as an administrator.

When "System Manager Information Settings" is set, it is required to log in as a system manager in accordance with instructions of the user administrator.

Password at the time of shipment
System Manager ID: Administrator
System PIN: 7654321

- 1) Select [Settings/Registration] > [Function Settings] > [Common] > [Paper Output Settings] > [ON/OFF/ of Use Optional Output Tray].

- 2) Set the Delivery Tray 2 to [ON], and press [OK].

- 3) Turn OFF and then ON the main power.

- 4) Select [Settings/Registration] > [Function Settings] > [Common] > [Paper Output Settings] > [Output Tray Settings].

- 5) Select Tray B for copy, and press [OK] to conduct a test copy.

- 6) Check that the output paper has been delivered to the Inner 2-way Tray.

- 7) Change the tray setting according to the user's request.

Copy Tray-J2

Points to Note at Installation

Be sure to install this equipment after installing the 3 Way Unit.

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF

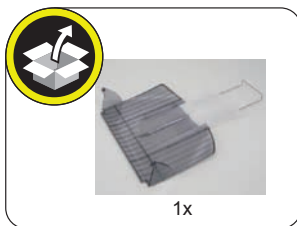
- 1) Turn OFF the main power switch.
- 2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing



F-9-84

Checking the contents



1x

F-9-85

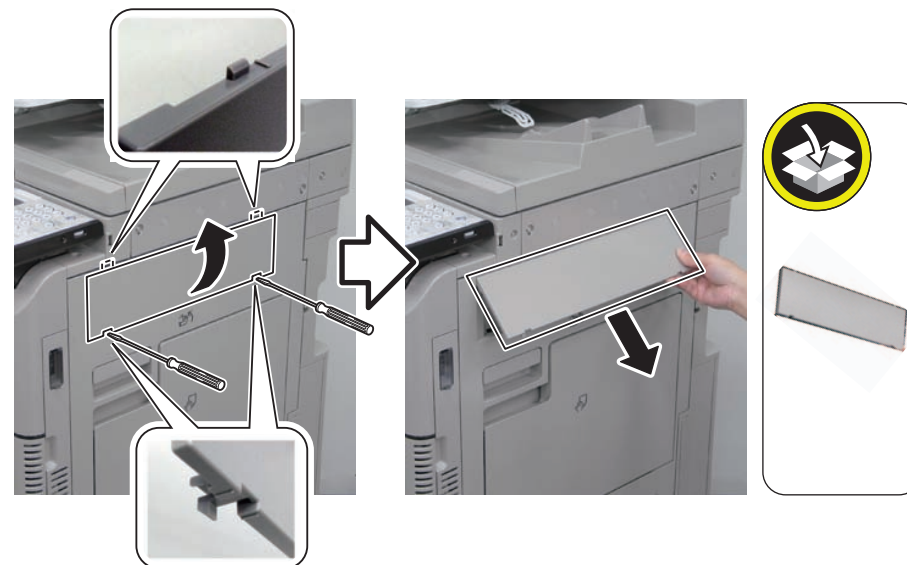
Installation procedure



1)

NOTE:

The work is the same when the Utility Tray is installed.



F-9-86

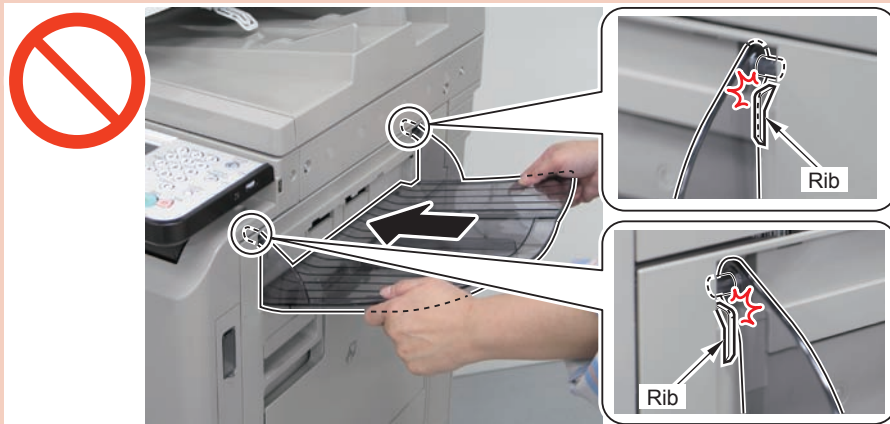
□
2)



F-9-87

CAUTION:

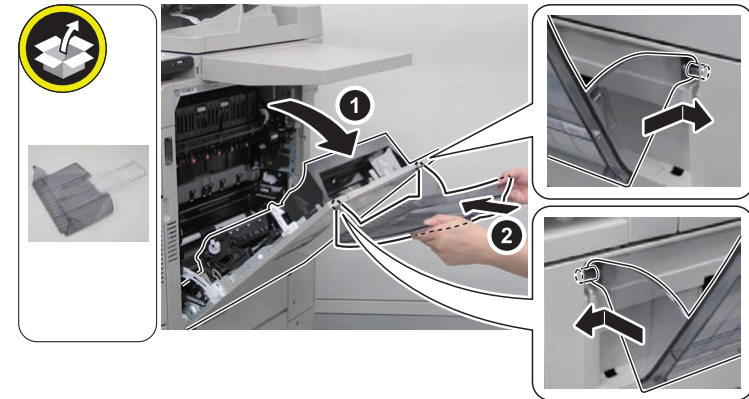
Because the Copy Tray comes in contact with the rib if installed while laid flat, be sure to install it while keeping it upright.



F-9-88

< When the Utility Tray is installed >

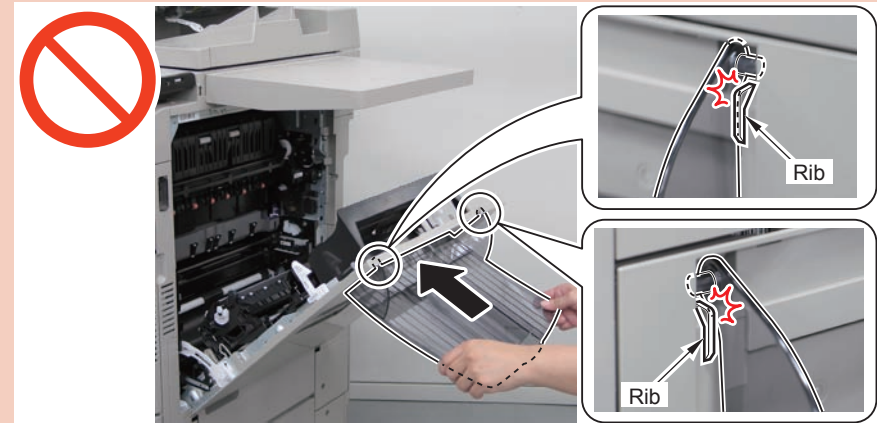
□
2)



F-9-89

CAUTION:

Because the Copy Tray comes in contact with the rib if installed while laid flat, be sure to install it while keeping it upright.



F-9-90

□

- 3) Connect the power plug to the outlet.
- 4) Turn ON the main power switch of the host machine.

Checking after Installation

NOTE:

The setting of "ON/OFF of Use Optional Output Tray" can be made only when logged in as an administrator.

When "System Manager Information Settings" is set, it is required to log in as a system manager in accordance with instructions of the user administrator.

Password at the time of shipment
System Manager ID: Administrator
System PIN: 7654321

- 1) Select [Settings/Registration] > [Function Settings] > [Common] > [Paper Output Settings] > [ON/OFF of Use Optional Output Tray].
- 2) Set the Delivery Tray 1 to [ON], and press [OK].
- 3) Turn OFF and then ON the main power.
- 4) Select [Settings/Registration] > [Function Settings] > [Common] > [Paper Output Settings] > [Output Tray Settings].
- 5) Select Tray B or Tray C for copy, and press [OK] to conduct a test copy.
- 6) Check that the output paper has been delivered to the Copy Tray.
- 7) Change the tray setting according to the user's request.

Copy Card Reader-F1/Copy Card Reader Attachment Kit-B4

Points to Note at Installation

- To install this equipment, the Copy Card Reader Attachment Kit is required.
- Refer to "Table of Options Combination" when installing this equipment before operation.

Table of Options Combination

	Utility Tray	Voice Operation Kit	Voice Guidance Kit	Serial Interface Kit	Copy Control Interface Kit
Copy Card Reader	yes	yes	yes	no	no

yes: Available

no: Unavailable

T-9-4

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-91

Check Items when Turning OFF the Main Power

Check that the main power is OFF.

- Turn OFF the main power switch.
- Check that the display in the Control Panel and the lamp of the main power are turned off, and then disconnect the power plug.

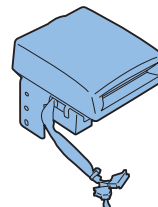


Installation Outline Drawing



F-9-92

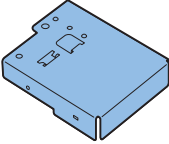
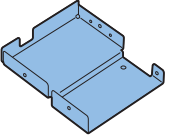
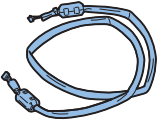
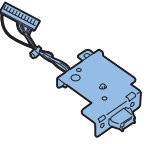

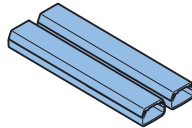



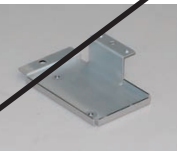

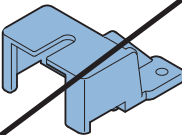



Checking the Contents

Copy Card Reader-F1

<input type="checkbox"/> [1] Card Reader Unit X 1 	<input type="checkbox"/> [2] Screw (RS tight; M4x10) X 1 	<input type="checkbox"/> [3] Toothed washer X 1 
--	---	--

F-9-93

Copy Card Reader Attachment-B4

<input type="checkbox"/> [1] Card Reader Mounting Plate (front) Unit X 1 	<input type="checkbox"/> [2] Card Reader Mounting Plate (rear) Unit X 1 	<input type="checkbox"/> [3] Card reader External Relay Cable X 1 
<input type="checkbox"/> [4] Card Reader Relay Unit X 1 	<input type="checkbox"/> [5] Connector Cover X 1 	<input type="checkbox"/> [6] Cord Guide X 2 
<input type="checkbox"/> [7] Wire Saddle X 1 	<input type="checkbox"/> [8] Screw (TP; M3x6) X 5 	<input type="checkbox"/> [9] Screw (TP; M3x12) X 2 
<input type="checkbox"/> [10] Card Reader Mounting Plate (lower) Unit X 1 	<input type="checkbox"/> [11] Screw (W Sams; M3x14) X 2 	<input type="checkbox"/> [12] Connector Cover X 1 
<input type="checkbox"/> [13] PCB Spacer X 1 	<input type="checkbox"/> [14] Screw (TP; M4x12) X 2 	<input type="checkbox"/> [15] Screw (Binding; M4x6) X 4 

F-9-94

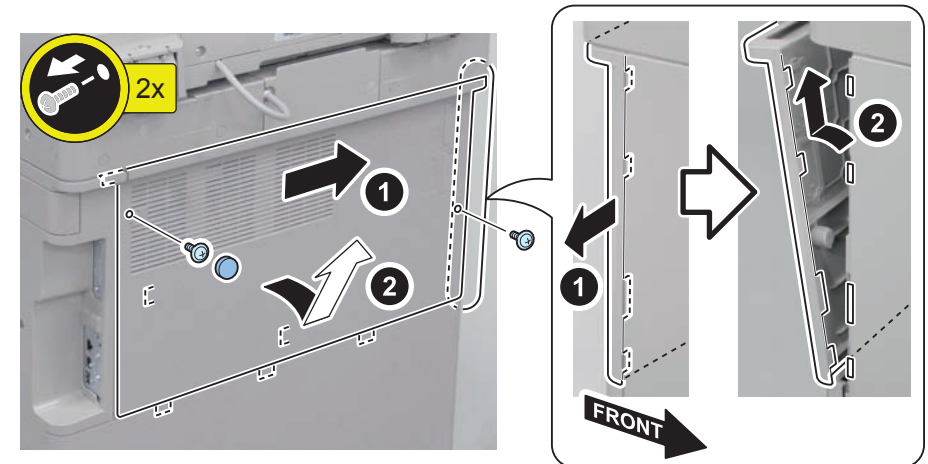
Installation Procedure

CAUTION:

After installing the Copy Card Reader, enter the card number to be used in the following service mode (Level 1): COPIER > FUNCTION > INSTALL > CARD. Otherwise, the card will not be recognized even if inserting it.

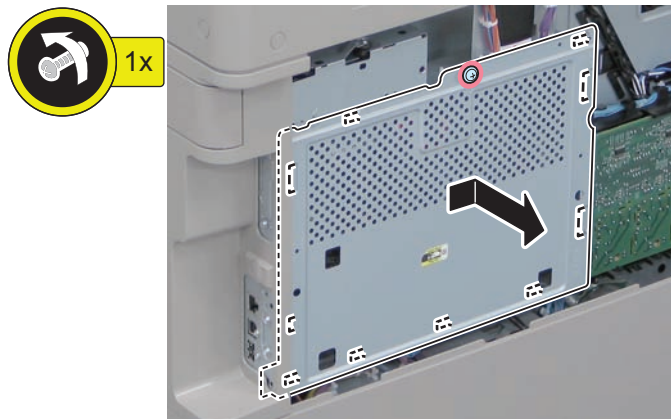
Removing the Covers

- 1)



F-9-95

□
2)



F-9-96

■ Installing the Copy Card Reader

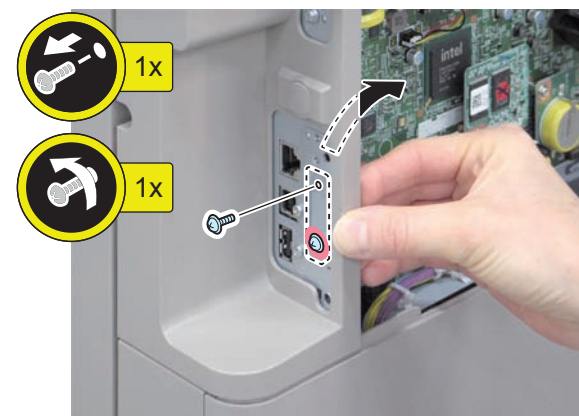
□
1)

NOTE: Remove the Face Plate while holding it.

- 1 Screw (upper) (Remove)
- 1 Screw (lower) (to loosen)

CAUTION:

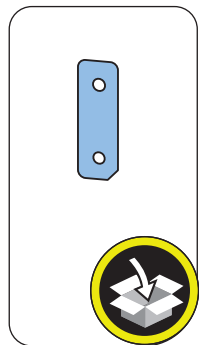
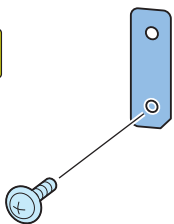
Be careful not to drop the Face Plate.



F-9-97

NOTE: The removed screw (upper) will be used in step 4.

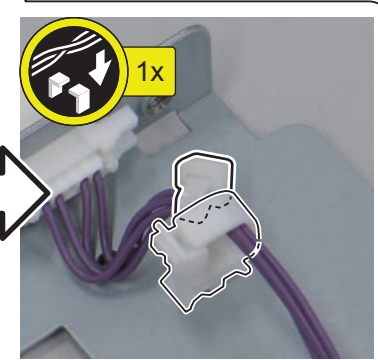
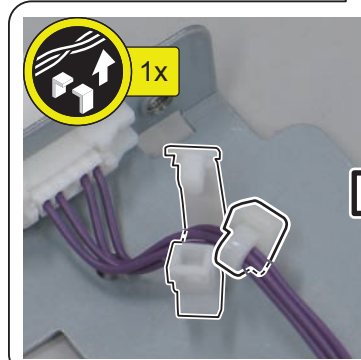
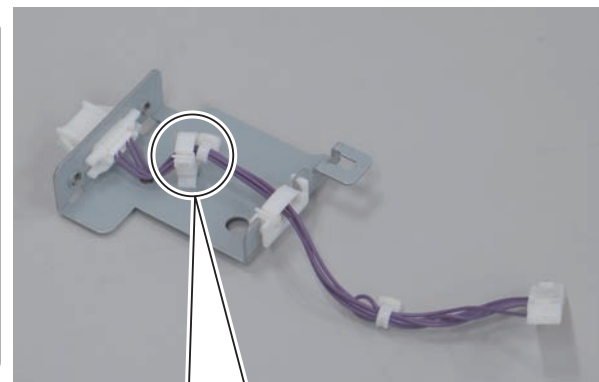
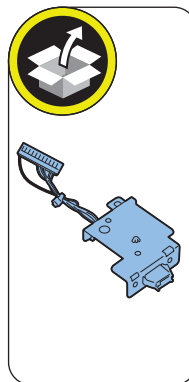
□
2)



F-9-98

NOTE: The removed screw (lower) will be used in step 4.

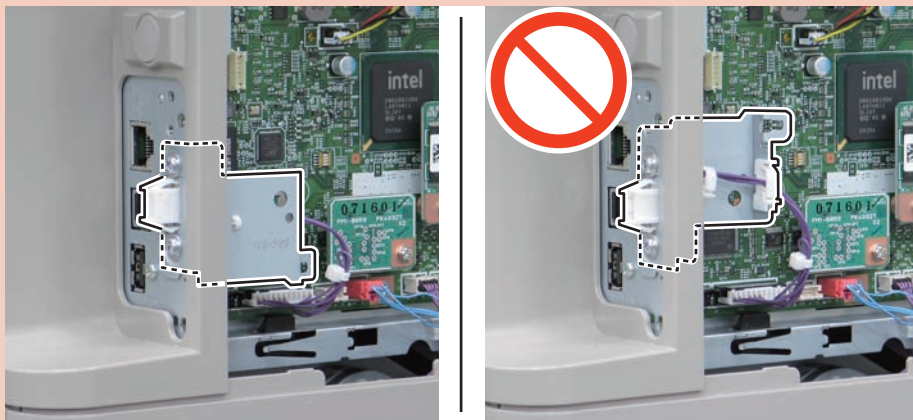
□
3)



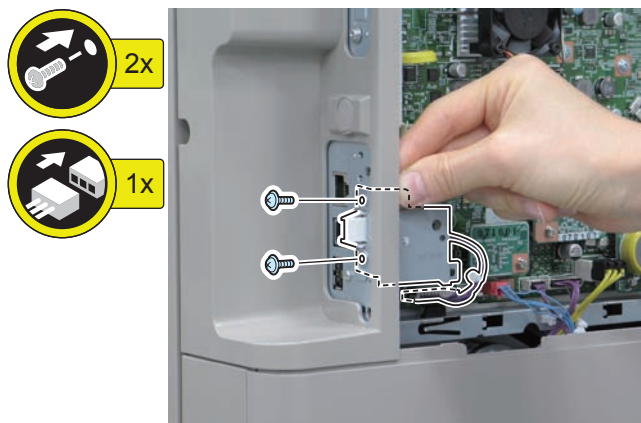
4)

NOTE: Use the screws removed in steps 1 and 2.

CAUTION: Installation orientation of the Card Reader Relay Unit
Be sure to install it in the orientation shown in the figure.

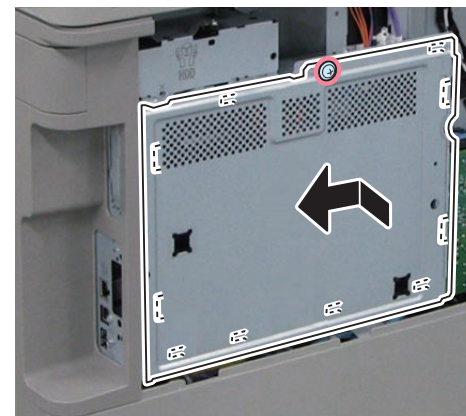


F-9-99



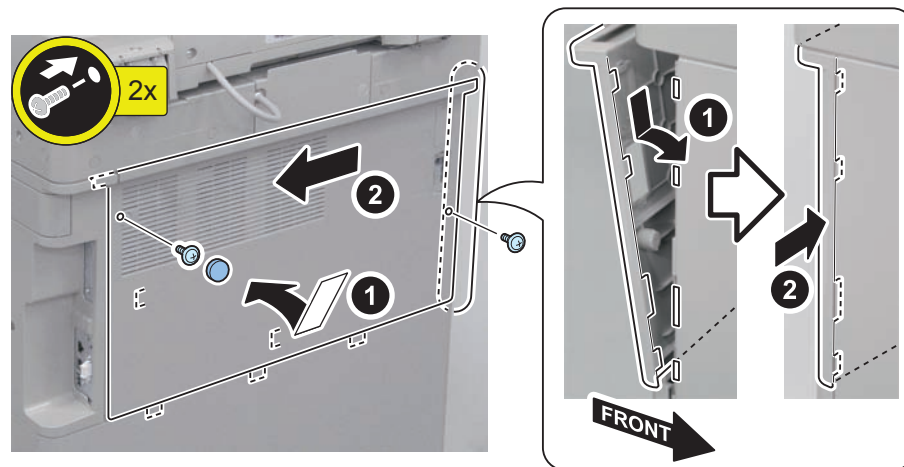
F-9-100

5)



F-9-101

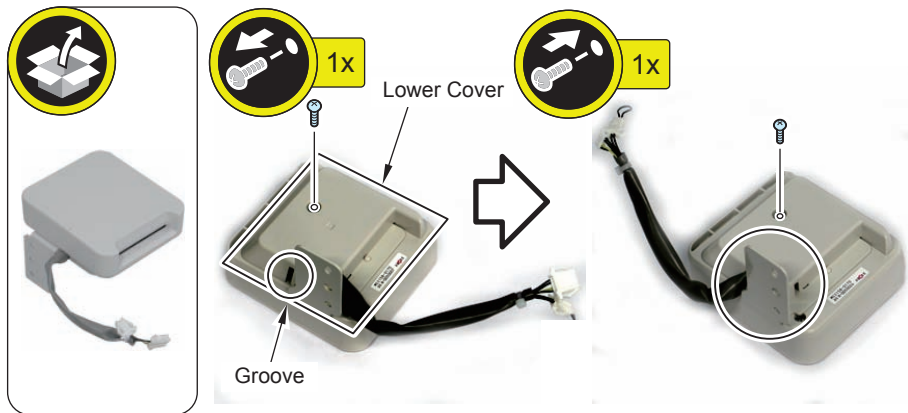
6)



F-9-102

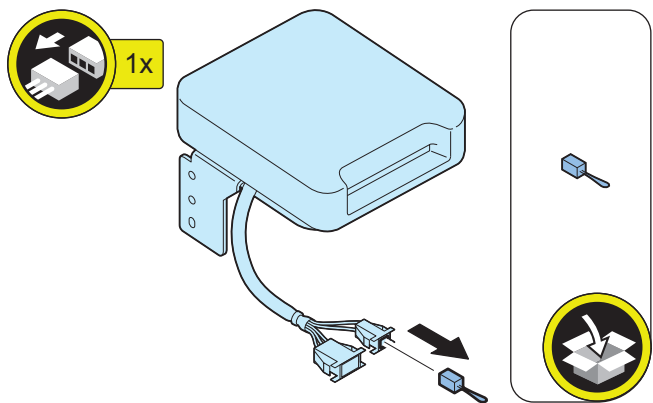
7)

NOTE:
Remove the Lower Cover of the Card Reader Unit, and change the position of the cable.



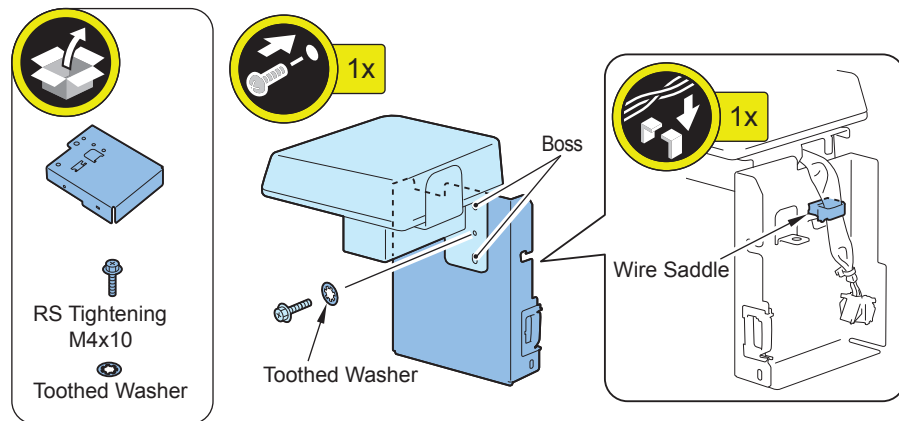
F-9-103

8)



F-9-104

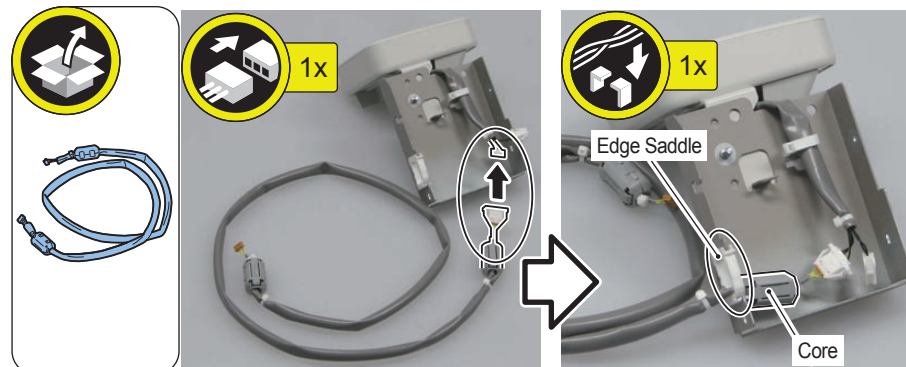
9)



F-9-105

10)

CAUTION:
Be sure that the core is inside the Edge Saddle.



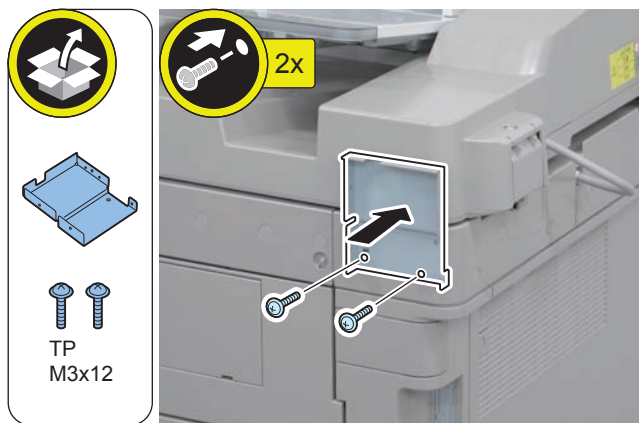
F-9-106

11)



F-9-107

12)



F-9-108

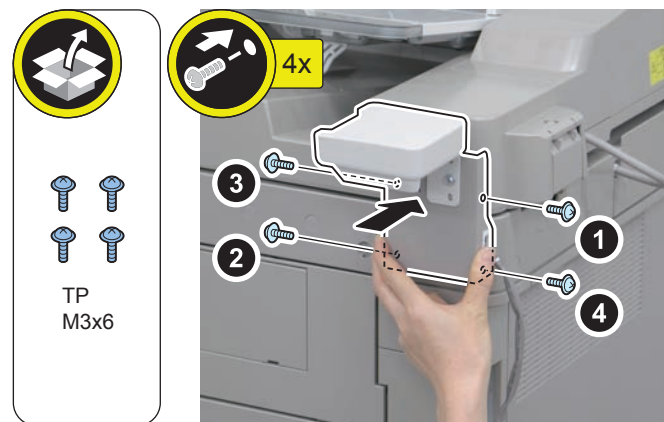
13)

CAUTION: Prevention of a fall

Be sure to hold the Card Reader Mounting Plate (Front) Unit with your hand until securing it with screws.

NOTE: Installing the Screws

Install the screws in the order from (1) to (4).



F-9-109

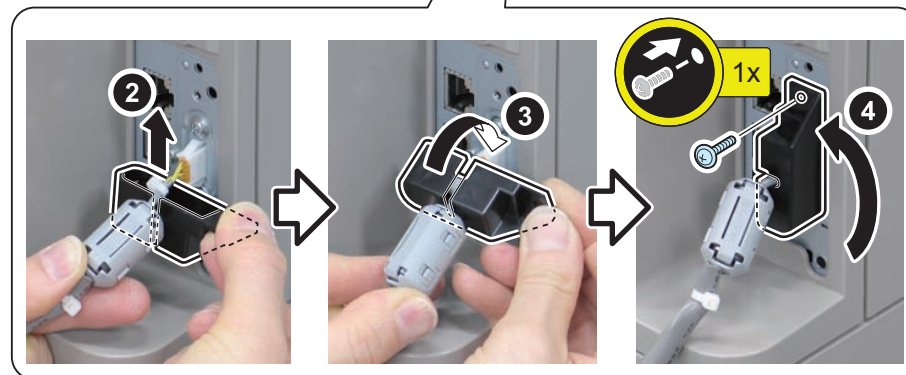
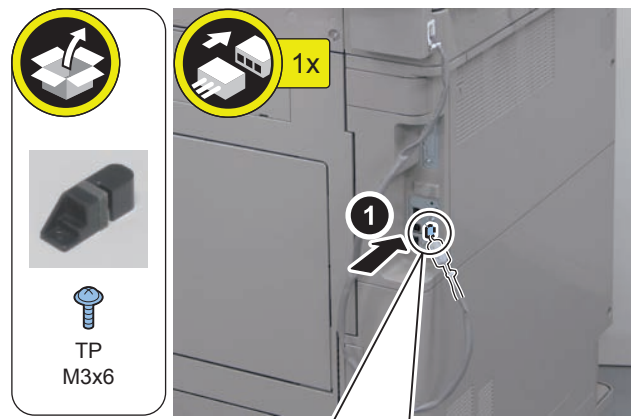
- 14) Connect the connector of the Card Reader External Relay Cable to the host machine, and install the Connector Cover.
- 1 Screw (TP; M3x6)

CAUTION: Installing the Connector Cover

Be sure to insert the Harness Band inside the Connector Cover.

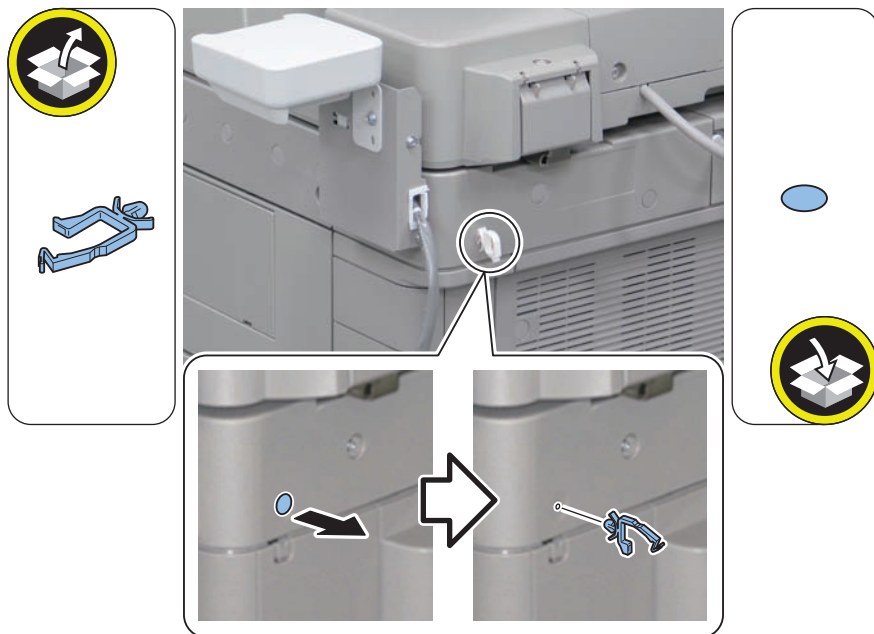


F-9-110



F-9-111

□
15)



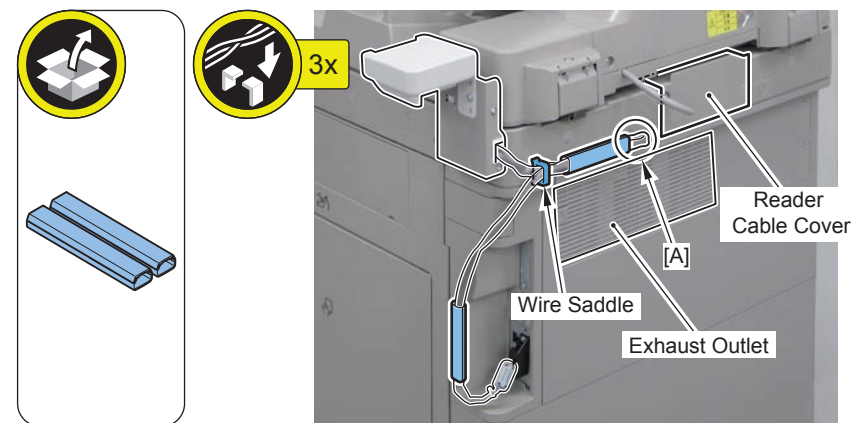
F-9-112

□

- 16) Remove the covers of the 2 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 17) Fold the Card Reader External Relay Cable at the [A] part and pass it through the Cord Guides and Wire Saddle.
- 18) Install the 2 covers of the Cord Guides.
- 19) Close the 1 Wire Saddle.

CAUTION:

- Do not cover the Exhaust Outlet with the Cord Guide.
- Do not affix a Cord Guide on the Reader Cable Cover.



F-9-113

□

- 20) Connect the power plug to the outlet.
- 21) Turn ON the main power switch of the host machine.

■ Routing the Cable (when installing this equipment and other options simultaneously)

- Routing the cable when installing the Copy Card Reader and other options simultaneously is described below.
- Combinations are shown in the following table.

	Voice Guidance Kit	Voice Operation Kit
Card Reader	TYPE-1	TYPE-2

T-9-5

● For TYPE-1 (When installing the Copy Card Reader and the Voice Guidance Kit at the same time.)

1. Securing the Cable of the Voice Guidance

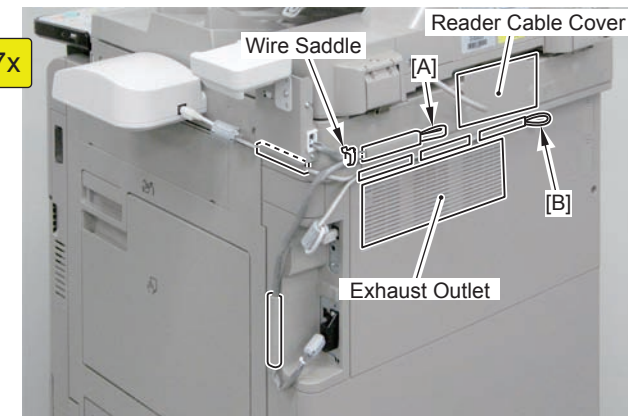
- 1) Remove the covers of the 4 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 2) Insert only the Speaker Cable through the 4 Cord Guides.
- 3) Install the 4 Cord Guide Covers.

2. Securing the Cable of the Copy Card Reader

- 1) Remove the covers of the 2 Cord Guides, and affix the Cord Guides to the position as shown in the figure. (Use the Cord Guides (thick) included with the Copy Card Reader.)
- 2) Remove the Face Seal, and install the Wire Saddle. (included with the Copy Card Reader).
- 3) Fold the Copy Card Reader Cable at the [A] part, and insert only the Copy Card Reader Cable through the 2 Cord Guides and then secure it in place with the Wire Saddle.
- 4) Install the 2 Cord Guide Covers.

CAUTION:

- Do not cover the Exhaust Outlet with the Cord Guide.
- Do not affix a Cord Guide on the Reader Cable Cover.



F-9-114

● For TYPE-2 (When installing the Copy Card Reader and the Voice Operation Kit at the same time.)

□ 1. Securing the Cable of the Voice Operation Kit

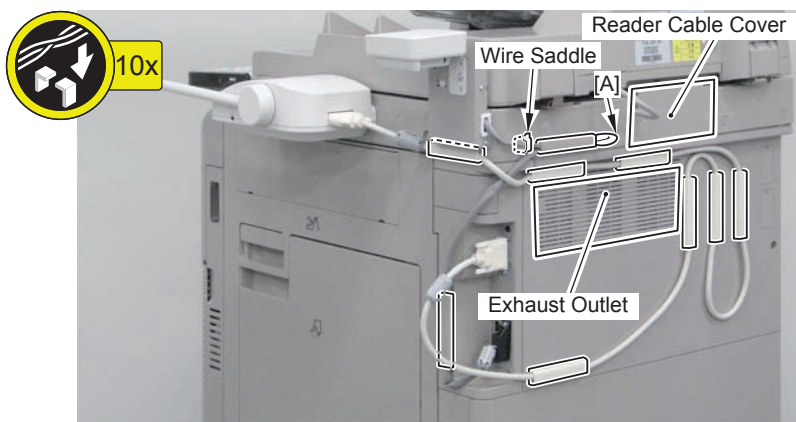
- 1) Remove the covers of the 7 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 2) Insert only the DVI Cable through the 7 Cord Guides.
- 3) Install the 7 Cord Guide Covers.

□ 2. Securing the Copy Card Reader Cable

- 1) Remove the covers of the 2 Cord Guides, and affix the Cord Guides to the position as shown in the figure. (Use the Cord Guides (thick) included with the Copy Card Reader.)
- 2) Remove the Face Seal, and install the Wire Saddle. (included with the Copy Card Reader).
- 3) Fold the Copy Card Reader Cable at the [A] part, and insert only the Copy Card Reader Cable through the 2 Cord Guides and then secure it in place with the Wire Saddle.
- 4) Install the 2 Cord Guide Covers.

CAUTION:

- Do not cover the Exhaust Outlet with the Cord Guide.
- Do not affix a Cord Guide on the Reader Cable Cover.



F-9-115

● Checking after Installation



1) Check the model of the Card Reader in service mode.

- Check that the setting value is "0" in the following service mode (Level 1): COPIER > OPTION > ACC > CR-TYPE.



2) Set the number of card (number of department ID) that can be used with the Card Reader in service mode.

- Set any value in the following service mode (Level 2): COPIER > OPTION > FNC-SW > CARD-RNG.



3) Enter the card number to be used (1 to 2001) in the following service mode (Level 1): COPIER > FUNCTION > INSTALL > CARD.

- Enter the smallest card number to be used by the user.
- From the entered card number, 1000 cards can be used.



4) Turn OFF and then ON the main power switch to enable the setting value.



5) Insert a card with a card number that has been registered, and check that the machine operates normally.

NOTE:

- Perform the following operations to change the number of cards (departments) after it has been set. In such a case, counter information for each department is reset.
- Execute the following service mode (Level 1): COPIER > FUNCTION > CLEAR > CARD.
- Turn OFF and then ON the main power switch to enable the setting value.
- After that, perform from step 1.

Utility Tray-A2

Points to Note when Installing

- If using together with the Copy Tray, install This equipment first.
- Refer to "Table of Options Combination" when installing this equipment before operation.

Table of Options Combination

	Voice Guidance Kit	Voice Operation Kit	Serial Interface Kit	Copy Control Interface Ki	Card Reader
Utility Tray	no	no	yes	yes	yes

yes: Available no: Unavailable

T-9-6

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-116

Checking the Contents

The parts using to install the keyboard

Use 7 of them

TP; M4x8

TP; M4x10

TP; M4x14

1x

10x

5x

1x

2x

4x

F-9-117

<Others>
Including guides

Installation Outline Drawing

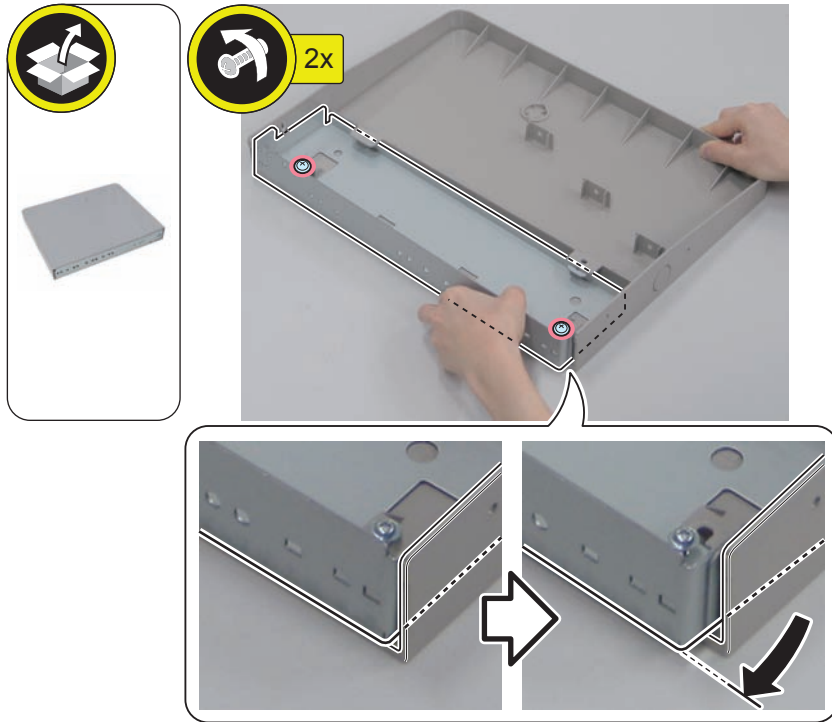


F-9-118

Installation Procedure

1) Remove the all tapes from this equipment.

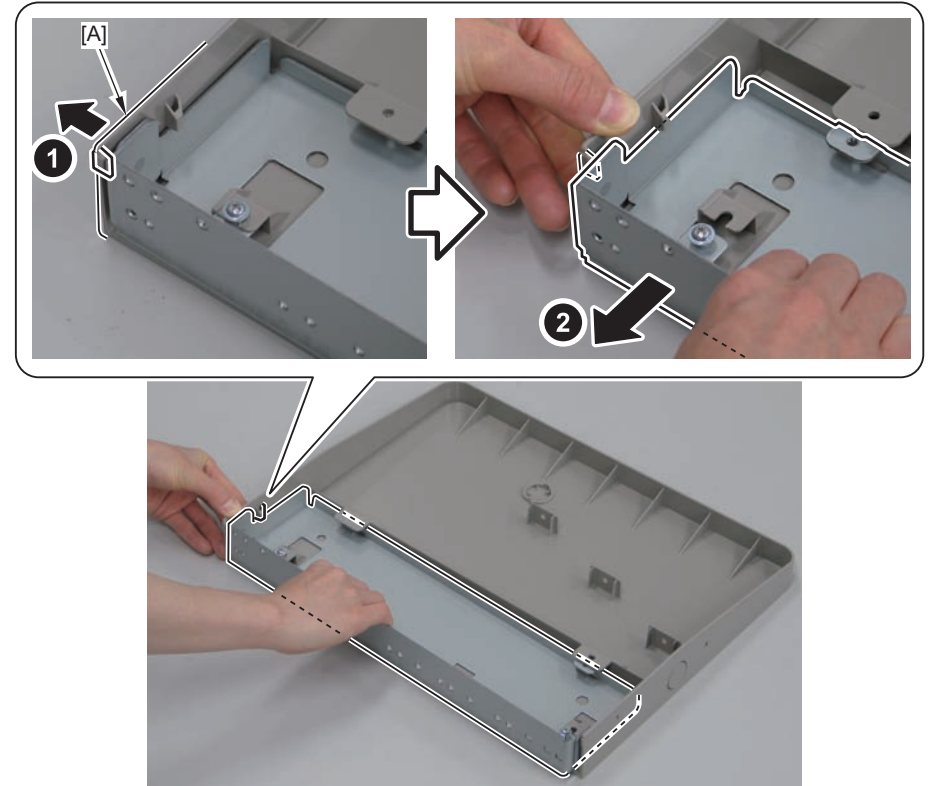
2)



F-9-119

3)

CAUTION:
To avoid damage, do not pull the [A] part of the Utility Tray too much.



F-9-120

4)



F-9-121

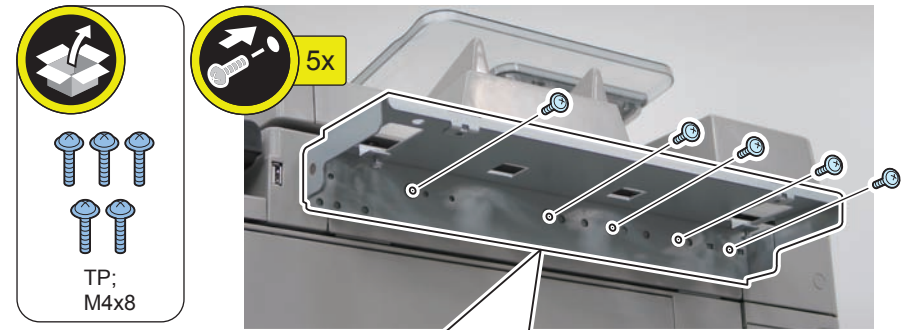
5)

CAUTION: Points to Note at Installation
Be sure to install it by using the holes with the marks C, F, I, L and O.

CAUTION:
Be sure to install the Utility Tray Mounting Plate where it does not cover the USB Slot.

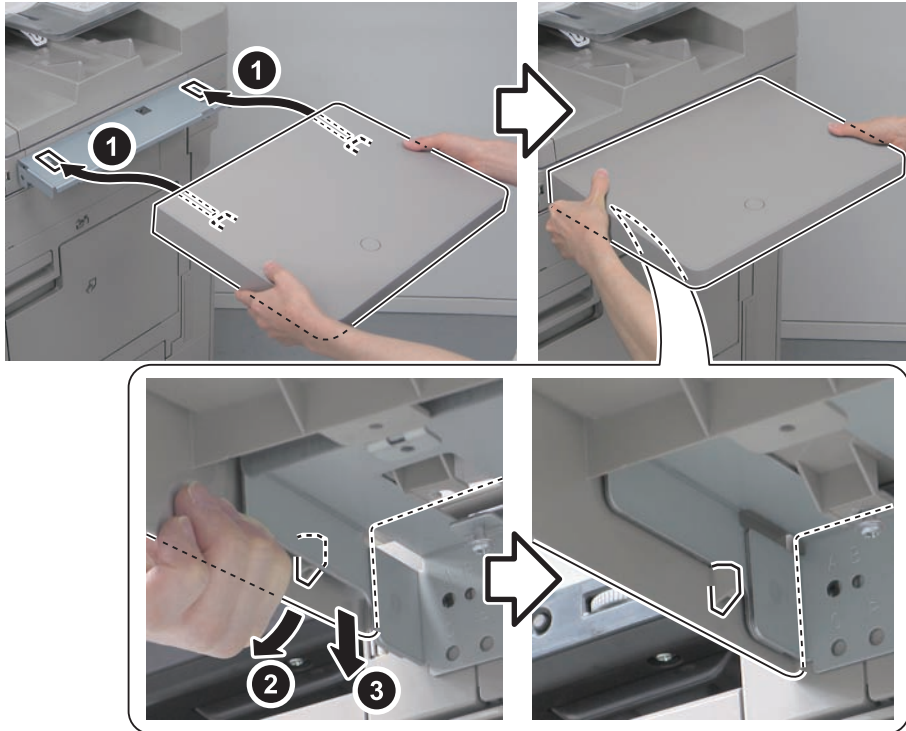


F-9-122



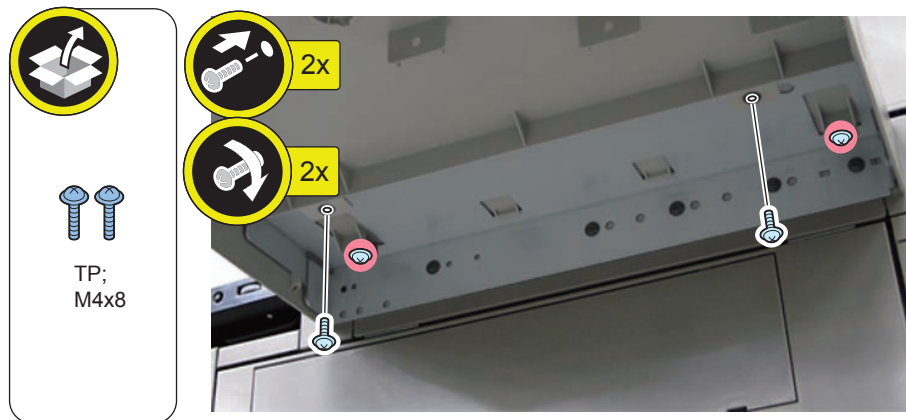
F-9-123

6)



F-9-124

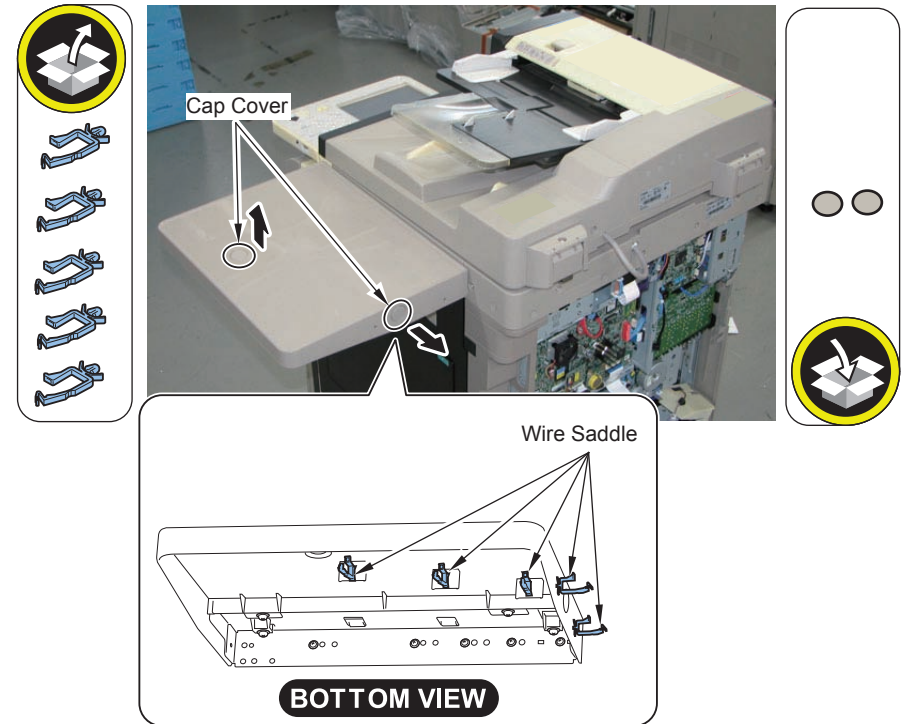
7)



F-9-125

When Installing the USB Keyboard

1)



F-9-126

Stamp Unit-B1

Points to Note at Installation

In order to enable the stamp function, it is necessary to enable the SEND function (Color Universal Send Kit).

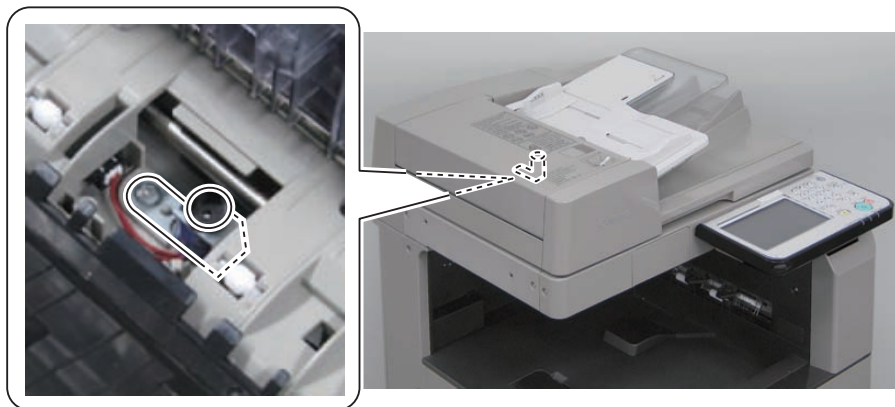
CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-127

Installation Outline Drawing



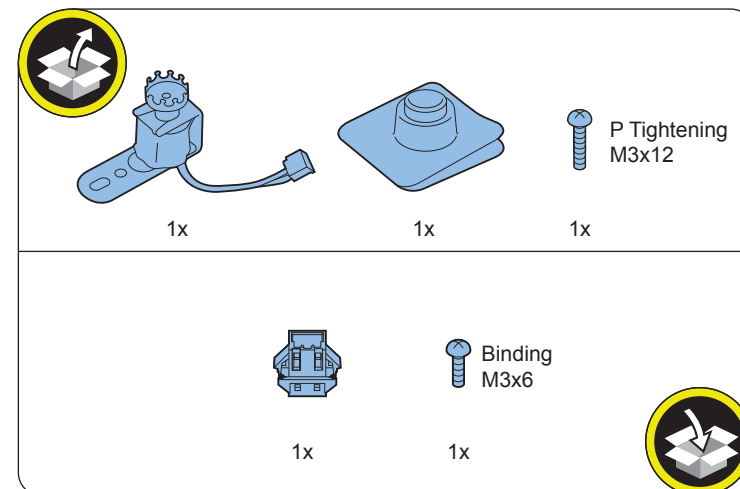
F-9-128

Check Items when Turning OFF the Main Power

Check that the main power switch is OFF.

- 1) Turn OFF the main power switch.
- 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.

Checking the contents



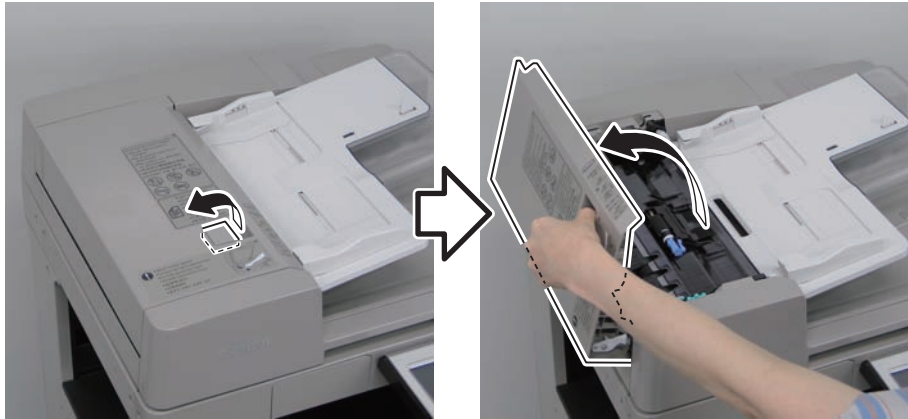
F-9-129

<Others>

- Including guides

Installation procedure

1)



F-9-130

2)



F-9-131

3)

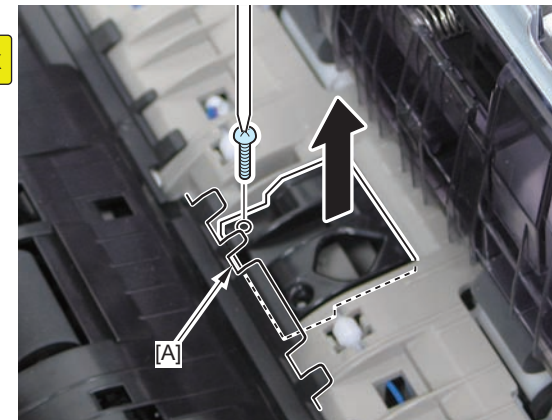


F-9-132

4)

CAUTION:

Be careful not to damage the [A] part of the Feed Guide with a screwdriver when removing the screw.

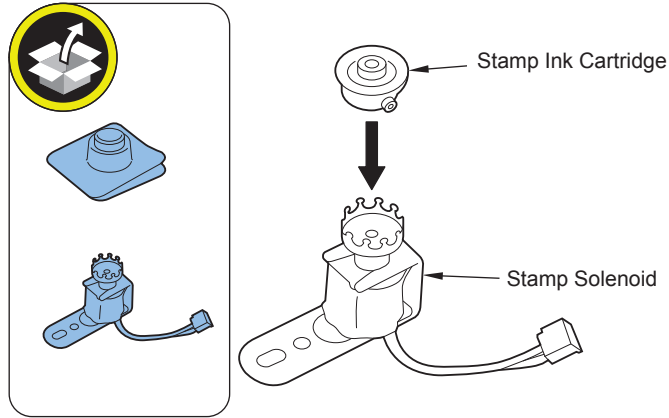


F-9-133

NOTE: The removed screw will be used in step 7.)

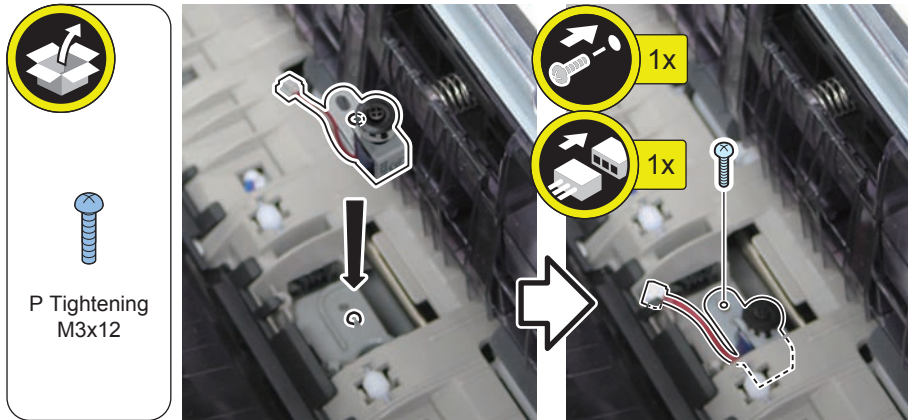
5)

CAUTION:
Be sure to push the Stamp Ink Cartridge in until it clicks.



F-9-134

6)

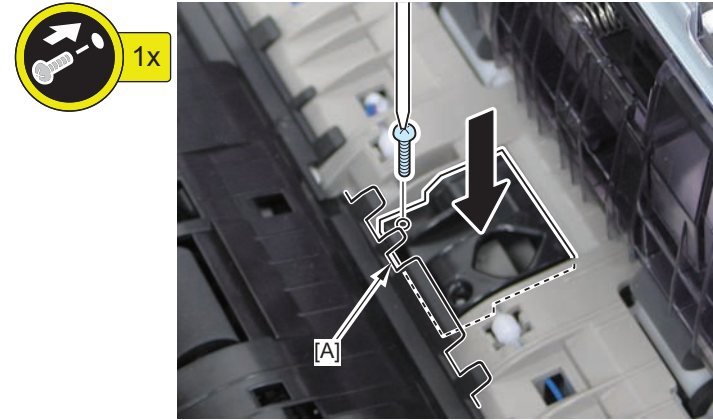


F-9-135

7)

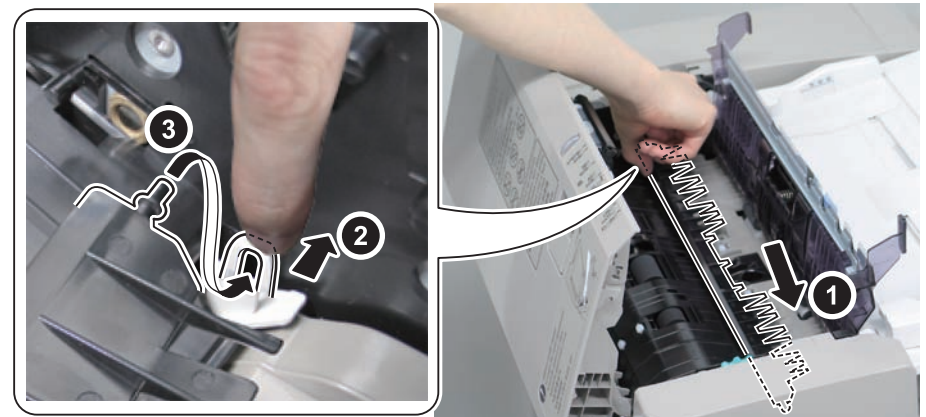
NOTE: Use the screws removed in step 4.

CAUTION:
Be careful not to damage the [A] part of the Feed Guide with a screwdriver when tightening the screw.



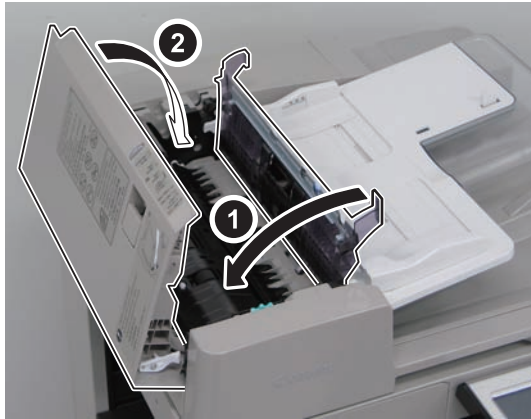
F-9-136

8)



F-9-137

9)



F-9-138

Operation Check

Be sure to perform the following procedure for operation check of the Stamp Unit.

- 1) Connect the Power Plug into the outlet.
- 2) Turn ON the main power switch.
- 3) Press "Finished Stamp" key.
 - [Scan and Send] or [Fax] > [Other Function] > [Finished Stamp]
- 4) Put an original in the Feeder, perform a send test, and check that a stamp is printed on the original.

NOTE: Send test method

- 1) Load paper to the Feeder.
- 2) Enter "1" for the destination and then send from [Scan and Send].
- 3) The paper in the feeder is fed and stamped.
- 4) Cancel the operation when the host machine enters the transmission waiting state.
- 5) The transmission error report is output.

Voice Operation Kit-C2

Points to Note when Installing

Refer to "Table of Options Combination" when installing this equipment before operation.

Table of Options Combination

	Voice Guidance Kit	Utility Tray	Copy Control Interface Kit	Serial Interface Kit	Card Reader
Voice Operation Kit	no	no	yes	yes	yes

yes: Available no: Unavailable

T-9-7

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



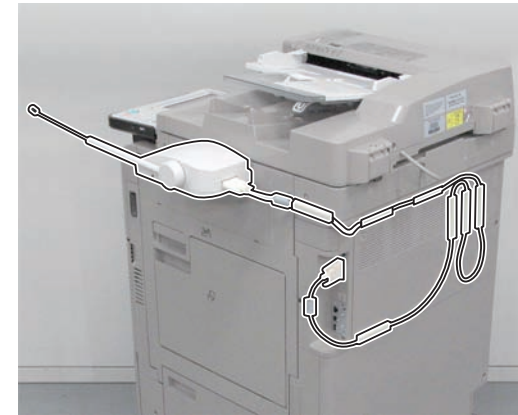
F-9-139

Check Items when Turning OFF the Main Power

Check that the main power is OFF.

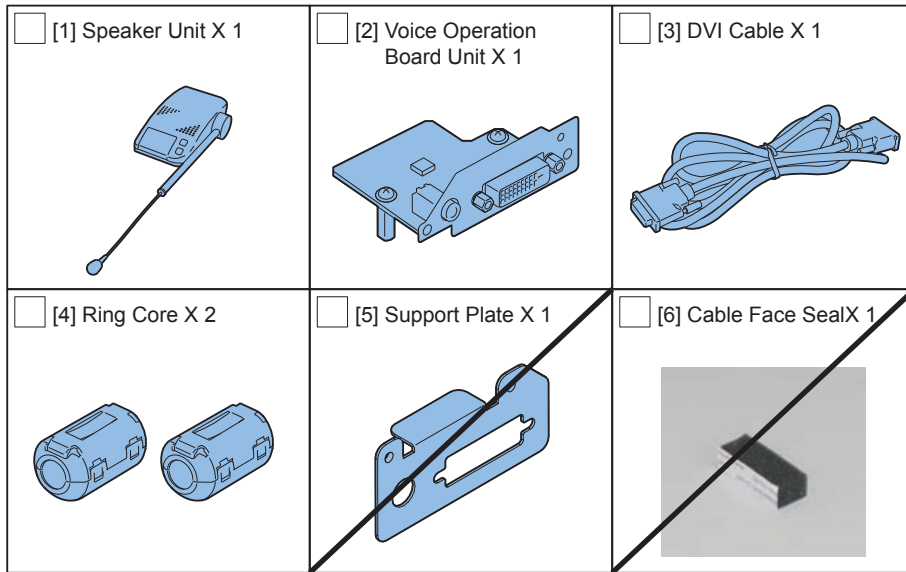
- 1) Turn OFF the main power switch.
- 2) Be sure that display in the Control Panel and the lamp of the main power supply are turned off, then disconnect the power plug.

Installation Outline Drawing

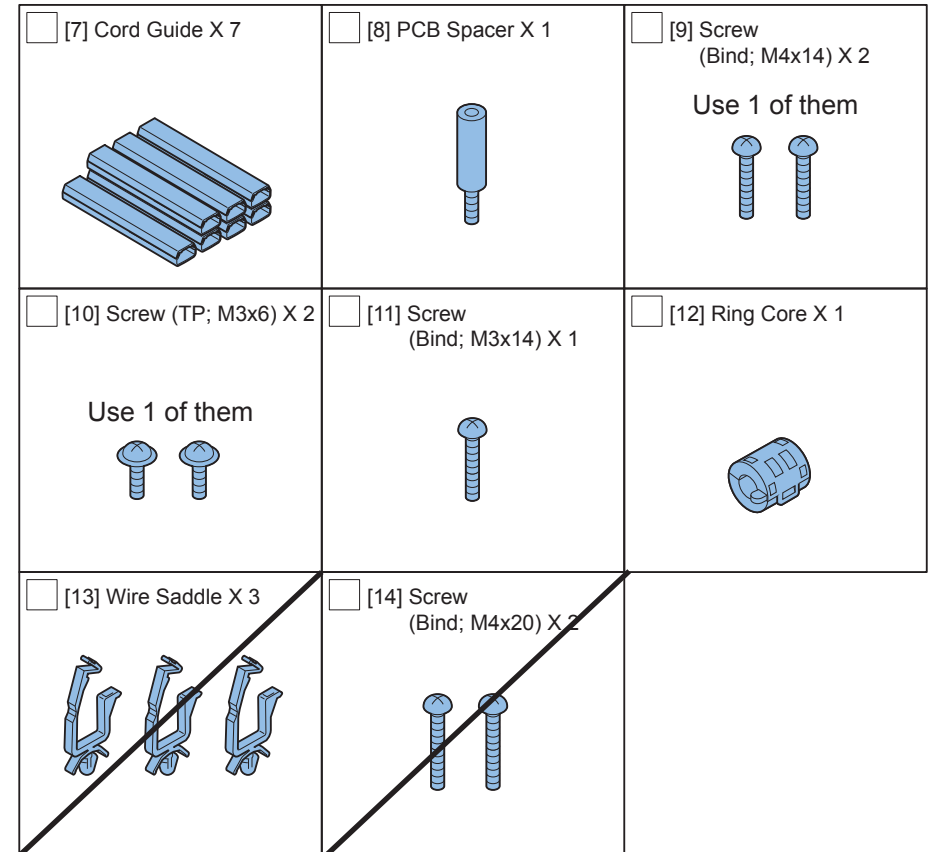


F-9-140

Checking the Contents



F-9-141



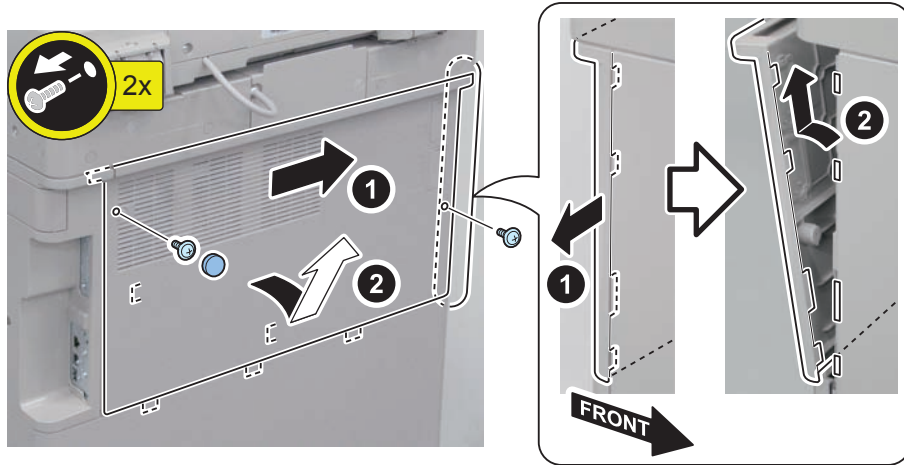
F-9-142

[12] : Use the Ring Core for the External Switch Cable which belongs to the user.

<Others>
Including guides

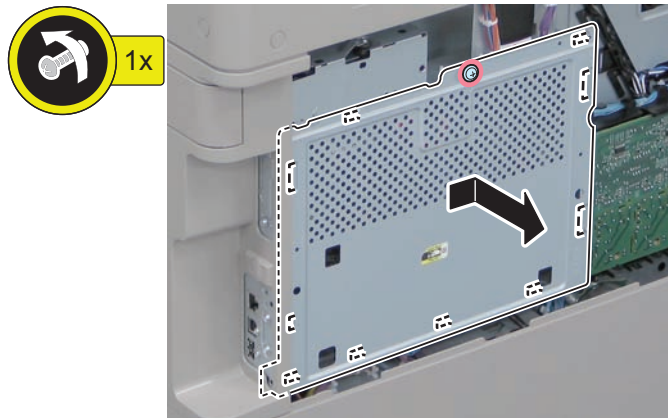
Installation Procedure

1)



F-9-143

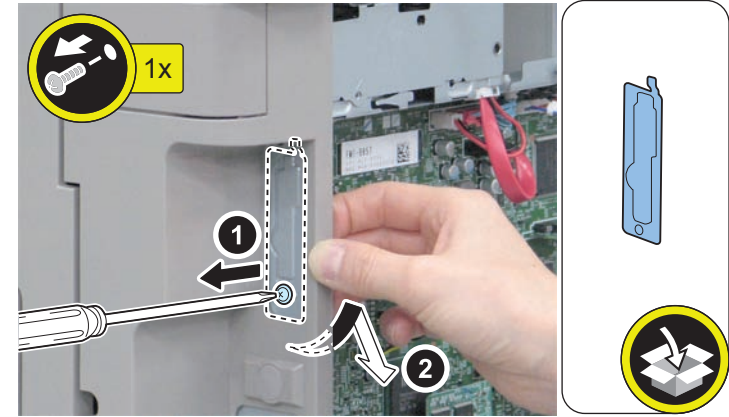
2)



F-9-144

3)

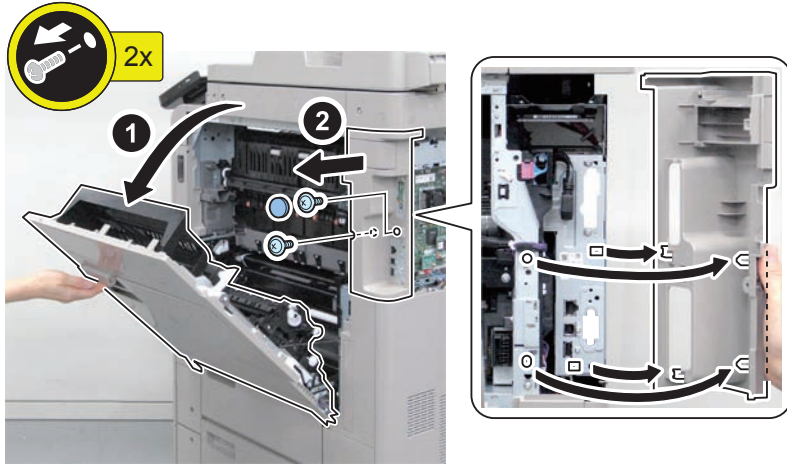
NOTE:
Remove the Face Plate while holding it as shown in the figure.



F-9-145

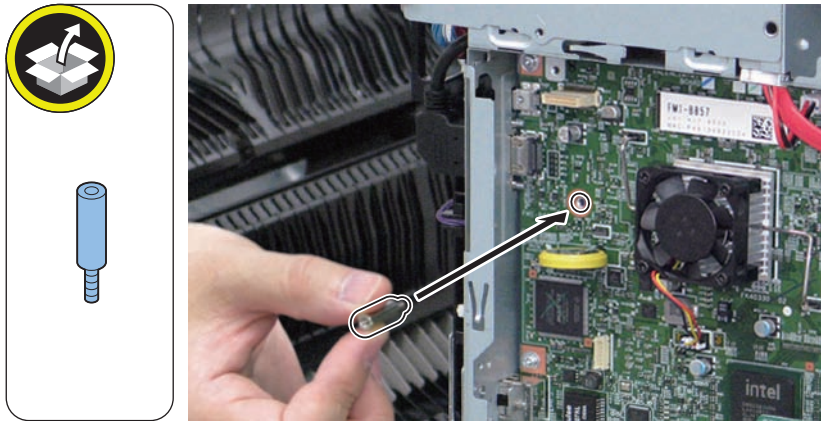
NOTE:
The removed screw will be used in step 7.

□
4)



F-9-146

□
5) Install the PCB Spacer.

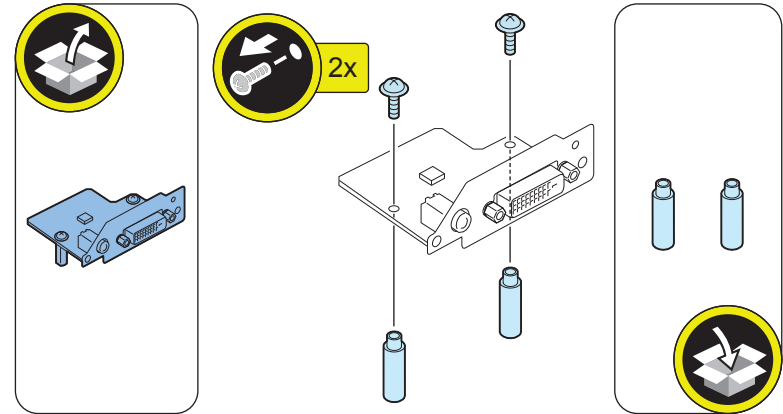


F-9-147

□

6) Remove the spacers and screws from the Voice Operation Board Unit.

- 2 Screws (The removed screws will be used in step 7.)
- 2 spacers (The removed spacers will not be used.)



F-9-148



7) Install the Voice Operation Board Unit while holding it as shown in the figure.

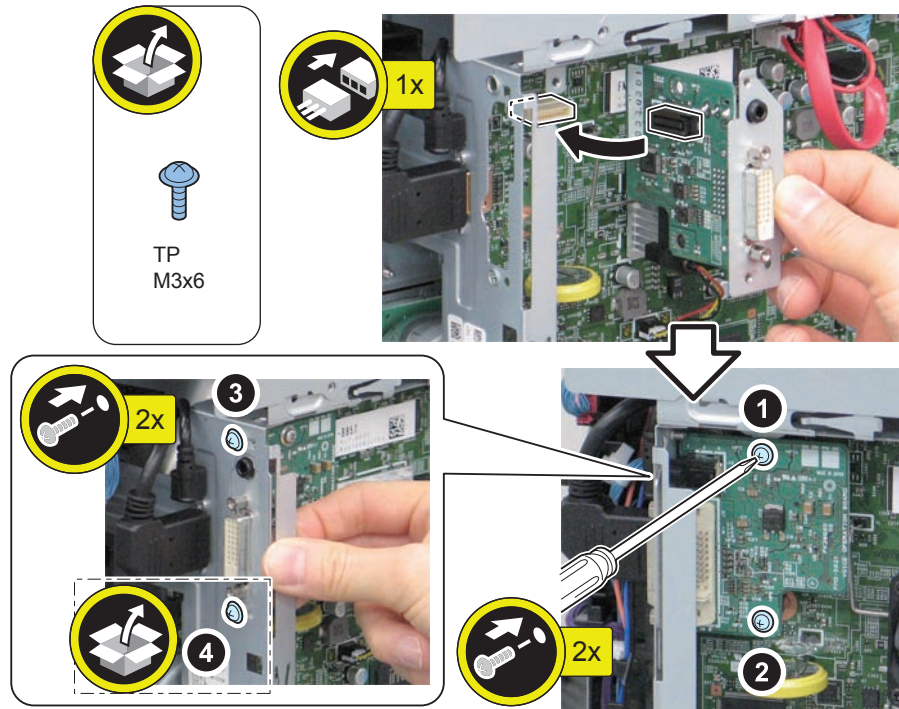
- 1 Connector
- 3 Screws (Use the 1 screw removed in step 3 and the 2 screws removed in step 6.)
- 1 Screw (TP; M3x6)

CAUTION:

Check that the connector is connected properly

NOTE:

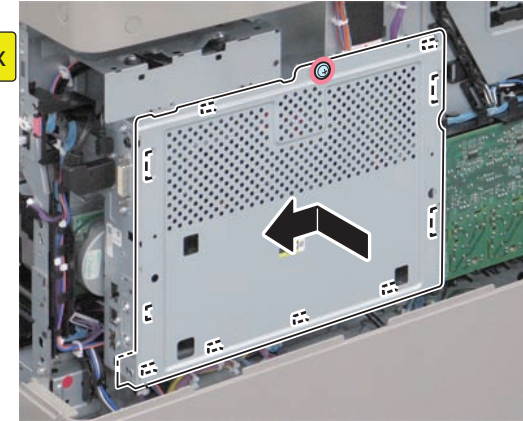
Install the screws in the order from (1) to (4).



F-9-149



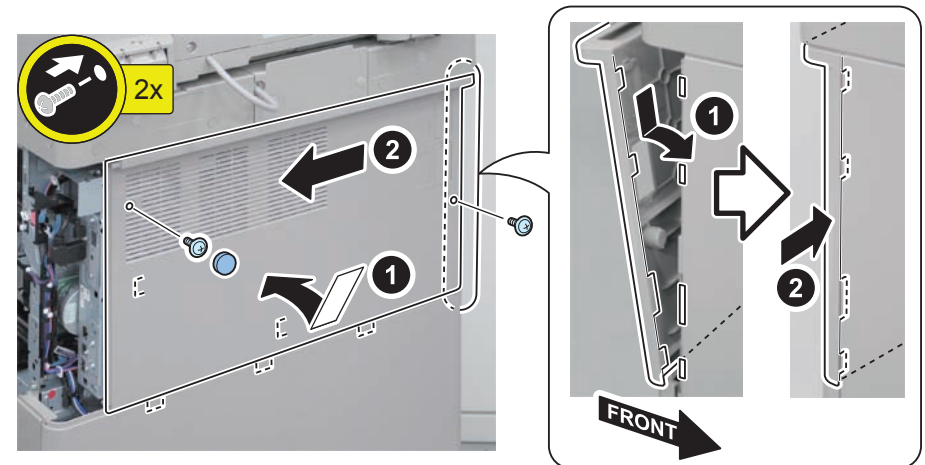
8)



F-9-150

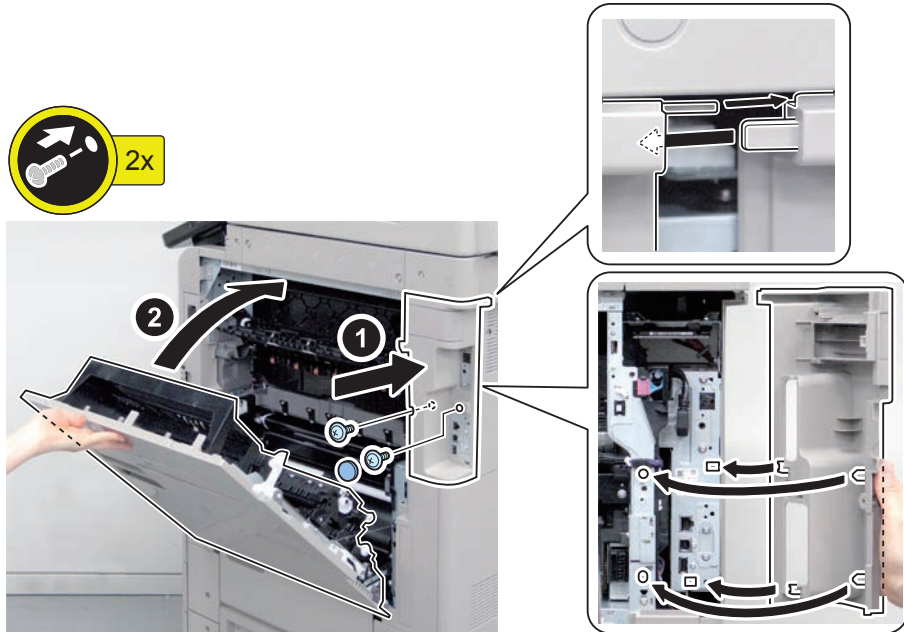


9)



F-9-151

□
10)



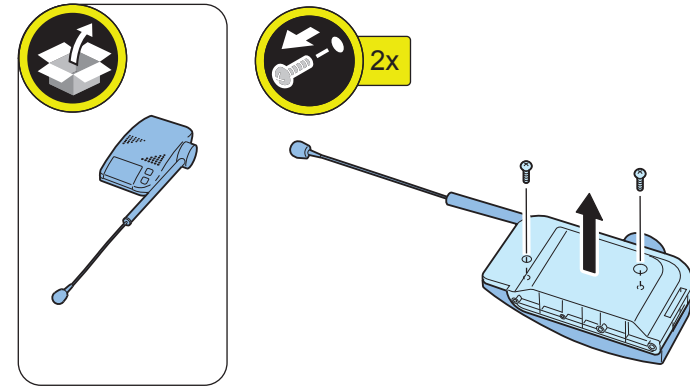
F-9-152

□
11) Remove the Face Seals from the Reader Right Cover. (The removed Face Seals will not be used.)



F-9-153

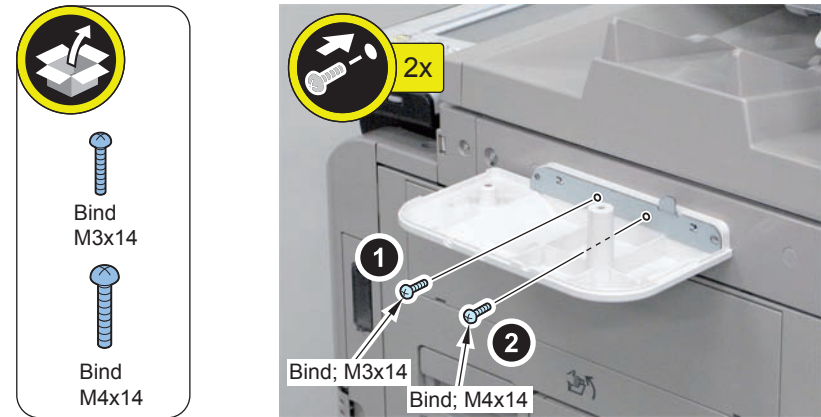
□
12) Remove the Speaker Unit (Lower) from the Speaker Unit.
• 2 Screws (The removed screws will be used in step 14.)



F-9-154

□
13) Install the Speaker Unit (Lower).
• 1 Screw (Binding; M3x14)
• 1 Screw (Binding; M4x14)

NOTE: Installing the screws
Install the screws in the order from (1) to (2).



F-9-155

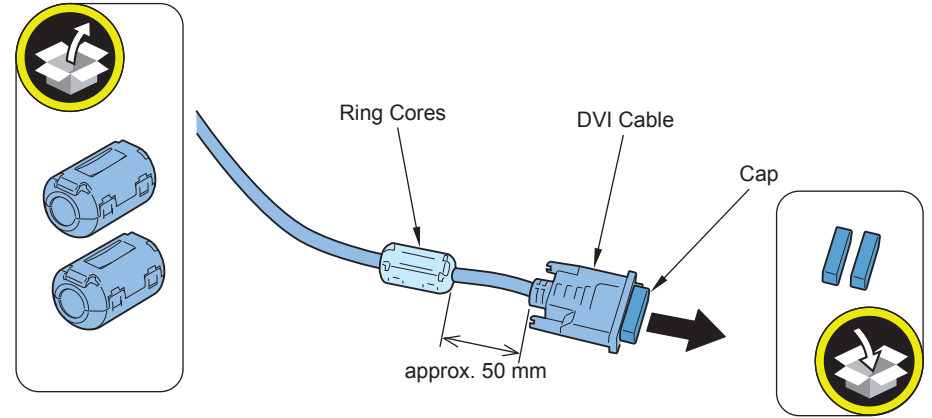
- 14) Install the Speaker Unit (Upper).
- 2 Screws (Use the screws removed in step 12.)

NOTE:
Install the Speaker Unit (Upper) while pressing it from the direction of the arrow.



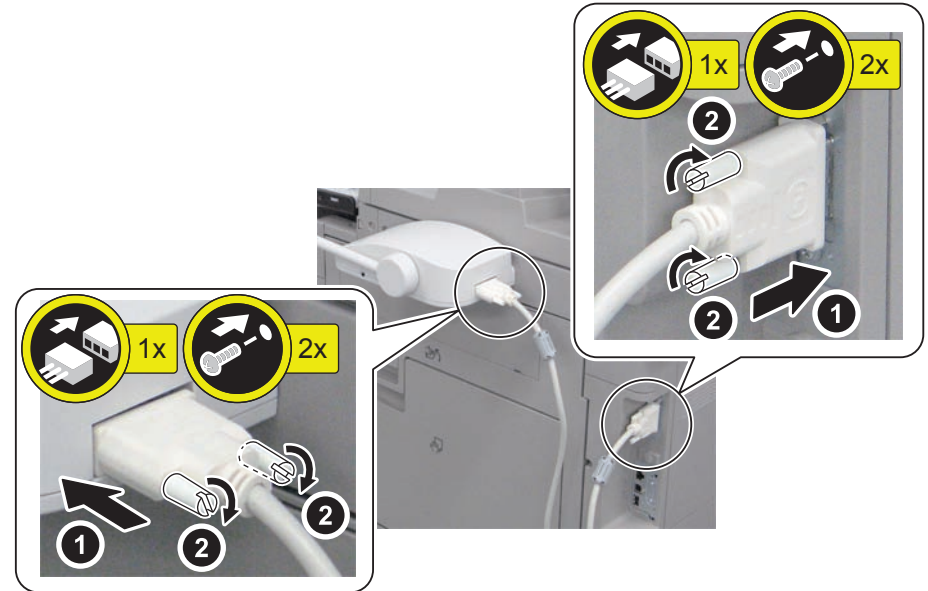
F-9-156

- 15) Install the Ring Cores to both ends of the DVI Cable, and remove the cap.



F-9-157

- 16) Connect both ends of the DVI Cable, and tighten the Fixation Screws.
- 2 Fixation Screws each

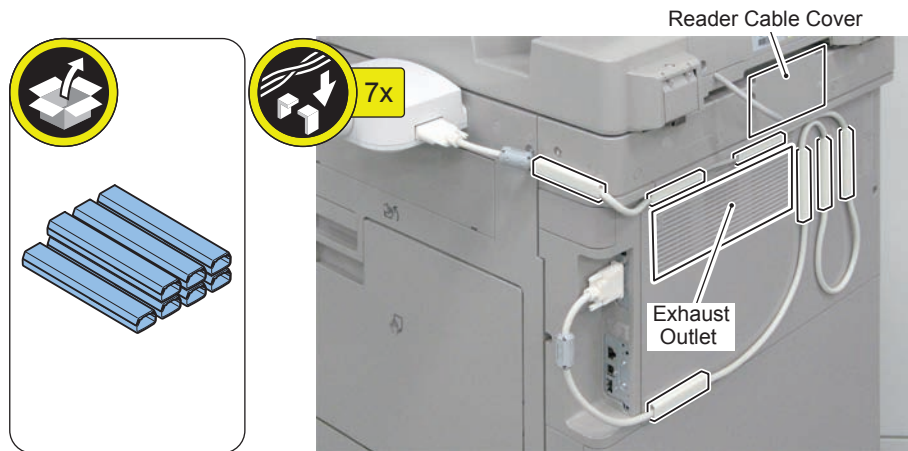


F-9-158

- 17) Remove the covers of the 7 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 18) Insert the DVI Cable through the Cord Guides, and install the 7 covers of the Cord Guides.

CAUTION:

- Do not cover the Exhaust Outlet with the Cord Guide.
- Do not affix a Cord Guide on the Reader Cable Cover.

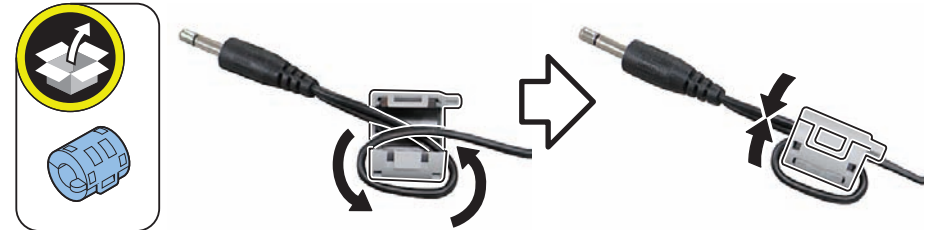


F-9-159

- 19) Putting the user's External Switch Cable around the Ring Core.

CAUTION:

Be sure to install the Ring Core as close to where the cable is connected as possible.



F-9-160

- 20) Insert the user's External Switch Cable into the terminal of the Voice Operation Board.



F-9-161

■ Routing the Cable (when installing this equipment and Copy Card Reader simultaneously)

1. Securing the Cable of the Voice Operation Kit



- 1) Remove the covers of the 7 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 2) Insert only the DVI Cable through the 7 Cord Guides, and install the 7 Cord Guide Covers.

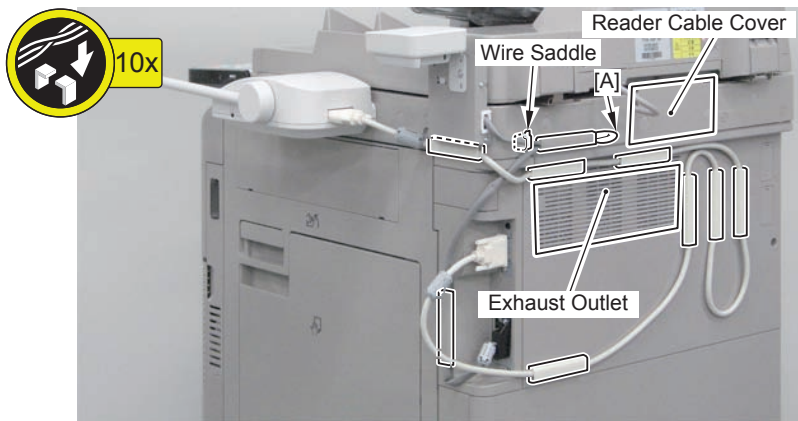
2. Securing the Cable of the Copy Card Reader



- 1) Remove the covers of the 2 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 2) Remove the Face Seal, and install the Wire Saddle. (included with the Copy Card Reader).
- 3) Fold the Card Reader Cable at the [A] part, insert only the Card Reader Cable through the 2 Cord Guides, and then secure it in place with the Wire Saddle.
- 4) Install the 2 Cord Guide Covers.

CAUTION:

- Do not cover the Exhaust Outlet with the Cord Guide.
- Do not affix a Cord Guide on the Reader Cable Cover.



F-9-162

● Checking after Installation

NOTE:

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) Connect the power plug of the host machine to the outlet.
- 2) Turn ON the main power switch.
- 3) Select Settings/Registration > Preferences > Accessibility > Voice Navigation Settings > Use Voice Navigation, and check that the setting is ON.
- 4) Select Settings/Registration > Preferences > Accessibility > Voice Navigation Settings > Voice Navigation at Startup, and check that "Select Mode at Startup" is set.
- 5) Select Settings/Registration > Preferences > Accessibility > Voice Navigation Settings, and check that "Tune Microphone" is displayed.
- 6) Turn OFF/ON the main power of the Host Machine.

● Operation Check

■ When Starting to Use



- 1) Press "Reset" key or the Voice Recognition button for more than 3 seconds.
- 2) In "Select the Voice Navigation type." on the Control Panel screen, select "Manual + Vocal Mode", "Vocal Mode" or "Manual Mode", and press OK.
- 3) Once the indication on the screen is framed in red, the "Voice Operation Kit" becomes enabled.

NOTE:

When "Manual Mode" is selected in "Select the Voice Navigation type.", nothing happens by pressing the Voice Recognition button.

■ When Stopping to Use



- 1) Press "Reset" key or the Voice Recognition button for more than 3 seconds.

USB Device Port-E4

Points to Note at Installation

- When installing the Inner Finisher and this equipment simultaneously, be sure to install this equipment first.
- If the Inner Finisher is installed, this equipment cannot be installed unless it is removed. For details of removal procedure, refer to the Service Manual.
- The USB Device Port must be installed beforehand to install the Card Reader (sales company's option).

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



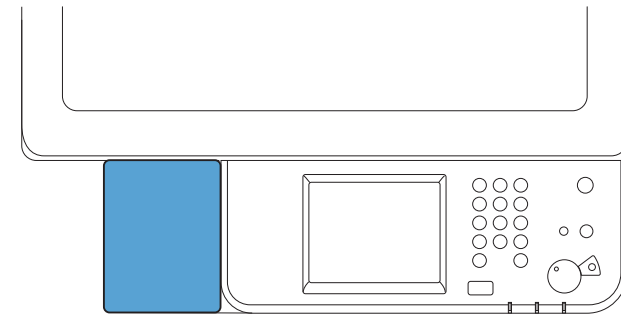
F-9-163

Check Item 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 Control Panel Display and the Main Power lamp are both turned OFF, and then disconnect the power plug

Installation Outline Drawing

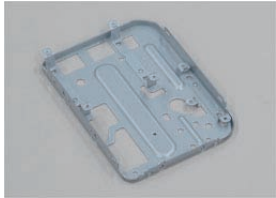

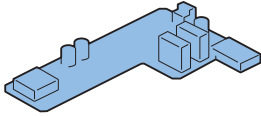
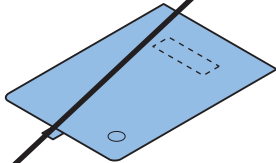
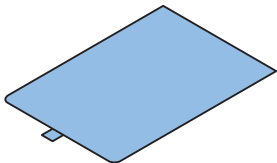
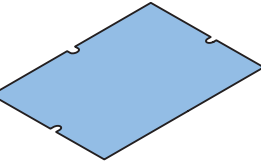
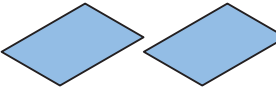
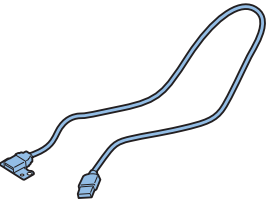

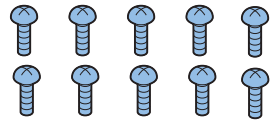




F-9-164



Checking the Contents

Be sure to use A, G, H and J with this product.
Others are the parts for other products.

A





<input type="checkbox"/> [1] DP Base X 1 	<input type="checkbox"/> [2] DP Upper Cover Unit X 1 	<input type="checkbox"/> [3] DP Board X 1 
<input type="checkbox"/> [4] DP Sheet (for Japan) X 1 	<input type="checkbox"/> [5] DP Sheet (for Europe) X 1 	<input type="checkbox"/> [6] DP Fireproof Sheet X 1 
<input type="checkbox"/> [7] Cusion X 2 	<input type="checkbox"/> [8] DP USB Cable X 1 	<input type="checkbox"/> [9] Screw (TP Round End; M3×6) X 10 Use 4 of them 
<input type="checkbox"/> [10] Screw (Binding; M4×6) X 10 	<input type="checkbox"/> [11] Screw (RS Tightening Round End ; M3×8.5) X 1 	<input type="checkbox"/> [12] Wire Saddle X 1 

F-9-165

<input type="checkbox"/> [13] Wire Saddle X 1 	<input type="checkbox"/> [14] Edge Saddle X 1 
--	--


G

F-9-166

<input type="checkbox"/> [1] DP Mounting Plate X 1 	<input type="checkbox"/> [2] DP Support Plate X 1 	<input type="checkbox"/> [3] DP Support Plate Cover X 1 
<input type="checkbox"/> [4] DP Cable Guide Unit X 1 		

H

F-9-167

<input type="checkbox"/> [1] DP Bottom Cover B X 1 

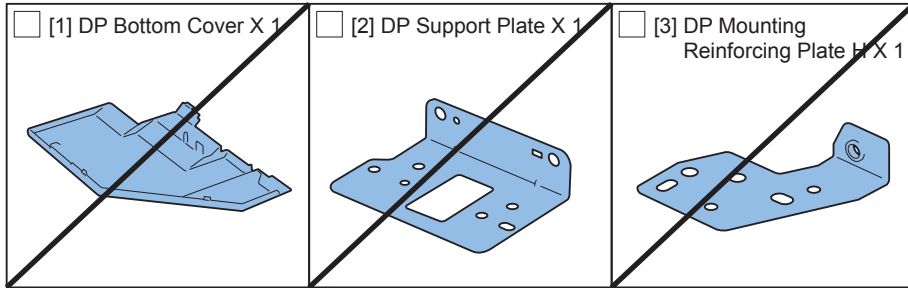
F-9-168

J



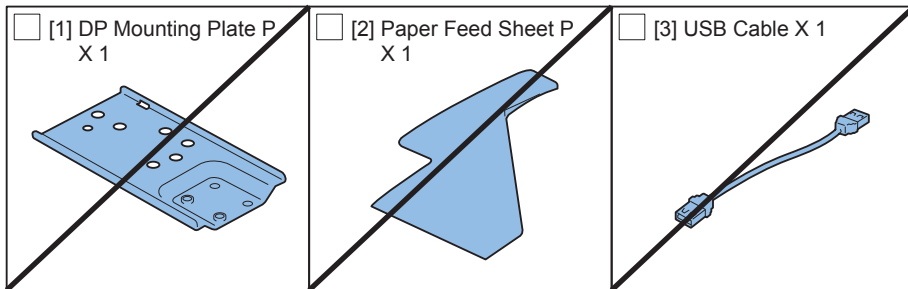
F-9-169

B



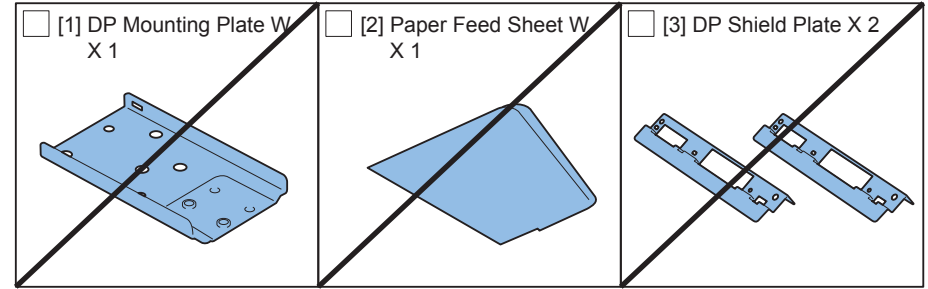
F-9-170

C



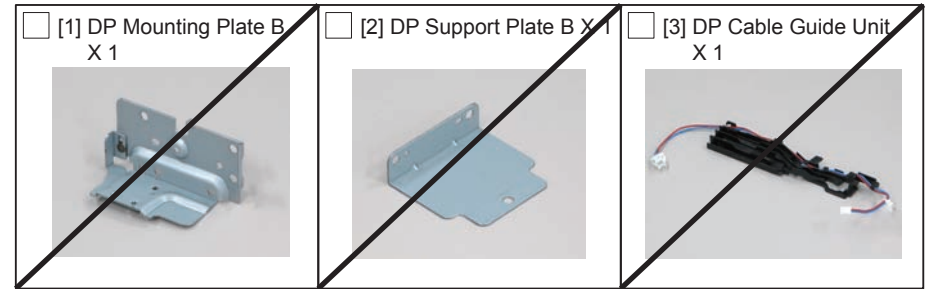
F-9-171

D



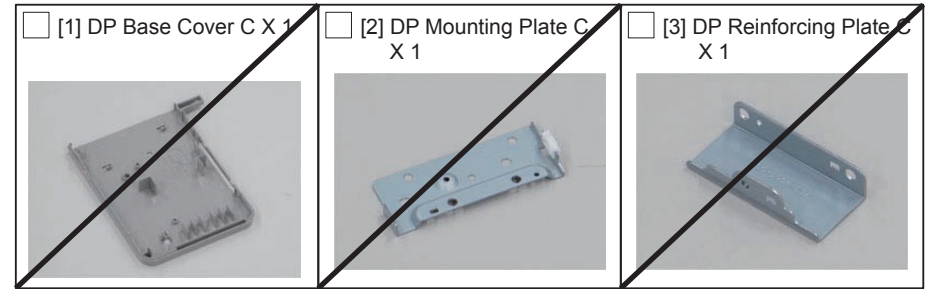
F-9-172

E



F-9-173

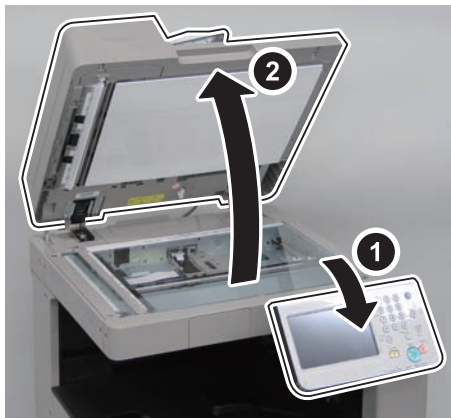
F



F-9-174

Installation Procedure

-
- 1) Move the Control Panel in the direction of the arrow, and open the DADF or the Copyboard Cover.



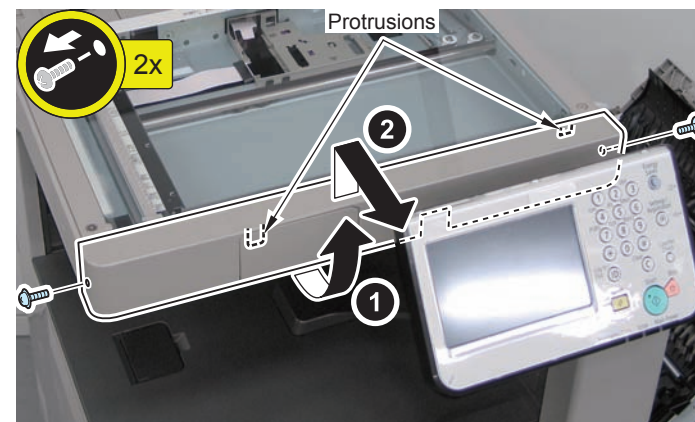
F-9-175

-
- 2) Open the Right Door.



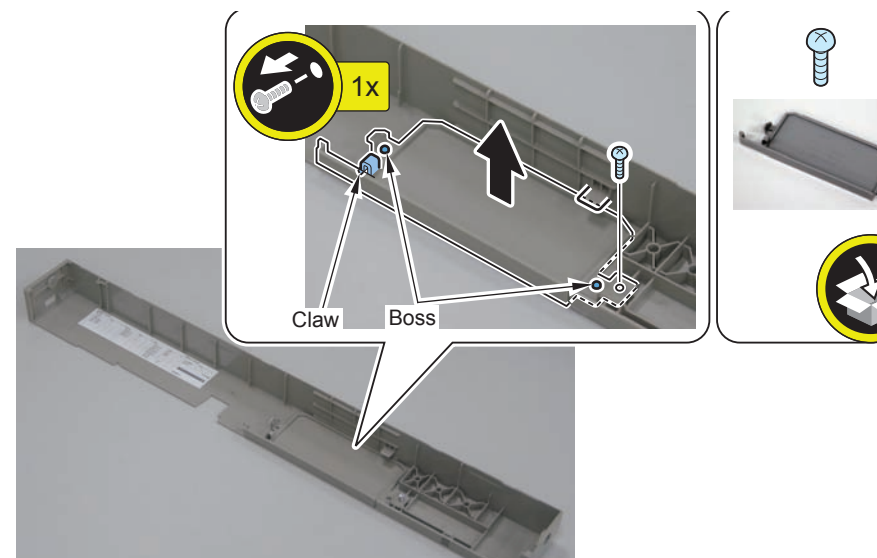
F-9-176

-
- 3) Remove the Reader Front Cover.
- 2 Screws
 - 2 Protrusions



F-9-177

-
- 4) Remove the Reader Front Sub Cover. (Removed Reader Front Sub Cover will not be used.)
- 1 Screw (Removed screw will not be used.)
 - 1 Claw
 - 2 Bosses

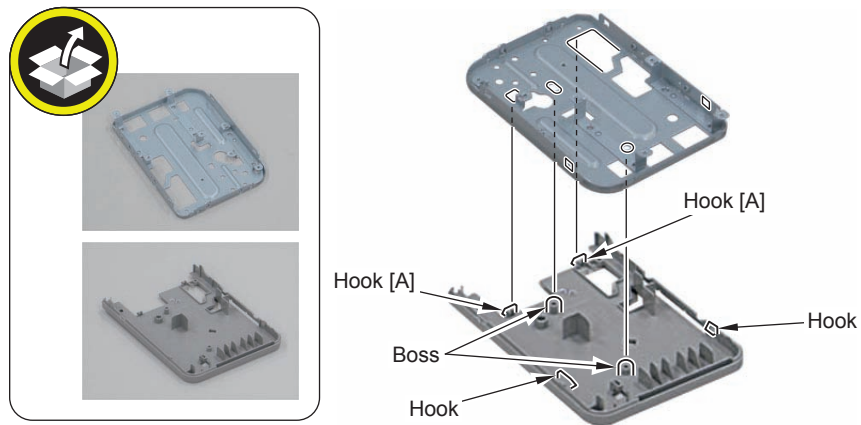


□
5) Install the DP Base Cover to the DP Base.

- 2 Bosses
- 4 Hooks

NOTE:

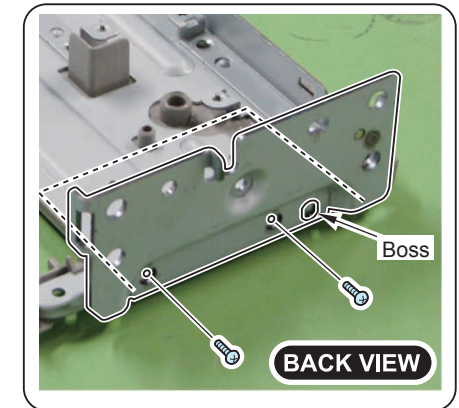
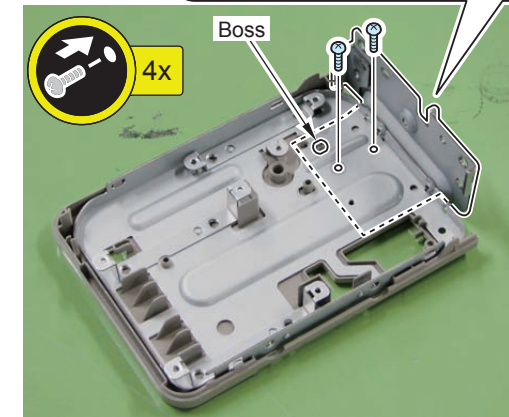
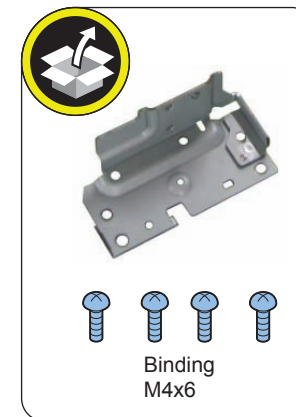
Align the 2 hooks [A] and the bosses (in the DP Base Cover) with the corresponding holes for the hooks and long holes for the bosses (in the DP Base), and push the DP base in to the DP Base Cover. Installation becomes difficult if the bosses and their positioning holes are aligned first.



F-9-179

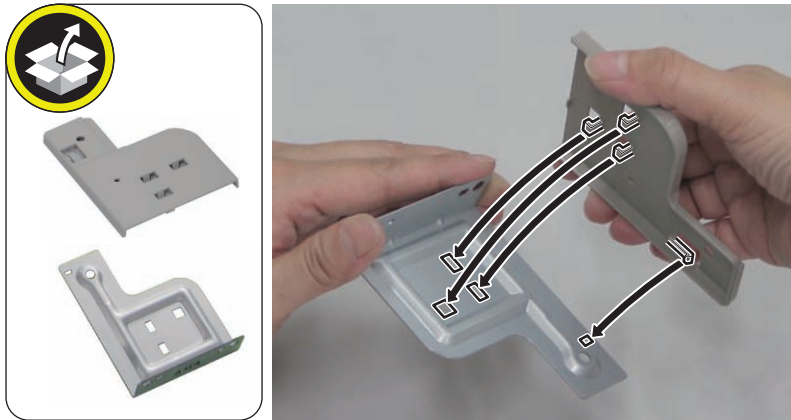
□
6) Install the DP Mounting Plate to the DP Lower Cover Unit.

- 2 Bosses
- 4 Screws (Binding; M4x6)



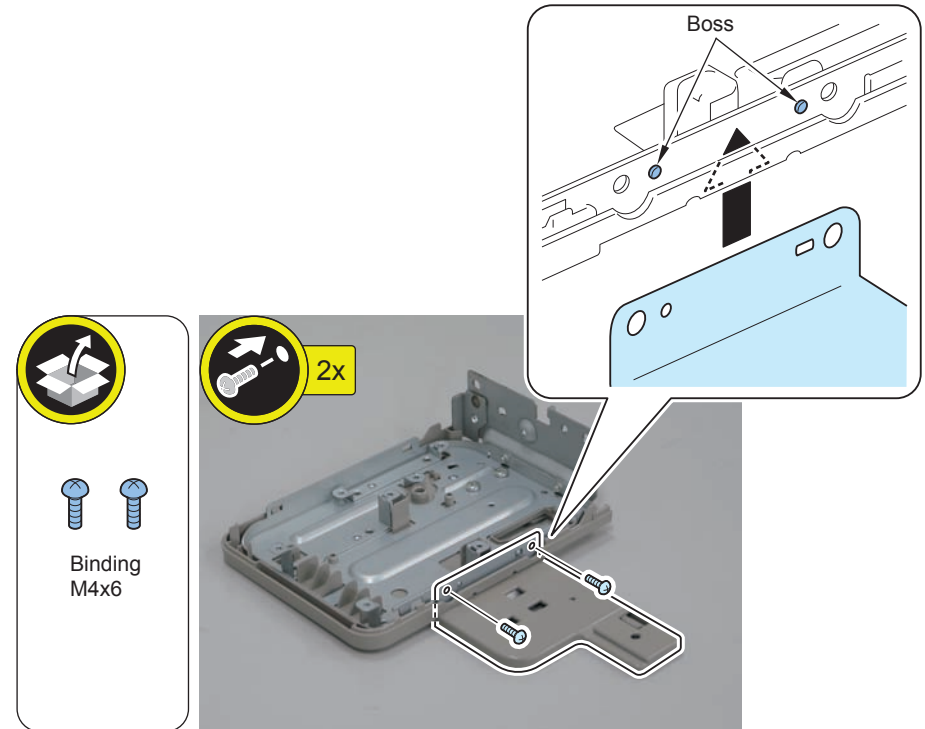
F-9-180

- 7) Install the DP Support Plate Cover to the DP Support Plate.
- 4 Claws



F-9-181

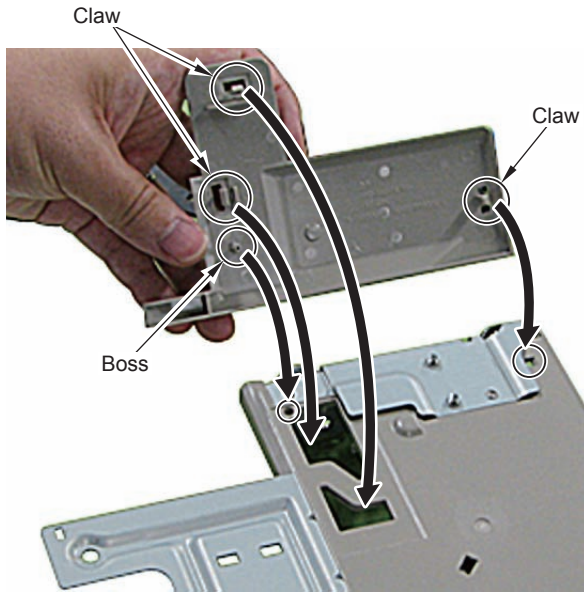
- 8) Install the DP Support Plate Unit to the DP Lower Cover Unit.
- 2 Bosses
- 2 Screws (Binding; M4x6)



F-9-182

9) Install the DP Bottom Cover B.

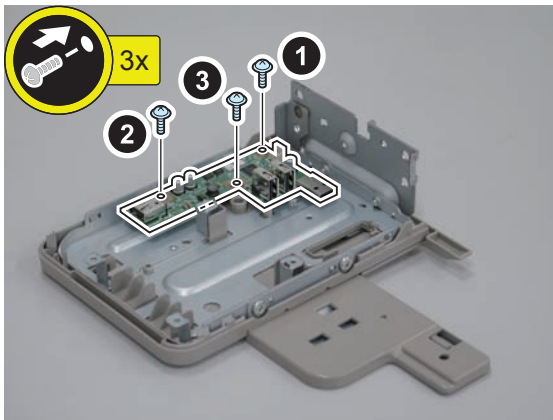
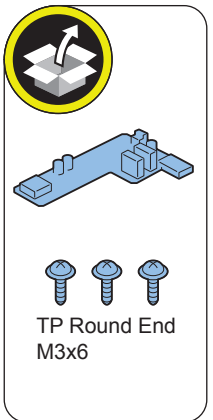
- 3 Claws
- 1 Boss



F-9-183

10) Install the DP PCB.

- 3 Screws (TP; M3x6)

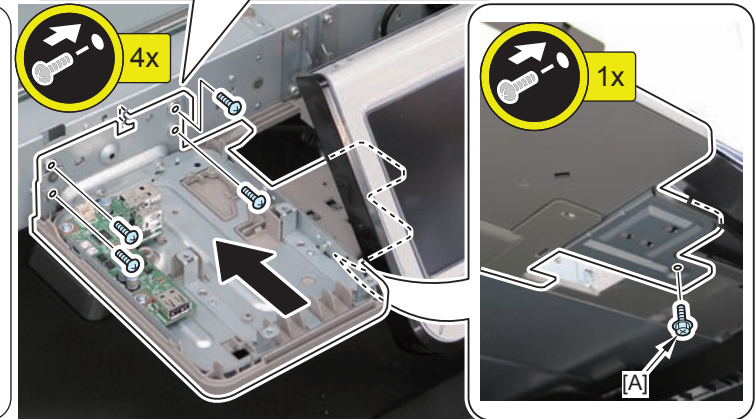
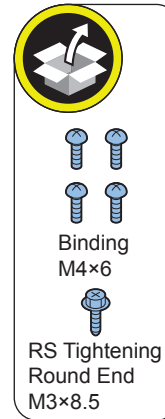
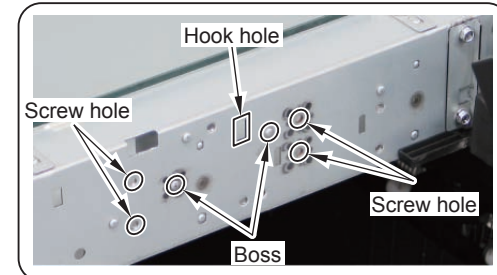


F-9-184

11) Install the DP Lower Cover Unit.

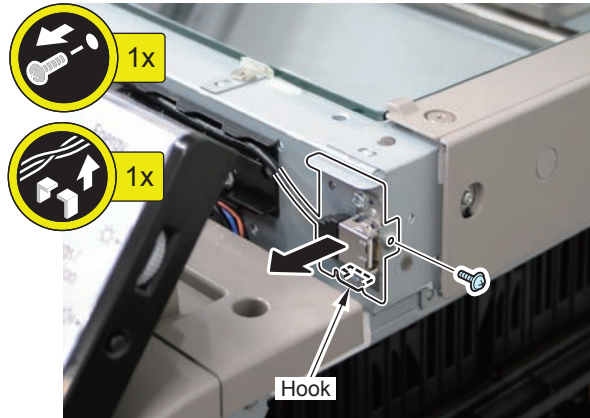
- 1 Hook
- 2 Bosses
- 1 Screw [A] (RS Tightening Round End; M3x8.5)
- 4 Screws (Binding; M4x6)

NOTE:
Use a stubby screwdriver to tighten the screw [A].



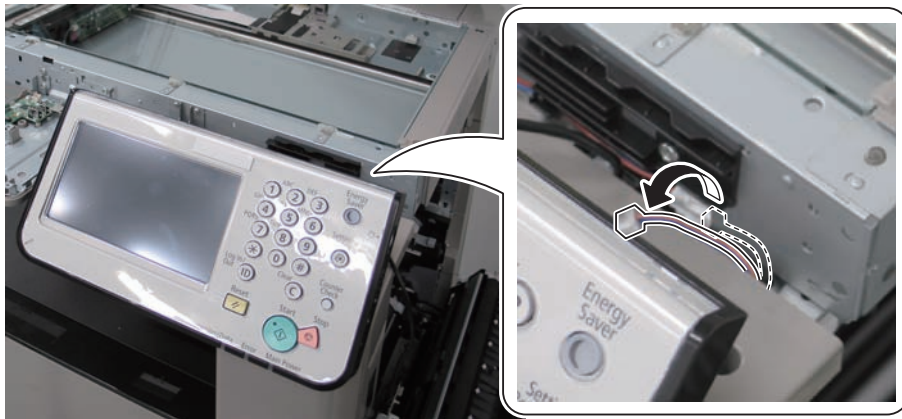
F-9-185

- 12) Remove the screw to remove the USB Cable.
- 1 Screw (The removed screw will be used in step 20.)
 - 1 Hook



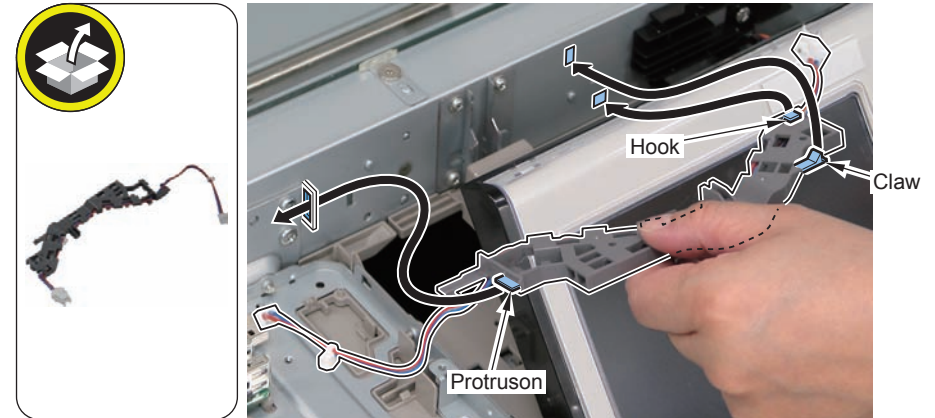
F-9-186

- 13) Pull out the Power Supply Cable of the Control Panel.



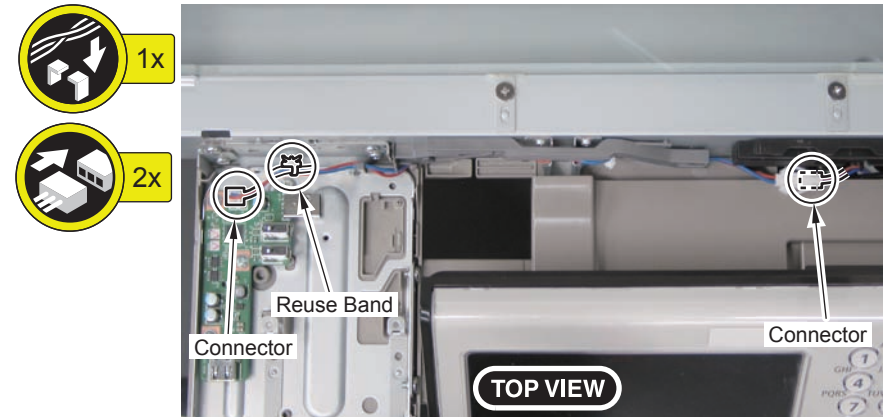
F-9-187

- 14) Install the DP Harness Guide Unit in the direction of the arrow.
- 1 Protrusion
 - 1 Hook
 - 1 Claw



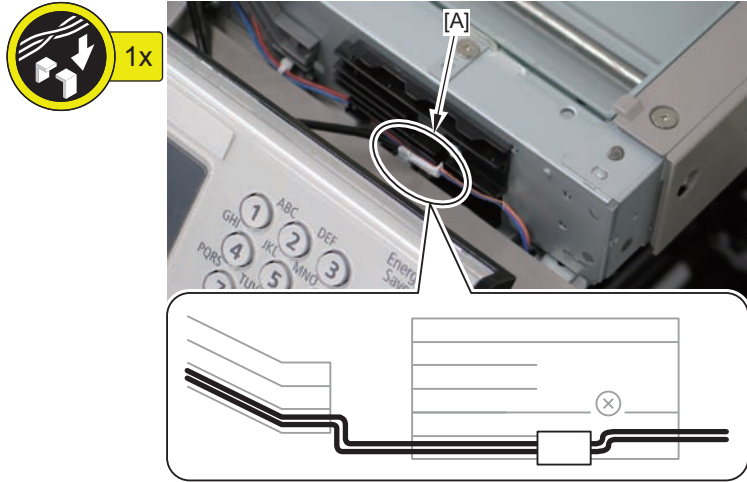
F-9-188

- 15) Connect the 2 connectors.
- 1 Reuse Band



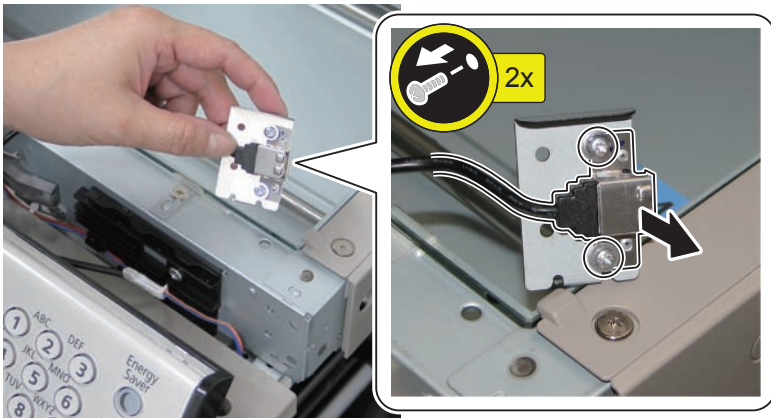
F-9-189

- 16) Route the Power Supply Cable and secure the connector with the guide [A].



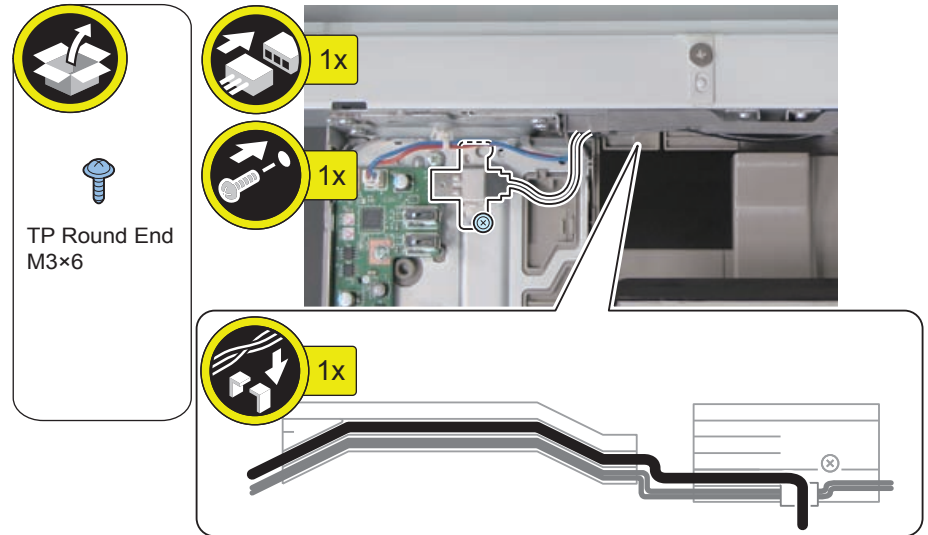
F-9-190

- 17) Remove the USB Mounting Plate (Removed USB Mounting Plate will be used in step 19).
- 2 Screws (Removed screws will be used in step 19.)



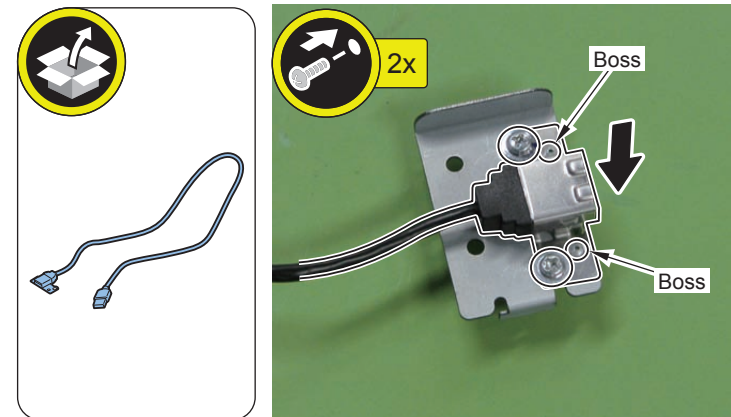
F-9-191

- 18) Route the USB Cable, which was disconnected in step 12, as shown in the figure, and connect it to the DP Board.
- 1 Screw (TP; M3x6)
 - Harness Guide



F-9-192

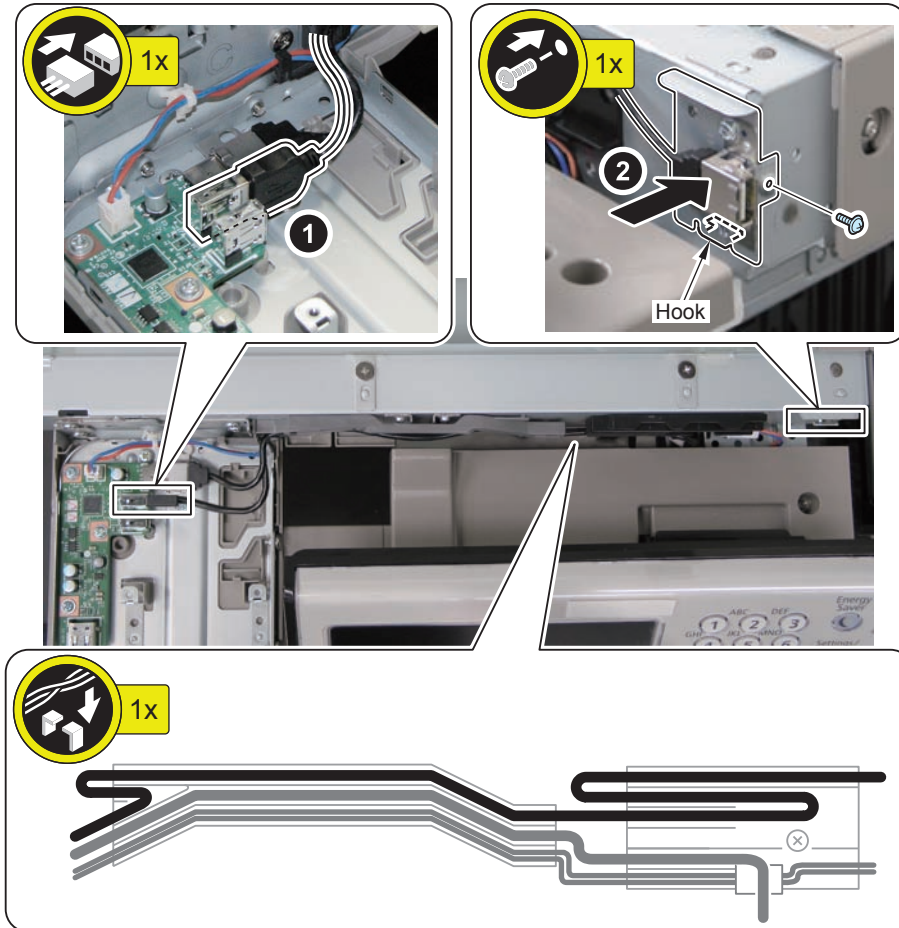
- 19) Connect the DP USB Cable which is included in the package to the USB Mounting Plate removed in step 17.
- 2 Bosses
 - 2 Screws (Use the screws removed in step 17.)



F-9-193

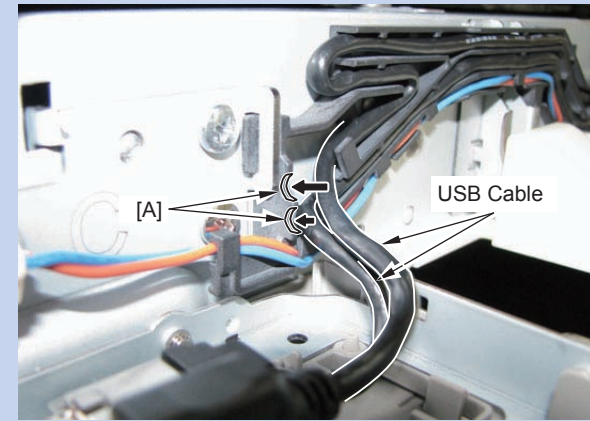
□
20) Connect the DP USB Cable mentioned in step 19 by routing it along the Harness Guide.

- 1 Hook
- 1 Screw (Use the screw removed in step 12.)



F-9-194

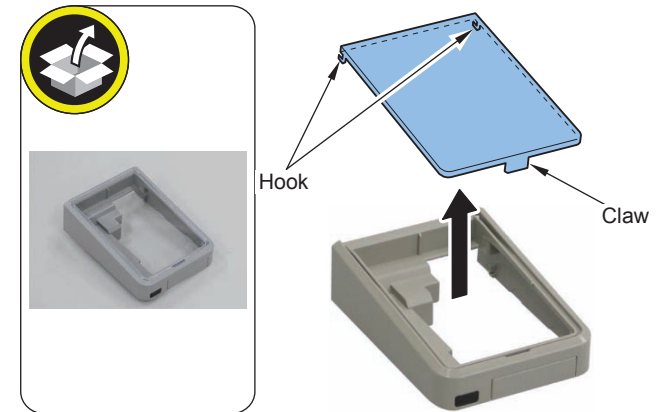
NOTE:
Route the USB Cable along the groove of the guide [A].



F-9-195

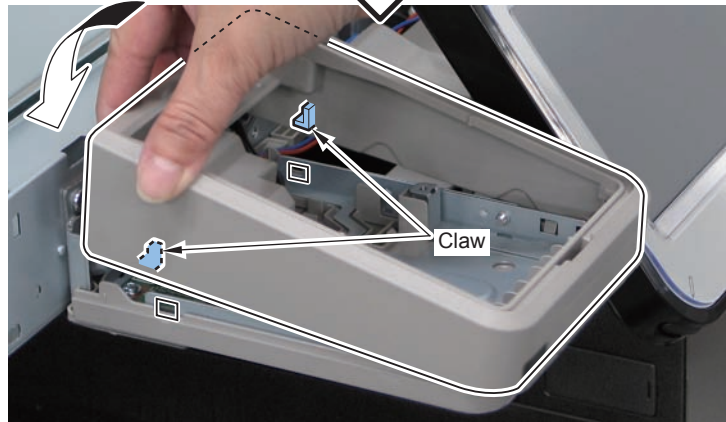
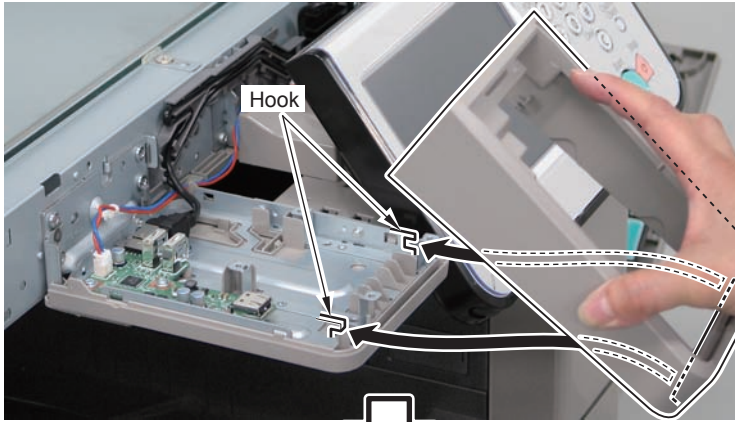
□
21) Remove the Transparent Cover using a flat-blade screwdriver.

- 1 Claw
- 2 Hooks



F-9-196

- 22) Install the DP Upper Cover in the direction of the arrow.
- 1 Protrusion
- 2 Hooks
- 2 Claws



F-9-197

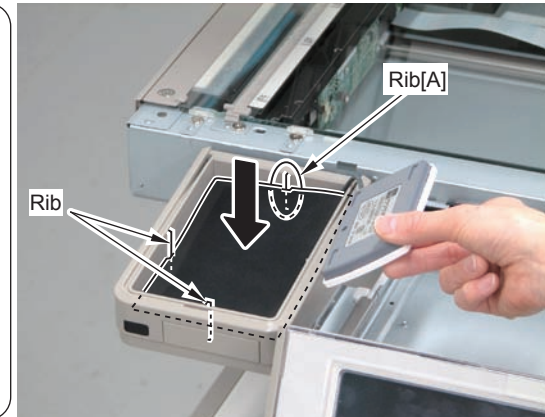
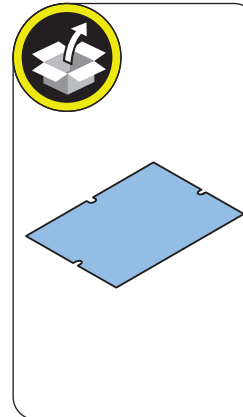
- 23) Install the Card Reader, and store the cable as shown in the figure.

NOTE:
Store the cable in place so that the Transparent Cover is securely fitted in step 28.



F-9-198

- 24) Remove the release sheet of the DP Fireproof Sheet, and affix the sheet by aligning it the 3 ribs and pushing it against the Rib [A].

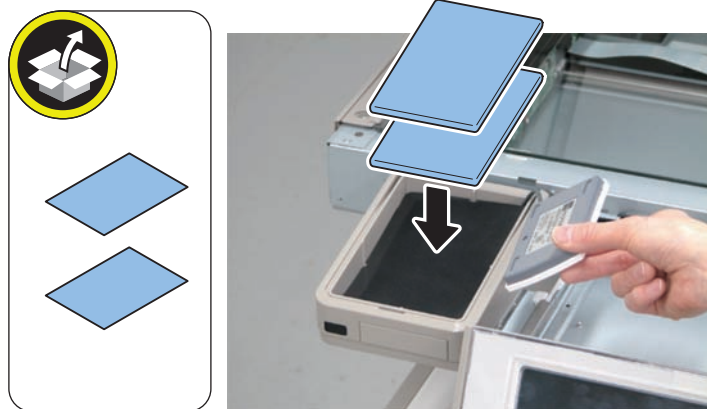


F-9-199

- 25) Place the cushions over the DP Fireproof Sheet.

NOTE:

Be sure to adjust the number of cushions (1 or 2) according to how the cable of the Card Reader is stored.



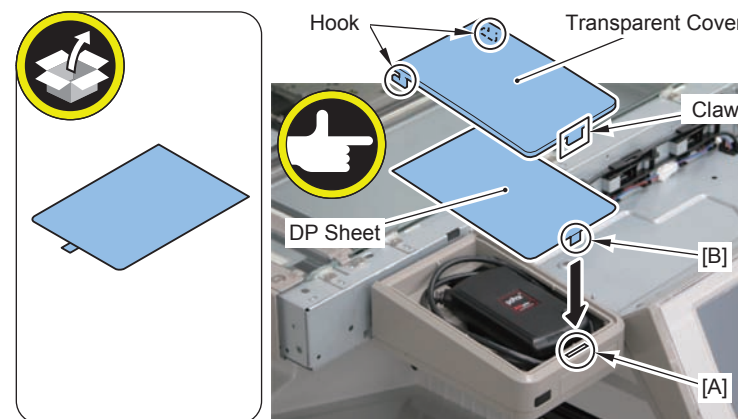
F-9-200

- 26) Place the Card Reader, and install the DP Sheet (for Europe) and the Transparent Cover.

- 2 Hooks
- 1 Claw

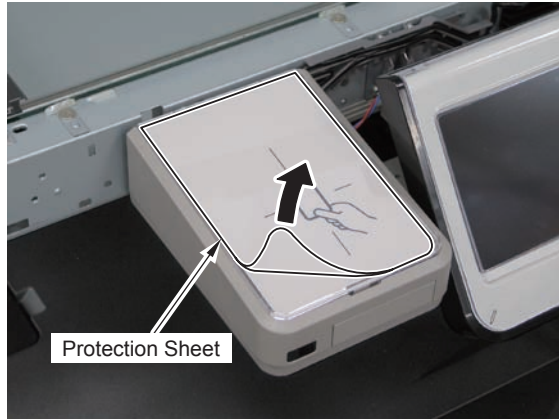
NOTE:

- Insert the DP Sheet (for Europe) to the [A] area with the illustration side facing up and by inserting bending the bent bar code area [B] and the claw.
- Be sure that the Transparent Cover is installed properly.



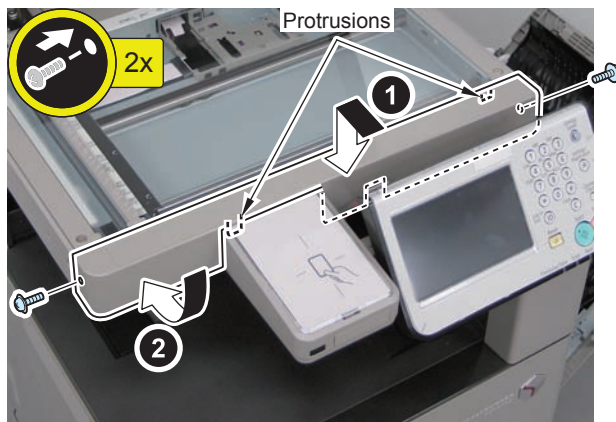
F-9-201

- 27) Remove the Protection Sheet on the Transparent Cover.



F-9-202

- 28) Return the Reader Front Cover to its original position.
 - 2 Protrusion
 - 2 Screws



F-9-203

- 29) Close the Right Door.
- 30) Return the Control Panel to its original position and close the DADF or the Copyboard cover.



F-9-204

- 31) Connect the power plug of the host machine to the outlet.
- 32) Turn ON the main power switch.

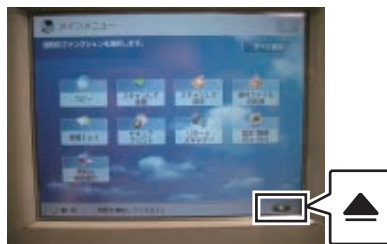
Operation Check

NOTE:

- Connect the memory media to the USB Port, and perform the operation check.
- When [System Manager Information Settings] is set, it is required to log in as a system manager in accordance with instructions from the user administrator.

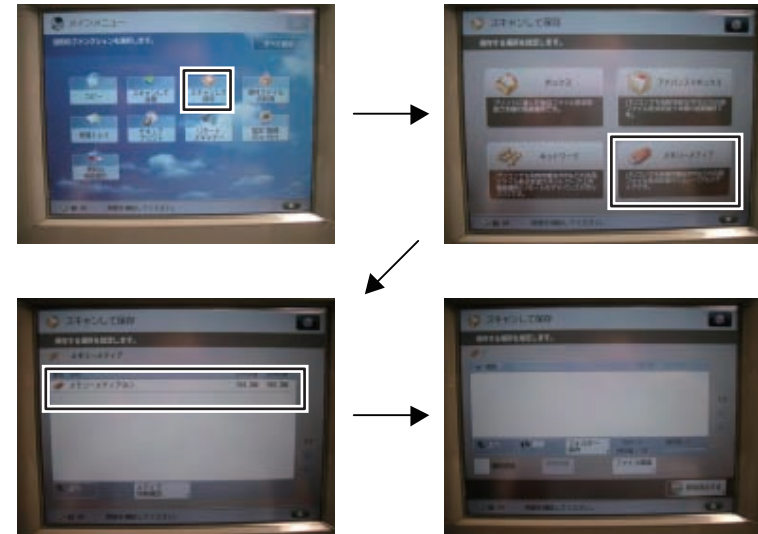
Writing Check

- 1) Check that "Memory Media" is set to ON in [Settings/Registration] > [Preferences] > [Display Settings] > [Store Location Display Settings]. When it is set to OFF, set it to ON, and execute [Settings/Registration] > [Apply Set. Chng.] according to the display.
- 2) Set [Settings/Registration] > [Function Settings] > [Store/Access Files] > [Memory Media Settings] > [Use Scan/Print Functions] to ON.
- 3) Execute [Settings/Registration] > [Apply Set. Chng.] according to the display.
- 4) Mount the Memory Media to the Multimedia Card Reader/Writer. (Check that the Mount Mark is indicated in the bottom right.)



F-9-205

- 5) Make the following selection:[Scan and Store] > [Memory Media] > [Memory Media (A)]



F-9-206

- 6) Set originals to DADF (or Copyboard Cover), and press the [Scan] button. Then, press the Start button on the Control Panel.



F-9-207

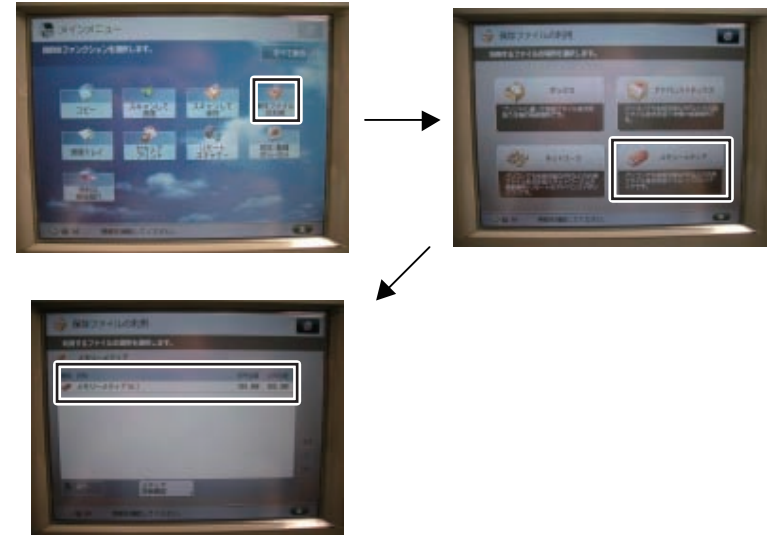
- 7) After scanning of the original is completed, press [Start Storing]. Confirm that data is stored in the media and press [Main Menu] on the Control Panel.



F-9-208

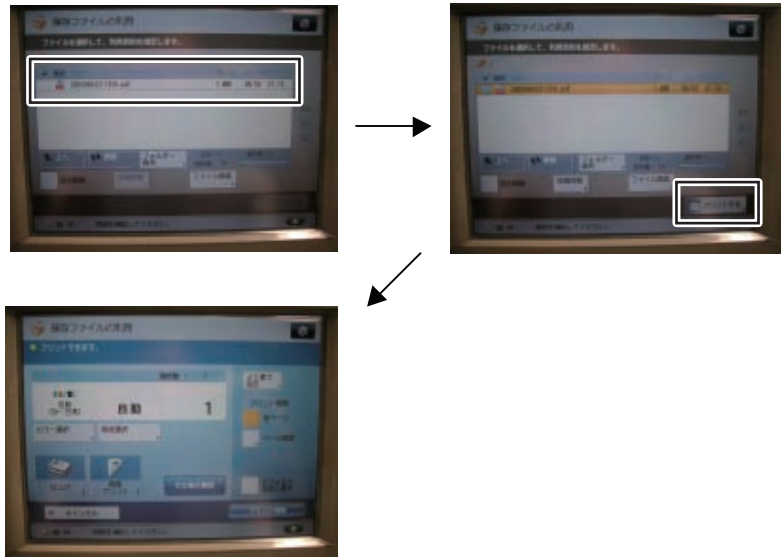
■ Reading Check

- 1) Make the following selection from Main Menu: [Access Stored Files] > [Memory Media] > [Memory Media(A)]



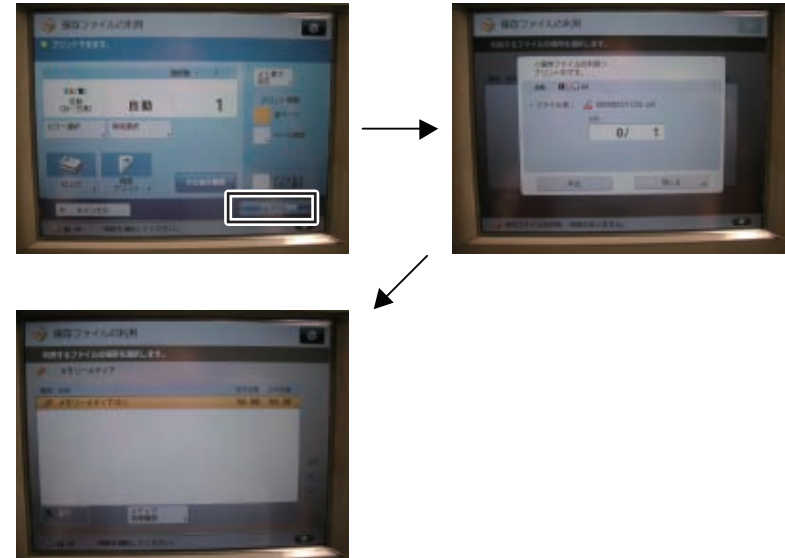
F-9-209

- 2) Select the files stored in step 4, step 5, step 6 of "Writing Check" and then press the [Print] button,



F-9-210

- 3) Press the [Start Printing] button, and print the file. Then check that the file is printed correctly.



F-9-211

- 4) Press the [Main Menu] button on the Control Panel.

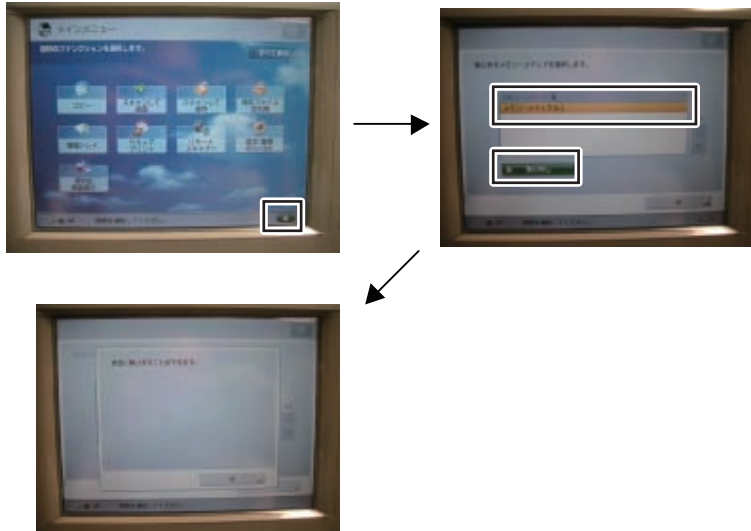


F-9-212

Memory Media Removal



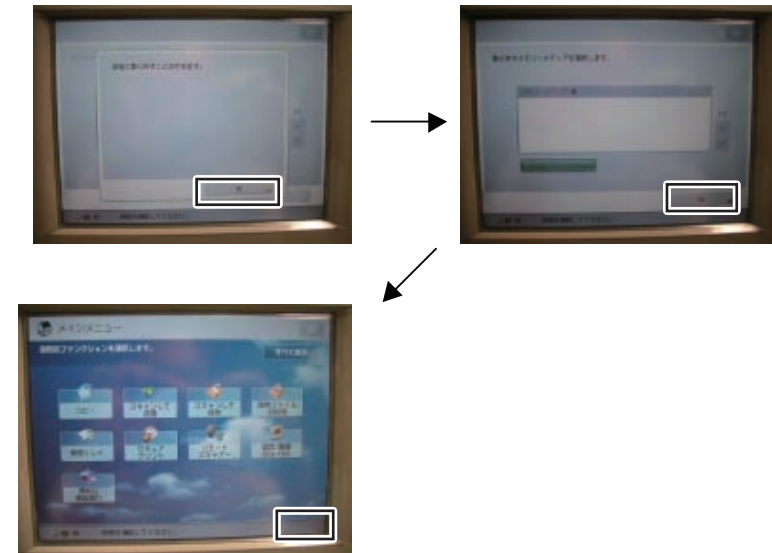
- 1) Press the [Mount Mark] in the bottom right. Then, select the memory media to be removed, and press the [Remove] button.



F-9-213



- 2) Press the [OK] button. Then, check that the Mount Mark is not indicated in the bottom right on the Main Menu screen.



F-9-214

Voice Guidance Kit-F2 / Voice Guidance Connection Kit for iR-ADV C3300 series

Points to Note when Installing

CAUTION:

Voice Guidance Board "Voice Guidance Board for iR-ADV C3300 series" is required to install this equipment.

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-215

- Refer to "Table of Options Combination" when installing this equipment before operation.

Table of Options Combination

	Utility Tray	Voice Operation Kit	Serial Interface Kit	Copy Control Interface Kit	Copy Card Reader
Voice Guidance Kit	no	no	yes	yes	yes

yes: Available no: Unavailable

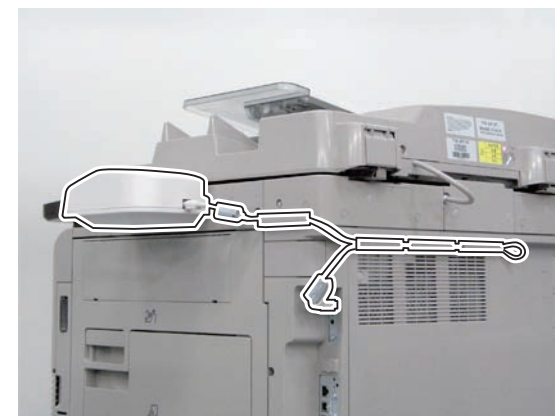
T-9-8

Check Items when Turning OFF the Main Power

Check that the main power is OFF.

- Turn OFF the main power switch.
- 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-9-216

Checking the Contents

Voice Guidance Kit-F2

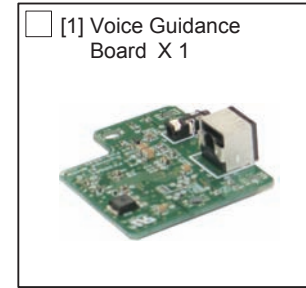
<input type="checkbox"/> [1] Speaker Unit (Upper) X 1 	<input type="checkbox"/> [2] Speaker Unit (Lower) X 1 	<input type="checkbox"/> [3] Voice Guidance Board Unit X 1
<input type="checkbox"/> [4] Speaker Cable X 1 	<input type="checkbox"/> [5] Cord Guide X 7 Use 4 of them 	<input type="checkbox"/> [6] Ring Core X 2
<input type="checkbox"/> [7] Screw (Binding; M3x16) X 1 	<input type="checkbox"/> [8] Screw (Binding; M4x6) X 1 	<input type="checkbox"/> [9] Screw (TP; M3x6) X 4 Use 1 of them
<input type="checkbox"/> [10] Screw (Binding; M4x16) X 2 Use 1 of them 	<input type="checkbox"/> [11] Voice Guidance Board Support Plate X 1 	<input type="checkbox"/> [12] Cable Face Seal X 1
<input type="checkbox"/> [13] Card Spacer X 1 	<input type="checkbox"/> [14] Screw (Binding; M4x26) X 2 	

<Others>

Including guides

F-9-217

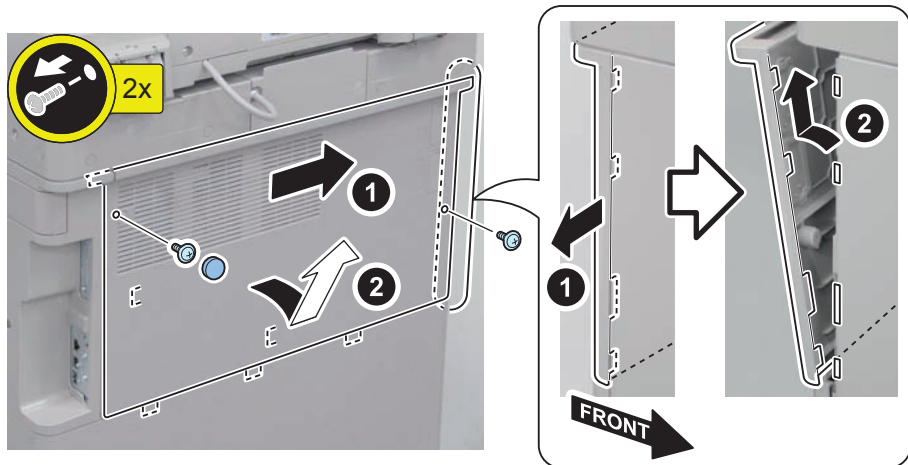
Voice Guidance Connection Kit for iR-ADV C3300 series



F-9-218

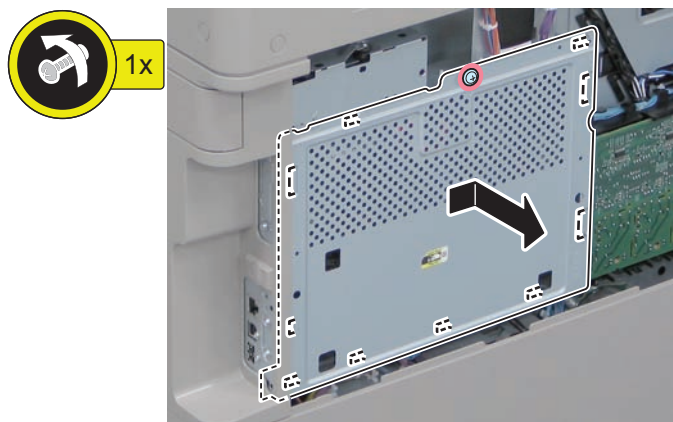
Installation Procedure

1)



F-9-219

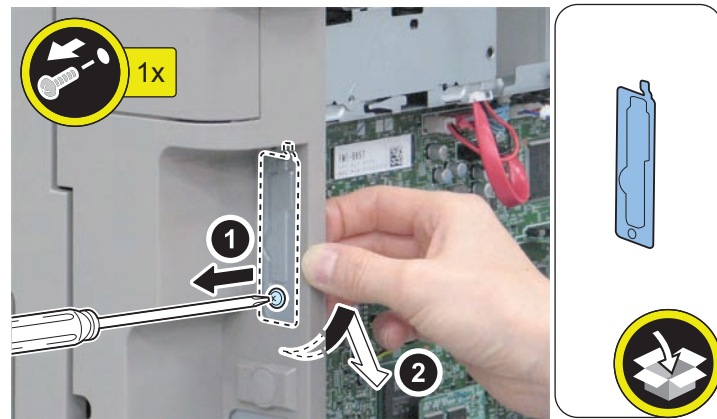
2)



F-9-220

3)

NOTE:
Remove the Face Plate while holding it.

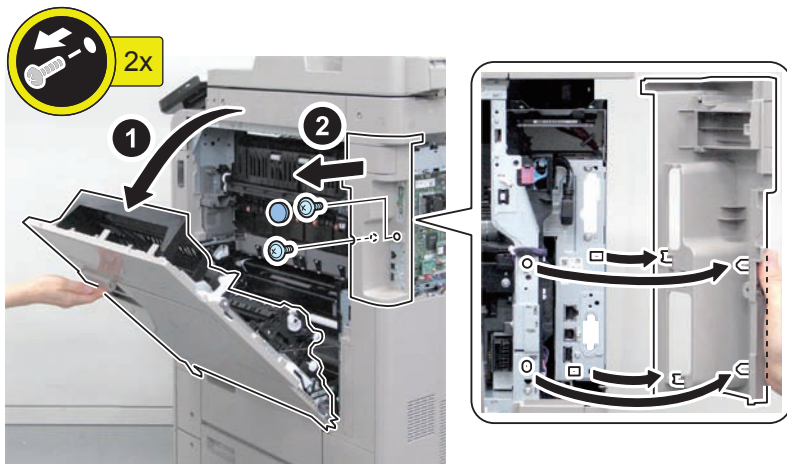


F-9-221

NOTE:
The removed screw will be used in step 7.



4)



F-9-222

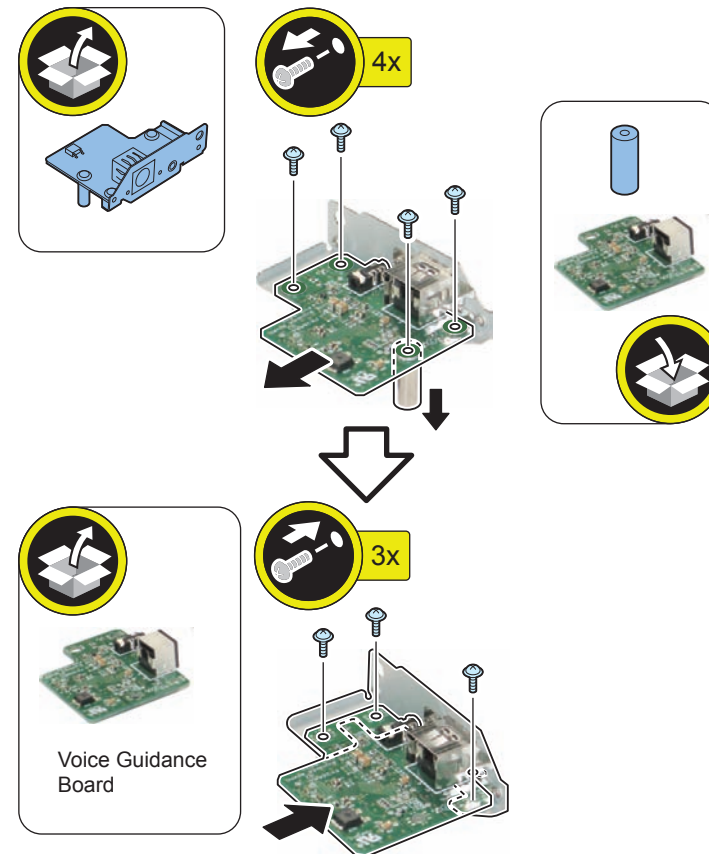


5) Remove the 4 screws, and replace the Voice Guidance Board (Voice Guidance Board for iR-ADV C3300 series) with Voice Guidance Board.

- 3 Screws (The removed screws will be used in step 6.)
- 1 Screw (The removed screw will be used in step 7.)
- 1 Spacer (The removed spacer will not be used.)

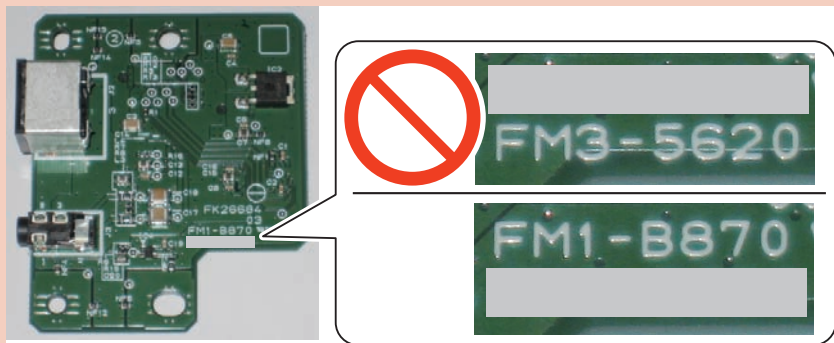


6) Install the 3 screws removed in the previous step.



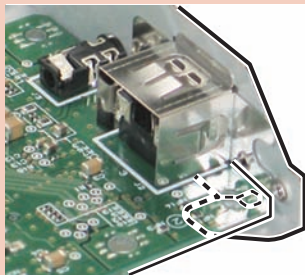
F-9-223

CAUTION: After replacement, check that you have installed FM1-B870.



F-9-224

CAUTION:
Place the Support late under the Voice Guidance Board.



F-9-225

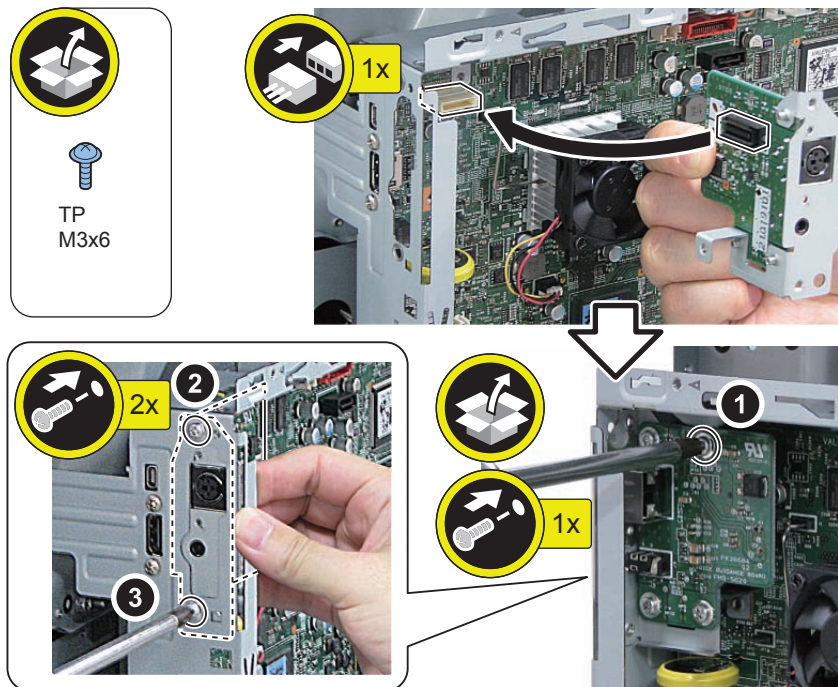
□
7)

NOTE:

- Use the screws removed in step 5 and step 3.
- Install the screws in the order from (1) to (3).

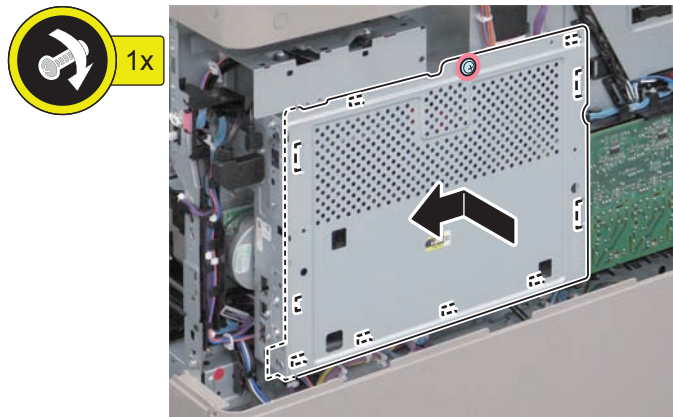
CAUTION:

Check that the connector is connected properly.



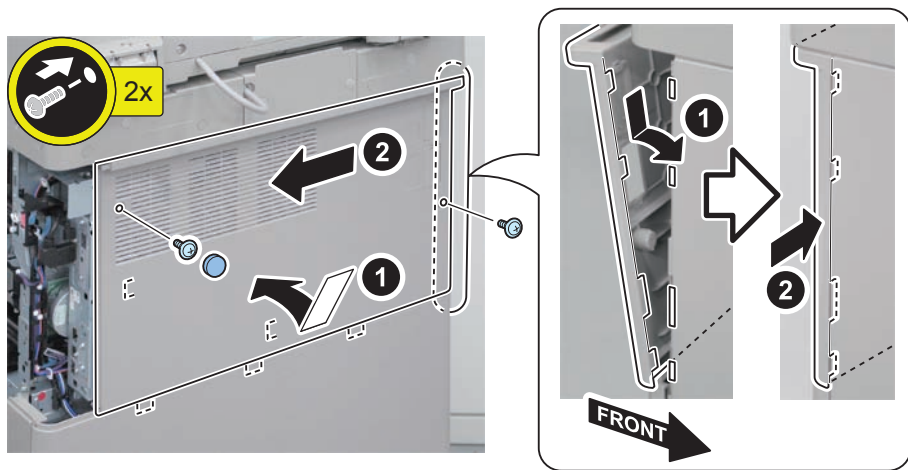
F-9-226

8)



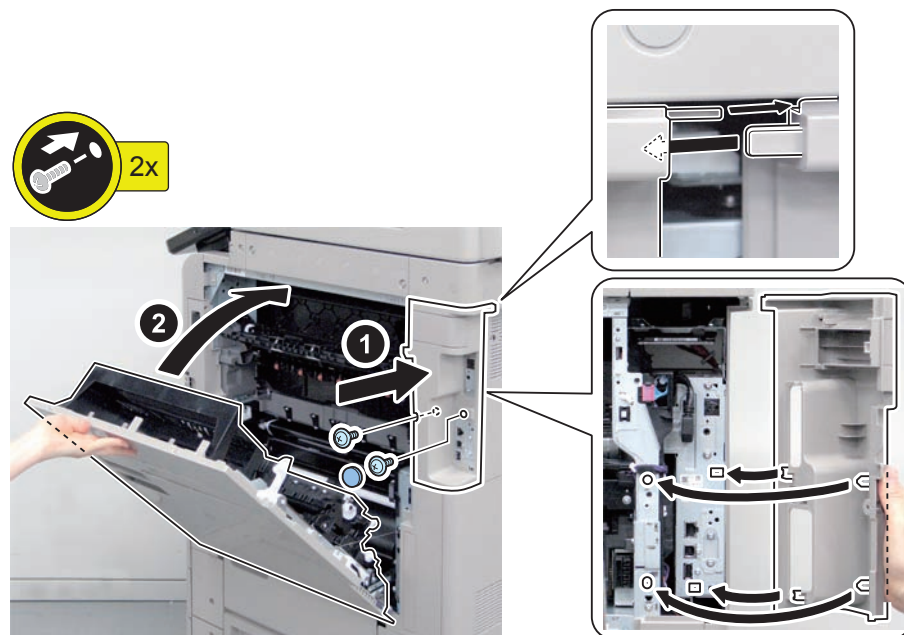
F-9-227

9)



F-9-228

10)



F-9-229

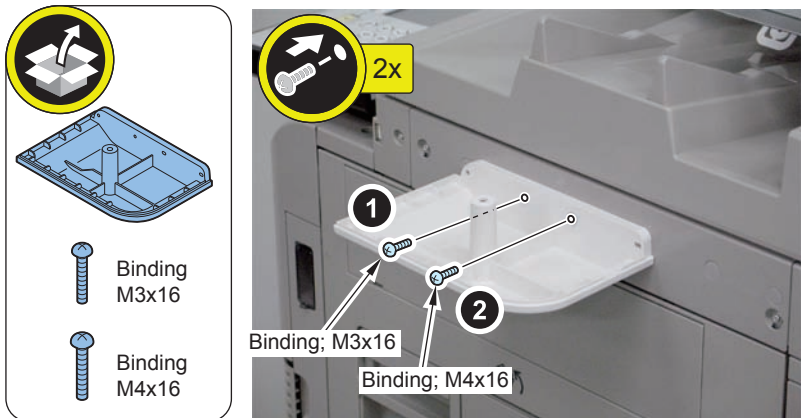
11)



F-9-230

□
12)

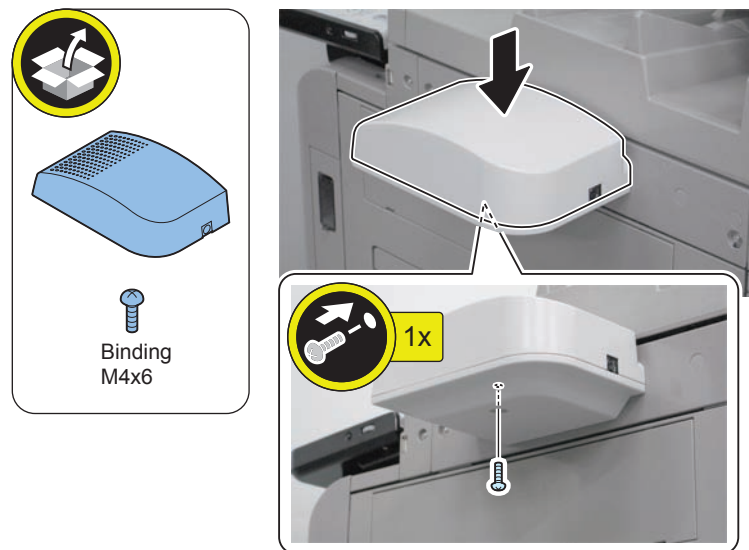
NOTE: Installing the screws
Install the screws in the order from (1) to (2).



F-9-231

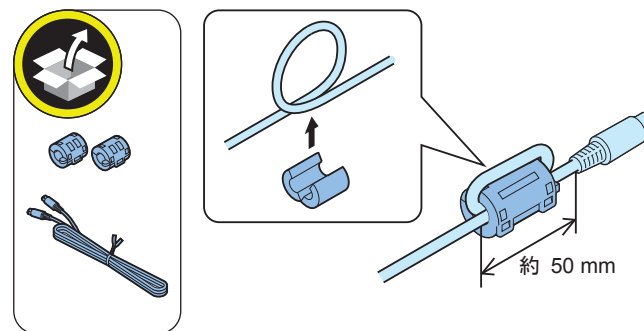
□
13)

NOTE: Installing the screws
Install the Speaker Unit (Upper) while pressing it from the direction of the arrow.



F-9-232

□
14)



F-9-233

□
15)



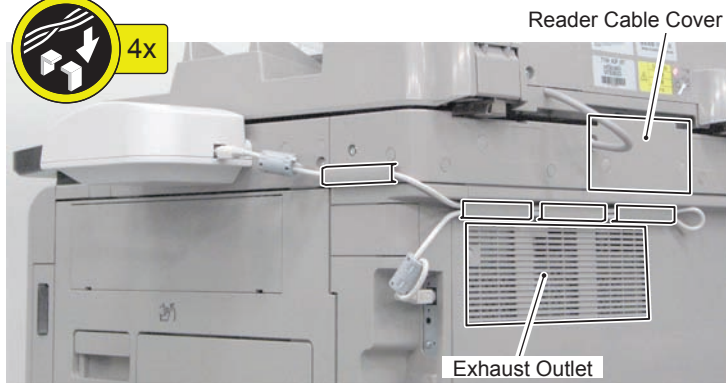
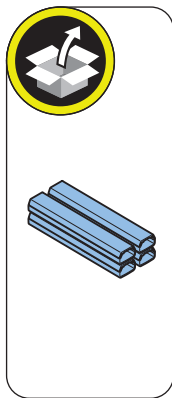
F-9-234

□

- 16) Remove the covers of the 4 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 17) Put the Speaker Cable through the Cord Guides and install the 4 covers of the guides.

CAUTION:

- Do not cover the Exhaust Outlet with the Cord Guide.
- Do not affix a Cord Guide on the Reader Cable Cover



F-9-235

■ Routing the Cable (when installing this equipment and other options simultaneously)

● For Copy Card Reader-F1 and Voice Guidance-F2.

□

1. Securing the Cable of the Voice Guidance

- 1) Remove the covers of the 4 Cord Guides, and affix the Cord Guides to the position as shown in the figure.
- 2) Insert only the Speaker Cable through the 4 Cord Guides.
- 3) Install the 4 Cord Guide Covers.

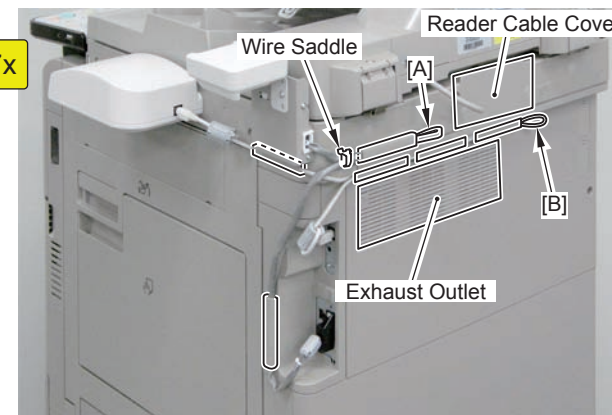
□

2. Securing the Cable of the Copy Card Reader

- 1) Remove the covers of the 2 Cord Guides, and affix the Cord Guides to the position as shown in the figure. (Use the Cord Guides (thick) included with the Copy Card Reader.)
- 2) Remove the Face Seal, and install the Wire Saddle. (included with the Copy Card Reader).
- 3) Fold the Copy Card Reader Cable at the [A] part, and insert only the Copy Card Reader Cable through the 2 Cord Guides and then secure it in place with the Wire Saddle.
- 4) Install the 2 Cord Guide Covers.

CAUTION:

- Do not cover the Exhaust Outlet with the Cord Guide.
- Do not affix a Cord Guide on the Reader Cable Cover.



F-9-236

Checking the Settings

NOTE:

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) Connect the power plug of the host machine to the outlet.
- 2) Turn ON the main power switch.
- 3) Select Settings/Registration > Preferences > Accessibility > Voice Navigation Settings > Use Voice Navigation, and check that the setting is ON.
- 4) Select Settings/Registration > Preferences > Accessibility > Voice Navigation Settings > Voice Guide from Speakers, and check that the setting is ON.
- 5) Turn OFF/ON the main power of the Host Machine.

Operation Check

■ When Using



- 1) Press "Reset" key for more than 3 seconds.
- 2) Once the indication on the screen is framed in red, the "Voice Guidance Kit" becomes enabled.

■ When Stopping to Use



- 1) Press "Reset" key for more than 3 seconds.

Document Scan Lock Kit-B1

Points to Note at Installation

- 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.

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-237

Check Items when Turning OFF the Main Power

Check that the main power is OFF.

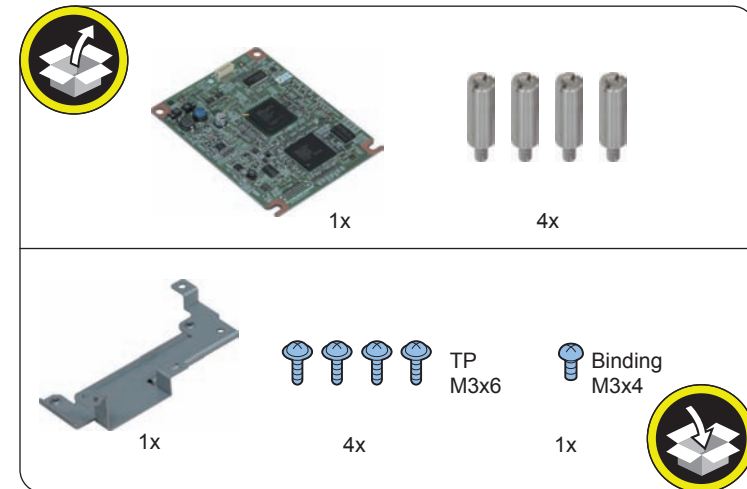
- 1) Turn OFF the main power switch.
- 2) Check that the display in the Control Panel and the lamp of the main power are turned off, and then disconnect the power plug.

Installation Outline Drawing



F-9-238

Checking the Contents



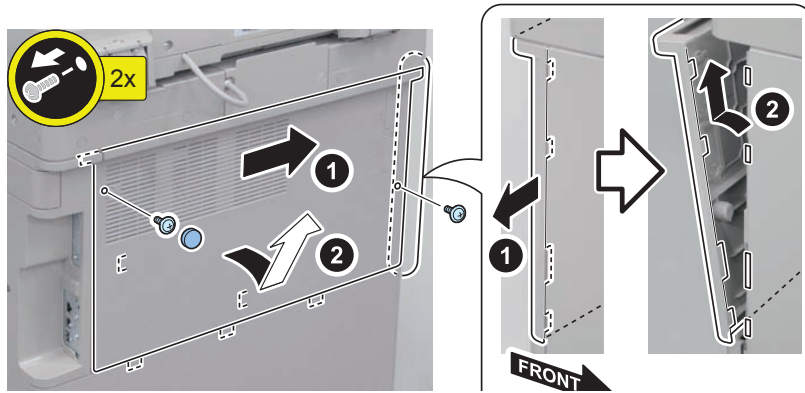
F-9-239

<Others>

Including guides

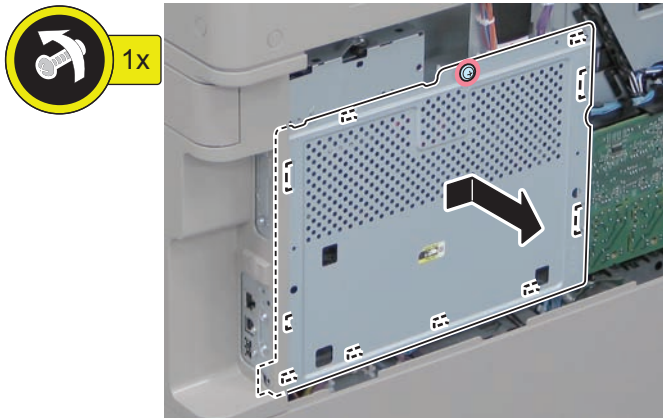
Installation Procedure

1)



F-9-240

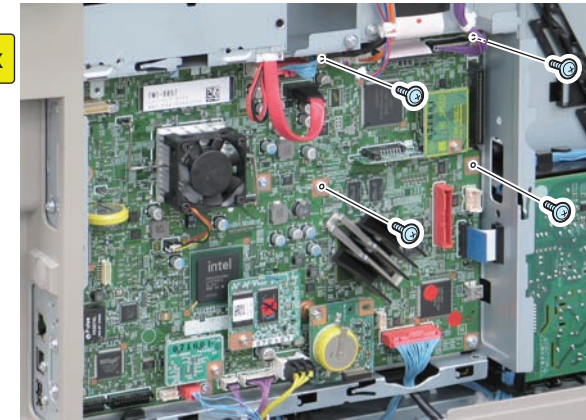
2)



F-9-241

3)

CAUTION:
Be careful not to drop the screws.

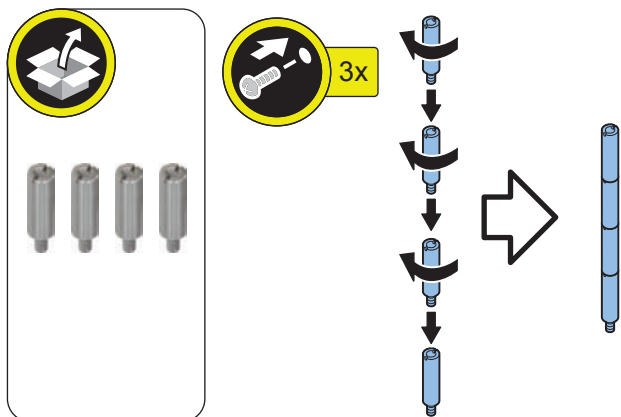


F-9-242

NOTE: The removed screws will be used in step 7.

4)

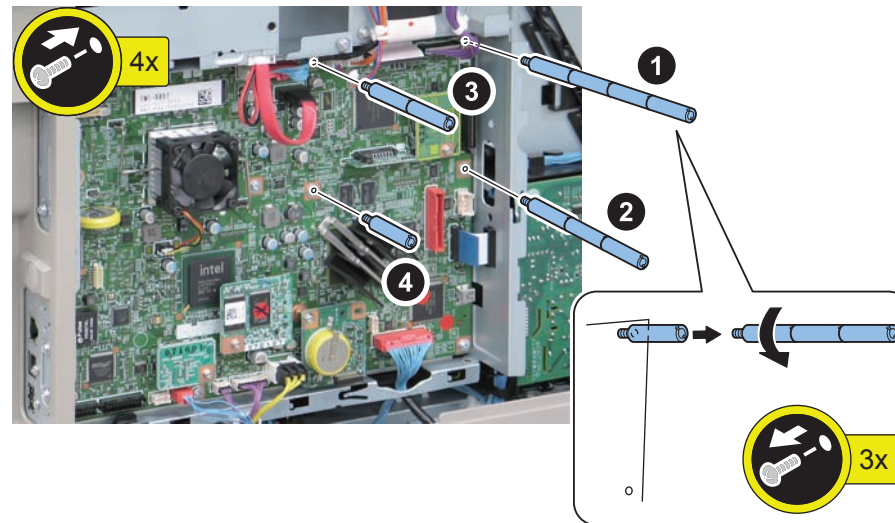
NOTE:
Be sure to connect the PCB spacers to improve work efficiency.



F-9-243

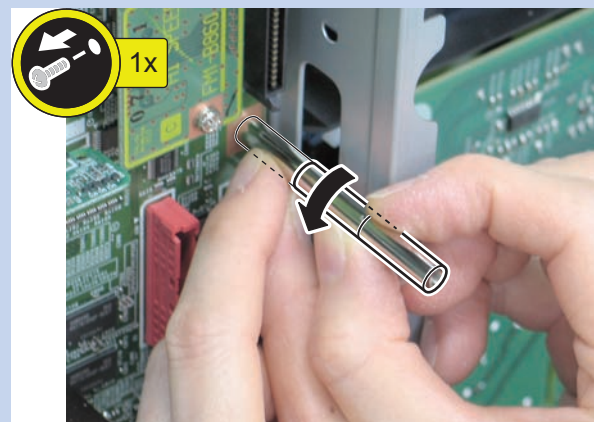
5)

NOTE:
Be sure to install the PCB Spacers in the order of (1) to (4).



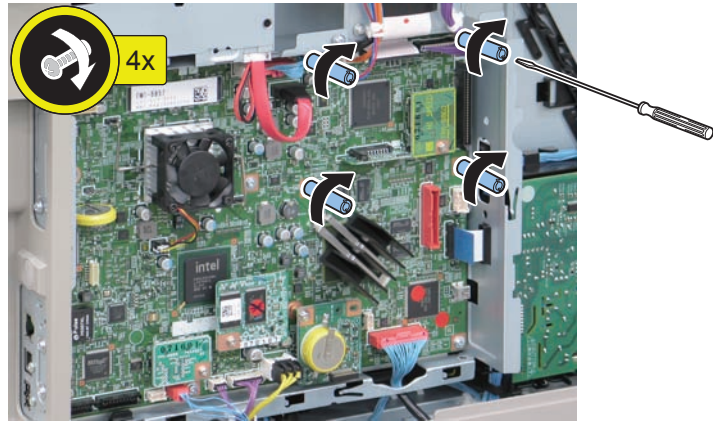
F-9-244

NOTE: How to Remove the PCB Spacers
Be sure to hold the PCB Spacer and remove the second and the subsequent ones as shown below.



F-9-245

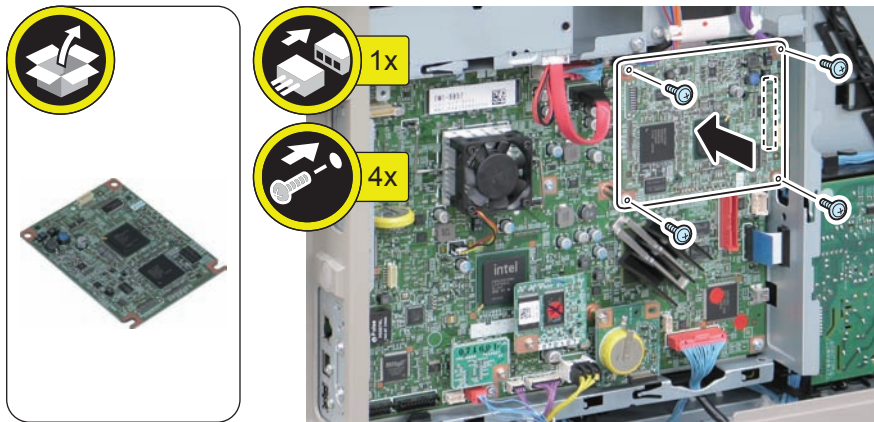
6)



F-9-246

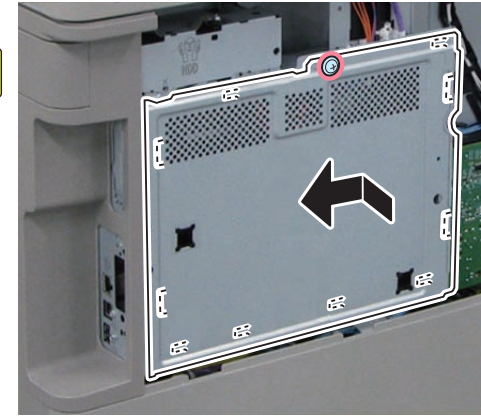
7)

NOTE: Use the screws removed in step 3.



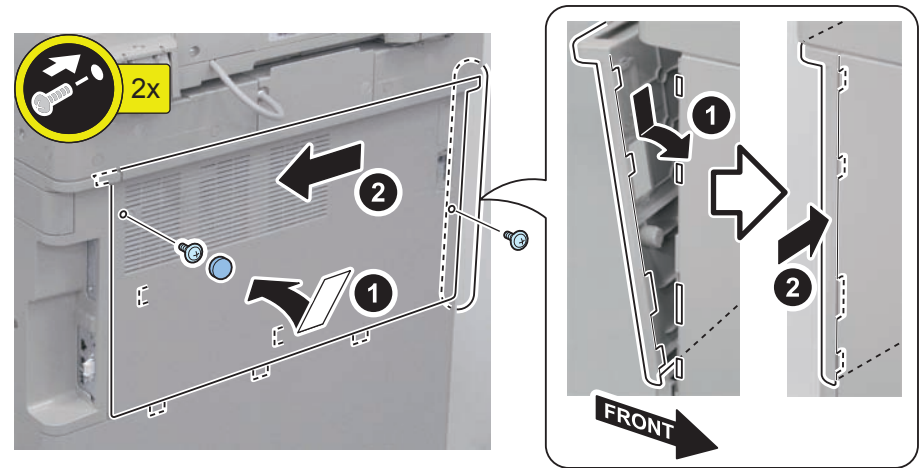
F-9-247

8)



F-9-248

9)



F-9-249

Checking after Installation



- 1) Connect the power plug of the host machine to the power outlet.
- 2) Turn ON the main power switch.
- 3) Ask users to install license.
- 4) Turn OFF/ON the main power switch.
- 5) Press [Counter Check] key on the control panel.
- 6) Press [Chk. Device Config].
- 7) Check that “Image Data Analyzer Board” is displayed in option field.

Serial Interface KIT-K2/ Copy Control Interface KIT-A1

Points to Note at Installation

- Refer to "Table of Options Combination" when installing this equipment before operation.'
- Serial Interface Kit and Control Interface Kit cannot be used concurrently.

Table of Options Combination

	Utility Tray	Voice Operation Kit	Voice Operation Kit	Serial Interface Kit	Copy Control Interface Kit	Copy Card Reader
Serial Interface Kit	yes	yes	yes	-	no	no
Copy Control Interface Kit	yes	yes	yes	no	-	no

yes: Available no: Unavailable

T-9-9

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-250

Check that the main power switch is OFF

- 1) Turn OFF the main power switch of the host machine.
- 2) Be sure that Control Panel Display and Main Power Lamp are both turned OFF, and then disconnect the power plug.

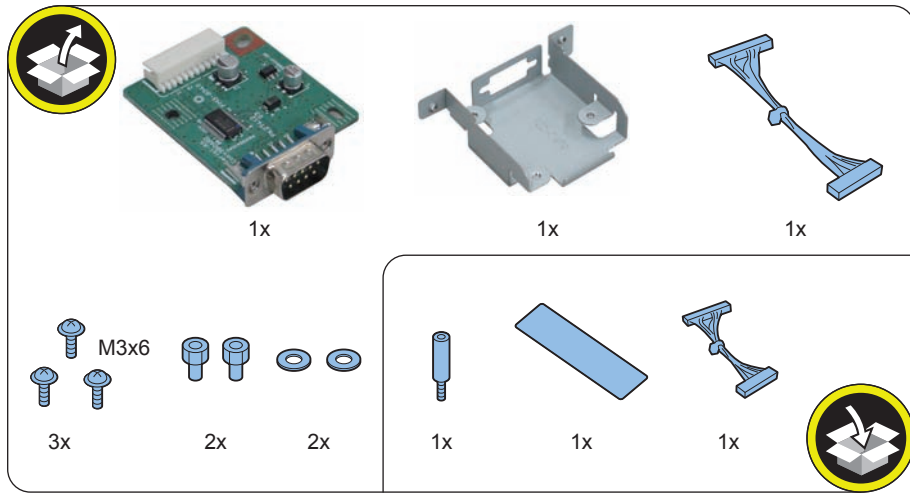
Installation Outline Drawing



F-9-251

Checking the Contents

Serial Interface KIT-K2

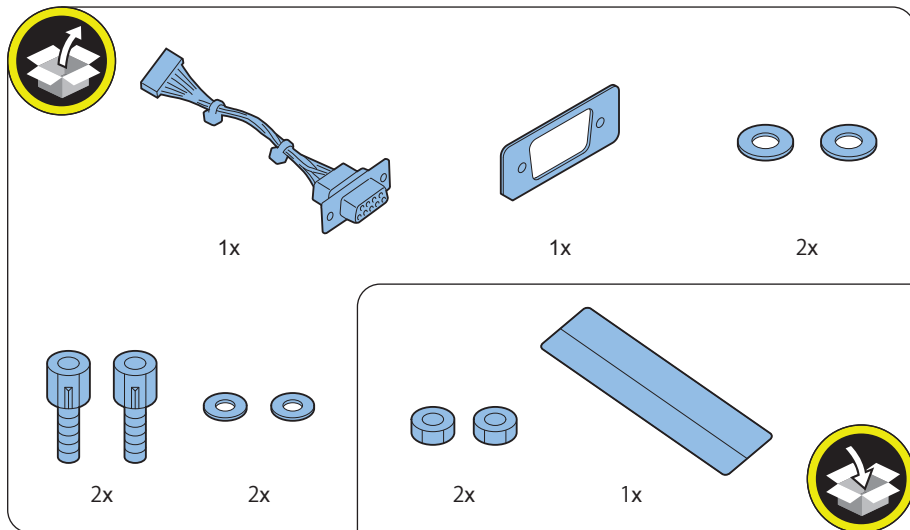


F-9-252

<Others>

Including guides

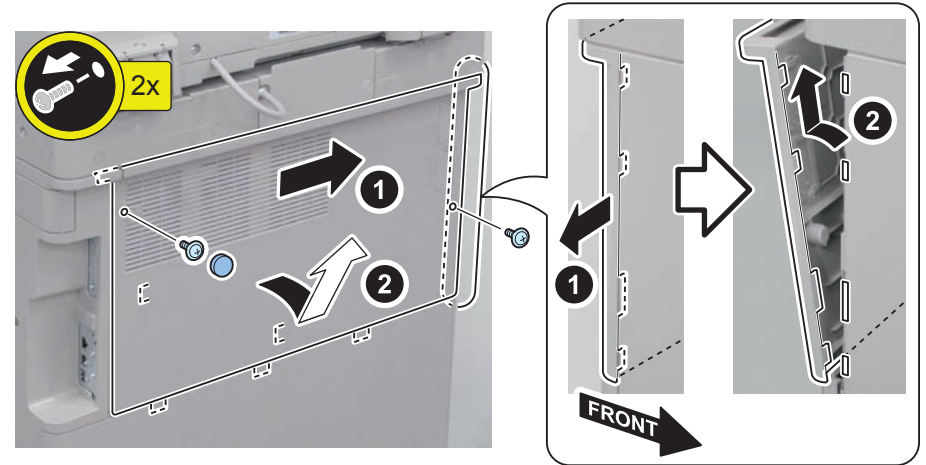
Copy Control Interface KIT-A1



F-9-253

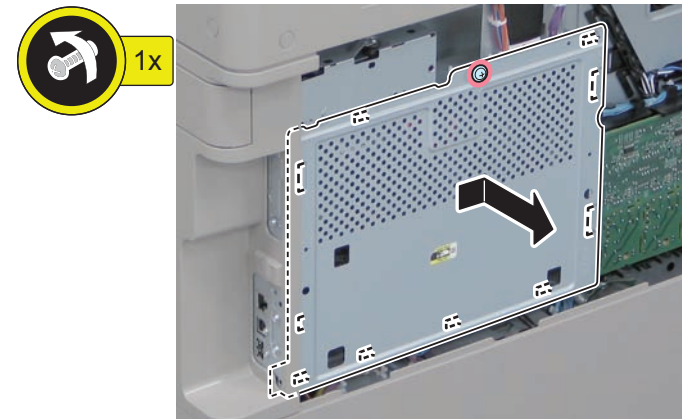
Remove the covers

1)ws



F-9-254

2)



F-9-255

Installation Procedure

Installing the Serial Interface Kit



1)

NOTE: Remove the Face Plate while holding it.

- 1 Screw (upper) (Remove)
- 1 Screw (lower) (to loosen)

CAUTION:

Be careful not to drop the Face Plate.

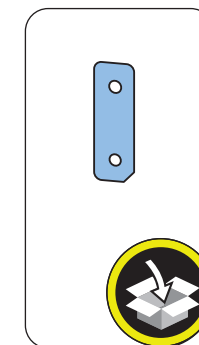
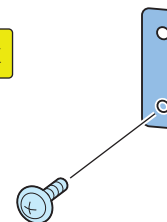


F-9-256

NOTE: The removed screw (upper) will be used in step 4.



2)



F-9-257

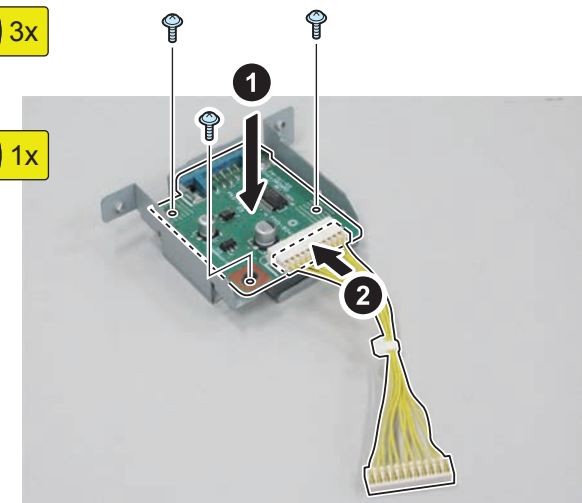
NOTE: The removed screw (lower) will be used in step 4.



3)



M3x6

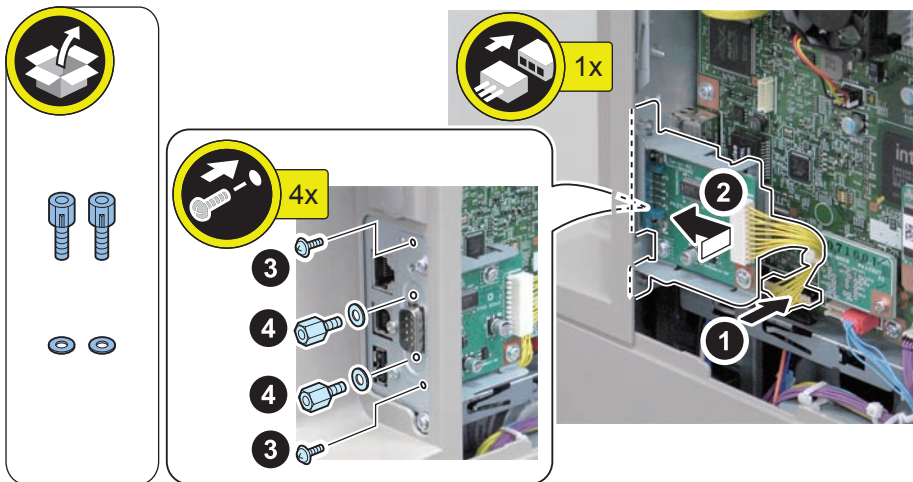


F-9-258

4)

NOTE:

- Connect the connector to J14 (11-pin), and install the Serial RS Conversion Board.
- Use the screws removed in steps 1 and 2.



F-9-259

■ Installing the Copy Control Interface Kit

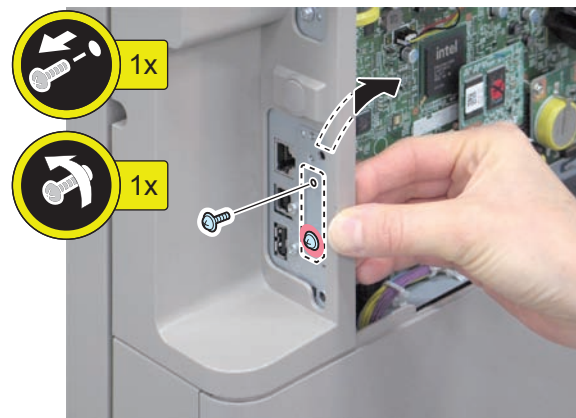
1)

NOTE: Remove the Face Plate while holding it.

- 1 Screw (upper) (Remove)
- 1 Screw (lower) (to loosen)

CAUTION:

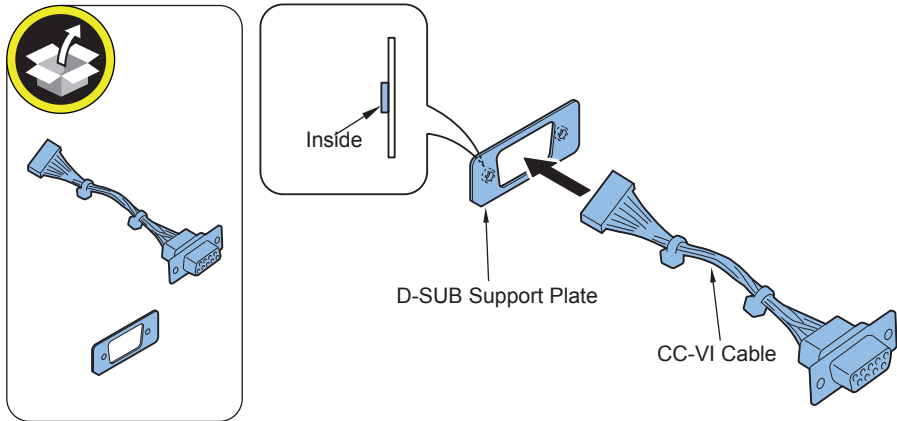
Be careful not to drop the Face Plate.



F-9-260

2)

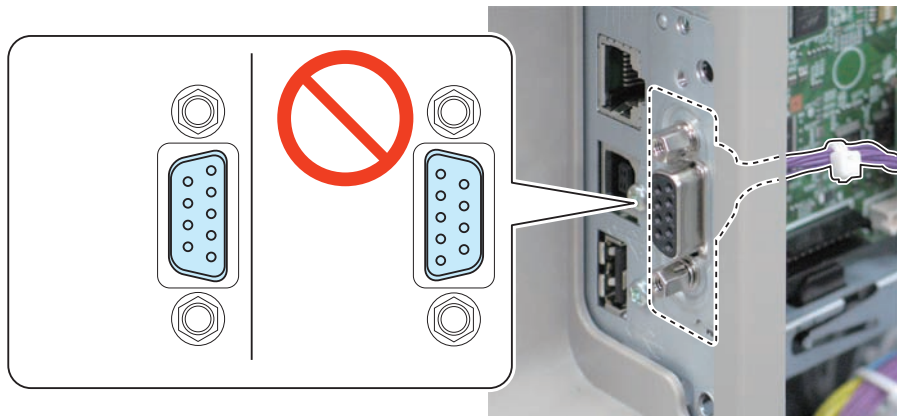
CAUTION:
Install the extruded side of the D-SUB Support Plate as shown in the figure.



F-9-261

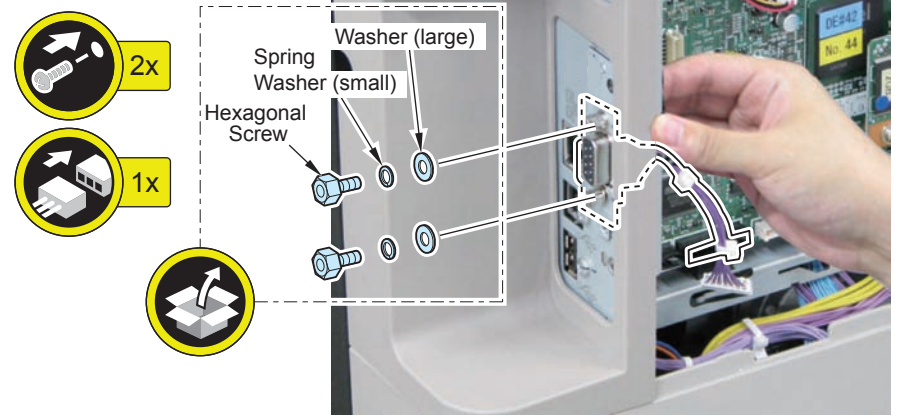
3)

CAUTION:
Install the CC-VI Cable in the direction shown in the figure.



F-9-262

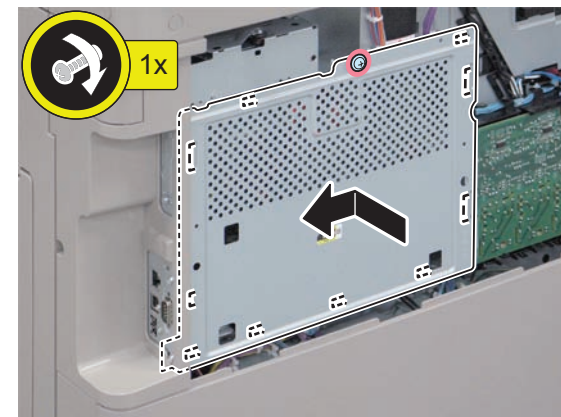
4)



F-9-263

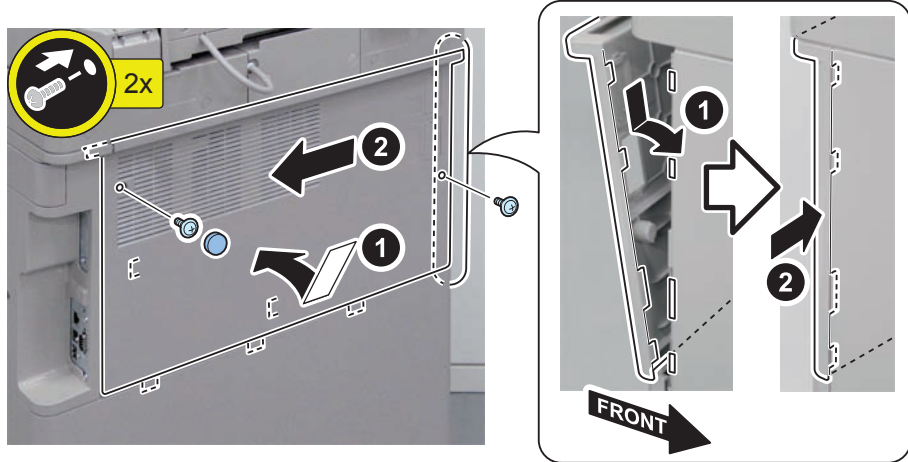
Installing the Covers

1)



F-9-264

2)



F-9-265

- 3) Connect the power plug to the outlet.
- 4) Turn ON the power switch.

Combination of HDD Options

Combinations of installation are as follows.

CAUTION:

After installing the HDD Data Encryption Kit, the system software must be install.

Reference Pages in the Manual According to Product Combination

Title.	Combination of Product	Reference Pages
TYPE-1	HDD Data Encryption Kit	p. 9-113
TYPE-2	Removable HDD Kit	p. 9-122
TYPE-3	Removable HDD Kit / HDD Data Encryption Kit	p. 9-132

T-9-10

Points to Note Regarding Data Backup/Export

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.

[Backup List]

Backup target data	Availability of Backup
	User (excluding DCM)
Address List	Yes
Forwarding Settings	Yes
Settings / Registration	
Preferences (Except for Paper Type Management Settings)	No
Adjustment/Maintenance(*)	No
Function Settings (Except for Printer Custom Settings, Forwarding Settings)	No
Set Destination (Except for Address List)	No
Management Settings (Except for Address List)	No
User authentication information used for local device authentication of UA (User Authentication) (Management Settings > User Management > Authentication Management > User Management, etc.)	Yes
Printer Settings	Yes
Set Paper Information	Yes
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	Yes
Default Settings	No
Shortcut settings for "Options"	No
Previous Settings	No
Setting items for Quick Menu	
Button Size information	Yes
Wallpaper Setting	Yes
Button information in Quick Menu	Yes
Restrict Quick Menu	Yes
Setting items for Main Menu	
Button settings in Main Menu	No
Button settings on the top of the screen	No
Wallpaper Setting for Main Menu	No
Other settings for Main Menu	No
Box settings	
Mail Box Settings (Box Name, PIN, Time Until File Auto Delete, Print Files Upon Storing from Printer Driver)	Yes
Image data in Mail Box, Fax Inbox, and Memory RX Inbox	Yes
Network Place Settings	No
Web browser settings	
Web Access setting information	Yes
MEAP settings	
MEAP application	No
License files for MEAP applications	Yes
Data saved using MEAP applications	Yes

Backup target data	Availability of Backup
	User
	(excluding DCM)
SMS (Service Management Service) password	No
Universal data settings	
Unsent documents (documents waiting to be sent with the Delayed Send mode)	No
Job logs	No
Audit Log	Yes
Key Pair and Server Certificate in Certificate Settings in TCP/IP Settings in Network Settings in System Settings (from the Additional Functions screen)	No
Auto Adjust Gradation setting values	No
PS font	No
Key information to be used for encryption when TPM is OFF	No
Key and settings information to be used for encryption when TPM is ON	Yes
Service Mode	
Service Mode setting values (MN-CON)	No

T-9-11

[Backup Method]

Backup target data	Backup Method
Address List	Remote UI > Settings/Registration > Management Settings > Data Management > Import or Export
Forwarding Settings	Remote UI > Settings/Registration > Management Settings > Data Management > Import or Export
Settings / Registration	
User authentication information used for local device authentication of UA (User Authentication) (Management Settings > User Management > Authentication Management > User Management, etc.)	Remote UI > Settings/Registration > Management Settings > User Management > Authentication Management > User Management
Printer Settings	Remote UI > Settings/Registration > Management Settings > Data Management > Import or Export
Set Paper Information	Remote UI > Settings/Registration > Management Settings > Data Management > Import or Export
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	Remote UI > Settings/Registration > Management Settings > Data Management > Import or Export All
Setting items for Quick Menu	

Backup target data	Backup Method
Button Size information	Remote UI > Quick Menu > Export
Wallpaper Setting	Remote UI > Quick Menu > Export
Button information in Quick Menu	Remote UI > Quick Menu > Export
Restrict Quick Menu	Remote UI > Quick Menu > Export
Box settings	
Mail Box Settings (Box Name, PIN, Time Until File Auto Delete, Print Files Upon Storing from Printer Driver)	Remote UI > Settings/Registration > Management Settings > Data Management > Back Up or Restore
Image data in Mail Box, Fax Inbox, and Memory RX Inbox	Remote UI > Settings/Registration > Management Settings > Data Management > Back Up or Restore
Web browser settings	
Web Access setting information	Remote UI > Settings/Registration > Management Settings > Data Management > Import/Export All
MEAP settings	
License files for MEAP applications	Remote UI > Service Management Service
Data saved using MEAP applications	Remote UI > Service Management Service
Universal data settings	
Audit Log	Remote UI > Settings/Registration > Management Settings > Device Management > Save Audit Log Audit log that was exported cannot be put back to the device from which the log was exported.
Key and settings information to be used for encryption when TPM is ON	Settings/Registration > Management Settings > Data Management > TPM Settings

T-9-12

Making a Backup of the Data (reference only)

The data items that have been backed up may be restored when the HDD Data Encryption & Mirroring Kit-C Series 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 T-1-2/T-1-4 (Data to be backed up) in Points to Note About Installation of the Installation Procedure.

Preparation

Service mode setting values should be imported/exported by service technicians.

Execute import/export of service mode setting values by either of the following methods:

a. When importing/exporting from remote UI

1) Change the setting value of the following service mode to [1] to display "Service Mode Settings" on remote UI.

- Service mode (Level 1) > Copier > Option > USER > SMD-EXPT
[0] : Hide the "Service Mode Settings" (Default)
[1] : Display the "Service Mode Settings"

2) Turn OFF and then ON the power of the host machine.

b. When importing/exporting from service mode

Perform backup of service mode setting values in the USB flash drive.

Perform backup from [BACK UP] in service mode.

For the procedure, refer to the following section of the Service Manual.

ServiceManual > Technology > DCM > DCM > Import/Export by Service Mode (External)
(Refer to p. 2-165)

Procedure for Import/Export ALL of User Settings

Following data can be batch exported.

- Settings/Registration Basic Information
- Paper Type Management Settings
- Forwarding Settings
- Box Settings
- Department ID Management Settings
- Key Settings
- Certificate/Certificate Revocation List (CRL) Settings
- Main Menu Settings
- Web Access Settings
- Favorite Settings
- Address Book
- Authentication User Management
- Personal Setting Information
- Quick Menu Settings
- MEAP Application Setting Information

1) Access the URL given below, and then access Remote UI.

[http://\[IP address of the device\]/](http://[IP address of the device]/)

Enter the user name and password, select the login destination.

2) Select [Settings/Registration] > [Management Settings] > [Data Management] > [Import/Export ALL] > [Export].

3) Select the items to export (Select All).

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 result of the batch export, and click [Start Downloading].

■ 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/
Enter the user name and password, select the login destination.

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 User Authentication

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/userauth/Preference
- 2) Enter the user name and password, select the login destination.
- 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].

■ 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 flash drive or HDD of the machine.

Backup of User inbox document data

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 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 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.

TYPE-1: HDD Data Encryption Kit Installation Procedure

Points to Note at Installation

CAUTION:

- When handling the HDD, be careful not to vibrate or drop it.
- Be sure to prepare a USB memory for upgrading created with SST.
- If HDD Data Encryption Kit is installed, the data on the HDD will be erased. Be sure to back up/export the data as necessary.

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-266










Points to Note when Unpacking HDD Data Encryption Kit

CAUTION:

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

HDD Data Encryption Kit

<input type="checkbox"/> [1] Encryption Board X 1 	<input type="checkbox"/> [2] Signal Cable (250mm; A:HDD-Sig) X 1 	<input type="checkbox"/> [3] Power Cable (270mm; A:HDD-Pow1) X 1 
<input type="checkbox"/> [4] Cable Guide X 1 	<input type="checkbox"/> [5] Screw (TP; M3x6) X 4 	<input type="checkbox"/> [6] Signal Cable (135mm; A:Cont-Sig) X 1 
<input type="checkbox"/> [7] Power Cable (135mm; A:Cont-Pow) X 1 	<input type="checkbox"/> [8] Cable Guide X 1 	<input type="checkbox"/> [9] Wire Saddle X 3 

F-9-267

<Others>

Including guides

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 is OFF.

- 1) Turn OFF the main power switch.
- 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



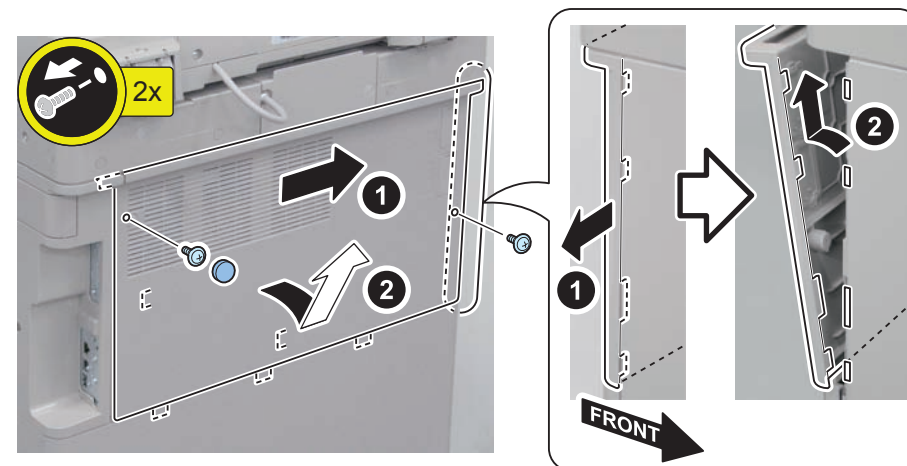
F-9-268

Installation Procedure

Removing the Covers



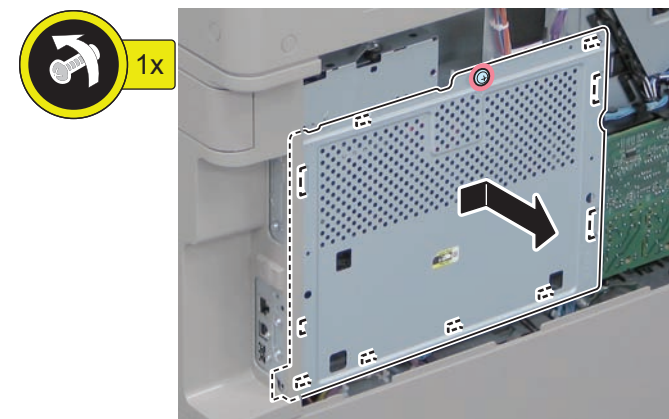
1)



F-9-269

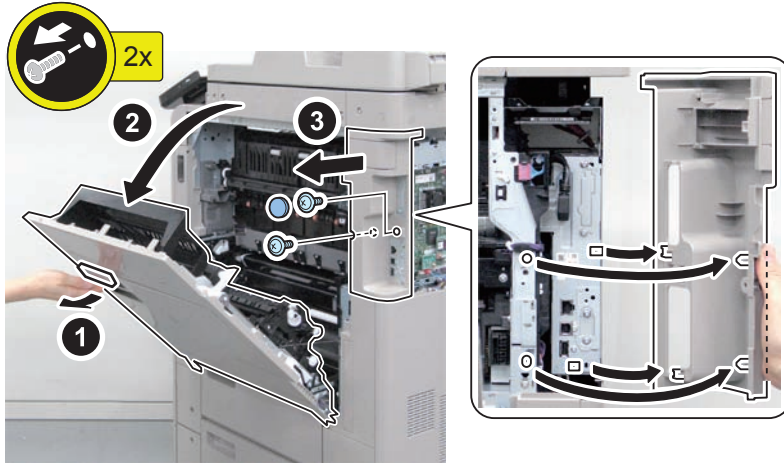


2)



F-9-270

□
3)



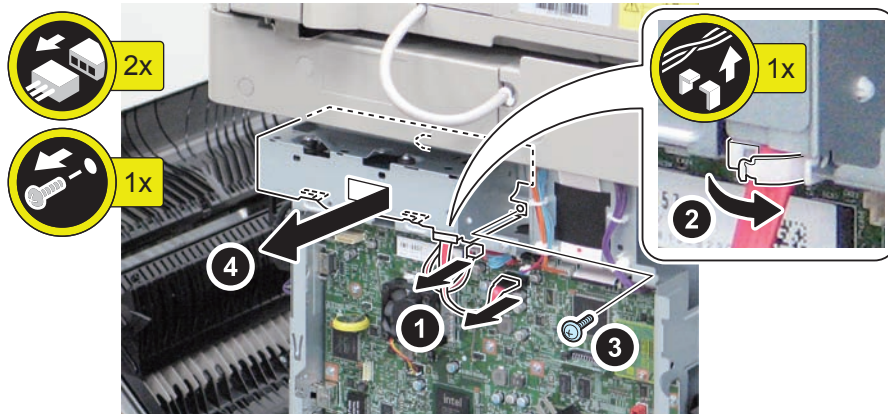
F-9-271

■ Installing the HDD Data Encryption Kit-C9

□

1) Remove the HDD Frame by sliding it.

- 2 Connectors
- 1 Edge Saddle
- 1 Screw (The removed screw will be used in step 11.)
- 3 Hooks

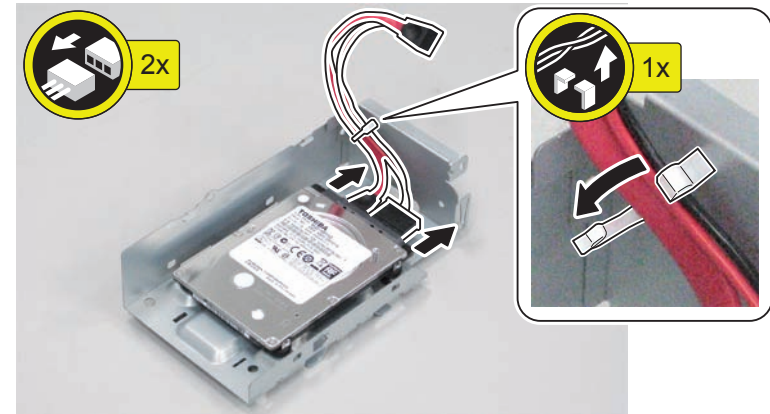


F-9-272

□

2) Open the Wire Saddle and disconnect Power Cable and Signal Cable. (The removed Power Cable and Signal Cable will be used in step 3.)

- 2 Connectors

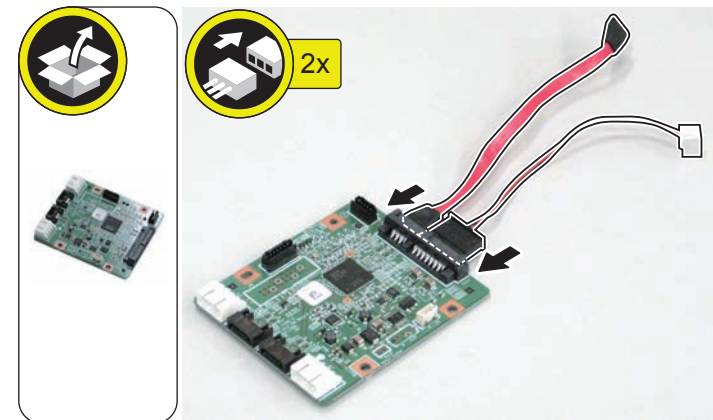


F-9-273

□

3) Connect Power Cable and Signal Cable disconnected in the step 2 to the Encryption Board.

- 2 Connectors



F-9-274



4) Secure the Power Cable (270 mm; A: HDD-Pow1) and the Signal Cable (250 mm; A: HDD-Sig) included in the package with the Cable Guide.

CAUTION 1: Installing the cables

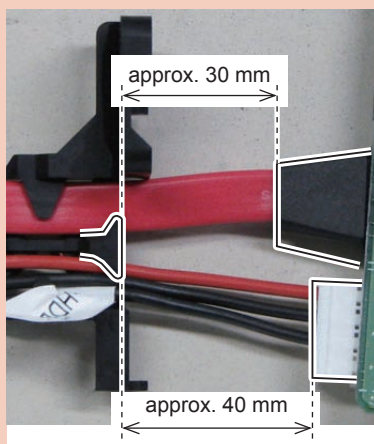
Be sure to install it in the orientation shown in the figure.



F-9-275

CAUTION 2: Position to install the Power Cable (270 mm; A: HDD-Pow1) and the Signal Cable (250 mm; A: HDD-Sig).

Be sure to install each Cable in the position shown in the figure.



F-9-276

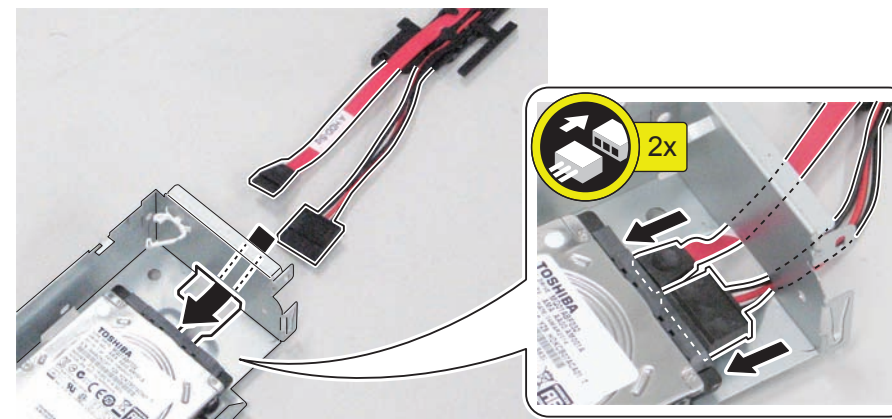


F-9-277



5) Pass the Power Cable (270 mm; A: HDD-Pow1) and the Signal Cable (250 mm; A: HDD-Sig) through the hole in the HDD Frame, and then connect them to the HDD.

- 2 Connectors

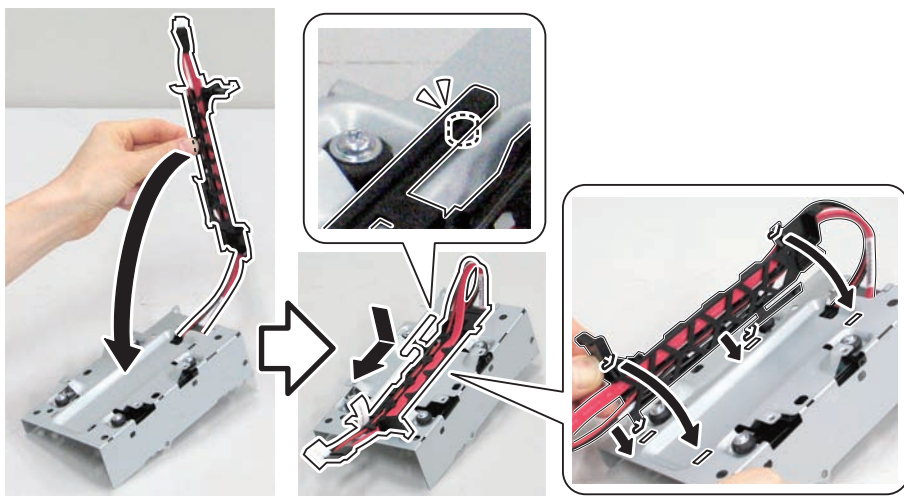


F-9-278

- 6) Turn over the HDD Frame, and attach the Cable Guide to the HDD Frame.
- 4 Hooks
 - 1 Boss

CAUTION:

Be sure that the boss is fitted properly.

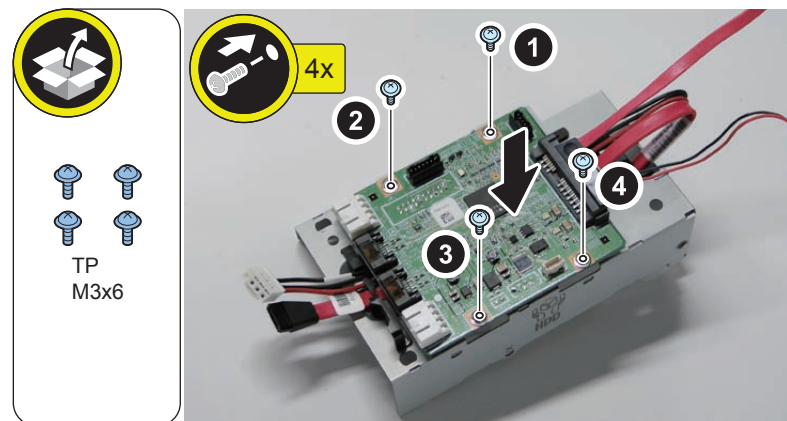


F-9-279

- 7) Install the Encryption Board.
- 4 Screws (TP; M3x6)

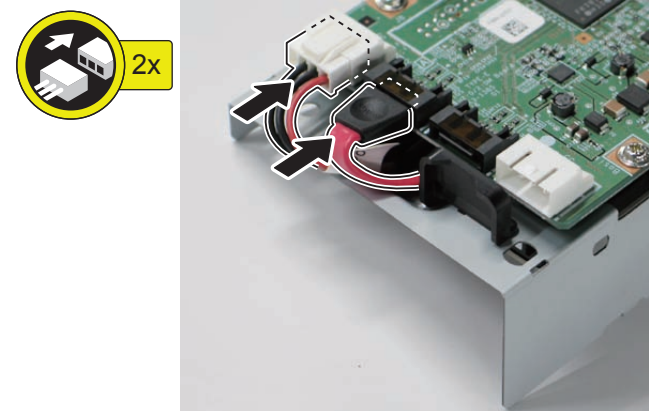
CAUTION: Installing the screws

Install the screws in the order from (1) to (4).



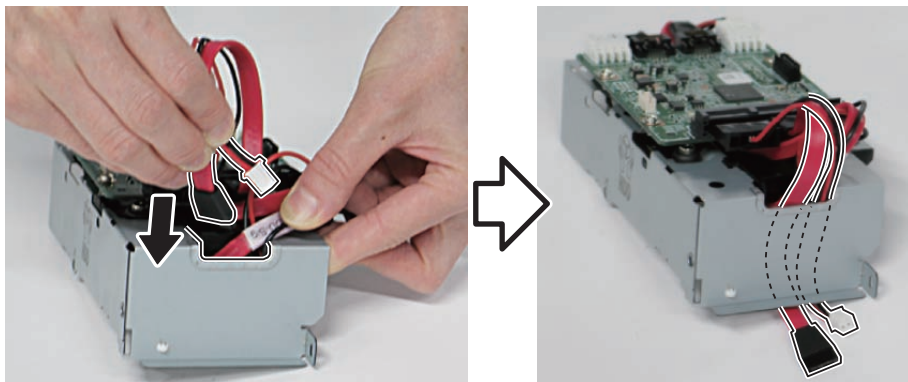
F-9-280

- 8) Connect the Power Cable (270 mm; A: HDD-Pow1) and Signal Cable (250 mm; A: HDD-Sig) to the Encryption Board.
- 2 Connectors



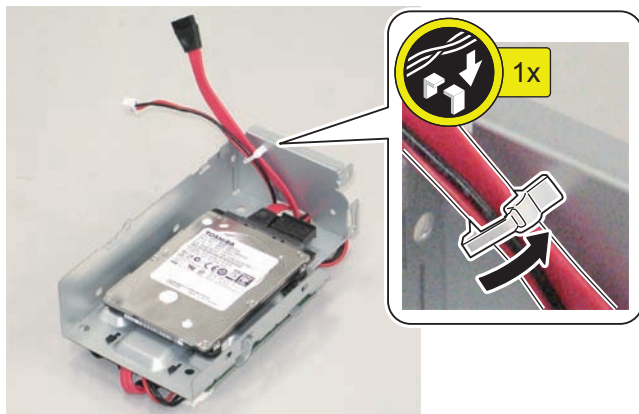
F-9-281

- 9) Pass the other ends of the Power Cable and Signal Cable through the hole in the HDD Frame, and pull them out as shown in the figure.



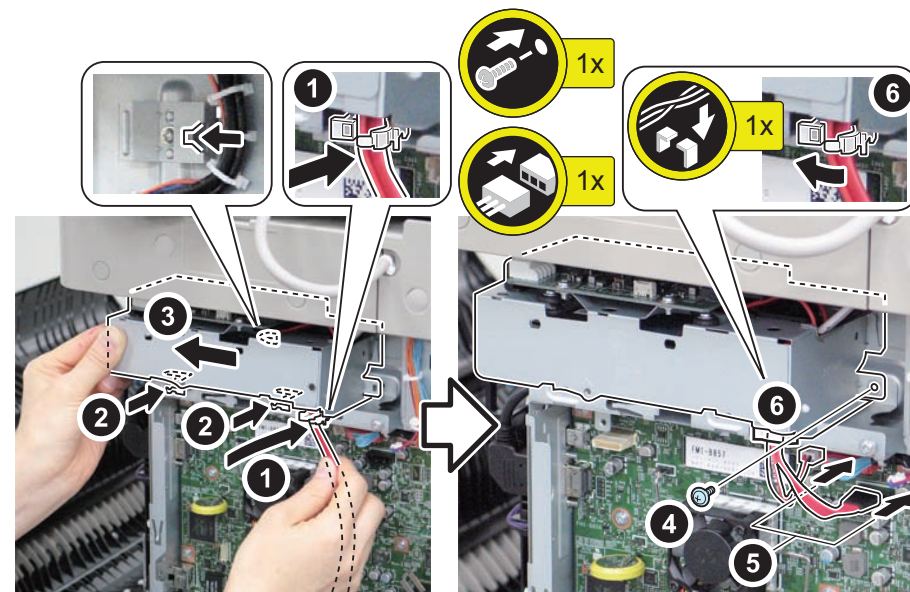
F-9-282

- 10) Secure the Power Cable and Signal Cable in place using the Wire Saddle.



F-9-283

- 11) Install the HDD Frame to the host machine by sliding it.
- 3 Hooks
 - 1 Screw (Use the screw removed in steps 1.)
 - 2 Connectors
 - 1 Edge Saddle

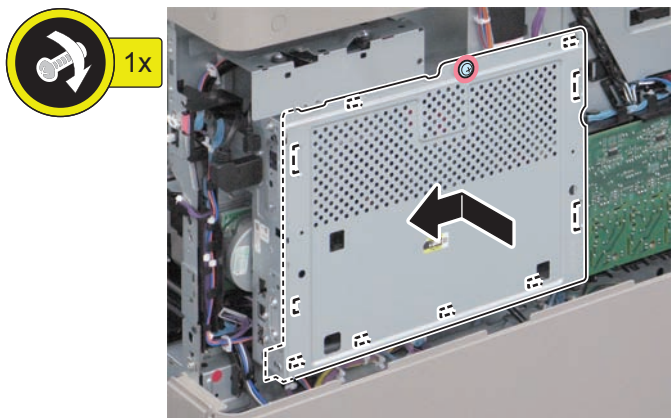


F-9-284

■ Installing the Covers

□

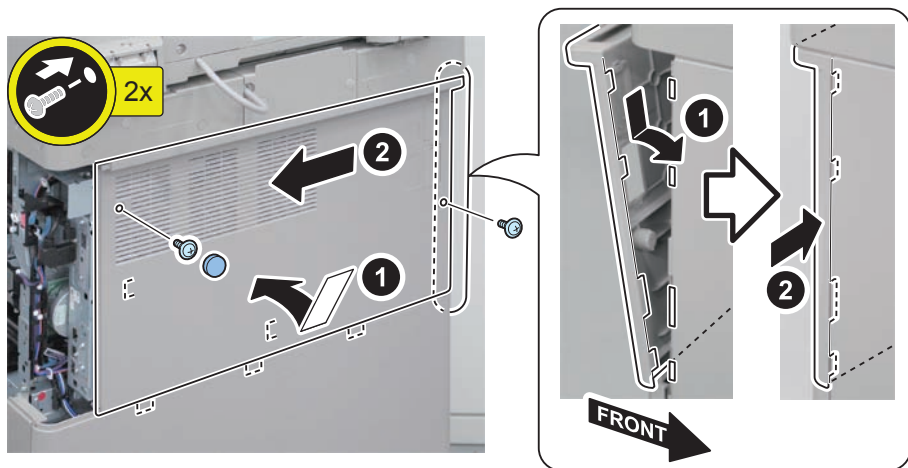
1)



F-9-285

□

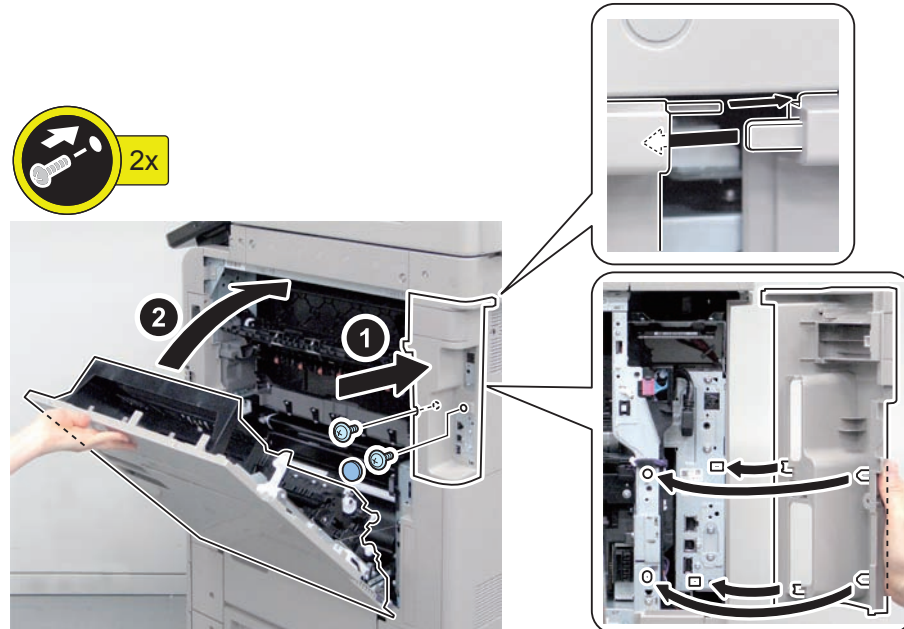
2)



F-9-286

□

3)



F-9-287

HDD Initialization Procedure

1. Items to be prepared

1) PC

Be sure that the version of the Service Support Tool that supports the host machine is installed.

2) Crossover Ethernet cable.

2. Preparing for the Installation of the System Software of Host machine

1) If the PC and host machine have been started, turn the main power OFF.

2) Connect the PC and the machine using an Cross Ethernet cable. (In case of SST).

3) Turn ON the power of the PC.

3. Registering the system software

1) Insert the latest System Software into the PC using the SST.

2) Start the SST.

3) Click 'Register Firmware'.

4) Select the drive where the system software has been inserted, and click the [SEARCH] button.

5) Click the [REGISTER] button.

6) Click [OK].

4. Initializing HDD

< In case of SST >

1) Start the host machine with download mode in safe mode.

2) Start the SST.

3) Select the model. Then, select [Single] and click [Start].

4) Click [Format HDD].

5) Select [All], and click [Start].

6) Click [Execute Format].

7) The Format is executed.

8) Click [OK].

9) After formatting is completed, select [Shutdown/Restart], and click [Restart].

10) Click [OK]

11) The power of the host machine is turned OFF.

12) Terminate the SST.

13) Disconnect the Cross Ethernet Cable from the machine, and connect the user's network cable to the machine.

<In case of USB flash drive>

1) Connect the USB memory to the PC.

2) Start up SST, and click the USB icon displayed in the target selection screen.

3) Select the drive, the model series, and the version to be written to the USB flash drive, and click [Confirm].

4) Click [Start], and after the version has been written to the USB flash drive, click [OK] and then remove the USB flash drive.

5) Terminate the SST.

6) Connect the USB memory device to the host machine, and start the host machine with download mode in safe mode.

7) Press keys on the Control Panel in the order shown below.

- Press any keys
- [4] : Clear/Format
- [1] : Disk Format
- [0] : OK
- Press any keys
- [C] : Return to Menu
- [Reset] : Start shutdown sequence
- [0] : OK (The power of the host machine is turned OFF automatically.)

8) Remove the USB flash drive.

9) Turn ON the main power switch.

Checking the Security Version

1) Press the Counter Check key on the control panel.

2) Press the [Check Device Configuration] key appearing on the control panel.

3) Confirm that '2.01' is displayed for the [Canon MFP Security Chip] item indicating the version of the security chip.

If multiple Encryption Boards are installed, the version information for each board is displayed.

CAUTION:


The user can refer to the version displayed in the [Canon MFP Security Chip] item indicating the version of the security chip to confirm that an Encryption Board that contains a security chip version that has received CC certification is operating correctly.

Checking the Security Mark

The user can check the security mark displayed on the Control Panel when using the host

machine to confirm that security is being protected. This security mark is displayed only when an Encryption Board is installed and operating normally. The location where the security mark is displayed is described in the User's Guide as shown below.

< Confirming the Security Mark >

When the HDD Data Encryption Kit is operating normally, a security mark () is displayed on the lower left corner of a panel screen.

Informing the System Administrator That Installation Is Complete

- When installation is complete, give the following explanation to the system administrator.
- When installation is complete, inform the system administrator that the security functions have been added, and explain the procedure for checking whether the security functions are enabled.
- This will enable the system administrator to quickly detect when the functions become disabled and request a service call to correct the error.

Checking That Installation Is Complete:

Following the section "Checking the Security Version", display the version information of the security chip from [Check Device Configuration] on the Control Panel, and show the system administrator that "2.01" is displayed for the [Canon MFP Security Chip] item.

Checking That the Security Functions Are Enabled:

Request the system administrator to refer to the section "Checking the Security Mark" to confirm that the security functions are enabled each time the host machine is started by checking the security mark.

Executing auto gradation adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation correction.

Therefore, execute full adjustment of auto gradation adjustment after installing this kit to enable proper images to be output.

Execution of the minimum installation work

Be sure to execute the minimum installation work in accordance with the Setup Guide because HDD is initialized when this kit is installed.

TYPE-2: Removable HDD Kit Installation Procedure

Points to Note at Installation

CAUTION:

- When handling the HDD, be careful not to vibrate or drop it.
- Be sure to prepare a USB memory for upgrading created with SST.

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-288

Check Items when Turning OFF the Main Power

Check that the main power is OFF.

- 1) Turn OFF the main power switch.
- 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-9-289

Checking the Contents

Removable HDD Kit

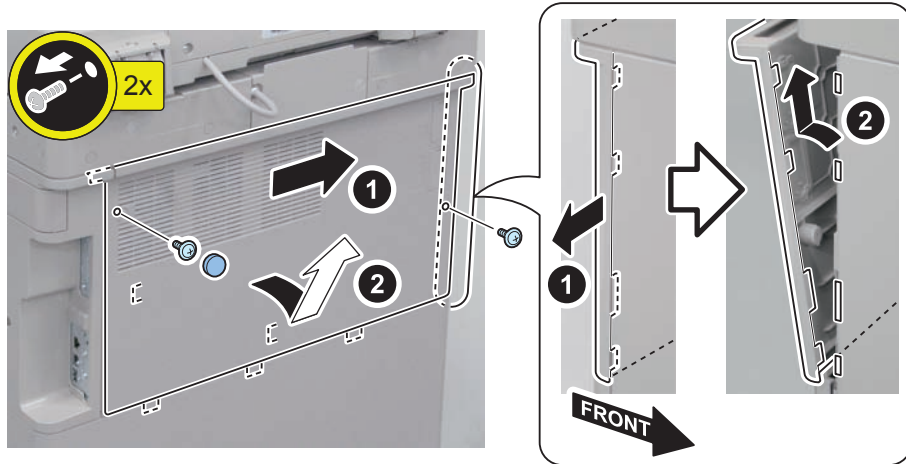
<input type="checkbox"/> [1] HDD Slot Unit X 1 	<input type="checkbox"/> [2] Wire Saddle X 2 	<input type="checkbox"/> [3] HDD Warning Label X 1 
<input type="checkbox"/> [4] R-HDD Label X 1 	<input type="checkbox"/> [5] Conversion Connector X 1 	

F-9-290

Installation Procedure

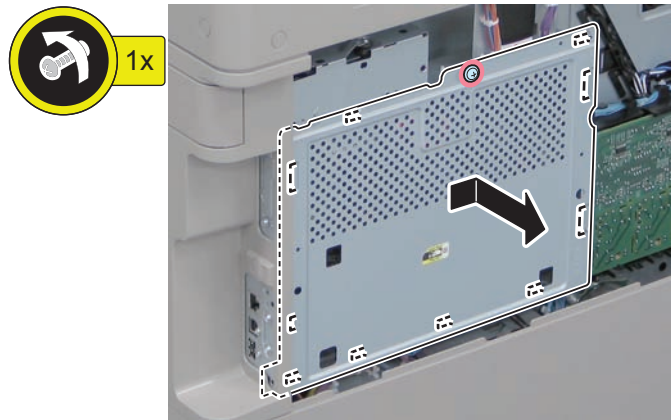
Removing the Covers

1)



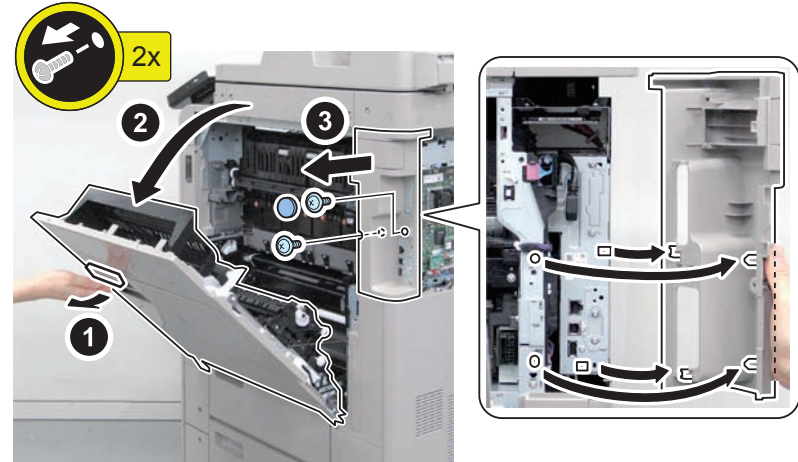
F-9-291

2)



F-9-292

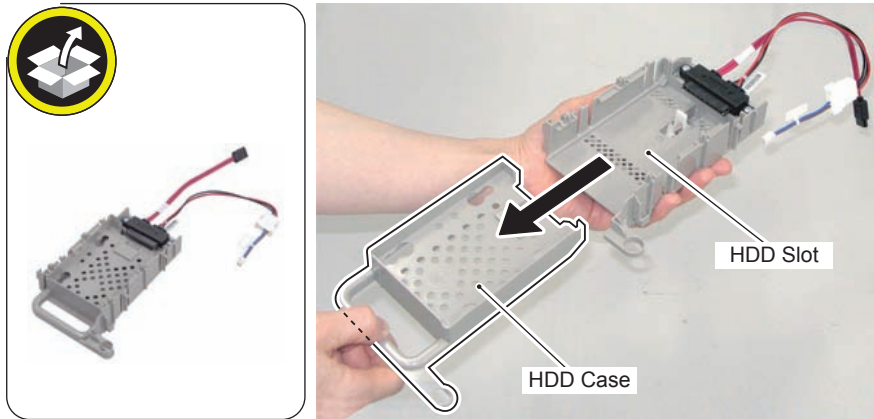
3)



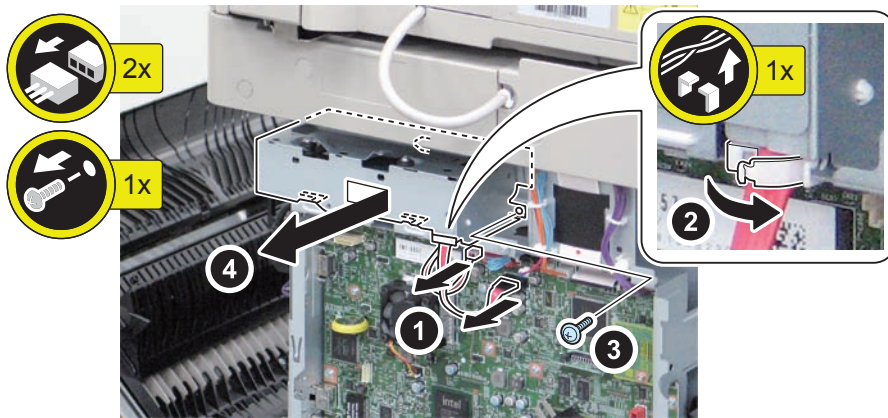
F-9-293

Installing the Removable HDD Kit

-
- 1) Remove the packing tape and disassemble the HDD Slot Unit.



-
- 2) Remove the HDD Frame by sliding it.
 - 2 Connectors
 - 1 Edge Saddle
 - 1 Screw (The removed screw will be used in step 12.)
 - 3 Hooks

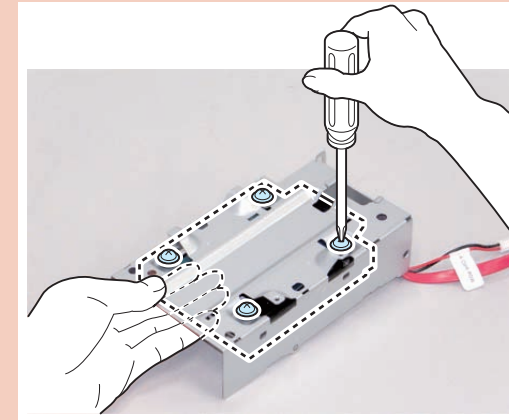


F-9-294

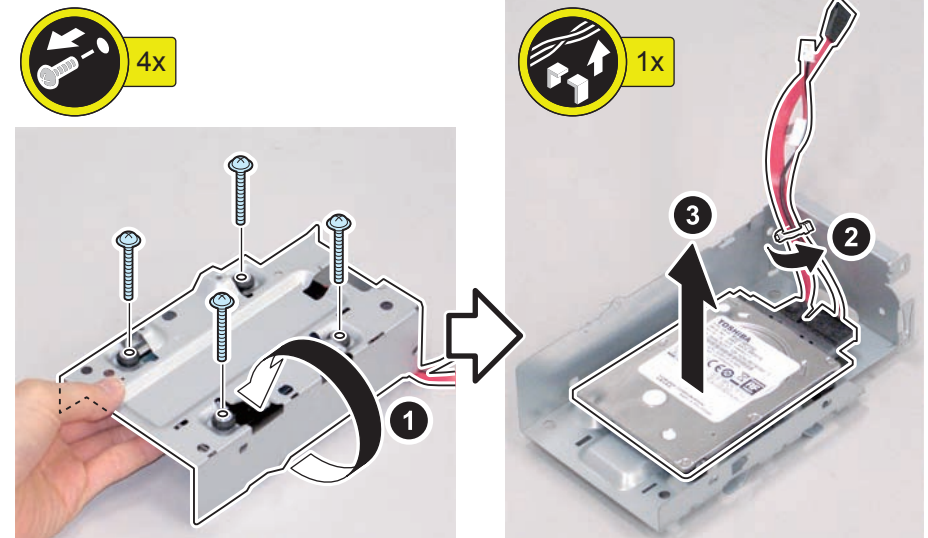
-
- 3) Remove the HDD and 2 Cables from the HDD Frame.
 - 4 Screws (They will be used in step 7.)
 - 1 Wire Saddle

CAUTION:

Be sure to hold the HDD so as not to drop it when removing the screw.

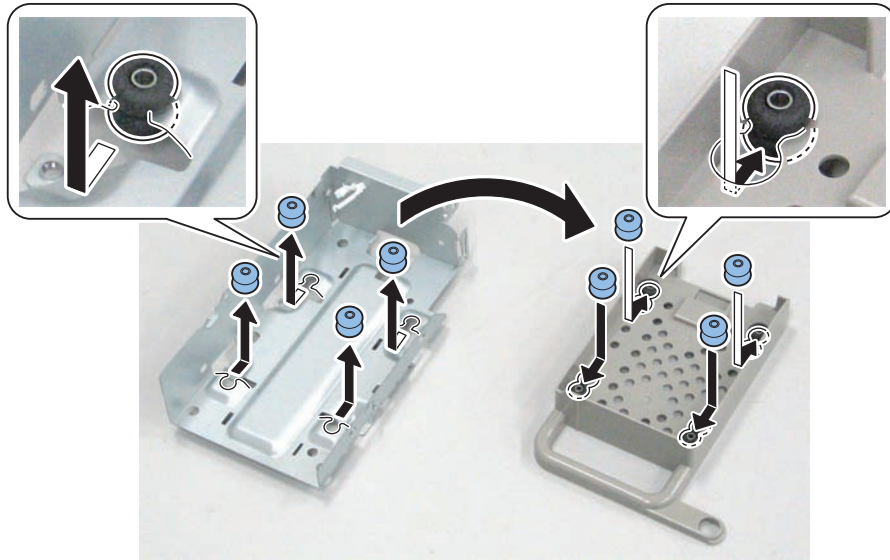


F-9-295



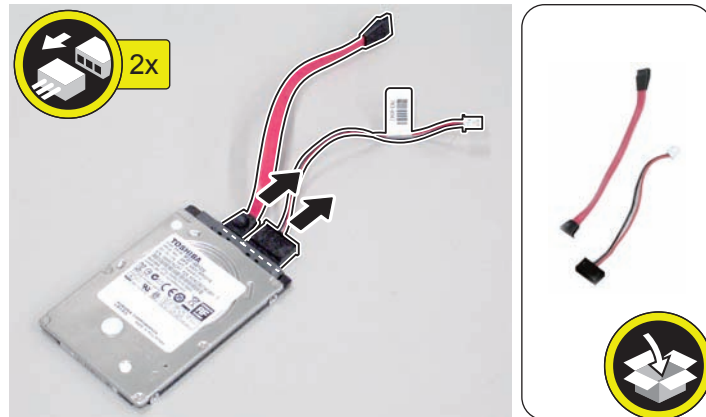
F-9-296

- 4) Remove the 4 Anti-vibration Dampers and then Install these Dampers to the HDD Case.



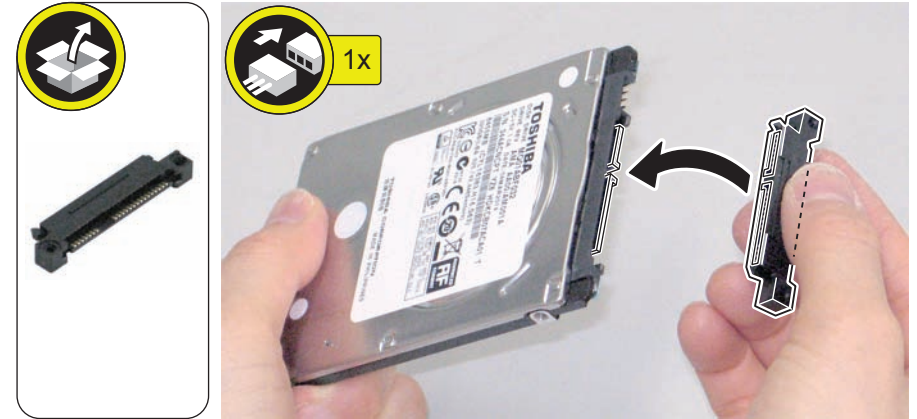
F-9-297

- 5) Disconnect 2 Cables from the HDD. (The 2 removed cables will not be used.)



F-9-298

- 6) Connect the Conversion Connector. to the HDD.



F-9-299



7) Install the HDD into the HDD Case.

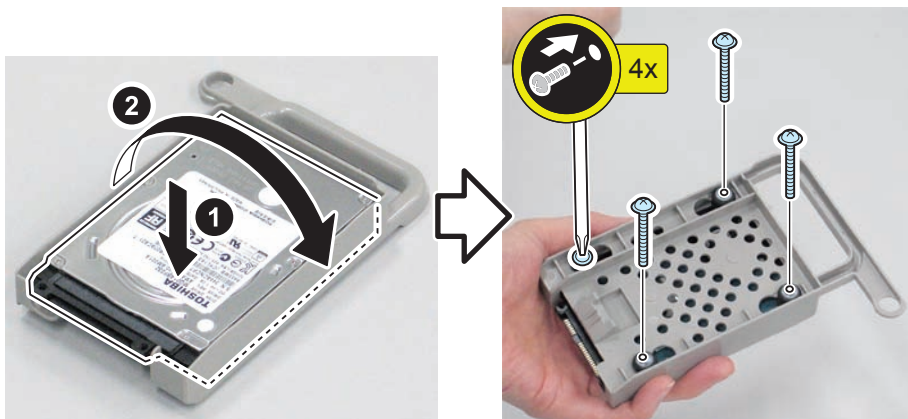
- 4 Screws (Use the screws removed in step 3.)

CAUTION:

- Be careful not to drop the HDD.
- Place the HDD with the label side facing up and the connector oriented as shown in the figure.



F-9-300



F-9-301



8) Affix the HDD Warning Label in the appropriate language, aligning the label with the Rib.

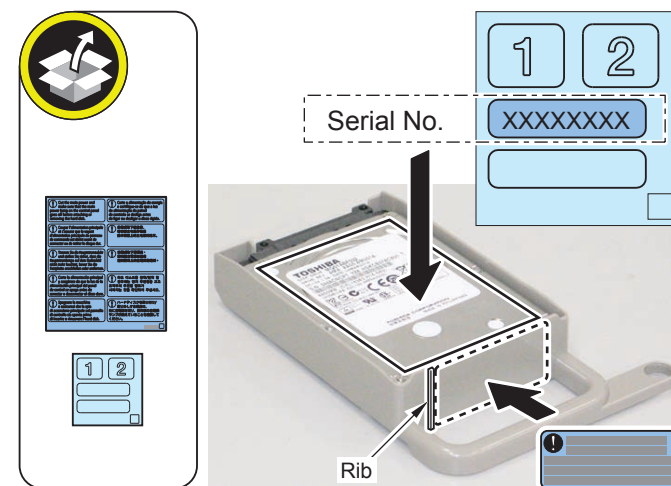
CAUTION:

Be sure to affix the HDD Warning Label in the direction as shown in the figure

9) Write down the serial number of the host machine to the R-HDD Label, and affix it to the space on the top of the HDD.

CAUTION:

- Be sure to write down the serial number on the R-HDD Label in order to show from which machine it was removed and prevent it from being installed to another machine.
- Be sure to affix it on a flat surface.



F-9-302

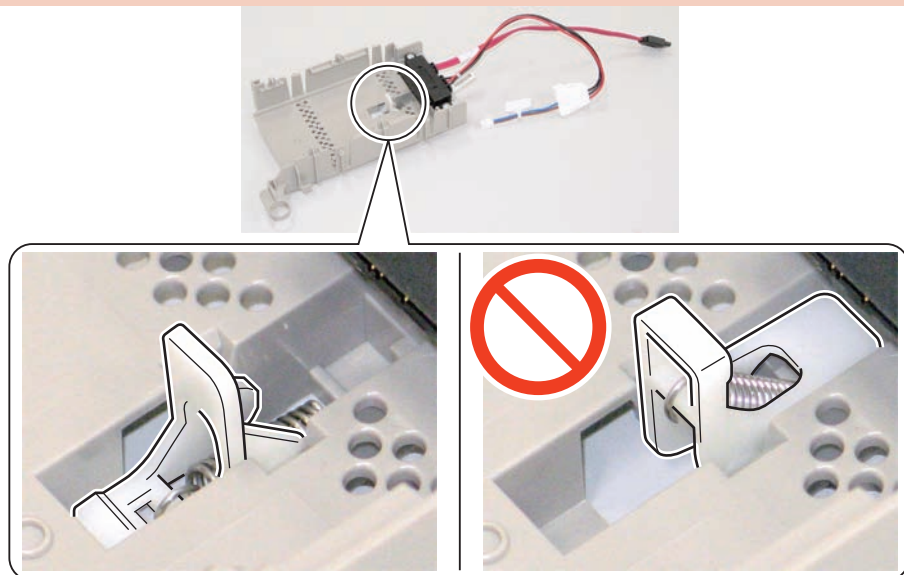


10) Install the HDD Slot to the HDD Frame.

- 8 Bosses
- 4 Hooks

CAUTION:

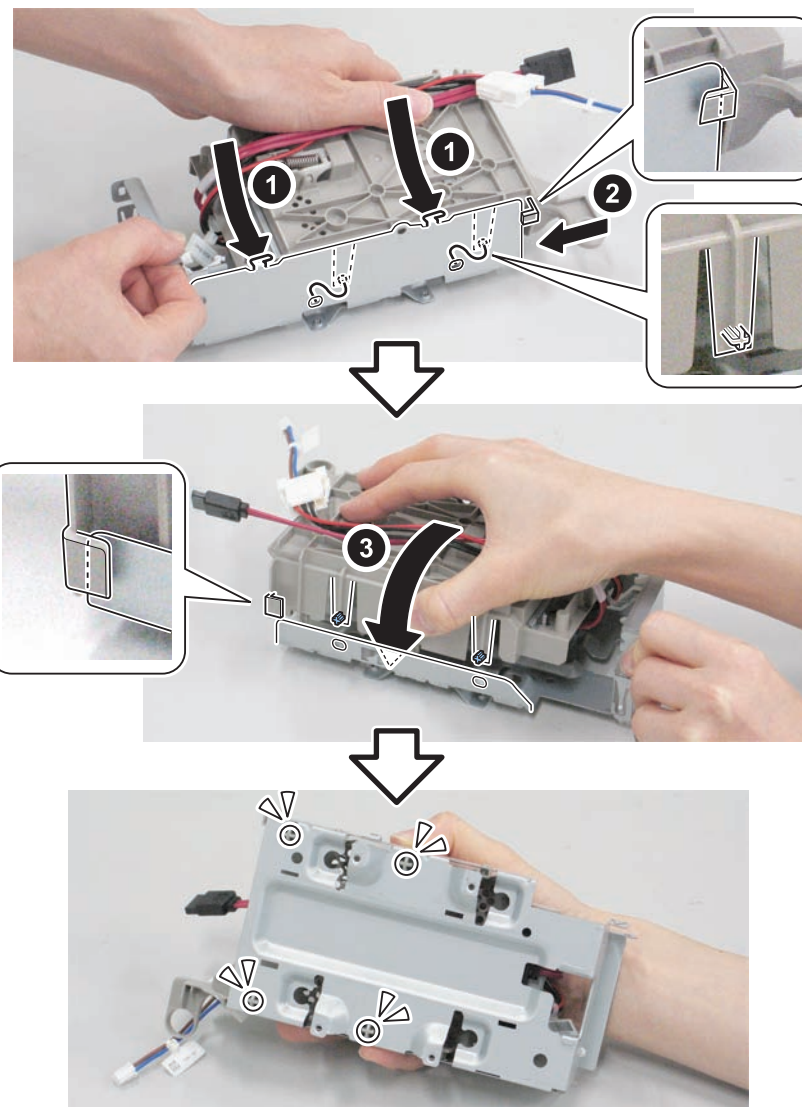
- Set the HDD Toggle Lever in the correct position as shown in the figure, and check that the HDD Case can be inserted all the way and installed properly.
- Unless the HDD Toggle Lever is in the correct position, the HDD Case cannot be installed.



F-9-303

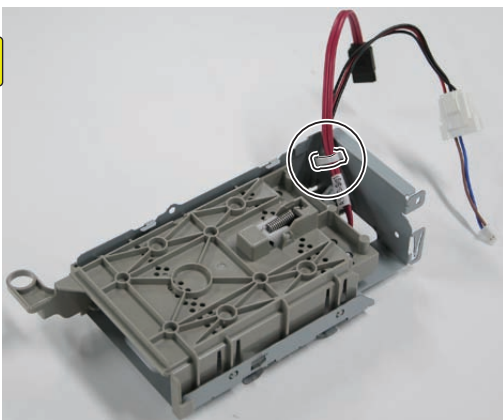
CAUTION:

Be sure not to trap the Power Cable and Signal Cable during installation.



F-9-304

- 11) Secure the Power Cable and Signal Cable in place using the Wire Saddle.

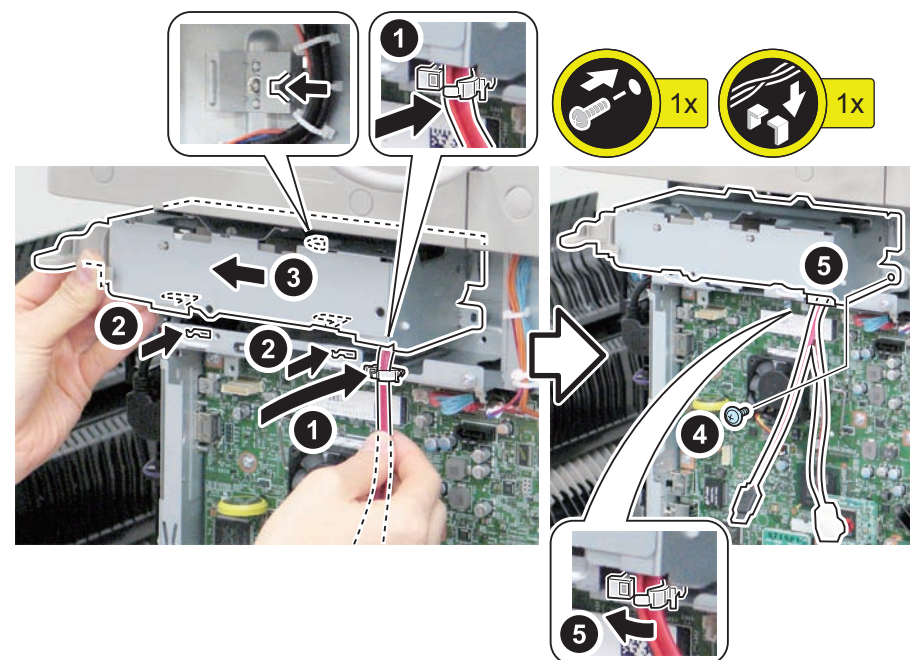


F-9-305

- 12) Install the HDD Frame by sliding it.
- 3 Hooks
 - 1 Screw (Use the screw removed in step 2.)
 - 1 Edge Saddle

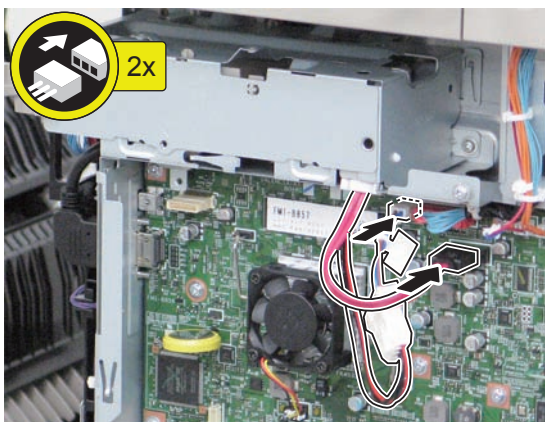
CAUTION:

Be sure not to trap the Power Cable and Signal Cable during installation.



F-9-306

- 13) Connect the Signal Cable and the Power Cable to the Main Controller PCB.
- 2 Connectors



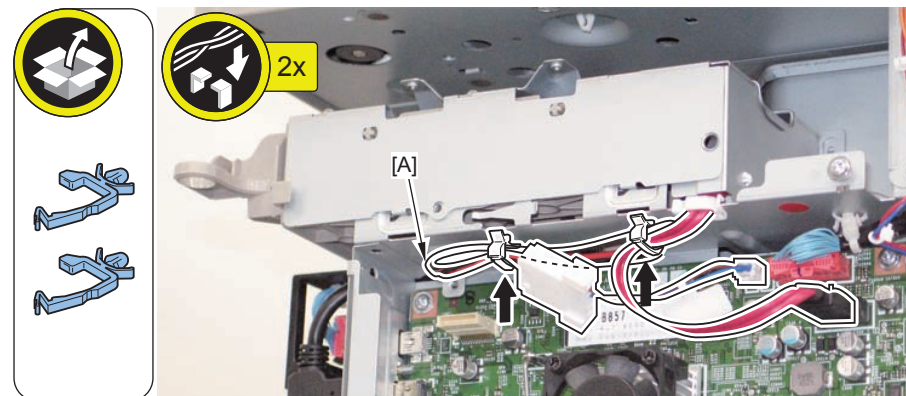
- 14) Install the 2 Wire Saddles to the Controller Box Frame.
- 15) Secure the Signal Cable and Power Cable in place using the 2Wire Saddles.

NOTE:

Fold the Power Cable at the [A] part and then secure it using the Wire Saddles.

NOTE:

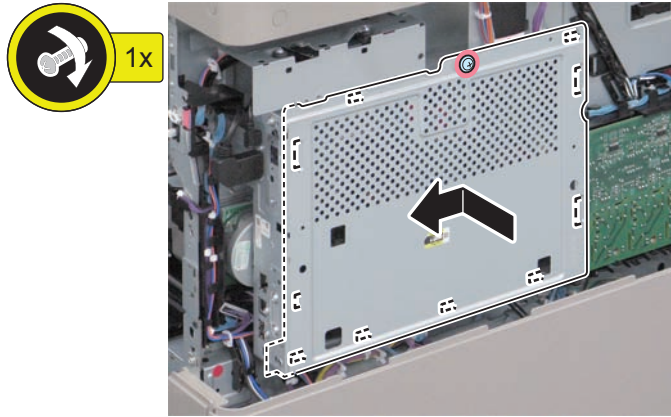
- Secure the Power Cable in place using the 2 Wire Saddles.
- Secure the Signal Cable in place using the Wire Saddle.



F-9-307

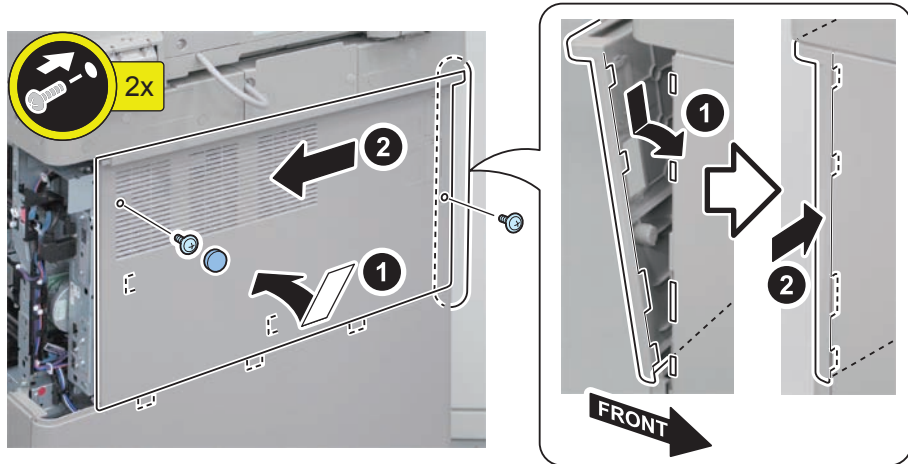
Installing the Covers

1)



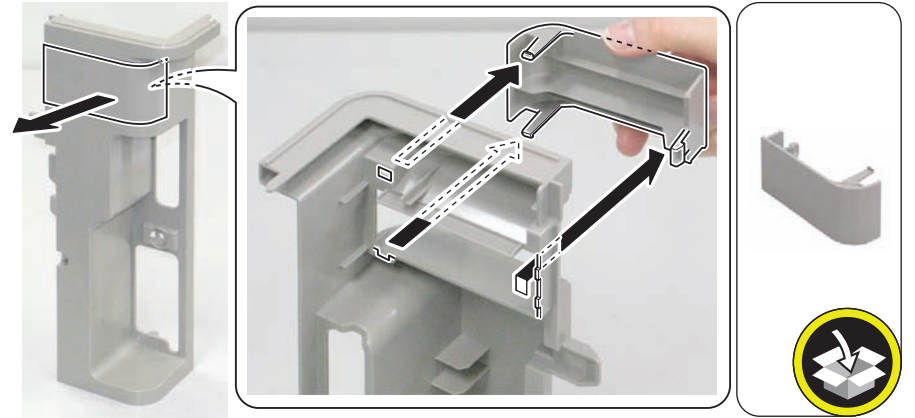
F-9-308

2)



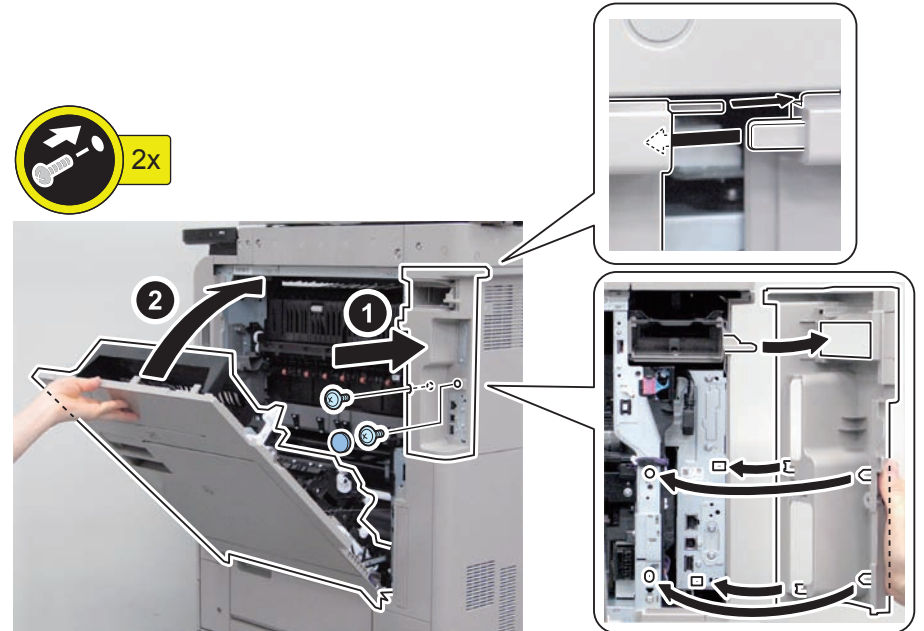
F-9-309

3)



F-9-310

4)



F-9-311

■ Installing the Removable HDD



1) Install the HDD Unit to the HDD Slot.



F-9-312



2) Be sure to request the user to padlock the removable HDD to discourage theft.

● Checking after Installation



- 1) Connect the power plug to the outlet.
- 2) Turn ON the main power switch.
- 3) Check that the HDD is recognized.

Select [service mode (level 1) > COPIER > Display > ACC-ST5 > HDD], and check that the manufacturer's name and the model number are displayed.

TYPE-3: HDD Data Encryption Kit/ Removable HDD Kit Installation Procedure

Points to Note at Installation

CAUTION:

- When handling the HDD, be careful not to vibrate or drop it.
- Be sure to prepare a USB memory for upgrading created with SST.
- If only the HDD Data Encryption Kit is installed, the data on the HDD will be erased. Be sure to back up/export the data as necessary.

CAUTION: Marked portion

When tightening the screws, do not tighten them too tightly. Otherwise, there is a risk of damage and deformation of screw holes.



F-9-313










Points to Note when Unpacking HDD Data Encryption & Mirroring Kit

CAUTION:

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

HDD Data Encryption Kit

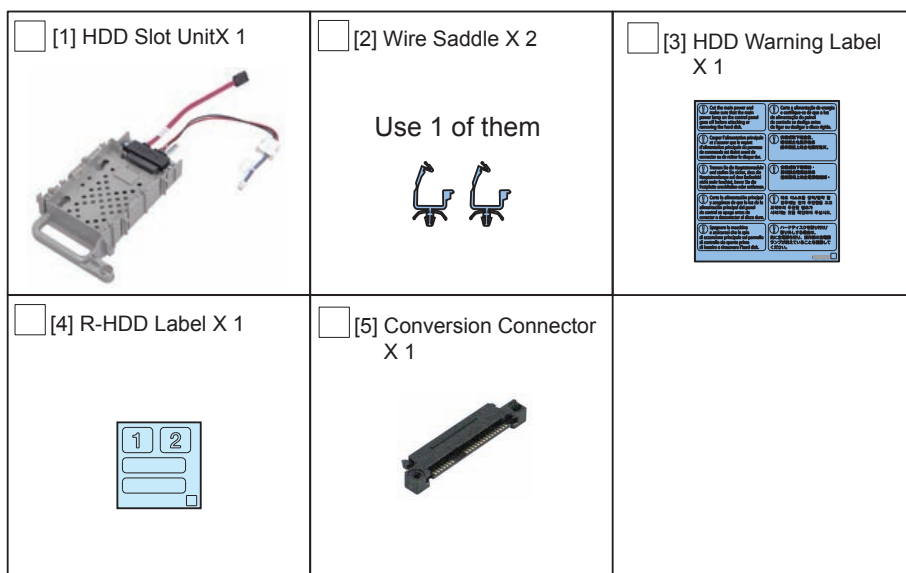
<input type="checkbox"/> [1] Encryption Board X 1 	<input type="checkbox"/> [2] Cable Guide X 1 	<input type="checkbox"/> [3] Screw (TP; M3x6) X 4 
<input type="checkbox"/> [4] Signal Cable (250mm; A:HDD-Sig) X 1 	<input type="checkbox"/> [5] Power Cable (270mm; A:HDD-Pow1) X 1 	<input type="checkbox"/> [6] Signal Cable (135mm; A:Cont-Sig) X 1 
<input type="checkbox"/> [7] Power Cable (135mm; A:Cont-Pow) X 1 	<input type="checkbox"/> [8] Cable Guide X 1 	<input type="checkbox"/> [9] Wire Saddle X 3 

F-9-314

<Others>

Including guides

Removable HDD Kit



F-9-315

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 (mistake in the procedure before installing the HDD Encryption Board)" to occur when turning ON the main power after installing the Encryption Board. If this error occurs, the HDD needs to be returned to the non-encrypted state.



- 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 is OFF.

- Turn OFF the main power switch.
- 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

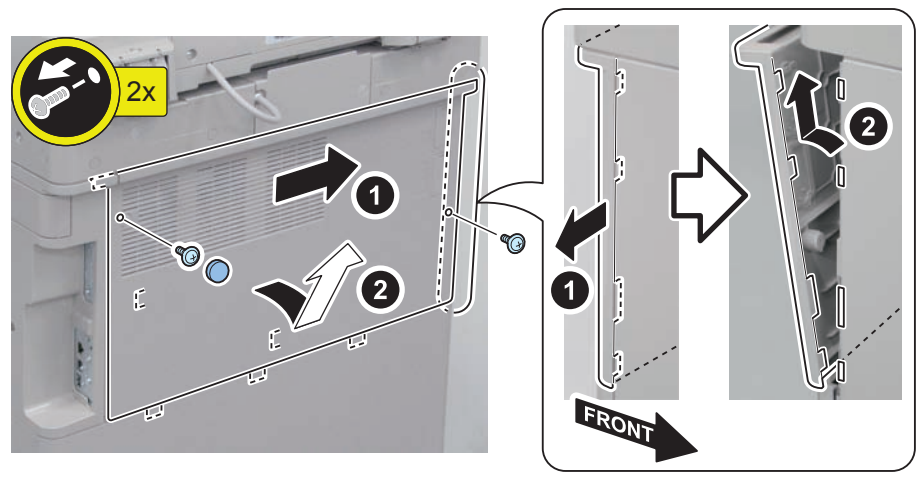


F-9-316

Installation Procedure

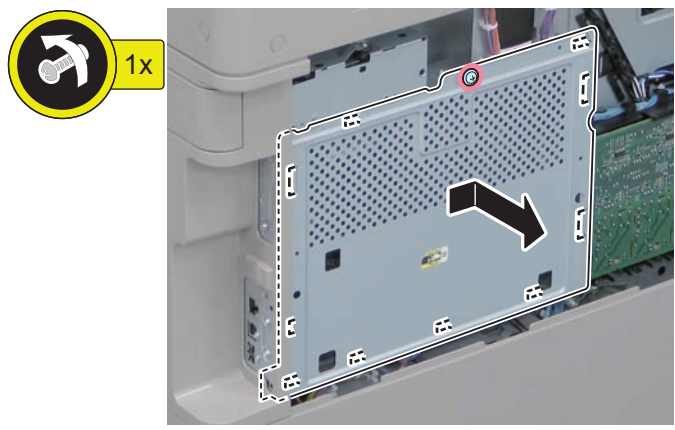
Removing the Covers

1)



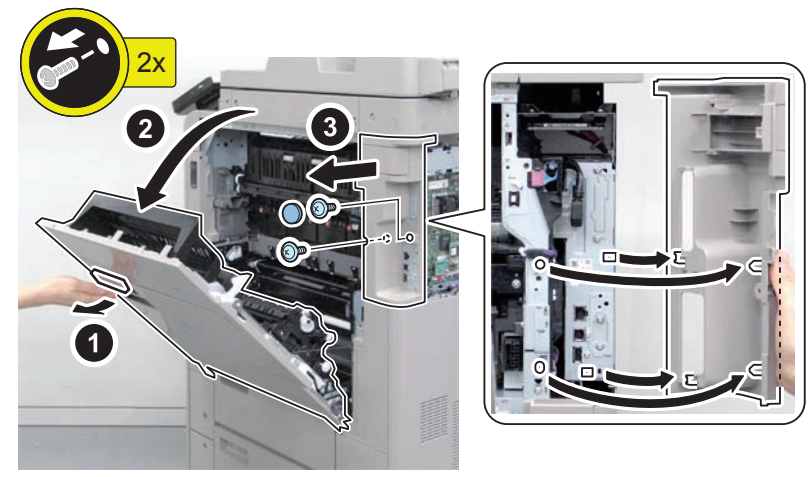
F-9-317

2)



F-9-318

3)

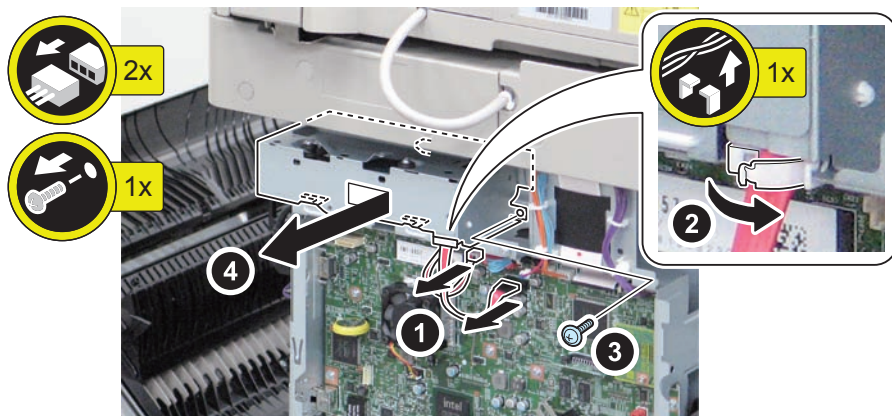


F-9-319

Installing the Removable HDD Kit/HDD Data Encryption Kit



- 1) Remove the HDD Frame by sliding it.
 - 2 Connectors
 - 1 Edge Saddle
 - 1 Screw (The removed screw will be used in step 20.)
 - 3 Hooks



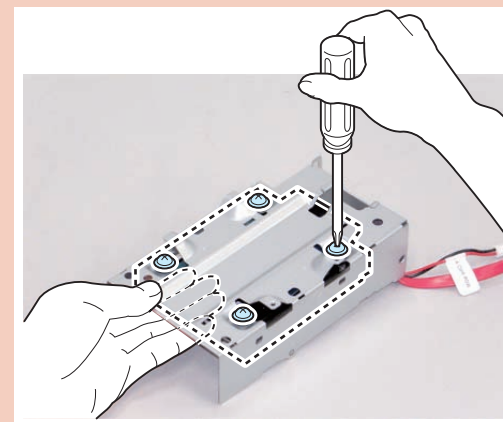
F-9-320



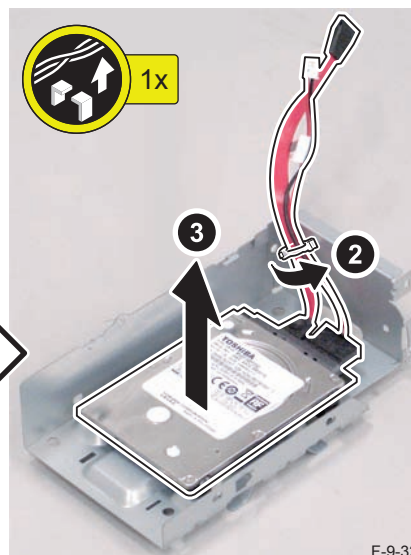
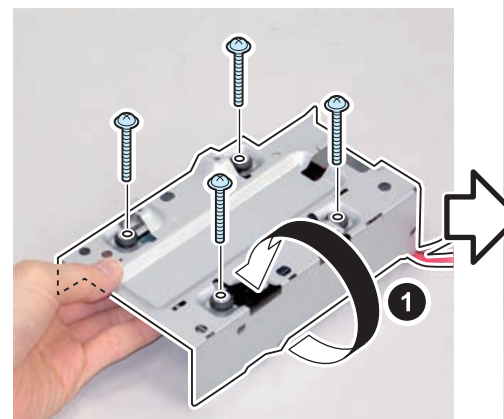
- 2) Remove the HDD from the HDD Frame.
 - 4 Screws (The removed screws will be used in step 7.)
 - 1 Wire Saddle

CAUTION:

Be sure to hold the HDD so as not to drop it when removing the screw.



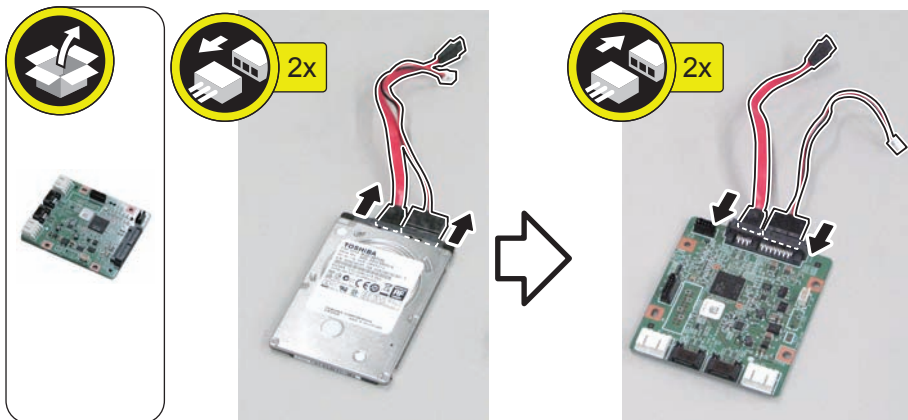
F-9-321



F-9-322

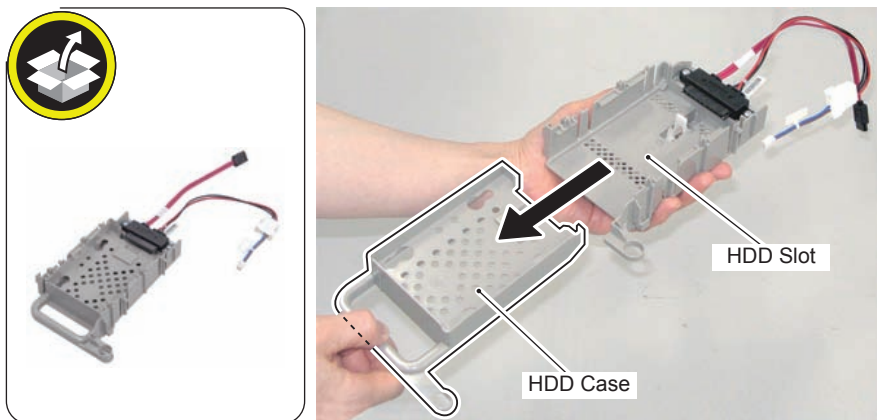
- 3) Remove the Power Cable and Signal Cable from the HDD, and install the Encryption Board.

• 2 Connector



F-9-323

- 4) Remove the packing tape and disassemble the HDD Slot Unit.



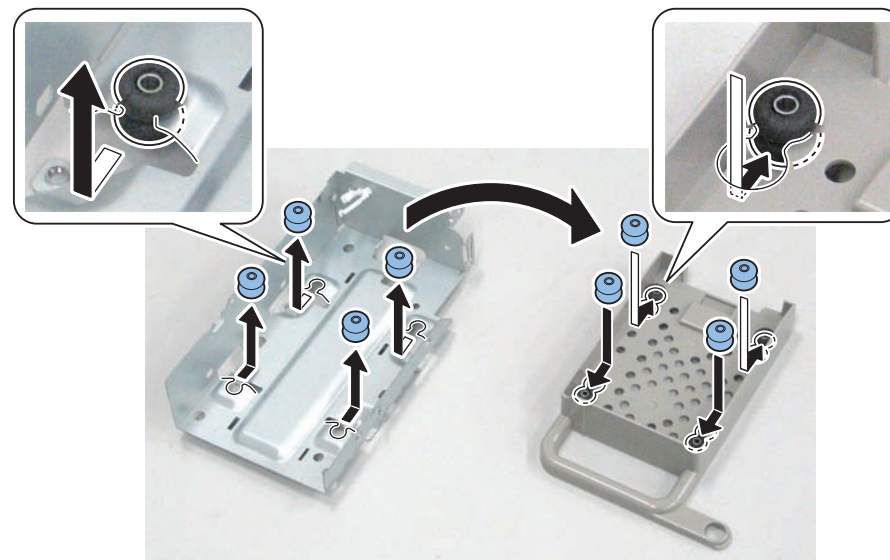
F-9-324

- 5) Connect the Conversion Connector to the HDD.



F-9-325

- 6) Remove the 4 Anti-vibration Dampers and install them to the HDD Case.



F-9-326



7) Install the HDD in the HDD Case.

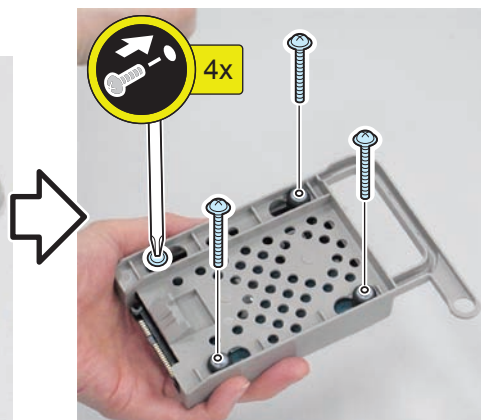
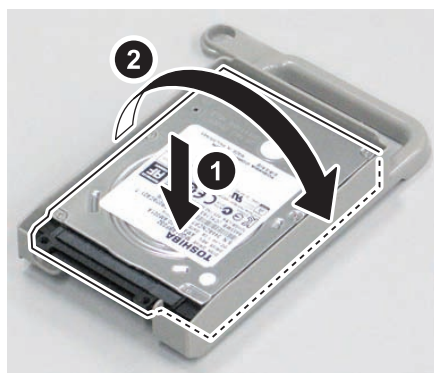
- 4 Screws (Use the screws removed in step 2.)

CAUTION:

- Be careful not to drop the HDD.
- Place the HDD with the label side facing up and the connector oriented as shown in the figure.



F-9-327



F-9-328



8) Affix the HDD Warning Label in the appropriate language, aligning the label with the Rib.

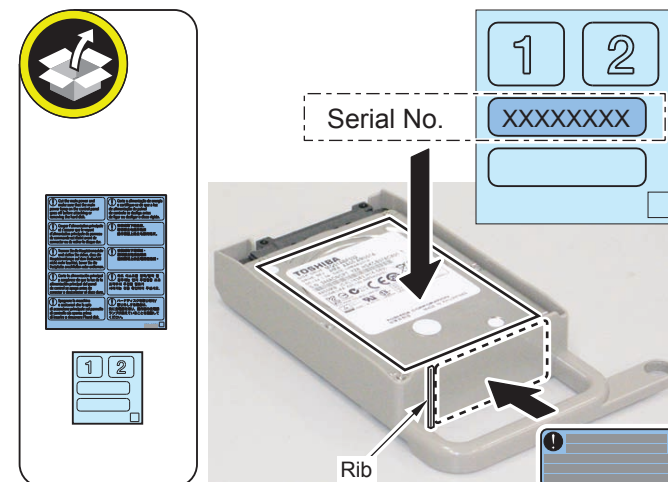
CAUTION:

Be sure to affix the HDD Warning Label in the direction as shown in the figure.

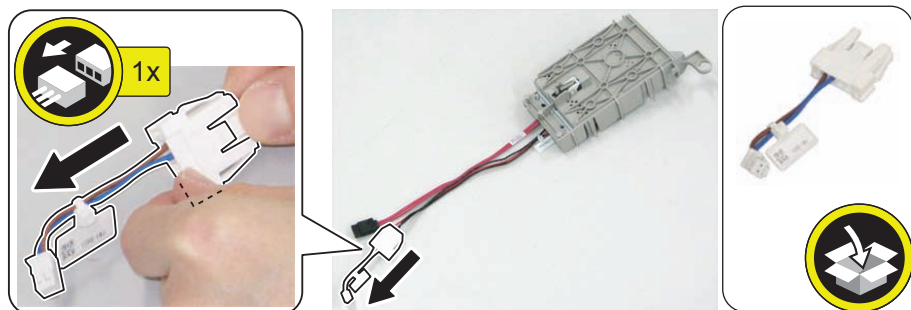
9) Write down the serial number of the host machine to the R-HDD Label, and affix it to the space on the top of the HDD.

CAUTION:

- Be sure to write down the serial number on the R-HDD Label in order to show from which machine it was removed and prevent it from being installed to another machine.
- Be sure to affix it on a flat surface.



- 10) Remove the Relay Connector. (The removed Relay Connector will not be used.)
- 1 Connector

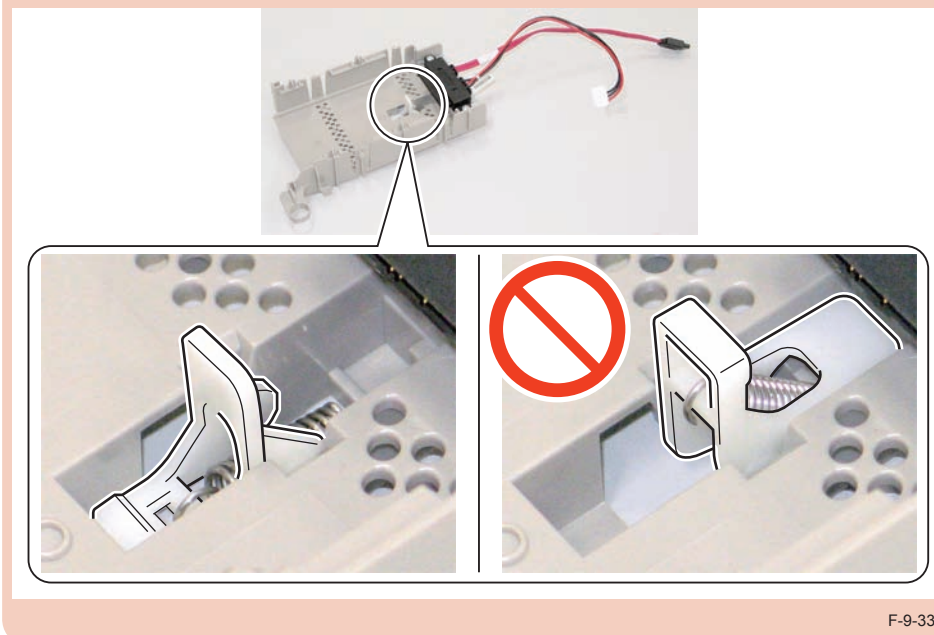


F-9-329

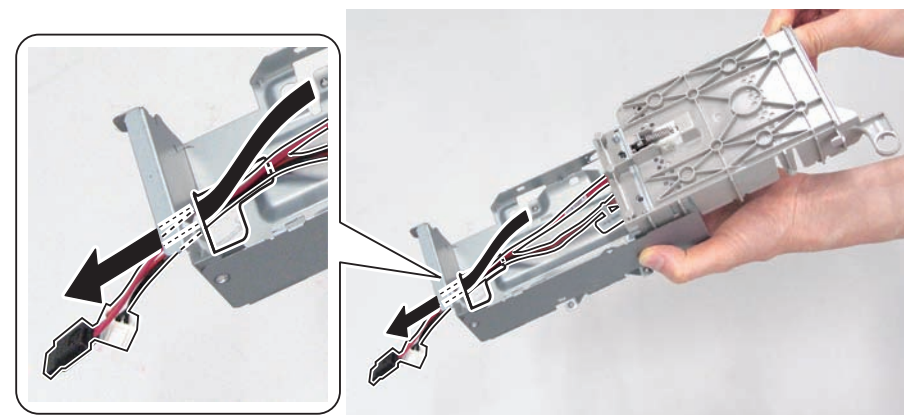
- 11) Pass the Power Cable and Signal Cable through the hole in the HDD Frame.

CAUTION:

Set the HDD Toggle Lever in the correct position as shown in the figure, and check that the HDD Case can be inserted all the way and installed properly. Unless the HDD Toggle Lever is in the correct position, the HDD Case cannot be installed.



F-9-330



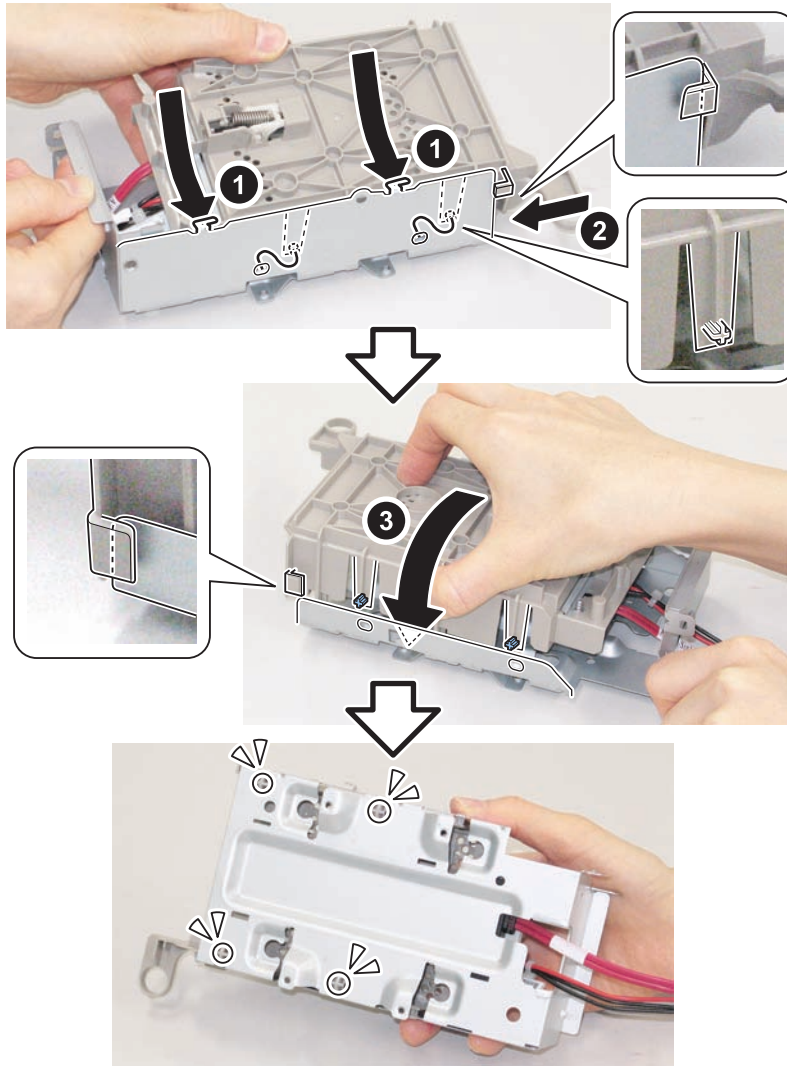
F-9-331

12) Install the HDD Slot to the HDD Frame.

- 8 Bosses
- 4 Hooks

CAUTION:

Be sure not to trap the Power Cable and Signal Cable during installation.

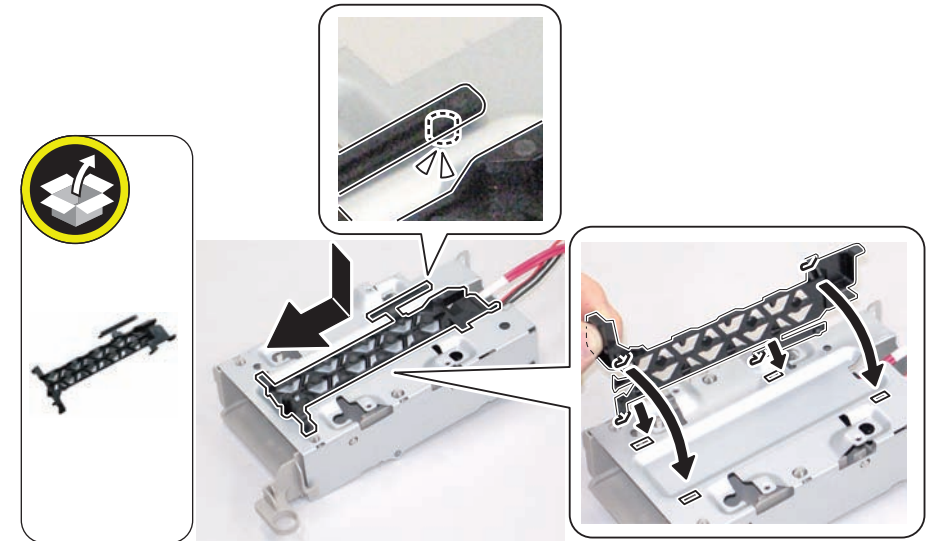


F-9-332



13) Install the Cable Guide to the HDD Frame.

- 4 Hooks
- 1 Boss

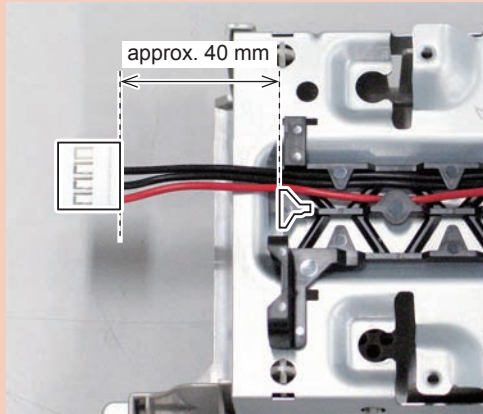


F-9-333

- 14) Secure the Power Cable connected to the HDD Slot with the Cable Guide.

CAUTION: Position to install the Cable

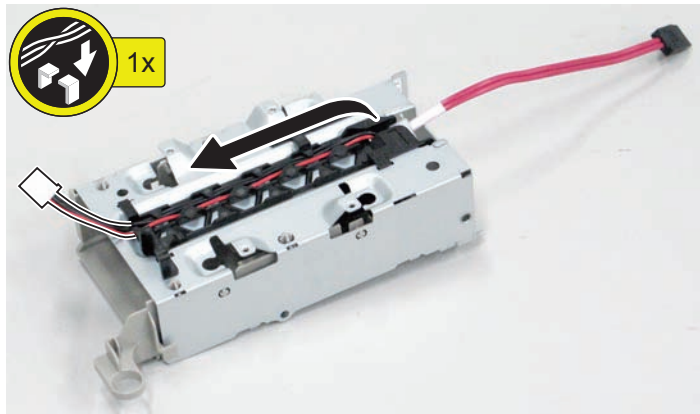
Be sure to connect the Power Cable in a way such that its extra length is approx. 40 mm.



F-9-334

CAUTION:

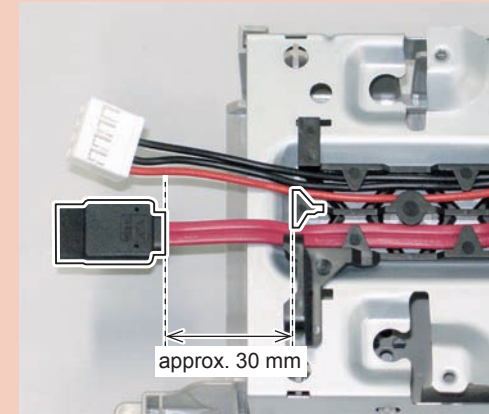
Be sure to route the Power Cable along the bottom of the concave of the Cable Guide.



- 15) Secure the Signal Cable connected to the HDD Slot with the Cable Guide.

CAUTION: Position to install the Cable

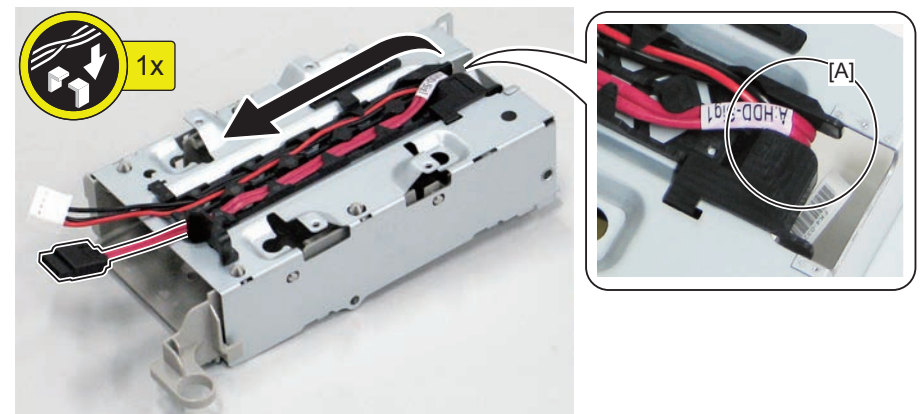
Be sure to connect the Signal Cable in a way such that its extra length is approx. 30 mm.



F-9-335

CAUTION:

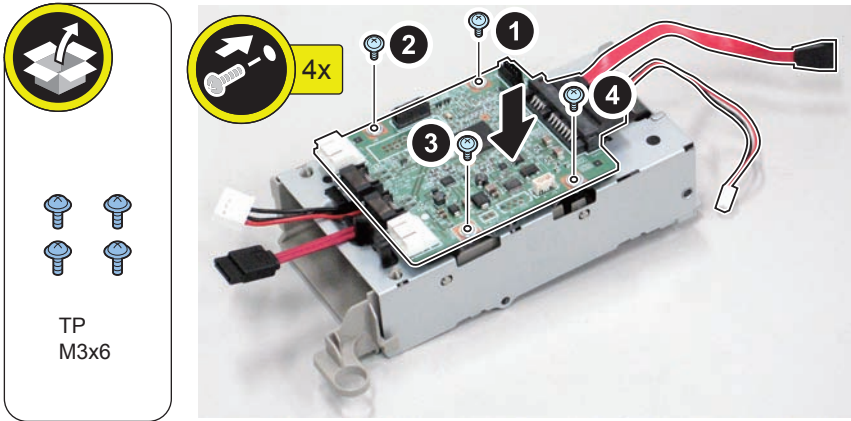
Do not allow extra cable at the [A] part in the figure shown below.



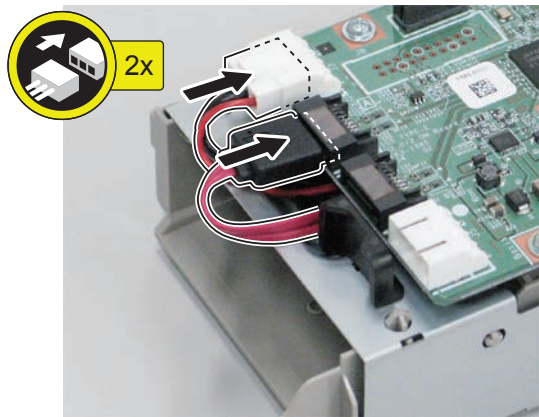
F-9-336

- 16) Install the Encryption Board.
 - 4 Screws (TP; M3x6)

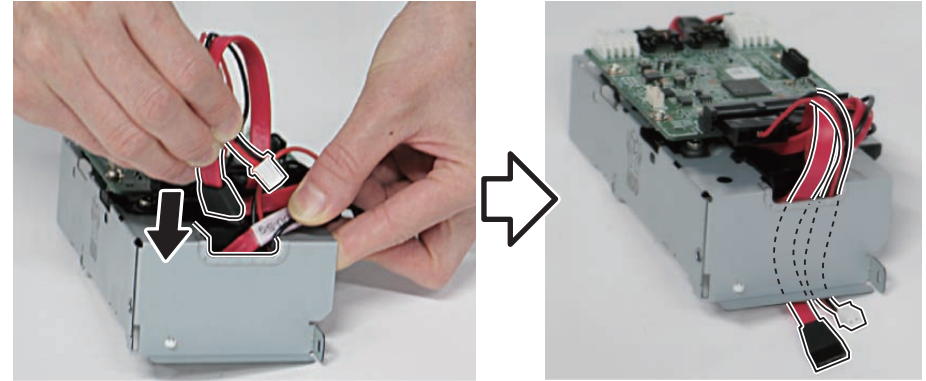
CAUTION:
Install the screws in the order from (1) to (4).



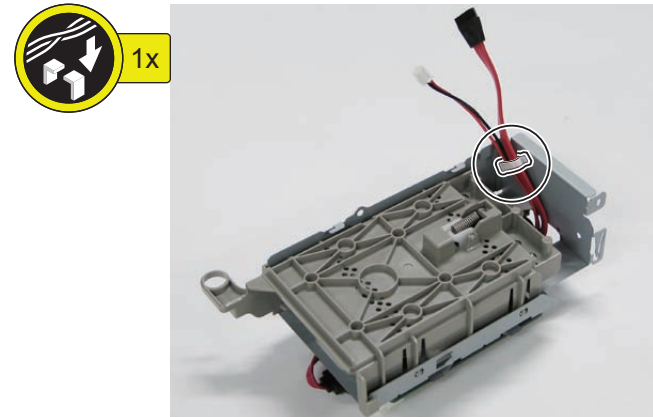
- 17) Connect the Power Cable and Signal Cable to the Encryption Board.
 - 2 Connectors



- 18) Pass the Power Cable and Signal Cable through the hole in the HDD Frame.



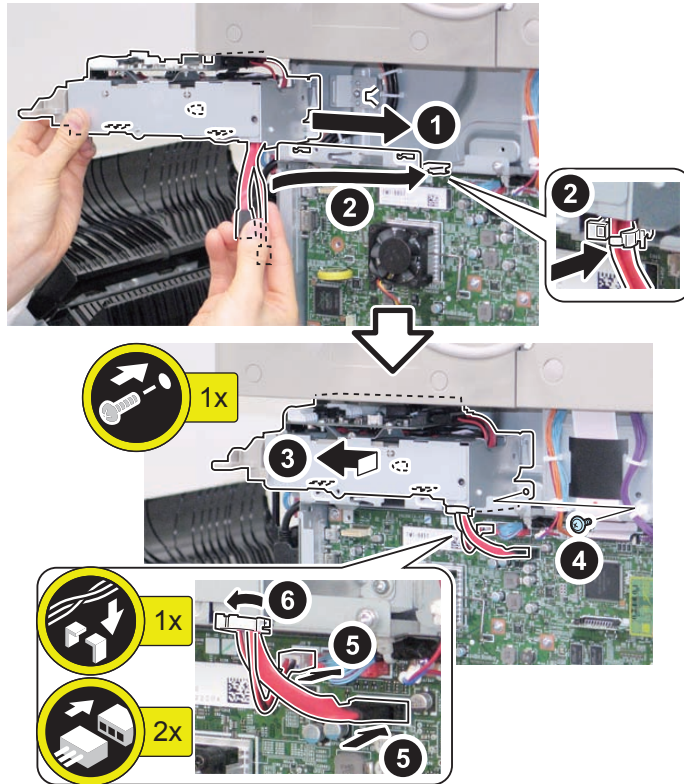
- 19) Secure the Power Cable and Signal Cable in place using the Wire Saddle.



- 20) Install the HDD Frame to the host machine by sliding it.
- 3 Hooks
 - 1 Screw (Use the screw removed in step 1.)
 - 2 Connectors
 - 1 Edge Saddle

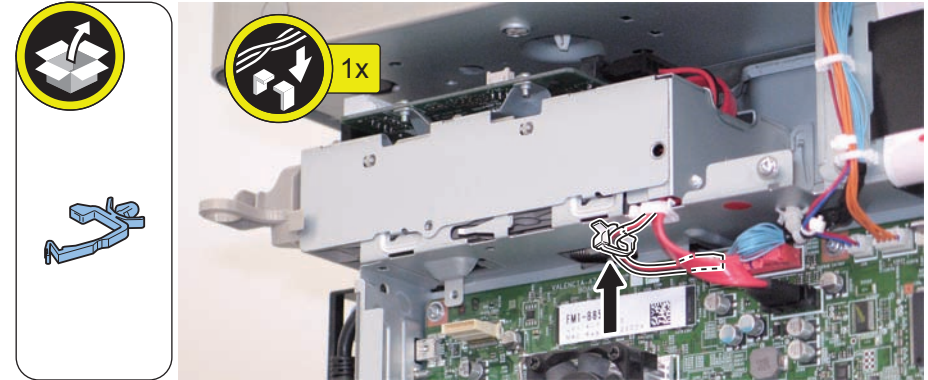
CAUTION: Install the HDD Frame

- Be sure to install the HDD Frame by holding the cable and pushing the HDD Frame.
- Do not damage the cable with the edge, etc. during installation.
- Be careful not to drop the screws.



F-9-341

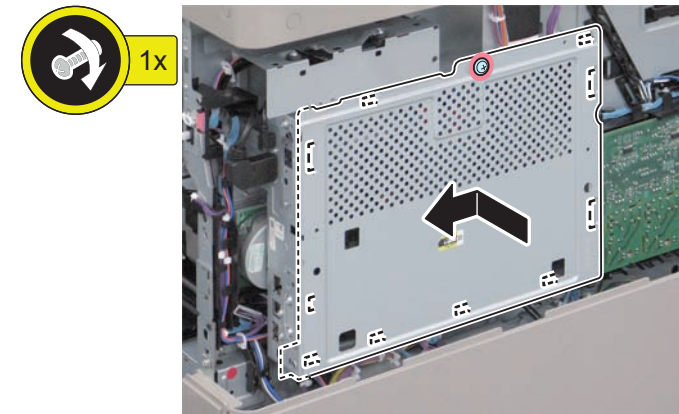
- 21) Install the Wire Saddle to the Controller Box Frame.
- 22) Secure the Power Cable in place using the Wire Saddle.



F-9-342

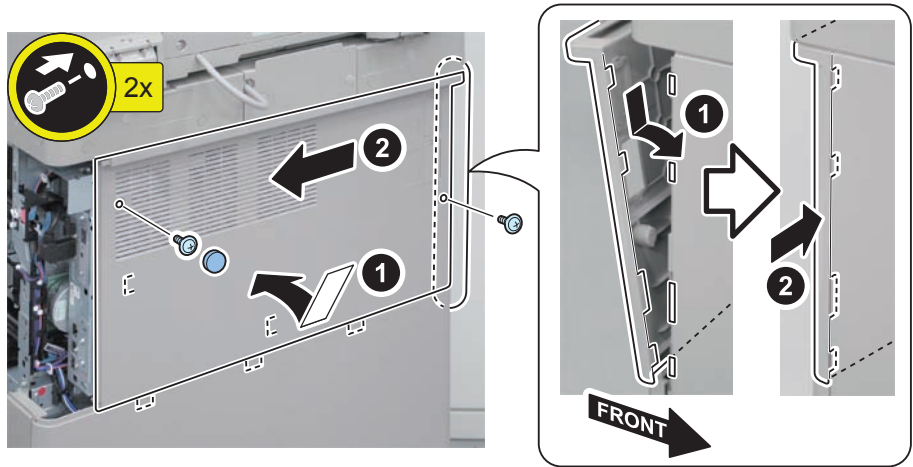
Installing the Covers

- 1)



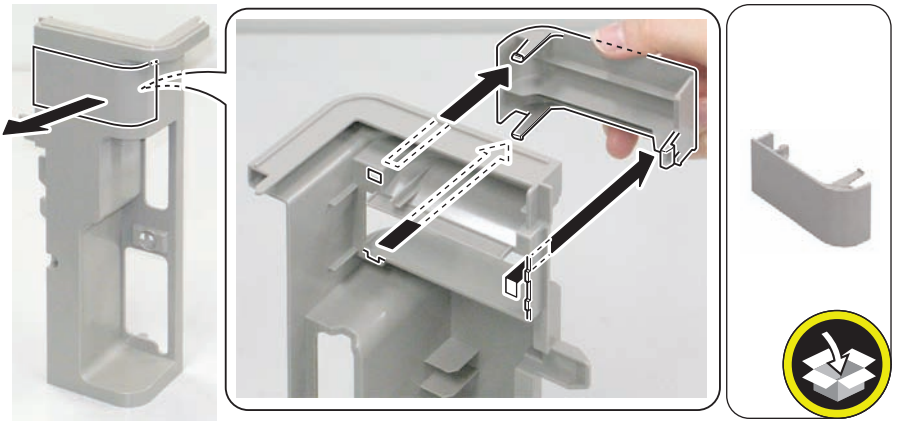
F-9-343

2)



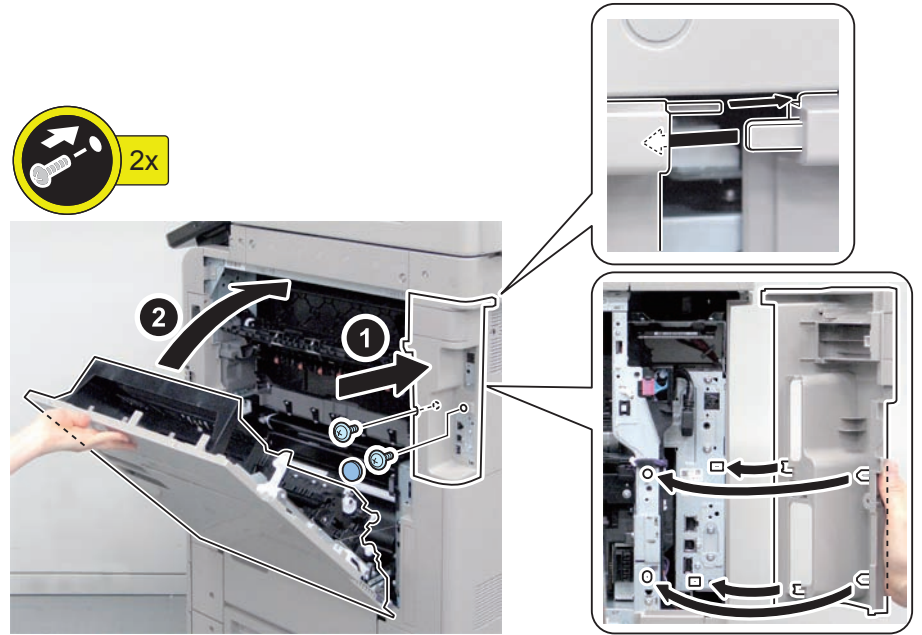
F-9-344

3)



F-9-345

4)



F-9-346

Installing the Removable HDD



- 1) Install the HDD Unit to the HDD Slot.



F-9-347



- 2) Be sure to request the user to padlock the removable HDD to discourage theft.

HDD Initialization Procedure

1. Items to be prepared

- 1) PC

Be sure that the version of the Service Support Tool that supports the host machine is installed.

- 2) Crossover Ethernet cable.

2. Preparing for the Installation of the System Software of Host machine

- 1) If the PC and host machine have been started, turn the main power OFF.
- 2) Connect the PC and the machine using an Cross Ethernet cable. (In case of SST).
- 3) Turn ON the power of the PC.

3. Registering the system software

- 1) Insert the latest System Software into the PC using the SST.
- 2) Start the SST.
- 3) Click 'Register Firmware'.
- 4) Select the drive where the system software has been inserted, and click the [SEARCH] button.
- 5) Click the [REGISTER] button.
- 6) Click [OK].

4. Initializing HDD

< In case of SST >

- 1) Start the host machine with download mode in safe mode.
- 2) Start the SST.
- 3) Select the model. Then, select [Single] and click [Start].
- 4) Click [Format HDD].
- 5) Select [All], and click [Start].
- 6) Click [Execute Format].
- 7) The Format is executed.
- 8) Click [OK].
- 9) After formatting is completed, select [Shutdown/Restart], and click [Restart].
- 10) Click [OK]
- 11) The power of the host machine is turned OFF.
- 12) Terminate the SST.
- 13) Disconnect the Cross Ethernet Cable from the machine, and connect the user's network cable to the machine.

<In case of USB flash drive>

- 1) Connect the USB memory to the PC.
- 2) Start up SST, and click the USB icon displayed in the target selection screen.
- 3) Select the drive, the model series, and the version to be written to the USB flash drive, and click [Confirm].
- 4) Click [Start], and after the version has been written to the USB flash drive, click [OK] and then remove the USB flash drive.
- 5) Terminate the SST.
- 6) Connect the USB memory device to the host machine, and start the host machine with download mode in safe mode.
- 7) Press keys on the Control Panel in the order shown below.
 - Press any keys
 - [4] : Clear/Format
 - [1] : Disk Format
 - [0] : OK
 - Press any keys
 - [C] : Return to Menu
 - [Reset] : Start shutdown sequence
 - [0] : OK (The power of the host machine is turned OFF automatically.)
- 8) Remove the USB flash drive.
- 9) Turn ON the main power switch.

Checking the Security Version

- 1) Press the Counter Check key on the control panel.
- 2) Press the [Check Device Configuration] key appearing on the control panel.
- 3) Confirm that '2.01' is displayed for the [Canon MFP Security Chip] item indicating the version of the security chip.

If multiple Encryption Boards are installed, the version information for each board is displayed.

CAUTION:


The user can refer to the version displayed in the [Canon MFP Security Chip] item indicating the version of the security chip to confirm that an Encryption Board that contains a security chip version that has received CC certification is operating correctly.

Checking the Security Mark

The user can check the security mark displayed on the Control Panel when using the host

machine to confirm that security is being protected. This security mark is displayed only when an Encryption Board is installed and operating normally. The location where the security mark is displayed is described in the User's Guide as shown below.

< Confirming the Security Mark >

When the HDD Data Encryption Kit is operating normally, a security mark () is displayed on the lower left corner of a panel screen.

Informing the System Administrator That Installation Is Complete

- When installation is complete, give the following explanation to the system administrator.
- When installation is complete, inform the system administrator that the security functions have been added, and explain the procedure for checking whether the security functions are enabled.
- This will enable the system administrator to quickly detect when the functions become disabled and request a service call to correct the error.

Checking That Installation Is Complete:

Following the section "Checking the Security Version", display the version information of the security chip from [Check Device Configuration] on the Control Panel, and show the system administrator that "2.01" is displayed for the [Canon MFP Security Chip] item.

Checking That the Security Functions Are Enabled:

Request the system administrator to refer to the section "Checking the Security Mark" to confirm that the security functions are enabled each time the host machine is started by checking the security mark.

Executing auto gradation adjustment

When this product is installed, the machine initializes its HDD, resetting the data used for auto gradation correction.

Therefore, execute full adjustment of auto gradation adjustment after installing this kit to enable proper images to be output.

Execution of the minimum installation work

Be sure to execute the minimum installation work in accordance with the Setup Guide because HDD is initialized when this kit is installed.

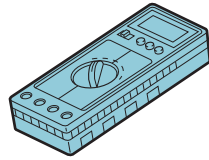
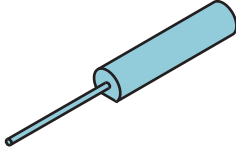
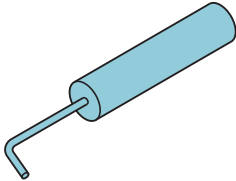

Appendix

- Service Tools
- General Circuit Diagram
- Backup Data
- Detail of HDD partition
- Soft counter specifications
- 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.
Tester extension pin	FY9-3038	A		
Tester extension pin (L-shaped)	FY9-3039	A		Use for electrical checks.
CA-7 test Sheet	FY9-9323	A		Used for adjusting/checking images.

Reference: Category

T-10-1

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 workshop

 Solvents and Oils

None

Backup Data

Data Location Lists / Delete Method Lists

Data	Location	Replacement					Clear method													
		When Replacing HDD / Executing AllFormat	When Replacing Flash / Executing AllFormat	Main Controller PCB	DC Controller PCB	Replace the TPM PCB	Initialize All Data / Settings	User function				Service function (COPIER > Function > xxxx)								
								Settings/Registration > Function Settings				CLEAR > xxxx								
								Copy > Change Default Settings > Initialize	Send > Common Settings > Change Default Settings > Initialize	Send > Fax Settings > Change Default Settings > Initialize	Printer Settings > Custom Settings > Initialize	MN-CONT	MMI	DC-CON	R-CON	ADRS-BK	JV-CASHE	CNT-DCON	CNT-MCON	
Address List	HDD/FLASH	Clear	-	-	-	-	Clear	-	-	-	-	Clear	-	-	-	Clear	-	-	-	
Forwarding Settings	HDD/FLASH	Clear	-	-	-	-	Clear	-	-	-	-	Clear	Clear	-	-	-	-	-	-	
Settings / Registration																				
Preferences (Except for Paper Type Management Settings)	HDD	Clear	-	-	-	-	Clear	-	-	-	-	Clear	Clear	Clear(*1)	-	-	-	-	-	
Adjustment/Maintenance *24	HDD	Clear	-	-	-	-	Clear	-	-	-	-	Clear	Clear	-	-	-	-	-	-	
Function Settings (Except for [Printer > Custom Settings] [Receive/Forward > Forwarding Settings])	HDD	Clear	-	-	Clear	-	Clear	Clear	Clear	Clear	-	Clear	Clear	Clear(*3)	Clear(*4)	-	-	-	-	
Set Destination (Except for [Address Lists])	HDD	Clear	-	-	-	-	Clear	-	-	-	-	Clear	Clear	-	-	-	-	-	-	
Management Settings (Except for [Department ID Management])	HDD	Clear	-	-	-	-	Clear	-	-	-	-	Clear	Clear	-	-	-	-	-	-	
UA(User Authentication) information	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	Clear (*20)	-	-	-	-	-	-	
Printer Settings	HDD	Clear	-	-	-	-	Clear	-	-	-	Clear	Clear	Clear	-	-	-	-	-	-	
Set Paper Information	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	
Default Settings	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Shortcut settings for "Options"	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Previous Settings	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Setting items for Quick Menu																				
Button Size information	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Wallpaper Setting	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Button information in Quick Menu	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Restrict Quick Menu	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Setting items for Main Men																				
Button settings in Main Menu	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	
Button settings on the top of the screen	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	
Wallpaper Setting for Main Menu	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	
Other settings for Main Menu	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	Clear	-	-	-	-	-	-	
Function Settings > Store/Access Files																				
Mail Box Settings (Register Box Name, PIN, Time Until File Auto Delete, Printer upon Storing from Printer Driver)	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Image data (Mail Box , Memory RX Inbox, Confidential Fax Inbox)	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Network Place Settings	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Web browser settings																				
Web Access setting information	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
MEAP settings																				
MEAP application	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
License files for MEAP applications	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Data saved using MEAP applications	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
SMS (Service Management Service) password of MEAP	HDD	Clear	-	-	-	-	Clear(*9)	-	-	-	-	-	-	-	-	-	Clear	-	-	
Universal data settings																				
Unsent documents (documents waiting to be sent with the Delayed Send mode)	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Job logs	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Audit Log	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	Clear	-	-	
Management Settings > Device Management > Certificate Settings	HDD	-	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Auto Adjust Gradation setting values	FLASH	-	Clear	-	-	-	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	
PS font	HDD	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Key information to be used for encryption when TPM is OFF	FLASH	Clear (*11)	Clear (*12)	-	-	-	Clear	-	-	-	-	Clear	-	-	-	-	-	-	-	
Key and settings information to be used for encryption when TPM is ON	FLASH HDD/TPM	Clear (*13)	Clear (*13)	-	-	Clear	Clear (*15)	-	-	-	-	Clear (*14)	-	-	-	-	-	-	-	
Service Mode																				
Service Mode setting values (MN-CON)	HDD	Clear	-	-	-	-	-	-	-	-	-	-	Clear	-	-	-	-	-	-	
Service Mode setting values (DC-CON)	DC-CON	-	-	-	Clear	-	-	-	-	-	-	-	-	Clear	-	-	-	-	-	
Service Mode setting values (R-CON)	FLASH	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Clear	-	-	-	-	
Counter information																				
Department ID Counter	FLASH	-	Clear	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	-	
Sevice Counter (MN-CON)	FLASH	-	Clear	-	-	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Clear	
Sevice Counter (DC-CON)	DC-CON	-	-	-	Clear	-	Clear	-	-	-	-	-	-	-	-	-	-	-	Clear	

Backup / Restore Method Lists (1/2)

Data	Location	Backup method												
		Backup Method (excluding DCM and device information delivery)												
		Backup by User						Backup by Service						
Yes/No	Method	Location	Compatibility: Old model to this model	Compatibility: iRADV (1) to this model	Compatibility: iRADV (2) to this model	Yes/No	Method	Location	Compatibility: Old model to this model	Compatibility: iRADV (1) to this model	Compatibility: iRADV (2) to this model			
Address List	HDD FLASH	Yes	RUI > Settings/Registration > Management Settings > Data Management > Import/Export individually > Address Lists	PC	Yes	Yes	Yes	No	---	---	---	---	---	
Forwarding Settings	HDD FLASH	Yes	RUI > Settings/Registration > Management Settings > Data Management > Import/Export individually > Device Settings (Forwarding Settings, Address Book, Send Function Favorite Settings)	PC	Yes	Yes	Yes	No	---	---	---	---	---	
Settings / Registration														
Preferences (Except for Paper Type Management Settings)	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Adjustment/Maintenance *24	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Function Settings (Except for [Printer > Custom Settings] [Receive/Forward > Forwarding Settings])	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Set Destination (Except for [Address Lists])	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Management Settings (Except for [Department ID Management])	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
UA(User Authentication) information	HDD	Yes	RUI > Settings/Registration > Management Settings > User Management > Authentication Management > User Management	PC	Yes(*21)	Yes(*21)	Yes(*21)	No	---	---	---	---	---	
Printer Settings	HDD	Yes	RUI > Settings/Registration > Management Settings > Data Management > Import/Export individually > Printer Settings	PC	Yes	Yes	Yes	No	---	---	---	---	---	
Set Paper Information	HDD	Yes	RUI > Settings/Registration > Management Settings > Data Management > Import/Export individually > Paper Information	PC	Yes(*19)	Yes(*19)	Yes(*19)	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	Yes(*5)	RUI > Settings/Registration > Management Settings > Data Management > Import/Export All > Export	PC	No	Yes	Yes	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Default Settings	HDD	No	---	---	No	No	No	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Shortcut settings for "Options"	HDD	No	---	---	No	No	No	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Previous Settings	HDD	No	---	---	No	No	No	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Setting items for Quick Menu														
Button Size information	HDD	Yes	RUI > Quick Menu > Export	PC	No	No	Yes(*25)	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Wallpaper Setting	HDD	Yes	RUI > Quick Menu > Export	PC	No	No	Yes(*25)	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Button information in Quick Menu	HDD	Yes	RUI > Quick Menu > Export	PC	No	No	Yes(*25)	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Restrict Quick Menu	HDD	Yes	RUI > Quick Menu > Export	PC	No	No	Yes(*25)	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Setting items for Main Men														
Button settings in Main Menu	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Button settings on the top of the screen	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Wallpaper Setting for Main Menu	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Other settings for Main Menu	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Function Settings > Store/Access Files														
Mail Box Settings (Register Box Name, PIN, Time Until File Auto Delete, Printer upon Storing from Printer Driver)	HDD	Yes	RUI > Settings/Registration > Management Settings > Data Management > Back Up/Restore Settings	USB/HDD/SMB Server	No	No	No	No	---	---	---	---	---	
Image data (Mail Box , Memory RX Inbox, Confidential Fax Inbox)	HDD	Yes	RUI > Settings/Registration > Management Settings > Data Management > Back Up/Restore Settings	USB/HDD/SMB Server	No	No	No	No	---	---	---	---	---	
Network Place Settings	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Web browser settings														
Web Access setting information	HDD	No	---	---	---	---	---	---	---	---	---	---	---	
MEAP settings														
MEAP application	HDD	No	---	---	No	No	No	Yes	Download Mode (Meapback)	PC/USB	---	---	---	
License files for MEAP applications	HDD	Yes	RUI > SMS	PC	No	No	No	No	---	---	---	---	---	
Data saved using MEAP applications	HDD	Yes (*16)	iWEMC DAM plug-in(*8)	PC (iWEMC) (*8)	---	Yes (*8)	Yes(*8)	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
SMS (Service Management Service) password of MEAP	HDD	No	---	---	No	No	No	Yes(*6)	Download Mode (Meapback)	PC/USB	---	---	---	
Universal data settings														
Unsent documents (documents waiting to be sent with the Delayed Send mode)	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Job logs	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Audit Log	HDD	Yes (*10)	RUI > Settings/Registration > Management Settings > Device Management > Save Audit Log	PC	No	No	No	No	---	---	---	---	---	
Management Settings > Device Management > Certificate Settings	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Auto Adjust Gradation setting values	FLASH	No	---	---	No	No	No	No	---	---	---	---	---	
PS font	HDD	No	---	---	No	No	No	No	---	---	---	---	---	
Key information to be used for encryption when TPM is OFF	FLASH	No	---	---	No	No	No	No	---	---	---	---	---	

Data	Location	Backup method											
		Backup Method (excluding DCM and device information delivery)											
		Backup by User						Backup by Service					
Yes/No	Method	Location	Compatibility: Old model to this model	Compatibility: iRADV (1) to this model	Compatibility: iRADV (2) to this model	Yes/No	Method	Location	Compatibility: Old model to this model	Compatibility: iRADV (1) to this model	Compatibility: iRADV (2) to this model		
Key and settings information to be used for encryption when TPM is ON	FLASH HDD/TPM	Yes (*16)	Settings/Registration > Management Settings > Data Management > TPM Settings	USB	No	No	No	No	---	---	---	---	
Service Mode													
Service Mode setting values (MN-CON)	HDD	No	---	---	No	No	No	No	---	---	---	---	
Service Mode setting values (DC-CON)	DC-CON	No	---	---	No	No	No	Yes	DSRAMBUP	HDD	No	No	No
Service Mode setting values (R-CON)	FLASH	No	---	---	No	No	No	Yes	RSRAMBUP	HDD	No	No	No
Counter information													
Department ID Counter	FLASH	No	---	---	No	No	No	Yes(*23)	Download Mode (Sramimg)	PC/USB/HDD	No	No	No
Sevice Counter (MN-CON)	FLASH	No	---	---	No	No	No	Yes(*23)	Download Mode (Sramimg)	PC/USB/HDD	No	No	No
Sevice Counter (DC-CON)	DC-CON	No	---	---	No	No	No	Yes	DSRAMBUP	HDD	No	No	No

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■ Backup / Restore Method Lists (2/2)

Data	Location	Backup method											
		Backup Method using DCM (Settings/Registration : Management Settings : Data Management > Import/Export All)						Backup Method using Device Information Delivery					
		Yes/No	Method	Location	Compatibility: iRADV (2) to this model	Yes/No	Method	Location	Compatibility: Old model to this model	Compatibility: iRADV (1) to this model	Compatibility: iRADV (2) to this model		
Address List	HDD/FLASH	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
Forwarding Settings	HDD/FLASH	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
Settings / Registration													
Preferences (Except for Paper Type Management Settings)	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
Adjustment/Maintenance *24	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
Function Settings (Except for [Printer > Custom Settings] [Receive/Forward > Forwarding Settings])	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
Set Destination (Except for [Address Lists])	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
Management Settings (Except for [Department ID Management])	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
UA(User Authentication) information	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes(*22)	No	---	---	---	---	---		
Printer Settings	HDD	No	---	---	No	Yes	WebService	PC	Yes	Yes	Yes		
Set Paper Information	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
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	Yes	RUI / LUI / WebService	PC/USB	Yes(*)	Yes(*1)	WebService	PC	---	Yes	Yes		
Default Settings	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes(*)	No	---	---	---	---	---		
Shortcut settings for "Options"	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes(*)	No	---	---	---	---	---		
Previous Settings	HDD	No	---	---	No	No	---	---	---	---	---		
Setting items for Quick Menu													
Button Size information	HDD	Yes	RUI / LUI / WebService	PC/USB	No	No	---	---	---	---	---		
Wallpaper Setting	HDD	Yes	RUI / LUI / WebService	PC/USB	No	No	---	---	---	---	---		
Button information in Quick Menu	HDD	Yes	RUI / LUI / WebService	PC/USB	No	No	---	---	---	---	---		
Restrict Quick Menu	HDD	Yes	RUI / LUI / WebService	PC/USB	No	No	---	---	---	---	---		
Setting items for Main Men													
Button settings in Main Menu	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	No	---	---	---	---	---		
Button settings on the top of the screen	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	No	---	---	---	---	---		
Wallpaper Setting for Main Menu	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	No	---	---	---	---	---		
Other settings for Main Menu	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	No	---	---	---	---	---		
Function Settings > Store/Access Files													
Mail Box Settings (Register Box Name, PIN, Time Until File Auto Delete, Printer upon Storing from Printer Driver)	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	Yes	WebService	PC	Yes	Yes	Yes		
Image data (Mail Box , Memory RX Inbox, Confidential Fax Inbox)	HDD	No	---	---	No	No	---	---	---	---	---		
Network Place Settings	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes	No	---	---	---	---	---		
Web browser settings													
Web Access setting information	HDD	Yes(*7)	RUI / LUI / WebService	PC/USB	Yes	Yes(*7)	WebService	PC	Yes	Yes	Yes		
MEAP settings													
MEAP application	HDD	No	---	---	No	No	---	---	---	---	---		
License files for MEAP applications	HDD	No	---	---	No	No	---	---	---	---	---		
Data saved using MEAP applications	HDD	Yes	RUI / LUI / WebService	PC/USB	Yes(*18)	No	---	---	---	---	---		
SMS (Service Management Service) password of MEAP	HDD	No	---	---	No	No	---	---	---	---	---		
Universal data settings													
Unsent documents (documents waiting to be sent with the Delayed Send mode)	HDD	No	---	---	No	No	---	---	---	---	---		
Job logs	HDD	No	---	---	No	No	---	---	---	---	---		
Audit Log	HDD	No	---	---	---	No	---	---	---	---	---		
Management Settings > Device Management > Certificate Settings	HDD	Yes	RUI / LUI / WebService	PC/USB	No	No	---	---	---	---	---		
Auto Adjust Gradation setting values	FLASH	No	---	---	No	No	---	---	---	---	---		

Data	Location	Backup method									
		Backup Method using DCM (Settings/Registration : Management Settings : Data Management > Import/Export All)				Backup Method using Device Information Delivery					
		Yes/No	Method	Location	Compatibility: iRADV (2) to this model	Yes/No	Method	Location	Compatibility: Old model to this model	Compatibility: iRADV (1) to this model	Compatibility: iRADV (2) to this model
PS font	HDD	No	---	---	No	No	---	---	---	---	---
Key information to be used for encryption when TPM is OFF	FLASH	No	---	---	No	No	---	---	---	---	---
Key and settings information to be used for encryption when TPM is ON	FLASH / HDD/TPM	No	---	---	No	No	---	---	---	---	---
Service Mode											
Service Mode setting values (MN-CON)	HDD	Yes(*17)	RUI / USB / Service Mode / WebService	PC/USB/HDD	Yes	No	---	---	---	---	---
Service Mode setting values (DC-CON)	DC-CON	Yes(*17)	RUI / USB / Service Mode / WebService	PC/USB/HDD	Yes	No	---	---	---	---	---
Service Mode setting values (R-CON)	FLASH	Yes(*17)	RUI / USB / Service Mode / WebService	PC/USB/HDD	Yes	No	---	---	---	---	---
Counter information											
Department ID Counter	FLASH	No	---	---	No	No	---	---	---	---	---
Sevice Counter (MN-CON)	FLASH	No	---	---	No	No	---	---	---	---	---
Sevice Counter (DC-CON)	DC-CON	No	---	---	No	No	---	---	---	---	---

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*1	The following settings are deleted. Preferences > Paper Settings > Register Envelope Drawer Preferences > Paper Settings > B5/EXEC Paper Selection Preferences > Paper Settings > A5R/STMR Paper Selection
*2	Preferences > Timer/Energy Settings > [Adjust Time]/[Date/Time Settings] is excluded
*3	The following settings are deleted. Function Settings > Common > Paper Feed Settings > Paper Drawer Auto Selection On/Off Function Settings > Common > Paper Feed Settings > Feed Method Switch
*4	The following settings 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
*5	Backup is available only "Favorite Settings" in "Scan to Send"
*6	If the machine can be activated in download mode at the time of HDD failure, backup of Meapback using SST/USB may be possible. In this case, restore the backed-up Meapback after replacing the HDD so that Meapback information can be recovered.
*7	"Web Access Favorites" is the only data which can be backed up by a method other than collective export in DCM.
*8	The data saved using a MEAP application can be backed up only when the MEAP application has a backup function.
*9	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.
*10	The audit log which was backed up cannot be restored to the device.
*11	If the backup key information in the HDD is missing, it is automatically recovered from the key in the FLASH PCB.
*12	When replacing the HDD and FLASH PCB simultaneously, the key information is not restored automatically.
*13	An error code is displayed when "ON" is displayed for the TPM setting. After all data/settings are initialized after restart, select "ON" for the TPM setting to enable the TPM setting.
*14	If the TPM key information in the FLASH is lost, the key information in the FLASH is automatically recovered from the backup of the common key in the HDD. Then the internal state of TPM setting changes to "ON". However, the display on the UI remains "OFF", therefore the TPM setting needs to be manually changed to "ON".
*15	The TPM setting changes to "OFF" when all the data/settings have been initialized.
*16	Only backup in preparation for a TPM PCB failure is possible. Moreover, data cannot be restored to other machines where the TPM setting is set to "ON".
*17	Service mode setting values can be backed up and restored by the user from RUI/WebService only when COPIER>OPTION>USER>SMD-EXPT is set to ON.
*18	The data retained by MEAP application itself is not included in the target of backup.
*19	Detailed parameters cannot be imported by default. Only basic parameters can be imported. Detailed parameters can be imported when "All" is set in Settings/Registration > Device Information Delivery Settings > Set Paper Information. However, it is not recommended to import detailed parameters to/from different models.
*20	The password of "Administrator", which is a default administrator account, is initialized to "7654321". User information other than that is not initialized.
*21	The user information of SSO-H of old models and the 1st and 2nd generations of ADV machines can be exported and imported to this machine. However, it is not possible to export the user information for UA of this machine and import it to old models and the 1st and 2nd generations of ADV machines.
*22	The user information in Advanced Box can be imported to this machine.
*23	If the machine can be activated in download mode, Sramimg can be backed up to the PC, USB, or the HDD of the host machine. In this case, restore the backed-up Sramimg after replacing the Flash so that it can be recovered.
*24	The following settings are not initialized: Function Settings ->Common ->Paper Output Settings -> Output Tray Settings Adjustment/Maintenance -> Adjust Action -> Time Until Stapling Starts Stapler Mode
*25	Backup and restoration of data is possible to/from the following models only: - iR ADVANCE C2030/C2025/C2020 Series - iR ADVANCE C2230/C2225/C2220 Series - iR ADVANCE C250/350 Series - iR ADVANCE 400/500 Series
*26	(1) RUI: Remote UI > Settings/Registration > Management Settings > Data Management > Import/Export All (2) LUI: Settings/Registration > Management Settings > Data Management > Import/Export All (3) Service Mode: Service mode top screen > BACKUP Service mode setting values only can be backed up and restored. (4) Web Service

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Detail of HDD partition

Partition name	CHK-TYPE	Description	HDD Format																			
			CHK_TYPE_0	CHK_TYPE_1	CHK_TYPE_2	CHK_TYPE_3	CHK_TYPE_4	CHK_TYPE_5	CHK_TYPE_6	CHK_TYPE_7	CHK_TYPE_8	CHK_TYPE_9	CHK_TYPE_10	CHK_TYPE_11	CHK_TYPE_12	CHK_TYPE_13	CHK_TYPE_14	CHK_TYPE_15	CHK_TYPE_16	CHK_TYPE_17	CHK_TYPE_18	
PDLDEV	1	PDL-related file storage area (font, registration form, color correction information file for ICCProfile-PDL function)	*1	*1																		
FSTDEV	2	Image data storage area (Box etc)	*1		*1			*1	*1													
APL_MEAP	3	MEAP	*1			*1																
-	4	Area that can be expanded																				
FSTCDEV	5	Image data storage area (for Job archive system)	*1		*1			*1	*1													
IMGMNG	6	Management data of image	*1		*1			*1	*1													
TMP_GEN	7	Storage area of universal data (temporary file)	*1							*1	*1											
APL_GEN	8	Storage area of universal data (Note: For details, see the following list.)	*1								*1											
TMP_PSS	9	PDL spool-related area	*1								*1	*1										
APL_SEND	10	Address book, Setting for Forwarding	*1										*1									
UPDATE	11	Update-related area	*1								*1				*1							
APL_KEEP	12	MEAP stored data	*2															*2				
SYSDEV	13	The system-related area	*2															*2				
SWAP	14	SWAP (temporary file / memory alternative area)	*3																	*3		
CRBGV	15	lvm area																				
-	16	--																				
DBG_LOG	17	Debug-related area	*1									*1										*1
CRBDEV	18	Advanced Box area	*1																			*1

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*1: Both of HD-CHECK and HD-CLEAR can be executed

*2: HD-CHECK can be executed; HD-CLEAR cannot be executed

*3: HD-CHECK cannot be executed; HD-CLEAR can be executed

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	Button settings in Main Menu
	Button settings on the top of the screen
	Wallpaper Setting for Main Menu
	Other settings for Main Menu
Setting for Advance 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 specifications

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)
- Copy: Local copy
- Copy A: Local copy
- Print: PDL print + report print
- Print A: PDL print + report print
- Scan: Black and white scan + color scan

No.	Counter Details
071	Toner bottle black
072	Toner bottle yellow
073	Toner bottle magenta
074	Toner bottle cyan
091	1/10 Toner bottle black
092	1/10 Toner bottle yellow
093	1/10 Toner bottle magenta
094	1/10 Toner bottle cyan
101	Total 1
102	Total 2
103	Total (large)
104	Total (small)
105	Total (full color 1)
106	Total (full color 2)
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)
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)

No.	Counter Details
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)
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)
181	Unidentified Toner bottle black
182	Unidentified Toner bottle yellow
183	Unidentified Toner bottle magenta
184	Unidentified Toner bottle cyan
201	Copy (Total 1)
202	Copy (Total 2)
203	Copy (large)
204	Copy (small)
205	Copy A (Total 1)
206	Copy A (Total 2)

No.	Counter Details
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)
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)

No.	Counter Details
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)
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)

No.	Counter Details
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)
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)

No.	Counter Details
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)
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)

No.	Counter Details
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)
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)
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)

No.	Counter Details
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)
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)

No.	Counter Details
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)
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 FLASH PCB 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.
- Deletion Mode can be changed. Normally, "Once with 0 (Null) Data" can sufficiently delete data. 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.

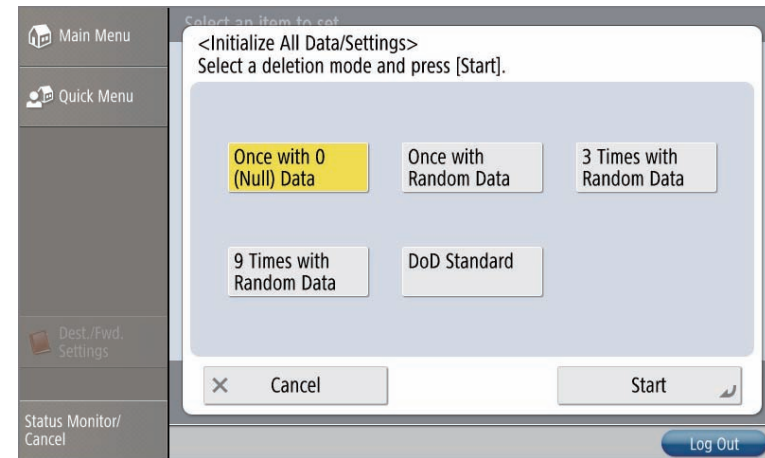
Work Procedure

If the user uses MEAP applications, ask the user to uninstall the MEAP applications if necessary.

User data delete procedure

1. Settings/Registration > Management Settings > Data Management > Initialize All Data/Settings
2. Select a deletion mode.
3. Press [Start].

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 Flash PCB 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

A report is output after "Initialize All Data/Settings" is completed.

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 XXXX (iAXXXX)

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)

```

F-10-3

- *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-CON



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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.